

**Values Orientation Influencing Relationship
Cooperative Behavioural Mechanisms between
Health PFI Project Leaders**

Keith Christopher McNally

**A thesis submitted in partial fulfilment of the requirements of
Kingston University for the Degree of Doctor of Business Administration**

Kingston Business School
Kingston University
Kingston Hill
Kingston Upon Thames
Surrey KT6 7LB

© Keith McNally

June 2009

To the memory of my parents Estelle and Harry McNally.

For Shorts

Whose tenacity, support and encouragement have ensured that I make this long journey.

ABSTRACT

Complex multi-sector relationships are created in long-term health private finance initiative (PFI) projects within and across the inter-organisational (IOR) boundary. Relationship engagement and cooperative behaviour are influenced by an individual's values orientation, which in turn affects attitude and influences the selection and operation of various cooperation mechanisms.

The study considered the use of behavioural cooperation mechanisms by project leaders within role-sets created within a PFI environment from the theoretical positions of role-set theory (Katz and Kahn, 1966), behavioural mechanisms influencing cooperation (Chen et al. 1998), and values orientation (Schwartz, 1992). The research adopted the position that values act as general guiding principles in one's life (Schwartz, 1992), a stance that extends Rokeach's (1973) research of the universal nature of human values.

A mixed methodology was used to obtain the values orientation profiles of twenty-nine respondents from six project environments using the Schwartz Values Survey Instrument (SVS) combined with repertory grid interviews to elicit the individuals' construct structures. Cluster and principal components analyses were subsequently carried out to enable values profiles to be assessed against construct categorisation.

Two-dimensional values domains were obtained for all respondents where respondent propensity tended towards self-transcendent and openness-to-change domains (Schwartz, 1992). Values orientation was examined against elicited constructs after cluster and principal components analysis was carried out for each repertory grid interview response.

Analysis enabled construct categorisation to be aligned with the categories identified in an amended model of cooperation. Cooperation mechanisms clustered into two groupings. These reflected the high importance to the sample of trust and accountability in relationships, and the lower importance of group membership, communication process and goals. However, the ranking of the second cluster of attributes was highly sensitive to a changing order. Consistently, the least important behavioural mechanism was reward structures.

ACKNOWLEDGEMENTS

My first thank you has to be to my long-suffering supervisor Dr. Stephen Gourlay of Kingston University Business School, who has endured and in equal measure supported me over the years to help me complete this thesis. I am sure most doctoral students ride many highs, and perhaps even more lows while completing their research and without a guiding hand would simply fail to make it to completion.

I would also like to express my gratitude to Sanjiv Sachdev, also of Kingston University Business School, who guided me through the depths of the literature relating to the public sector in general, the NHS and private finance initiatives and on many occasions simply provided kind words to help me keep the process moving along. A very special thank you is given to Professor Stavros Kalafatis of Kingston University who has guided me through many arduous tasks and provided invaluable help and wise words when it came to structural and presentational matters.

Without the project locations in which I undertook my research, none of this would have been possible, so I express my gratitude to each person who graciously gave their time over the years to completing endless questionnaires and interviews.

Thank you to Annette Kobak who provided me with much needed guidance in academic writing style and to Angela Kingston who brought the necessary polish to the final document. The finished work is immeasurably enhanced by their contribution.

Many people were simply generous with their time, too many to mention here. Professors Schwartz and Triandis provided guidance in the early days when I was wrestling with the values literature: I would encourage everyone to seek out the originators of valuable sources of information and ask for guidance; you may be surprised what you find.

Finally to my colleagues, family and most importantly close friends, as there is a little bit of each of you in this finished work: thank you for understanding all the times that I needed to be elsewhere.

Keith McNally

TABLE OF CONTENTS

	Page Number
Abstract	vi
Preface	1
CHAPTER A1	INTRODUCTION
A1.1	3
	The Changing NHS
	<i>A1.1.1 Outline of a private finance initiative (PFI)</i>
	<i>A1.1.2 Simplified PFI model</i>
	<i>A1.1.3 Relationships and influences</i>
A1.2	7
	Study Focus
	<i>A1.2.1 A problem to research</i>
	<i>A1.2.2 Literature that supports the assertion</i>
	<i>A1.2.3 Research aims</i>
	<i>A1.2.4 Research questions</i>
	<i>A1.2.5 Research contribution</i>
A1.3	12
	Thesis Plan
	<i>A1.3.1 Chapter plan</i>
CHAPTER A2	APPLICATION OF THE PRIVATE FINANCE INITIATIVE IN THE NHS
A2.1	13
	Introduction
	<i>A2.1.1 Defining a private finance initiative project</i>
	<i>A2.1.2 Defining a public private partnership (PPP)</i>
A2.2	14
	Foundations of the Welfare State
	<i>A2.2.1 A legacy of long-term under-investment</i>
	<i>A2.2.2 The changing nature of the state</i>
	<i>A2.2.3 Conservative-led reform</i>
	<i>A2.2.4 The arrival of New Labour: a new investment climate</i>
A2.3	21
	<i>A Changing Relationship</i>
	<i>A2.3.1 Blurring the sector boundary</i>
A2.4	23
	The Role of PFI
	<i>A2.4.1 PFI redefined under New Labour</i>
A2.5	27
	A Climate of Opportunism
	<i>A2.5.1 Opportunism in re-financing behaviour</i>
	<i>A2.5.2 Opportunistic design</i>

A2.6	Facing the PFI Challenge	29
A2.7	Building Relationship Partnering	30
	<i>A2.7.1 Towards a better understanding</i>	31
	<i>A2.7.2 PFI in the longer term</i>	32
A2.8	Chapter Endnote	34
	<i>A2.8.1 Prelude to the literature review</i>	35
CHAPTER B	LITERATURE REVIEW	37
B1.1	Introduction	37
B1.2	Private Finance Initiative Project Environment	37
B1.3	Introduction to Inter-organisational Relationships (IORs)	38
B1.4	IOR Forms and Paradigms	39
	<i>B1.4.1 Organisational research paradigms</i>	40
B1.5	Relating the Organisation and the Individual	49
	<i>B1.5.1 The individual and the boundary environment</i>	49
B1.6	Role-set Theory Expanded	51
B1.7	Section Endnote	56
B1.8	Values: An Introduction	56
	<i>B1.8.1 Personal and social perspectives</i>	57
B1.9	Defining Values	58
B1.10	Individualist-Collectivist Dichotomy	62
	<i>B1.10.1 Introduction</i>	62
	<i>B1.10.2 The individualist-collectivist orientation</i>	63
	<i>B1.10.2.1 Relating self and group</i>	65
B1.11	Measuring Values	66
	<i>B1.11.1 Introduction</i>	66
	<i>B1.11.2 Values measurement development</i>	66
B1.12	Section Endnote	70
B1.13	Behaviour and Relationship Cooperation	71
	<i>B1.13.1 Bounding relationship cooperation</i>	71
	<i>B1.13.2 The implications of values orientation and cooperative behaviour</i>	72
B1.14	Cooperative Behavioural Mechanisms	73
	<i>B1.14.1 Distinguishing trust from relationship cooperation</i>	73
	<i>B1.14.2 Trust as a cooperative behavioural mechanism</i>	74
	<i>B1.14.3 Relationship accountability as a cooperative behavioural mechanism</i>	78

	<i>B1.14.4</i>	<i>Super-ordinate goals as a cooperative behavioural mechanism</i>	79
	<i>B1.14.5</i>	<i>Communication as a cooperative behavioural mechanism</i>	79
	<i>B1.14.6</i>	<i>Reward allocation as a cooperative behavioural mechanism</i>	80
B1.15		Literature Review End-section	81
	<i>B1.15.1</i>	<i>Summary and conclusions</i>	82
CHAPTER C1		RESEARCH FRAMEWORK	85
C1.1		Introduction	85
C1.2		Research Philosophy	86
	<i>C1.2.1</i>	<i>The nature of reality</i>	86
	<i>C1.2.2</i>	<i>Value positions in research</i>	87
C1.3		Integrated Theoretical Framework	87
	<i>C1.3.1</i>	<i>Research Aim</i>	87
	<i>C1.3.2</i>	<i>Overview of theoretical framework</i>	88
	<i>C1.3.3</i>	<i>Study implications</i>	90
C1.4		Research Questions and Data Requirements	92
C1.5		A Mixed Methodological Approach to Research	97
	<i>C1.5.1</i>	<i>Establishing values orientation</i>	98
	<i>C1.5.2</i>	<i>Introduction to personal construct theory</i>	101
	<i>C1.5.3</i>	<i>An introduction to repertory grid interviews</i>	104
CHAPTER C2		RESEARCH DESIGN	112
C2.1		Introduction	112
	<i>C2.1.1</i>	<i>Purpose of the study</i>	113
	<i>C2.1.2</i>	<i>Type of investigation</i>	113
	<i>C2.1.3</i>	<i>Relevance of case study design to research setting</i>	119
	<i>C2.1.4</i>	<i>Study setting and extent of researcher interference</i>	121
	<i>C2.1.5</i>	<i>Unit of analysis</i>	121
	<i>C2.1.6</i>	<i>Sampling design</i>	122
CHAPTER C3		DATA COLLECTION	124
C3.1		Measurement of Values Orientation	124
	<i>C3.1.1</i>	<i>Process of initial scale selection</i>	124
	<i>C3.1.2</i>	<i>Scale pre-testing</i>	125
	<i>C3.1.3</i>	<i>Pre-testing and piloting</i>	126
	<i>C3.1.4</i>	<i>Pilot documentation</i>	127

	<i>C3.1.5</i>	<i>Scale purification</i>	128
	<i>C3.1.6</i>	<i>Pilot conclusions</i>	129
C3.2		Measurement Quality and Accuracy of SVS Scale	129
	<i>C3.2.1</i>	<i>Validity and reliability</i>	129
	<i>C3.2.2</i>	<i>Scale purification at the research stage</i>	132
	<i>C3.2.3</i>	<i>Reliability of linear combinations in summated scales</i>	132
	<i>C3.2.4</i>	<i>Section concluding comment</i>	134
C3.3		Interview Data Collection	134
	<i>C3.3.1</i>	<i>Data collection methods</i>	135
	<i>C3.3.2</i>	<i>Alternative methods to obtaining a respondents values orientation</i>	136
C3.4		Basic Repertory Grid Interview	137
	<i>C3.4.1</i>	<i>Defining elements</i>	137
	<i>C3.4.2</i>	<i>Constructing a repertory grid</i>	139
	<i>C3.4.3</i>	<i>Piloting the repertory grid interview</i>	140
	<i>C3.4.4</i>	<i>Review of pilot interview</i>	141
	<i>C3.4.5</i>	<i>Section concluding comment</i>	142
CHAPTER C4		DATA ANALYSIS METHODS	143
C4.1		Introduction	143
C4.2		Approach to Data Analysis	144
C4.3		Analysis of Values Orientation	147
C4.4		Analysis of Repertory Grid Interview Data	152
	<i>C4.4.1</i>	<i>Single repertory grid analysis</i>	153
C4.5		Concluding Comments to Data Analysis Methods	160
C4.6		Introduction to Research Findings	160
	<i>C4.6.1</i>	<i>Aim and research questions</i>	161
CHAPTER D1		PRESENTATION OF RESEARCH FINDINGS: ASSESSMENT OF INDIVIDUALS' VALUES ORIENTATION	163
D1.1		Introduction	163
D1.2		A Comparison of Individuals' Values	163
	<i>D1.2.1</i>	<i>Analysis of project A</i>	164
	<i>D1.2.2</i>	<i>Analysis of project B</i>	167
	<i>D1.2.3</i>	<i>Analysis of project C</i>	171
	<i>D1.2.4</i>	<i>Analysis of project D</i>	175
	<i>D1.2.5</i>	<i>Analysis of project E</i>	179
	<i>D1.2.6</i>	<i>Analysis of project F</i>	182
D1.3		Differences in Public and Private Sector Values Orientations	186

CHAPTER D2		PRESENTATION OF RESEARCH FINDINGS: ASSESSMENT OF COOPERATION MECHANISMS	192
D2.1		Introduction	192
D2.2		Construct Allocation to Cooperation Mechanism Categories	192
	<i>D2.2.1</i>	<i>Assessment of reliability</i>	<i>196</i>
D2.3		Relative Importance of Cooperation Mechanisms	196
	<i>D2.3.1</i>	<i>Differential analysis discussion</i>	<i>199</i>
D2.4		Relating Values Orientation to Goals	209
CHAPTER D3		PRESENTATION OF RESEARCH FINDINGS: VALUES ORIENTATION AND COOPERATION MECHANISMS RELATED	213
D3.1		Introduction	213
D3.2		Relating Goals and the Importance of Time Horizon	213
D3.3		Personal versus Collective Goal Satisfaction	216
D3.4		Protection Against Short Termism	218
D3.5		Potential for Boundary Spanning Role-sets to Emerge	222
D3.6		Concluding Comments	226
CHAPTER E		CONCLUDING DISCUSSION, RESEARCH IMPLICATIONS AND FURTHER RESEARCH OPPORTUNITIES	227
E1.1		Introduction	227
E1.2		Summary of Key Findings	229
E1.3		Research Contribution	232
	<i>E1.3.1</i>	<i>Academic context</i>	<i>232</i>
	<i>E1.3.2</i>	<i>Business context</i>	<i>233</i>
E1.4		Implications of Findings	233
E1.5		Research Limitations	235
	<i>E1.5.1</i>	<i>Project setting</i>	<i>235</i>
E1.6		Methodology Issues	236
	<i>E1.6.1</i>	<i>Methodology approach</i>	<i>236</i>
	<i>E1.6.2</i>	<i>Methodology limitations</i>	<i>236</i>
E1.7		Further Research Opportunities	237
	<i>E1.7.1</i>	<i>Research design</i>	<i>238</i>
E1.8		Closing Comment	238
APPENDICES			240
REFERENCES			342

LIST OF APPENDICES

			Page Number
Appendix	A:	Scale Cronbach Alpha coefficient results	241
	A1:	Pre-tested scales	242
	A2:	Purified SVS scale	246
Appendix	B:	Summary chronology of values measurement development	248
Appendix	C:	Pre-test instruments	259
	C1:	SVS pre-test instrument	260
	C2:	[S]INDCOL and INDCOL pre-test instruments	269
Appendix	D:	Revised Schwartz Value Survey (SVS) instrument	279
Appendix	E:	Schwartz Value Survey (SVS) responses to purified scale	284
Appendix	F:	Allocation of constructs by category	285
Appendix	G:	Allocation of constructs by high-intermediate-low (H-I-L) classification	286
Appendix	G1:	Construct allocation to high, intermediate and low categories	287
	G2:	Highly ranked constructs following Honey Content Analysis	295
Appendix	H:	Guidance notes for repertory grid interviewees	298
Appendix	I:	Descriptive analysis of repertory grid interviews	306
	I1:	Sample grid summary template for respondent analysis reporting	307
	I2:	Summary grid responses for all project respondents	308
Appendix	J	D1.5.3 full table including construct allocation for group identity category	338
Appendix	K	D1.6(b) full table including construct labels for high and intermediate categories	340

LIST OF TABLES

			Page Number
CHAPTER	A1		
Table	A1.2(a)	Project attributes	7
Table	A1.2(b)	Respondent attributes	8
CHAPTER	C1		
Table	C.1.3.2	Overview of research framework	89
Table	C1.3.3	Overview of values orientation influencing effects on cooperation mechanisms from Chen et al. (1998)	91
Table	C.1.5.1	Individual values allocated to motivational domains	99
CHAPTER	C2		
Table	C2.1.2	Comparison of research strategies (Denscombe, 1998)	115
CHAPTER	C3		
Table	C3.1.1	Summary of initial scale selection	125
Table	C3.2.3(a)	Descriptive statistics for SVS values domains	133
Table	C3.2.3(b)	Reliability values for each SVS values domains	133
Table	C3.3.1	Summary of benefits and disbenefits compiled from Denscombe (1998) and Hussey and Hussey (1997: chapter 6-8)	136
CHAPTER	C4		
Table	C4.3(a)	Respondent data values for all SVS domains	149
Table	C4.3(b)	Summated two-dimensional data values for each respondent	152
CHAPTER	D1		
Table	D1.2.1(a)	Project A – respondent data values for all SVS domains	164
Table	D1.2.1(b)	Summated two-dimensional data values for each respondent	166
Table	D1.2.2(a)	Project B – respondent data values for all SVS domains	168
Table	D1.2.2(b)	Summated two-dimensional data values for each respondent	171
Table	D1.2.3(a)	Project C – respondent data values for all SVS domains	172
Table	D1.2.3(b)	Summated two-dimensional data values for each respondent	174
Table	D1.2.4(a)	Project D – respondent data values for all SVS domains	176
Table	D1.2.4(b)	Summated two-dimensional data values for	178

		each respondent	
Table	D1.2.5(a)	Project E – respondent data values for all SVS domains	179
Table	D1.2.5(b)	Summated two-dimensional data values for each respondent	182
Table	D1.2.6(a)	Project F – respondent data values for all SVS domains	183
Table	D1.2.6(b)	Summated two-dimensional data values for each respondent	185
Table	D1.3(a)	Data values for all domains summarised for all public and private sector respondents	186
Table	D1.3(b)	Two-dimensional values domains for all respondents	188
Table	D1.3(c)	Data values for two-dimensions for all public and private sector respondents	190
CHAPTER	D2		
Table	D2.2(a)	Summary of constructs allocated to the behavioural mechanism categories	195
Table	D2.2(b)	Summary of indicators considered as important by respondents	195
Table	D2.2.1	Constructs allocation percentage agreement between interviewer and third party	196
Table	D2.3	Summary of differential analysis presented by project and respondent	198
Table	D2.4(a)	Summary of constructs allocated to the behavioural mechanism categories	212
CHAPTER	D3		
Table	D3.3	Honey content analysis construct allocation to group category	217
Table	D3.4(a)	Project leader key cooperation mechanism influencers	219
Table	D3.4(b)	Individual relationship construct category labels	221
Table	D3.5(a)	Summary of respondent two-dimensional domains	224
Table	D3.5(b)	Respondent self-direction values importance	225

LIST OF FIGURES

			Page
			Number
CHAPTER	A1		
Figure	A1.1.1	Stages in the delivery of a private finance project	5
Figure	A1.1.2	Simplified Private Finance Initiative relationship model for Health	6
CHAPTER	B		
Figure	B1.6(a)	A model of the role episode (Katz and Kahn, 1966: 182)	54
Figure	B1.6(b)	Theoretical model of factors involved in the taking of organisational roles (Katz and Kahn, 1966: 187)	55
CHAPTER	C1		
Figure	C1.1	The Research Process for Basic and Applied Science from Sekaran (2000: 54)	85
Figure	C1.3.2(a)	Contingent model of cooperation (Chen et al. 1998)	89
Figure	C1.3.2(b)	Model of cooperation adapted from Chen et al. (1998)	90
Figure	C1.5.1	Model of relations among motivational types of values (Schwartz 1992, 1994, 1996)	100
CHAPTER	C2		
Figure	C2.1	Research design adapted from Sekaran (2000: 122)	112
Figure	C2.1.1	Relationship between variables	113
CHAPTER	C4		
Figure	C4.1	Case and survey methodology levels of inference (Yin, 1994: 31)	143
Figure	C4.3(a)	Respondent values orientation profiles for all SVS domains	148
Figure	C4.3(b)	Individual values domain hierarchy for all respondents	150
Figure	C4.3(c)	Two-dimensional values orientations for all respondents	151
Figure	C4.4.1(a)	Summary repertory grid interview data for a sample respondent	154
Figure	C4.4.1(b)	Interview data cluster analysis for an a sample respondent	157
Figure	C4.4.1(c)	Interview data principal components analysis for a sample respondent	159

CHAPTER	D1		
Figure	D1.2.1(a)	Project A – respondent values orientation profiles for all SVS domains	164
Figure	D1.2.1(b)	Project A – individual values domain hierarchy for all respondents	165
Figure	D1.2.1(c)	Project A – respondent two-dimensional values domains	166
Figure	D1.2.2(a)	Project B – respondent values orientation profiles for all SVS domains	167
Figure	D1.2.2(b)	Project B – individual values domain hierarchy for all respondents	169
Figure	D1.2.2(c)	Project B – respondent two-dimensional values domains	170
Figure	D1.2.3(a)	Project C – respondent values orientation profiles for all SVS domains	171
Figure	D1.2.3(b)	Project C – individual values domain hierarchy for all respondents	173
Figure	D1.2.3(c)	Project C – respondent two-dimensional values domains	174
Figure	D1.2.4(a)	Project D – respondent values orientation profiles for all SVS domains	175
Figure	D1.2.4(b)	Project D – individual values domain hierarchy for all respondents	176
Figure	D1.2.4(c)	Project D – respondent two-dimensional values domains	177
Figure	D1.2.5(a)	Project E – respondent values orientation profiles for all SVS domains	179
Figure	D1.2.5(b)	Project E – individual values domain hierarchy for all respondents	180
Figure	D1.2.5(c)	Project E – respondent two-dimensional values domains	181
Figure	D1.2.6(a)	Project F – respondent values orientation profiles for all SVS domains	182
Figure	D1.2.6(b)	Project F – individual values domain hierarchy for all respondents	184
Figure	D1.2.6(c)	Project F – respondent two-dimensional values domains	184
Figure	D1.3(a)	Domain values summarised for all respondents by sector	187
Figure	D1.3(b)	Two-dimensional values summarised for public and private sector respondents	191
CHAPTER	D2		
Figure	D2.3.1.1	Project A respondent construct allocation by category	200
Figure	D2.3.1.2	Project B respondent construct allocation by category	203
Figure	D2.3.1.3	Project C respondent construct allocation by category	204
Figure	D2.3.1.4	Project D respondent construct allocation by category	206
Figure	D2.3.1.5	Project E respondent construct allocation by category	207

Figure	D2.3.1.6	Project F respondent construct allocation by category	209
CHAPTER	D3		
Figure	D3.5(a)	Two-dimensional values orientation for public and private sector respondents	223
Figure	D3.5(b)	Representation of project role-set relationships	225

PREFACE

The National Health Service (NHS) continues to undergo substantial change; this is not a new phenomenon but a reflection of the continuing public services modernisation agenda (Webster, 2002; Klein, 2006; Wanless et al. 2007).

The writer became involved with the NHS in 1985, at a time when it was evident that the NHS was responding to wide ranging social and political pressures. In 1982, Norman Fowler had planted the seeds that led to ancillary support service Compulsory Competitive Tendering (Timmins, 1995; Kelliher, 1996). This was followed by Kenneth Clarke, then Health Minister, who advised Health Authorities in September 1982 that ancillary services would be openly tested for cost and the lowest bid accepted. A programme to rationalise hospital estates was being advanced in conjunction with organisational changes to improve utilisation, enhance productivity and reduce the cost burden to the taxpayer. The writer experienced the modernisation agenda first hand as a result of the *NHS and Community Care Act 1990* that created self-governing trusts. Timmins (1995) noted that the Conservative government reform agenda was to be as dramatic as the Beveridge welfare state changes that were instigated in the NHS in 1948.

Although embryonic, the relationship between public and private sector service provision had begun in earnest. This would, in due course, extend to the introduction of the Private Finance Initiative (PFI) in 1992. It might be suggested that my personal experiences some 20 plus years ago planted the seed corn for this research study.

PFI, a means of delivering capital infrastructure, is used to procure projects involving the supply of assets and services – including buildings – needed to deliver public services (NAO, 2003). In essence, there is nothing new about the NHS requirement for buildings: after all, the NHS has required accommodation and services since its inception in 1948. A key change is how new buildings and services are provided. During the past decade, the procurement of buildings through PFI has largely replaced direct public sector provision.

PFI has transferred the provision of long-term buildings and ancillary service provision to the private sector through contracts whereby an annualised payment stream is made to the private sector against defined criteria and levels of performance. The costs for contractual periods, typically 25 years but in some cases up to 60 years,

are known at the point the financial liability is taken under contract by the public sector.

It has not all been plain sailing; PFI has not been universally welcomed or liked, especially by some clinical bodies and trade unions. However, it has been used as a vehicle for providing almost 600 projects (HM Treasury, 2007) and, continues to play a small but important part in the modernisation of public services (HM Treasury, 2006).

This study uses PFI within the NHS as the contextual setting. It explores the behaviour and use of cooperation mechanisms within the relationships formed between the public and private sector managers, who are responsible for the provision of new hospitals and the delivery of a wide range of support services. The introduction and literature review establish the background to NHS reform within a broader context, before dealing with the wider issues of relationships, individuals' values and cooperative behaviour that are so central to this study.

PFI contracts signed today have the potential to provide a health care delivery environment for almost as long as the NHS has existed to date. This is no small achievement in itself. People from all sectors need to combine their talents and experiences to ensure outcome success. As public services continue to reform, perhaps the debate should no longer be one relating solely to the econometrics of a deal and the marginal value delivered by PFI, but rather to the development of an environment reflective of the underlying themes of a 'Third Culture', as promoted by Useem et al. (1963, cited in Chen et al. 1998) some 40 years ago. It is hoped that this exploration of one small part of the changing nature of the relationship between the public and private sectors will add to the body of literature available today, and offer a balanced view within the plethora of economic works on the topic.

The introduction contains parts A1 and A2, which establish the frame for the subsequent chapters. In part 2 the NHS is discussed, together with the influence of PFI, and how it works and what it sets out to deliver. It is not intended to be a cited text, however: where it has been felt by the writer to add support, the occasional reference has been used.

CHAPTER A1: INTRODUCTION

The NHS has a long-standing track record of developing relationships with many organizations, which have been instrumental to the delivery of the overall patient care environment. Since its inception, the NHS has experienced periods of reform and modernisation (Webster, 2002). This has included, in more recent times, the development in the early 1990s of self-governing trusts, and the creation in 2002 of foundation trusts by Alan Milburn, who was then Health Secretary. These changes are resulting in an altered relationship dynamic at many interfaces, including between the employee and patient, and more generally between the public, private and voluntary sectors. It is this changing relationship dynamic that creates the impetus for the research.

A1.1 The Changing NHS

Successive governments continue to struggle with the increasing demands being placed on the National Health Service. During the 1980s, the Thatcher government initiated processes seeking increased efficiencies in the public sector, including compulsory competitive tendering and market testing. In 1992, the Major government introduced the Private Finance Initiative. Throughout this period, the aim was to bring about the creation of an internal market place to drive the efficient use of scarce resources through the wider use of the private sector in the delivery of 'non-core' services (Grimshaw et al. 2005a).

However, since its inception in 1992, PFI has been extended beyond economic infrastructure projects, including road and transport, to the provision of social infrastructure projects, including education, prisons and health. While early health sector PFI focused on the provision of small acute and community units, it now includes the provision of major hospital facilities. In effect, access to capital for health development is increasingly seen as restricted to the private sector market place. To date some 185 health projects have been completed within the context of some 600 PFI projects across all sectors (HM Treasury, 2007; NAO, 2007a,b).

The tensions resulting from PFI have been very evident, most notably within the medical professions and unions, where the mantra continues to be that it is back door privatisation of public services. There has also been concern within the health service

about the current and future role of PFI, as an increasingly wide range of services are included within its scope.

It is posited that long-term success will be influenced by the relationships created between the sectors and individuals. In some instances, the strong contracting and commercial backgrounds of provider teams (construction and service delivery operations), may result in tensions being created during project development, deal finalisation and on into the operational phase. These tensions may be exacerbated by the memory of early projects, in which the private sector lacked understanding of how the public and private sectors would jointly operate (Ghobadian et al. 2004); in effect the ethos, culture and motives of both sectors were poorly considered and little understood. Health PFI has now passed its first decade and employees from both sectors have moved across the public/private sector boundary. Public sector project managers in some instances may have worked in the private sector, while private sector project managers and teams may have worked in direct public service provision. This will potentially dilute sector differences.

A1.1.1 Outline of a private finance initiative

PFI's are long-term contractual relationships between the public and private sectors for the provision of services and related assets, e.g. hospitals, in which the day-to-day delivery of services to the public sector is managed through a performance and payment system linked – under contract – to the provision of buildings and services.

In PFI projects, a team is drawn from the public and private sector organisations that together undertake the contract. These teams are led by a project leader from each of the two sectors, and, directed by a small group of senior managers, the two leaders are responsible for operational and contractual performance. A PFI can undertake the design, build and operation of a hospital, and, most importantly, manage the provision of finance. The public sector specifies what is required within a broad output-based specification, leaving the private sector free (within certain constraints) to propose how best to meet the service requirements. The PFI determines what overall facilities are required to deliver its operations, in this case health care. The private sector designs and builds the building, raises the capital, and generally delivers a range of support services for a predefined term, referred to as the concession period.

The key stages of a typical project are outlined below in figure A1.1.1.

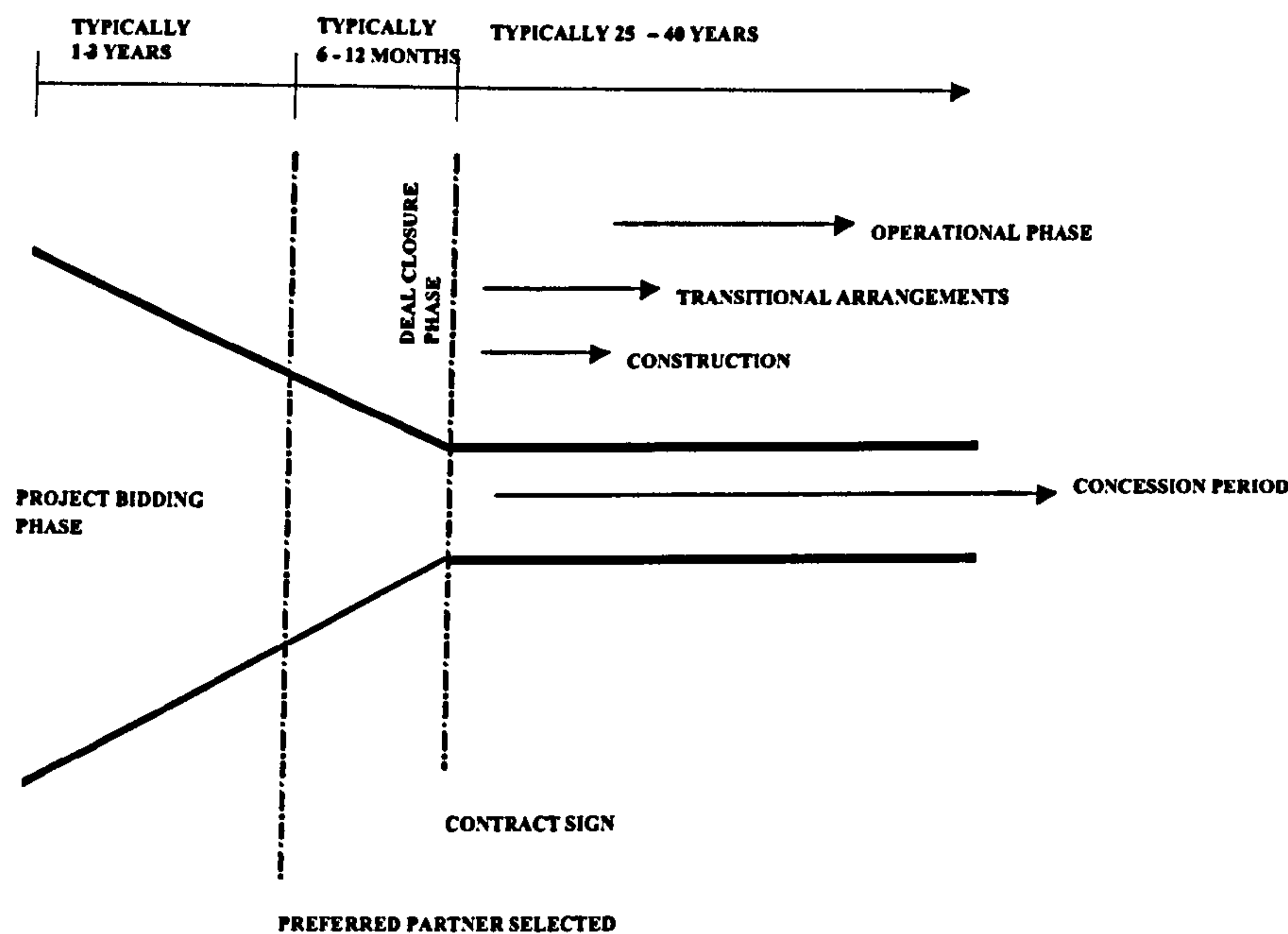


Figure A1.1.1: Stages in the delivery of a Private Finance Initiative project

- **Business justification:** includes a statement of strategic need by the public sector in response to changing health demographics, asset requirements and operational changes, resulting in a business case stating the costs for the public sector to deliver a long-term solution;
- **Bidding and development:** includes an open market competition where design, operations and commercial proposals will be developed through a negotiated procurement process, in line with European Union guidelines;
- **Selection of a Preferred Partner:** following a market competition, a bidder is selected and exclusive negotiation can take place prior to the signing of the contract by the awarding authority;
- **Concession period:** following negotiation, a contract will be awarded to the bidder for a term of typically 25 years; but in some instances liabilities may continue for 60 years.

A1.1.2 Simplified PFI model

Typically, a health sector PFI would:

- Deliver a project through a Special Purpose Company (SPC), a legal entity created by the private sector;

- Commit to a project length (concession period) of typically 25 years;
- Receive a stream of payments from the public sector against criteria associated with the availability of assets and the performance of services;
- Manage transitional arrangements regarding the existing estate, including land acquisition and disposal, demolition, decanting and interim service provision;
- Transfer staff from the public to the private sector under Transfer of Undertaking and Protection of Employment Rights (TUPE) legislation;
- Provide non-clinical support services to new and existing facilities;
- Maintain and replace the asset(s) during its life to a previously agreed standard, through a predetermined maintenance reserve fund;
- Hand over the asset(s) to the public sector, for a charge agreed at the contract stage, at the end of the concession period.

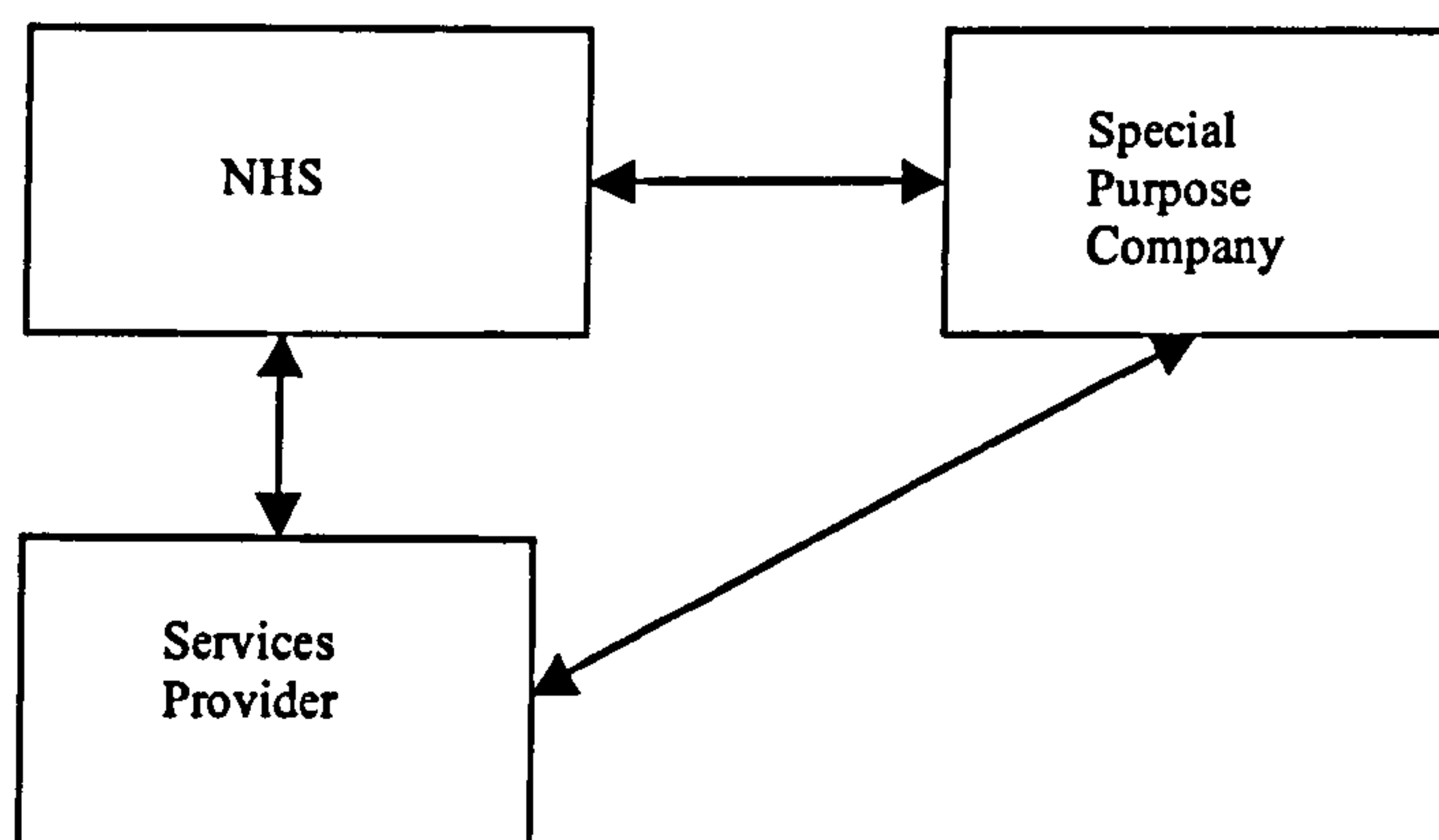


Figure A1.1.2: Simplified Private Finance Initiative relationship model for health

A1.1.3 Relationships and influences

PFI projects create a number of interfaces between the public and private sectors, some formal and contractually governed, while others are informally structured between individuals. At a project level, the NHS and the private sector come together to manage strategic, commercial and overall performance matters, while individual day-to-day relationships are created to manage service delivery. Project teams, comprising employees from the public and private sectors, have operational obligations associated with overall delivery, and are managed at the boundary by personnel from both sectors. It is suggested that good relationship behaviour and cooperative interaction between project leaders and management teams are key features to the ongoing successful delivery of a PFI project.

A1.2 Study Focus

Considerable research has been undertaken concerning the economic, financial and commercial performance of private finance initiatives. Much less research, however, has been undertaken regarding the social and behavioural consequences and whether PFI actually works at a practical level. This study examines a number of the largest schemes within the NHS and focuses on the project leaders and senior managers in order to consider how a person's values orientation influences the use of behavioural cooperation mechanisms.

The research programme initially commenced as an in-company based study analysing three major health projects. When the writer left the sponsoring organisation and one project withdrew, the opportunity arose to widen the scope of the study. Subsequently, four additional projects were added to the study. The six projects were selected because of size, complexity and capital cost, ranging from £80m to in excess of £400m; relevant project attributes are noted in table A1.2(a) below. For commercial confidentiality reasons the projects have been referenced A through F; respondents within projects are alpha numerically referenced.

	Projects					
	A	B	C	D	E	F
Relative capital values	1.2	1.2	1	3	2	4
Project relationships (years)	3-4	3-4	4-5	3-4	2-3	5
Public sector team members	1	2	3	2	2	3
Private sector team members	3	3	2	3	2	3

Table A1.2(a): Project attributes

A summary of the project respondents now follows in table A1.2(b) below. This gives the following details for each respondent: (i) their status within each project, and (ii) their public or private sector employment status. The respondent reference has been subsequently used throughout the document for data collection, analysis and reporting of findings.

Project	Respondent	Project Leader	Sector	Long-Term Pu	Long-Term Pr	Moved from Pu to Pr
A	30	*	Pr		*	
A	28	*	Pu	*		
A	39		Pr	*		
A	29		Pr		*	
B	48	*	Pr		*	
B	31		Pu	*		
B	25		Pr			*
B	32		Pr		*	
B	27	*	Pu	*		
C	36		Pr	*		
C	37		Pu			*
C	45	*	Pr			*
C	35		Pu	*		
C	46	*	Pu	*		
D	3	*	Pu	*		
D	11		Pu	*		
D	7		Pr			*
D	4	*	Pr			*
D	8		Pr			*
E	34	*	Pu	*		
E	40		Pu	*		
E	47		Pr		*	
E	41	*	Pr		*	
F	1	*	Pr		*	
F	17		Pr		*	
F	5	*	Pu	*		
F	13		Pu	*		
F	14		Pu	*		
F	12		Pr		*	

Notes to accompany table
1. Pu indicates Public Sector; Pr indicates Private Sector
2. There are no Pr to Pu sector transfers

Table A1.2(b): Respondent attributes

It is acknowledged that the employment status of both the project leaders and their sub-ordinates may be considered to be an influencing factor in terms of the way a project is negotiated to financial close, and that this could have longer term implications and create liabilities. During PFI project implementation it is usual for employees to transfer between the public and private sectors, as services migrate during the implementation of the project. While no respondents concerned with these projects transferred during the period studied, two respondents - C45 and D4 - had previously moved from long-term public service to the private sector. Respondent C45 was not involved with the project negotiations or financial close but joined the project during the transition phase. Respondent D4 moved from long public service to

the private sector prior to being involved in the negotiation of the project, and has maintained the association between sectors.

A1.2.1 A problem to research

The writer has observed a number of projects from inception, through development and into the operational phase. Some apparently operate smoothly and successfully, while others suffer from what can simply be called relationship difficulties; some people just don't get along. Why?

It is asserted that some relationships operate better than others because of values similarity between one person and another. When people share values, this contributes to the individuals' cooperative behaviour towards each other by positively influencing the use of cooperative mechanisms.

A1.2.2 Literature that supports the assertion

The boundary between the public and private sectors continues to be redefined by successive governments, requiring both sectors to learn new relationship skills at an organisational and individual level (Grimshaw and Hebson, 2005). McQuaid (2000) asserts that interaction requires, among other skills and attributes, voice equality, enhanced communication processes and joint understanding of each other's long-term needs, aspects of behaviour that are encountered by individual project leaders. Closer values alignment leads to increased relationship cooperation, while differences can contribute to increased levels of relationship conflict. A person's values orientation therefore contributes to an individual's behaviour (Chen et al. 1998), influencing cooperation towards another within a role-set environment (Katz and Kahn, 1966). Opportunity exists to potentially meld the sectors as jobs move between public and private sector organisations. Koch and Johnson (1997) note that repeated boundary interaction enhances cooperative behaviour, potentially creating a 'Third Culture' (Useem et al. 1963, cited in Chen et al. 1998).

It is therefore suggested that the literature supports the assertion that individuals' values orientation influences the use of behavioural cooperation mechanisms in public and private sector relationships. The research aims, which are stated below, and the objectives encompassed in the research questions, which are outlined in section A1.2.4, have been established to examine these issues in further detail.

A1.2.3 Research aims

A review of the literature concludes that public and private sector relationship reforms are influenced by boundary redefinition and collaborative relationship development. The interface between the public and private sectors occurs when they are required to interact and jointly manage different demands created by organisations and individuals that are embedded in the different sectors. Project leaders experience relationship tension due to the different types of ethos that are found within the public and private sectors: the ethos of the public sector is embedded in values of probity and accountability, while the ethos of the private sector is more concerned with shorter term profit maximisation. By combining the skills and competencies of the public and private sectors within collaborative working arrangements and practices, there is potential for well-managed public services to be delivered.

Relationships between public and private sector individuals – how they behave and interact – are important, as they shape and modify the inter organisational relationships that are created in PFI projects. An individual's values orientation influences the use of behavioural cooperation mechanisms, which in turn affects relationship behaviour.

By applying the values and cooperation mechanism literature to this research setting, this study aims to examine how behavioural cooperation mechanisms are influenced by individuals' values orientations within joint public–private sector relationships.

This study is not concerned with subjective accounts and it assumes that differences in values orientation can be objectively measured through recognised instruments. The questions stated below are developed in the context of the literature review contained in chapter B.

A1.2.4 Research questions

Given the requirements of the study, data will be collected from public and private sector employees who are involved in the joint delivery of PFI projects.

Research question 1: to (i) determine the values orientation of respondents and (ii) compare the values orientation of the public and private sectors.

Research question 2: to (i) elicit constructs from respondents and allocate these to the *a priori* cooperation mechanism categories (trust, accountability, group identity,

super-ordinate goals, communication channels and rewards); (ii) determine the relative importance of the cooperation mechanisms for respondents, and (iii) examine the relationship between the achievement values domain and super-ordinate goals.

Research question 3: to focus specifically on public and private sector project leaders, in order to examine the relationship between their values orientation and (i) their preference for short and long-term goals, and (ii) their personal or collective oriented goals.

Research question 4: to examine the relative importance of cooperation mechanisms in guarding against short-termist behaviour in relation to the values orientation of the public and private sector project leaders.

Research question 5: to (i) examine the relationship between the values orientation of the public and private sector individuals and the elicited constructs of the *a priori* group identity cooperation mechanism category and (ii) examine the extent of public and private sector role-set formation within each project.

A1.2.5 Research contribution

A doctoral study is required to make an original, independent contribution to knowledge. In addition to this, and as distinct from a PhD, a DBA is required to make a contribution to both academic and business communities. In recognising these dual objectives, the aims of the study and research questions are to contribute to: (i) academia, by applying existing theory and methods to a new public and private sector relationship setting, and (ii) business practice, by investigating the relationship between the public and private sectors, specifically public private partnerships and PFI in the NHS.

In the business context, the importance of relationships between the public and private sector are examined. The relative importance of different cooperation mechanisms, which are used by individuals to influence behaviour in relationship engagement, is established. Project leader preferences for shorter- or longer-term goals, together with their bias towards personal or collective oriented goals, will inform the nature of goal setting within the public and private sectors.

The relationship between individuals' values orientation and their use of cooperation mechanisms, which help to guard against short-termist behaviour, is explored; this

will inform the potential dissonance between shorter-term business cycles and the very long-term nature of PFI projects.

Finally, the similarity between individuals' values orientation is examined, and the extent of the similarity is considered in the context of the potential to establish collaboration and cross sector relationship working.

A1.3 Thesis Plan

The thesis has been presented in discrete parts to assist the reader. Following the preface, chapters A1 and A2 introduce the study and the private finance initiative. Chapter B deals with the literature relating to the wide body of work concerned with relationships, values and cooperative behaviour. In chapters C1 to C4 the research methodology is presented, including sections on the research design and data collection and analysis. Chapter D presents the research findings after which, in part E, the concluding discussion, limitations of the research and opportunities for further research are presented. Appendices and a reference list are included after chapter E.

A1.3.1 Chapter plan

Where required, the thesis is separated into chapters. Part A contains two chapters. Chapter A1 contextualises the changing National Health Service, outlines the structure of a private finance initiative project and the relationships that are formed, and describes the study focus and objectives. In chapter A2, the literature associated with the evolution of the NHS and the creation of the private finance initiative, including its application to the National Health Service, is considered. Chapter B reviews the literature associated with inter organisational relationships, the role of boundary spanning persons, and the nature of values and relationship cooperation mechanisms, and relates this literature to private finance project environments. Chapter C1 contains the research framework, the ontological issues and the theoretical framework, objectives and research questions; chapter C2 considers the research design; chapter C3 is concerned with data collection; chapter C4 concludes with the data analysis methods. Chapter D discusses the research findings. The final chapter E contains the overall study conclusions, limitations and areas for further research.

CHAPTER A2: APPLICATION OF THE PRIVATE FINANCE INITIATIVE IN THE NHS

A2.1 Introduction

Chapter A2 provides an overview of the development of the private finance initiative since its inception in 1992 and, in particular, its application to the National Health Service (NHS) in England. It provides a background and context for the literature review contained in chapter B, which examines the role of boundary spanning persons, and looks at individuals' values orientation in terms of the influence this has on behavioural cooperation mechanisms.

The overview does not purport to provide a comprehensive review of the evolution of the NHS, the complexity of socio-political influence or the wider application of private finance initiatives, but serves to demonstrate that the issues to be investigated are relevant. For a broader review of the issues, the reader is directed to the works of Timmins (1995), Webster (1988), Powell (2003), Ghobadian et al. (2004), Paton (2006) or Klein (2006), as examples of the wide-ranging commentary and analysis that is available. However, it does consider aspects of the chronology of change within the NHS, how years of low levels of investment created some of the conditions for private financing solutions, and how PFI still remains a small, but important, part of the government's modernising of public services agenda (HM Treasury, 2006; 2007).

As the relationship of PFI to public private partnerships (PPPs) is of importance to this narrative, it is considered worthwhile to define the two concepts below, before returning to discuss the NHS and PFI in further detail. The chapter concludes by stating that relationship behaviour between public and private sector counterparts in PFI projects is an important factor associated with cooperation and long-term performance.

A2.1.1 Defining a private finance initiative project

PFI, as a specific form of public private partnership, has been extensively described; however, the definition provided by Allen (2001: 10) amply covers the scope of this discussion. 'PFI involves the transfer of risks associated with a public service project to the private sector, either in part or full. It differs from privatisation in that the

public sector retains a substantial role in PFI projects, either as main purchaser of services or as the essential enabler of a project. It also differs from contracting out, in that the private sector provides capital as well as services'. This definition can be expanded by referring to Corry et al. (1997: 15), who provide further clarity by noting, 'that the services provided by the private sector are carried out under contract, while also providing the finance to construct and operate the facility for a period of years, in return for a stream of payments from the public purchaser – often over thirty years or more'.

A2.1.2 Defining a public private partnership

PPP is defined by Corry et al. (1997: 13) as an arrangement whereby a public service is delivered in co-operation with the private sector, combining, as noted by Ferlie et al. (2007), the resources of government and those of private agents to meet societal goals. As a hybrid organisational form, Paton (2006: 113) asserts that PPPs move beyond the purely contractual relationship of PFI, requiring greater cross sector alignment in terms of incentives and a culture that enhances collaboration. Financing for ongoing operations, debt repayment and investment may be provided from either the public or private sectors, whereas PFI – as one form of PPP (Kelly, 2000) – requires finance for investment and ongoing operations to be provided by the private sector.

A2.2 Foundations of the Welfare State

The foundations of a national health service lay in an array of 19th and early 20th century voluntary hospital and public authority provision that can be traced back to the first Public Health Act of 1848 (Webster, 2002; Ham, 2004). Although the NHS is a product of post-war optimism (Timmins, 1995), the genesis of the modern welfare state is to be found in the social welfare reforms contained in the *Beveridge Social Insurance and Allied Services* report published on 1 December 1942 (Cmnd 6404), which considered five giant programmes of welfare reform that included social security, health, education, housing and a policy of full employment. The report (idem) was founded on three guiding principles: (i) that while the experiences of the past should be a guide for future action, they should not be a constraint (Beveridge commented that as the war had removed landmarks of all kinds, this was a key moment in the world's history, which required revolution and not patching); (ii) that it

should attack Want in such a way that social security should become one part of social progress, and (iii) that social security should be achieved through cooperation between state and individual.

By the spring of 1943 the government had moved reform plans forward, resulting in the publication of the 1944 white paper *A National Health Service* (Cmnd 6502). This contained two underlying principles: first, that the NHS should be comprehensive, providing advice, treatment and care when needed, and second, that the service should be free to the public at the point of use. However, the battle to create the NHS had scarred the relationships between the political parties, the British Medical Association (BMA) and the Royal Colleges (Timmins, 1995; Webster, 2002), which created a long-term legacy of mistrust within the medical profession, and between the BMA and the Labour Party, which would last for many decades. Central to the BMA's challenge were concerns that professional independence would be removed and status reduced, with salaried positions being likened to civil servant posts. Aneurin Bevan – the post-war Labour Health Minister and architect of the NHS – needed a sop, resulting in concessions to NHS employment: this would be in accord with private practice, and the status of doctors would not become that of salaried civil servants. Following the 1946 National Health Service Act (England and Wales) (Timmins, 1995), opposition to the National Health Service all but evaporated, resulting in the NHS opening its doors in July 1948. At the time, Bevan stated that this was to be the biggest single experiment in social service that the world had ever undertaken (Timmins, 1995: 101; Webster, 2002).

A2.2.1 A legacy of long-term under-investment

A child of its time, the NHS started life in a period of post-war austerity. Poor financial planning from the outset contributed to the service being in financial difficulties within months (Timmins, 1995), a legacy that has continued to dog its performance (Williams, 1998; The King's Fund, 2002; Stevens, 2004; Klein, 2006). The optimistic view in the early years, of a self-funding service balanced against increasing public health, never materialised; in fact the opposite happened, as demand quickly exceeded supply due to factors including an aging population, new technologies and better drugs (Timmins, 1995); Enoch Powell, a former Conservative Health Minister, claimed in 1966 (Timmins, 1995) that the NHS was a bottomless money pit, with infinity of demand.

The NHS has endured a variable investment climate; in its 'golden years' (as Webster called them (2002)) during the 1950s, there was consistent planning and investment, and annual real term growth, until the effect of the 1973 oil crisis was felt in the economy. The investment picture has been variable ever since, with severe cash crises and negative growth in the late 1970s (Klein, 2006), and consistently higher levels of funding under New Labour than the four preceding Conservative governments (Emmerson et al. 2000). Investment peaked in real terms at over 7% of GDP from 2000 (Stevens, 2004; Maynard et al. 2007) to the financial year 2007/8, which, as noted by Thorlby and Maybin (2007), is twice the average investment during the previous 50 years.

The impact of the oil crisis brought a halt to the post-war period of public service expansion and expenditure growth (Ham, 2004), and there was a subsequent shift to a post-Fordist era (Ruane, 1997), with restructuring, de-regulation and decentralisation becoming the norm. The 1970s financial crisis in the NHS was brought into check by the Thatcher-led 1979 Conservative Government public service reforms (Timmins, 1995). The report of the 1979 Royal Commission (Cmnd 7615) stated that the NHS was wasting money, slow to respond and bureaucratic, and concluded that there is no universally acceptable method of establishing what the right level of investment in the NHS should be (Klein, 2006). As a result of the challenging economic conditions brought about by the 1979 to 1982 recession, NHS funding continued to stagnate in the 1980s. According to Webster (2002), public service financing was no longer seen as adequate to meet NHS needs, with demand continuing to outstrip supply. As one of the largest spending departments, the NHS was seen by the government as a greedy mouth to feed (Webster, 2002: 144), and this was out of line with the reform agenda of the times. Un-reformed, the NHS would prevent the Thatcher government objective of rolling back the state and expanding the market economy.

A2.2.2 The changing nature of the state

The public service reform agenda has been active for more than 20 years, from the decline of Public Administration in the 1970s, to the rise of New Public Management in the 1980s (Rhodes, 1996; IPPR, 2001; Bach, 2004), to what some consider a new paradigm of governance today (Ferlie et al. 2007; Paton, 2006). A consequence has been a radical restructuring of the nation state, a reduction in public enterprise and a

shift towards private and voluntary sector involvement in the delivery of public services (IPPR, 2001: 17; Ghobadian et al. 2004: 2).

The rise of global capitalism and the associated technological, societal and political impetus (Levy, 2006; Paton, 2006) create new demands and opportunities for state intervention. Two broad schools exist that represent the constraining or enabling view of the effects of globalism and neo-liberalism on domestic economies (Weiss, 2003; Levy, 2006). First, the constraining view, considered by Rhodes (1994; 1996) to be a hollowing out of the state, results in a loss of autonomy, independence and goal setting, and an inability to control domestic outcomes. For Weiss (2003: 308), who takes the second, enabling view, the changing nature of the state encourages various forms of 'governed independence' that are fuelling public-private partnerships under the auspices of state goal setting. This enabling view considers PPPs to be reflective of the government's ability to deepen ties with organised economic actors to pursue transformative projects (Weiss, 2003: 297), or to be a redeployment of state initiatives on behalf of new missions (Levy, 2006: 2). These positions can be summarised in terms of the extent of the influence of the state, rather than in terms of whether the role of the state is changing or not.

The post-war consensus for the welfare state (Bach, 2004) shifted focus as New Public Management introduced the competition state (Levy, 2006). The 'hyper-innovation' of the Thatcher government (Levy, 2006: 17) sought to break down club government and self-regulation: as Marquand summarised it in 1988, 'the atmosphere of the British government was like a club, whose members trusted each other to observe the spirit of club rules; the notion that the principles underlying the rules should be clearly defined and publicly proclaimed was profoundly alien' (p. 36). The Thatcher modernisation agenda set out to remove monopolistic and bureaucratic forms of the state (Beetham, 1987; Du Gay, 2000), by introducing private sector commercialisation (Bach, 2004; Ghobadian et al. 2004: 4).

The performance-oriented state based on management-by-objectives had arrived, self-regulation being replaced by centralist, direct state regulation. Paton (2006: 7) has suggested that the culture imposed by Thatcher and furthered by Blair's Third Way (Bach, 2004: 21), has created a culture of micro-management that is more evident today than in 1948. Both Bach, (2004: 47) and Paton (2006: 7) assert that the language of devolution embedded in New Public Management associates the state

with the notion of ‘steering and not rowing’. This is due to the separation of policy goals, which are set and monitored by central government, from delivery, which is devolved locally to separate agencies.

A2.2.3 Conservative-led reform

The Thatcher public service reform agenda was to have profound implications for the NHS. With the 1983 *Griffiths Report* (DH, 1984) came organisation and management reform (Bach, 2004), as well as questions such as was the NHS producing the right kind of goods of an adequate quality (Klein, 2006). Norman Fowler, Secretary of State for Health introduced cash saving limits, and performance indicators and manpower targets to challenge growing staff numbers (Timmins, 1995). The then Health Minister Kenneth Clarke also instructed Health Authorities to look at contracting out ancillary services and dispose of surplus land.

In 1990, the NHS and Community Care Act resulted in radical structural changes to the service that were seen to be as significant as the reforms of 1948 (Robinson, 1996; Webster, 2002): Thatcher introduced, in incremental steps, the degree of change that Bevan achieved with one piece of legislation. The reform agenda established the internal market and the purchaser-provider split (Ghobadian et al. 2004: 25), with the formation of the first wave of trusts in 1991 (Robinson, 1996). Decisions for NHS expenditure would, as a consequence, shift from the taxpayer and central government to a local level, and be end-user led. As noted by Powell (2003), the creation of a quasi-market place resulted in the state no longer being both the funder and provider of services. Instead, government moved to being primarily a funder, purchasing services from a range of public, private and voluntary sectors, all operating in competition with each other.

The NHS was simply not ready for the internal market and competition agenda: Klein (2006) noted that the impact of changes brought about by the earlier *Griffiths Report* (idem) were still being felt within the NHS. The shift from a management control philosophy to one based on negotiated contracts took until 1994 to implement, by which time the majority of self-governing trusts had been created. The internal market was to bring about a reversal of the provider-led structure that had existed since the inception of the NHS (Bach, 2004: 206), with the creation of one led by purchasers and geared to the needs of individual consumers. However, information asymmetry

meant that the providers retained service knowledge, and this resulted in the internal market becoming more of a managed market place. In time, under New Labour, purchasers would become commissioners, moving into the role of long-term planners, rather than short-term purchasing decision-makers, and preferring to make use of locally placed block contracts, rather than shopping around. The notion of patient-led funding did not materialise as originally conceived, and the anticipated free-for-all market place became, at best, locally regulated monopolies: (Ham, 2004; Klein, 2006); Robinson and Le Grand (1994, cited in Ham, 2004), among others, suggested that the internal market experiment had brought about only limited change in the service.

A2.2.4 The arrival of New Labour: a new investment climate

In 1997, New Labour inherited a climate of NHS under-investment from the outgoing Major government (Thorlby and Maybin, 2007). Entering government, New Labour was conscious that their commitments to increasing public sector expenditure had been partly responsible for their time in opposition (Webster, 2002: 210). It was therefore a 1997 manifesto pledge that public service spending would initially be maintained at the previous Conservative government levels, a commitment altered following the 1997/8 Comprehensive Spending Review (Klein, 2006). As noted by Webster (2002: 210), New Labour was very close to the previous Conservative government on three key policy fronts. First, they emancipated themselves from Labour's image as the 'tax and spend' option (Paton, 2006: 30). Secondly, they softened their opposition to the private sector, and this included embracing the private finance initiative (in particular Gordon Brown, see Peston, 2006). Thirdly, they kept what Le Grand (2003) referred to as a quasi-market place, with the retention of the purchaser (soon to be commissioner) and provider split.

With the publication of the *New NHS* white paper in 1997 (Cmnd 3807), a framework of excellence and partnership was established to replace the internal market. This was designed to harness the skills of the private and voluntary sectors in the delivery of public services, in order to promote accountability with regards to the needs of the user. The IPPR (2001) asserted that this was part of the transformation and development of the wider New Public Management agenda (PAC, 1998), which was concerned with issues including performance, efficiency, quasi-markets and competition. The Old Labour notion that collaborating with the private sector would

somehow contaminate the NHS was repudiated. New Labour had, as noted by Klein (2006), embraced a principle of plurality and diversity.

However, the removal of the internal market place was not to be interpreted as a return to 1970s centralist command and controls (Klein, 2006: 193), but represented a furtherance of Third Way politics – ‘pluralism without competition’ (Powell 2003: 734) – in that ‘what counts is what works’ (Ghobadian et al. 2004: 25; Paton, 2006: 147). The NHS was entering a phase of collaboration, planning, targets and audits – as distinct from the previous markets and competition phase (Powell, 2003; Bach, 2004; Stevens, 2004) – with the introduction of regulators and inspectors in the form of the National Institute for Clinical Excellence (NICE), the Commission for Health Improvement (CHI) and the Modernisation Agency, and with the Department of Health and ministers stepping back to a strategic decision making role.

The *NHS Plan* (Department of Health [DH], 2000) brought the NHS and private sectors closer together. Surplus capacity in the private sector was used to relieve NHS waiting list pressures, and the LiFT initiative was established to deliver £1bn of investment into the modernising of Primary Care premises (Klein, 2006). The 2003 *Health and Social Care Act* (HMSO, 2003) led to further expansion of private sector capacity, responding to increasing consumerism and a patient-driven service. Foundation Trusts, free of direct government ownership and intervention, were encouraged to become more accountable to the local populus (Stevens, 2004; Klein, 2006). The 2006 *Health Act* (HMSO, 2006) is redefining the role of the Healthcare Commission and Monitor, with transaction reforms, including payment-by-results, and better activity information to assist commissioners, and regulatory reforms.

The reform agenda continues, although Palmer (2006) considers the current situation to be a case of too little reform, too late, rather than too much reform being introduced too quickly. NHS funding, as stated by Hewitt (Carvel, 2007) when she was Health Secretary, has risen in real terms from £34bn in 1997, to more than £90bn in 2007/08. The substantial funding increase has brought improvements to some areas of service provision (Lewis and Dixon, 2005) and there has been a much needed balancing of budgets (Palmer, 2006). However, Klein (2006: 225) notes that performance has been patchy, with patient services often being delivered to satisfy the needs of the deliverer, rather than those of the patient.

The widespread NHS budget deficit of £512m of 2006/7 (Maynard et al. 2007), when combined with changes to NHS accounting policies, will result in a tightening of the spending regime between 2008 and 2010 (DH, 2006; Palmer, 2006; Thorlby and Maybin, 2007). Due to the context of devolution and service decentralisation, the current government – for example in the white paper *Our Health, Our Care, Our Say* (DH, 2006) – only makes passing comment about the PFI cost legacy issue now residing with Trusts (Paton, 2006; Maynard et al. 2007). The increased capacity will overlap with existing NHS services and, when combined with the impact of patient choice (Paton, 2006: 127), is likely to result in a declining need for new hospitals (Palmer, 2006; Timmins, 2007). Trusts will be required to deliver productivity gains, in response to a constrained financial climate, but contractually it will be difficult to dispose of PFI acquired hospitals. Pressure may result in better use being made of PFI assets – particularly those in the acute sector – but potentially at the expense of existing NHS services and facilities (Palmer, 2006), and at a time when the Department for Health (2006) is indicating that service provision will continue to shift from the acute to the primary care sector. Over capacity, for example in the education sector, has resulted in the closure of Balmoral High School in Northern Ireland due to declining pupil numbers, with the school board resigned to 20 years of unitary payments (Gainsbury, 2007).

A2.3 A Changing Relationship

Despite considerable interaction between the NHS and the private and voluntary sectors over many years (Select Committee on Health, 2002), there has to some extent been a standoff between the public and private sectors for decades (DH, 2000). In order for more people to be treated in the context of tightened financial constraints, and within a patient-driven NHS, Klein (2006) suggests that closer working relationships between the public, private and voluntary sectors are required: this is a position that could in some ways be considered to reflect the model of welfare provision prior to NHS formation. The increasing pressures on scarce public sector investment require health service provision to be considered in terms of final outcome and value contribution to society (IPPR, 2001: 15; Sachdev, 2001: 27), and less on whether the service is provided directly by any one particular sector (Kelly & Whittlestone, 2000). With its roots in the work of Hayek and Friedman – who postulated the benefits of market mechanisms over public administration – contracting

has become the preferred government instrument to advance public sector reform (Domberger, 1998; Colling, 1999; Carroll and Steane, 2000; Marchington et al. 2005a). The implication is that the public sector will focus on the provision of core functions (IPPR, 2001; Sachdev, 2001), leaving the private sector to deliver supporting services more efficiently and cost effectively through an open market (Broadbent and Laughlin, 1999).

A2.3.1 Blurring the sector boundary

Contractual relationships for public service provision have resulted in a blurring of the boundary between the public and private sectors (Sachdev, 2001; Marchington et al. 2005a; Ferlie et al. 2007), something New Labour consciously pursued by developing alternative forms of PPPs (Ruane, 1997). This reflects a movement towards networked and hybrid organisational forms and away from state controlled monopolies (Marchington et al. 2005a) – although Paton (2006: 149) suggests that the ‘managerialism’ in the NHS may be considered the ‘new bureaucracy’. Sturgess (1993, cited in Domberger, 1998: 29) posits that in time it will become increasingly difficult to distinguish between services provided by the public or private sectors; this is a phenomenon regarded by Pollock (2005) as a gradual unbundling of public services, and by Paton (2006) as centrally imposed marketisation and privatisation of provision.

Boundary blurring potentially creates a situation in which public and private sector motives will come into conflict. As suggested by Ferlie et al. (2007: 361), the drive for efficiency and effectiveness, as embedded in the profit driven private sector, may clash with the bedrocks of probity and accountability that exist within the public sector. Domberger (1998) suggests that the longer-term benefits of contracting will only be delivered through relationship cooperation, as opposed to the negativity of a spot transaction mentality. Boundary change requires greater contractual structure flexibility in order to be sensitive to the variations and differences in the distribution of knowledge and trust between purchasers and providers (Colling, 1999; Allen, 2003). Deakin (1994, cited in Corby and White, 1999) asserts that, over time, inter sector dependence may develop into a constructive partnership, such that the public sector increasingly becomes reliant on the private sector to supply up-to-date information about public services, and advise on what should be done to maintain them. However, as noted by Corry et al. (1997), the consequence of increasingly close

relationships is that scarce public sector knowledge may be lost, or transferred to the private sector. Information asymmetry makes it increasingly difficult to monitor and assess service provision: consequently, high quality monitoring and governance arrangements may be a requirement in long-term PPP relationships.

The shift away from public services being delivered through an internal administrative hierarchy (Paton, 2006) enables not only a separation of function, but introduces a contractual ability to levy penalties against a services provider for under performance. Although, as noted by Gaffney et al. (1999c), contractual penalty does not, of itself, ensure sustained efficiency of public service provision.

A2.4 The Role of PFI

Prior to PFI being introduced in Chancellor Norman Lamont's 1992 autumn statement (Broadbent and Laughlin, 1999; Boyle and Harrison, 2000a; Ruane, 2002), private sector investment in public services was governed by what are known as the Ryrie rules, which were prepared by the Treasury Select Committee that was chaired by Sir William Ryrie (Fox and Tott, 1999; Broadbent and Laughlin, 1999; Allen, 2001; 2003). The rules established criteria under which private finance could be introduced into nationalised industries (Ghobadian, 2004: 3). The underlying principles were such that (i) investment decisions should be taken in the context of fair competition and (ii) projects should yield benefits in terms of improved efficiency – i.e. the same or better services more cost effectively – and (iii) profit from the investment should be commensurate with the cost of raising risk capital in financial markets (Allen, 2001: 13).

Before PFI, the private sector had been involved in public service provision through Compulsory Competitive Tendering (CCT), Competing for Quality and Market Testing. From 1982 to 1983, health sector ancillary services were opened up to competition, and this would later be widened, initially into the ancillary services and subsequently white collar areas of local government, following the *Local Government Acts* of 1988 and 1992 (Ruane, 1997; Sachdev, 2001; Webster, 2002). In 2000, under New Labour, the Best Value initiative replaced CCT in local government.

Attempts to increase public sector efficiency had involved an increase in levels of partnership with the private sector – a 'hollowing out of the state' as labelled by Rhodes (1994; 1996), although this position is not universally accepted (see Weiss,

2003; Levy, 2006). This created market-based relationships that supported greater private sector expertise and managerial involvement. As previously noted, the public to private sector interface was to become enshrined in contract (Deakin, 1994 cited in Corby and White, 1999), with the public sector acting as purchaser and customer, and the private sector taking the role of transferred staff employer and provider of support services (Colling, 1999; Wright, 1998). The core objectives of this were to improve service delivery while reducing costs (Falconer and McLaughlin, 2000; Paton, 2006).

PFI sidestepped the issue of public service privatisation, while satisfying the Conservative ideology of bringing greater private sector involvement, innovation and creativity into the delivery of public services to improve efficiency (Broadbent and Laughlin, 2001). New hospitals could be privately financed where value for money was demonstrated, and terms of employment maintained, while keeping within government spending limits. As argued by an NHS Executive publication *Public Private Partnerships in the National Health Service: The Private Finance Initiative* (NHS Executive, 2007: 3), 'PFI is a key policy for improving the quality and cost-effectiveness of public services. It enlists the skills and expertise of the private sector in providing public services and facilities. It is not simply about the financing of capital investments, but about exploiting the full range of private sector management, commercial and creative skills'.

A2.4.1 PFI redefined under New Labour

Ideological gaps between the Major and Blair governments regarding PFI were small (Grout, 1997; Corry, 2002, 2003): partnership would become a guiding principle of New Labour, the government developing a business-friendly posture (Kelly, 2000) towards the private sector, believing that the vitality of commerce could be brought to improving public services (Ghobadian et al. 2004). This was reflected in the Labour party manifesto statement (Labour Party, 2001: 11): 'where the private sector can support public endeavour, we [New Labour] should use them. A spirit of enterprise should apply as much to public service as it does to business.'

The New Labour stance on PFI had softened considerably from that in opposition. PFI was embraced (Webster, 2002; Grimshaw and Hebson, 2005) as a way of reversing the dramatic cuts in health spending inherited from the Major government, while forging new relationships with the evolving private services sector (Kelly,

2000); Paton (2006: 80) referred to PFI as a private-public sub-government. As noted by Emmerson et al. (2000), real growth in expenditure had run at circa 2.5% for the previous five years, and this was well below the long-term average of 3.4%, and only marginally above the 2% level of the late Thatcher years (Clark et al. 2001; Thorlby and Maybin, 2007). Wanless et al. (2001; 2002; 2007) reported at the time that UK health expenditure had fallen behind other EU economies (Bach, 2004: 27). It needed to exceed 7.7% (in real terms) of GDP in 2002/3, and needed to rise to more than 10% of GDP by 2022/3.

As a principle of New Labour politics (Giddens, 1998), PFI was portrayed as a way to reverse years of capital under-investment. PFI was to be at the heart of the largest NHS new building programme advanced in 2000 by Blair (DH, 2001a; Clark et al. 2001; Webster, 2002; Thorlby and Maybin, 2007). Jones (2000: 1460) noted in the *British Medical Journal* (BMJ) that Alan Milburn had dubbed PFI 'the only game in town'. The government stated that private financing brought a number of benefits by comparison to traditional public sector procurement (Thorlby and Maybin, 2007), including the quicker delivery of projects within tighter financial constraints. However, these purported benefits were not universally accepted, as noted by Gaffney et al. (1999a): increases in borrowing rates were not offset by lower operating costs, as compared to traditional public funding.

New Labour quickly sought to redefine PFI, moving away from the Conservative's preoccupation with the allocation of roles within the public and private sectors. Whereas the Conservative government saw PFI as being central to advancing private sector involvement in public service modernisation, New Labour viewed PFI as being just one of several ways to establish public private partnerships (Fox and Tott, 1999, Ruane, 2002; Webster, 2002), vowing to resolve concerns with PFI and advance new models of partnership to benefit the NHS (HM Treasury, 2006).

Chancellor Gordon Brown introduced the 'golden rule' as one of two fiscal measures that established a limit on public sector investment, and stipulated that borrowing should result in the provision or replacement of a public asset. PFI was firmly re-established under a new PPP umbrella, in which private sector investment was not a necessary pre-condition for advancing the relationship between the public and private sectors in the delivery of public services. The impact of the Bates review of health PFI projects in 1997 (Gaffney et al. 1999a; Boyle and Harrison, 2000a; Bell, 2002)

resulted in twenty-nine key recommendations to improve structure, process, project learning and the cost of procurement. Assessment against new criteria, together with legislation change, including the NHS Residual Liabilities Act 1996 and the NHS (Private Finance) Act 1997, widened the application of PFI, with the first deal in the health sector at Norfolk and Norwich NHS Hospitals Trust being signed in 1997.

When PFI was introduced in 1992, decades of under-investment in infrastructure had resulted in an estate repairs backlog of circa £3bn by the time New Labour came into government in 1997 (Wanless et al. 2001; 2002; HM Treasury, 2006). As noted by Wanless et al. (2007: 20), this has continued to rise over the period 2000 to 2005 by a further 20%, rather than decline by 25%, as anticipated at the time of the 2002 review. The NHS has relied on an increasingly overburdened building stock unsuited to either the needs of modern patient care or the practice of modern medicine (Boyle and Harrison, 2000a). Over one third of NHS buildings were built before 1948 and a tenth before 1900, a time ‘when the cutting-edge of ward design was led by Florence Nightingale’ (DH, 2000: 1). By the end of 2006, PFI investment had led to some 600 projects being either signed or operational (NAO, 2007a,b; HM Treasury, 2008). This represents some £57bn of capital investment (HM Treasury, 2008), with more than £43bn of this implemented since the 1997 Bates review; health accounted for some £8bn, making it the single largest departmental user of PFI. It is estimated by HM Treasury (2006) that by 2010, total PFI commitments will have grown to circa £200bn.

In delivering a large number of new hospitals quickly, in order to replace and renew outdated building stock (Thorlby and Maybin, 2007), PFI has assisted in the reform and modernisation of public services, while transferring the responsibility for long-term financial obligations from central government to local NHS Trusts. However, Sussex (2002) has noted that PFI does not, in itself, address the efficiency of allocated resources to meet changing health demographic needs. For some (Ruane, 1997; Pollock et al. 2002; Ham, 2004), there has been a long-standing concern that PFI has been responsible for destroying a cohesive approach to health provision in England and creating long-term lock-in legacy cost-exposure and inflexibility within the health service. As noted by Klein (2006) in the 2001 white paper *Our Health, Our Care, Our Say*, (Cmnd 6737), yesterday’s policy solution is becoming tomorrow’s policy problem. This echoes the Wanless et al. (2001; 2002) review, which expressed

concern that the government's policy of that time was not taking account of the future impact and liabilities of rapid PFI expansion in the health sector.

A2.5 A Climate of Opportunism

Without appropriate behaviour and suitable governance arrangements, the potential for opportunism in contracted relationships is high (e.g. Williamson, 1975, 1985). In establishing a partnership, the public sector seeks sufficient risk transfer (Wright, 1998) and value for money (CPPP, 2000; Sussex, 2002), in order to meet desired public sector outcomes. Contract based relationships raise issues of private sector profit maximisation and sufficiency of risk transfer (Corry, et al. 1997; Fox and Tott, 1999; Gaffney et al. 1999b) – tensions which are at the heart of PFI. The private sector may potentially sacrifice quality in the short-term to maintain or reduce costs, especially where the public sector lacks expertise, monitoring and governance capability (Ruane, 2002; NAO, 2007a,b).

As contracted relationships, PFIs provide environments for opportunism, from the early stages of pre-contract negotiations, through to employment practices (Sachdev, 2001), risk allocation and transfer, information asymmetry (Deakin, 1994 cited in Corby and White, 1999), variations, benchmarking and market testing. The 2004 National Audit Office (NAO) report, *Managing the relationship to secure a successful partnership in PFI deals*, established that working in a spirit of partnership was key to mutual, long-term success, requiring open communications, resource co-location, clearly defined roles and responsibilities, honesty, the use of incentives and continuity of staff.

A2.5.1 Opportunism in re-financing behaviour

The refinancing behaviour of the private sector in early PFI deals has been considered highly opportunistic, and Darrent Valley (NAO, 2005a) and Norfolk and Norwich (NAO, 2005b) are considered to be notable examples within the NHS in which this has been the case. This is a particular area of concern (Dempsey and McKeivitt, 2001, UNISON, 2004; NAO, 2005a,b; 2006), and Webster (2002) has noted that gains to the private sector fly in the face of the cash-strapped NHS. However, instances of questionable refinancing behaviour within other sectors are also evident, including Fazakerley Prison in the prison sector (NAO, 2000) and Colfox School in the education sector (see Allen, 2001). The result has been a voluntary refinancing code

(2002) that stipulated a 50/50 share of refinancing gains for projects financially closing after 2002, and recommended a 30% return of gains to the public sector for projects that financially closed before 2002. Refinancing gains to the public sector have not come without cost, requiring the public sector to concede revised risk allocations, increases in concession length and less favourable termination provisions (Dempsey and McKeivitt, 2001, UNISON, 2004; NAO, 2005a,b; 2006a).

However, refinancing should not necessarily be seen in a totally negative light. Gains to the public sector were projected in 2003 to be in the region of £175-200m (NAO, 2006a), and to date, a figure of £93m has been returned (NAO, 2007b). It is unlikely that the potential for future gains will match those of early deals, as the number of projects coming forward for refinancing since 2002 has reduced, partly as a result of the maturing PFI financial markets and a decrease in the initial cost of funding. Both private and public sectors need to consider refinancing in value for money terms, as potential benefits are eroded by a number of factors, including (i) the difference between lower initial lending rates and those currently available in the financial markets; (ii) the costs of undertaking the refinancing process and (iii) the requirement of gain sharing between the public and private sectors.

A.2.5.2 Opportunistic design

Relationship partnering at the heart of PFI and PPP projects requires the public and private sectors to work together to deliver acceptable patient health care environments. The Commission for Architecture in the Built Environment (CABE), established in 1999, is highly critical of the quality of PFI design, stating that it is only where high quality design is delivered in public buildings, that true value for money is delivered (Ruane, 2002; CABE, 2003). High quality design improves the enjoyment of places and quality of time spent there, so important to environments associated with the provision of health care.

The *Wanless Report* (2002) recommended at the time that 75% of patient beds should be provided in single occupancy rooms: however, the *Wanless Report* (2007) notes that in the 2007 wave of PFI hospital approvals, only 50% of the beds are in single occupancy rooms. Sir Stuart Lipton, then CABE Chairman, stated at a UNISON Conference in 2002 that PFI design was poor and would not meet the changing demands of future generations. As recently reported by UNISON (2007: 3), design

quality in PFI still remains an issue, with the deputy chair of Architecture and Design Scotland commenting that, 'a generation of young lives risked being blighted by their dark classrooms, poor facilities and playgrounds'.

A2.6 Facing the PFI challenge

Health sector PFIs continue to be seen as unpopular by many (Webster, 2002), with long-term reporting by a number of sources (Grout, 1997; NAO, 2007a,b) that indicates that there is marginal value for money in PFI health and education schemes. This is partly due to the partitioning of core and ancillary services (Ghobadian et al. 2004: 155) and the sensitivity to fluctuating project investment discounting rates (Ghobadian et al. 2004: 169-170). UNISON (2002a,b, 2004; Pollock et al. 2005) continues to challenge PFI, citing employment conditions (including the two-tier work force) and the 'tyranny of contract culture', as reasons to stop further PFI deployment. The structure of contracts and the length of concessions are deemed insufficiently flexible to take account of the changing nature of future health service provision: in recent times, for example, government policy (DH, 2001b) has shifted health provision from acute hospital to community care settings (APPGM, 2002; Palmer, 2006). Allyson Pollock stated in 2002, when reporting to the Select Committee on Health, that 'there is a new pact with big business, which is currently not working in favour of the population', suggesting that efficiency gains and risk transfer to the private sector have not offset escalating PFI procurement costs. Following Hewitt's announcement in February 2007 of a further wave of PFI hospital approvals, Carvel (2007) reported that UNISON and the BMA remained concerned about the further development and application of PFI in the health sector. Nicholson (2000) also supported some of the adverse criticism surrounding PFI, citing decreasing bed numbers and increasing future financial liabilities associated with PFI payments to the private sector (Wanless et al. 2007).

However, the debate about PFI needs to be set within the context of the wide-ranging structural changes affecting the provision of UK health care during the past ten years. Accordingly, the debate needs to be broken down to national, local and project levels as differing factors come into play. More than a decade ago, Pollock et al. (1997) suggested that PFI would result in a shrunken health sector that would fail to provide comprehensive health services to all sections of the community. Reductions in hospital size would have a direct impact on the clinical planning process (Pollock et

al. 1999; Gaffney et al. 1999a; 1999b; 1999c), which focuses on demand anticipation rather than current demographic service needs. Pollock et al. (1999: 181) asserted that some of the caseload would move into other areas of health provision, reporting one Trust Chief Executive who referred to this as 'turning off trade'.

To some extent, PFI development in the acute sector may now be considered as part of a long-term financial problem (Paton, 2006; Gainsbury, 2007), rather than as a catalyst for change. Palmer (2006) asserts that while growth in the independent sector is assisting patient choice, it also leads to excess capacity in the NHS, particularly in PFI hospitals. The demands on new PFI hospitals (Timmins, 2007) have reduced considerably in recent times, but the long-term retained liabilities will no doubt present financial difficulties, given the shift in health services from acute to other sectors (Ruane, 1997).

A2.7 Building Relationship Partnering

When available skills and competencies are combined, collaborative working is enhanced, and this creates the potential to deliver innovative, high quality, good value and well-managed public services (HM Treasury, 2008). Efficiency can be increased and savings unlocked when the configuration and delivery of services is reviewed and traditional demarcation lines are broken down (Nicholson, 2000). In the health sector, there has been an arbitrary contractual separation of core and ancillary service provision that reduces the potential for service integration, innovation and cost reduction, according to Grout (2000, cited in Nicholson, 2000), who suggested that boundary demarcation lines should be based on the ability to specify the requirement and governance needs alone. However, a number of respondents to the CPPP (2000: 23) have asserted that while the private sector may bring new skills and working practices to the delivery of a service, there is no reason why the private sector should out-perform the public sector in the most difficult of environments, nor should there be a presumption of private sector superiority in any situation.

The creation of a partnership, as distinct from a contractual relationship, requires the development of a high degree of trust, common objectives and a long-term outlook, and the sharing of risks – although, as noted by Ruane (2001), partnership may simply be another word for markets and long-term contracts. However, in order for partnerships to evolve and be sustained, parties need to be flexible, requiring both the

importance of relationship all the time

public and private sectors to be informed and educated in new aspects of relationship management. Interaction requires voice equality, collective planning, alignment of goals and an inclusive communications process.

A2.7.1 Towards a better understanding

To advance the relationship between the public and private sectors, future interaction will require both sectors to accommodate each other's nuances. However, Jacobs (1992, cited in Ghobadian et al. 2004: 156) and Paton (2006: 10) assert that any reconciliation between the public and private sectors is impossible due to differences in value patterns. The public sector, they argue, has a distinctive workforce with particular values – the public sector ethos – in which behaviour is motivated by service rather than profit. However, for cooperation to develop, there needs to be a coherence between organisational structure and values, and the public sector is required to shift its thinking to accommodate the ethos of PFI partnership. According to Green (1995), this shift will involve: focusing on outputs rather than inputs; improving the ability to assess risk; clarifying roles and responsibilities, and more effective team working. The private sector will also have to change, and this will involve embracing issues of accountability and learning to understand public sector values – what Le Grand (1998, cited in Kelly, 2000: 7) refers to as a 'different ethical compass'. It is suggested by Taylor (IPPR, 2001) and Ghobadian et al. (2004) that the doctrine of public service ethos – which attributes nobility of motives to those who work within the public sector and to them alone – should be countered, as high service standards may be found in many organisations and sectors: 'a purity of motive within the public sector should not compensate for inadequacy of outcome'. *The Commission on Public Private Partnerships* (IPPR, 2001: 2) suggests that partnerships should embrace risk sharing, based upon an agreed public and private sector aspiration, to bring about a desired outcome.

Grimshaw et al. (2005b: 41) suggest that policy interest in PPPs is partly fuelled by claims that new organisational forms such as PPP will improve traditional public service ethos among public sector workers. However, while public private partnerships seek to bring about this shift, they require cooperation at an organisational and individual level in order to be effective, such that the interaction between the public and private sectors does not gravitate towards a zero sum outcome (McQuaid, 2000). An advantage of integrating the two different sectors is that their

relationship needs can be different; their interaction can mean that the utility or value derived by each partner from the encounter can be measured in both monetary and non-monetary terms. Challenging the privatisation versus public monopoly dichotomy, the CPPP (IPPR, 2001) suggests that PPPs, as a form of partnership, provide an immediate counter to the insular nature of long-standing public sector service provision, in which diversity has long been restricted, resulting in the sector missing out on skills, creativity and areas of expertise that reside in the private and not for profit sectors.

PFI remains one of the procurement options for creating partnerships between the public and private sectors to advance public service reform (HM Treasury, 2006). As a form of partnering, PFI tends to seek a marriage of distinct sector skills, as opposed to PPPs, which seek a synthesis of skills and competencies – something Kelly (2000) refers to as cocktail making – where both parties are fundamentally changed as a consequence of the interaction. PFI aims to create a favourable climate for the private sector to develop and deliver an optimised solution to the public sector, in which the public sector moves from the position of owner and provider, to enabler, purchaser and guardian of end-user interests (Corry et al. 1997; Fox and Tott, 1999; Corry, 2003).

A2.7.2 PFI in the longer term

PFI plays a small but important part in the government's public service reform agenda (HM Treasury, 2006; 2007). Choice and consumerism continue to alter the nature of the relationship between the public and the NHS, with devolution of central state ownership and increased control through Foundation Trusts – independent public-interest organisations that transform the NHS from a public sector monopoly to a patient led public service (Klein, 2006). However, the use of PFI is increasingly being tested for its suitability and appropriateness, to ensure that it is the best way to deliver public services (HM Treasury, 2006). In the *2007 Budget Statement* (HM Treasury, 2007), the Chancellor reiterated government commitment to PFI where it supports the principles of efficiency, equity and accountability, but not at the expense of public sector staff terms and conditions. Kelly (2000) asserts that PFI allows for the complete rethinking of the way public services are provided, such that the differing needs of the private sector can be accommodated alongside the provision of sensitive public services. However, PFI should not be seen as a universal panacea to resolve all

public sector problems (Boyle and Harrison, 2000b; Corry 2002, 2003); as noted by the All-Party Parliamentary Group on Management (APPGM, 2002), PFI should be regarded as something that contributes to the evolution of public service delivery and not a destination in its own right.

PFI's long-term potential to meet changing public service requirements remains to be seen: however, it has been responsible for replacing and updating the NHS estate by bringing new hospitals into operation quickly, and within defined spending limits. PFI projects are currently evaluated using conventional procurement methodologies and *ex ante* assessments of value for money (Grout, 1997; Nicholson, 2000; NAO, 2006b), and studies conducted to date indicate that the accrued benefits are sector-specific and marginal, at best (Paton, 2006). However, Kelly and Whittlestone (2000) argue that the real long-term benefits of PFI will not be seen until the range of services being delivered is widened and re-positioned to the strategic top table, moving away from meeting single Trust solutions in isolation. In 2002, the *First Report of the Select Committee on Health* noted (in clause 59) how polarised the arguments about PFI had become, with exaggerated claims being made by many on both sides of the argument, in a climate not always conducive to rational analysis.

Supporters suggest that PFI is a way to deal with the culture of cost and programme overruns that have traditionally plagued the public sector. The CBI asserts (Timmins, 2007) that the PFI debate needs to move beyond technicalities, to 'recognise the benefits of innovation in service delivery, facilities being delivered on time and to budget, assets being properly maintained and the value for money gains over time that come from a diverse and contestable market'. To some extent, the Department of Health supports this stance by acknowledging that PFI delivers projects faster, with risks transferred and budget certainty, due to having performance driven contracts (HM Treasury, 2003; 2006). KPMG (*Select Committee on Health*, 2002: cl 59) also asserts that PFI has 'led to a higher standard of hospital accommodation, delivered quicker than conventional procurement'. While the Business Services Association believes that private sector involvement in hospital facilitates working practices and purchasing regimes that will bring about higher quality public services.

The wider application of PPP and PFI remains a key tenet of government policy, with Corry (2003; HM Treasury, 2006; 2007) suggesting that a move towards outcome-based relationships may be the next stage; this was to some extent supported in 2003

by the NHS Confederation. The rhetoric surrounding PFI needs to be advanced, such that it is assessed using an evidence based approach (Sussex, 2002), in order to ascertain the suitability of PFI within each sector and in terms of projects. As noted by the Commission on Public Private Partnerships in 2001, only through a systematic review can a decision be taken to back the use of further PPPs and PFIs. Perhaps the removal or modification of the private financing element – so central to the additional cost debate – while retaining the remainder of the initiative, would be one potential option.

A2.8 Chapter Endnote

The NHS has existed in a state of changing politics and policy, and has operated under fiscal constraints since its inception in 1948: to some extent, the turmoil surrounding its formation has dogged the service for the past sixty years. The current reform agenda – referred to by Stevens (2004: 43) as uni-dimensional, in terms of maintaining competition and the quasi-market – seeks to transfer power and responsibility (through Foundation Trusts) from the centre, to users at a local level, by devolving health care decisions and creating a patient-led health service (Webster, 2002; Stevens, 2004; Klein, 2006; Secretary of State for Health, 2008). It is claimed by the government in *Building on the Best* (DH, 2003) that local accountability will be improved by ensuring that those delivering public services are made responsive to individual and community needs; patient choice will determine the time and location of treatment, and GPs will commission hospital services. PFI has and continues to play a small but important part in the modernisation of public services (Carvel, 2007; HM Treasury, 2007), but as noted by Timmins (2007), PFI projects are getting smaller due to changing government policy and adoption of EU accounting policies.

Moving some PFI projects to the government balance sheet may, however, result in increased flexibility, as less risk would need to be transferred to the private sector (Timmins, 2007). Deal concession terms could be shortened if projects were part-funded by the public sector during construction, reducing the need for private sector capital. The consequence of having less project debt at the most expensive, early stage of construction, would be reduced partner equity and a lower unitary payment for the life of the project to the public sector.

Operating PFI through a legal contractual structure creates a framework for government departments to act within when procuring capital assets and services. However, the presence of a contract does, to some extent, have an impact on aspects of New Labour's partnership ethos (Corry, 2003). With PPPs and PFI remaining important to Government policy and public service reforms (HM Treasury, 2006; 2007), criticism will remain (e.g. Kelly, 2000; Ham, 2004, Klein, 2006; UNISON, 2007), some of which includes:

- Looseness in the system is removed, reducing flexibility to deal with changing demands;
- Cost minimisation and profit maximisation lead to the removal of slack in the system to deal with change, resulting in an environment of low skilled and poorly paid staff that may create a downward service quality spiral;
- Erosion of trust at a provider and employee level, once considered the bedrock of public sector service delivery. If the consumers' view of the NHS were to shift from carer to measured care provider due to profit maximisation, the relationship would change dramatically;
- In broader terms, PPPs change the nature of the relationship between the citizen and service provider, inevitably becoming more direct. The nature of accountability and democracy changes: the ability for elected public servants to directly intervene in service delivery is removed, as PPPs pass on fixed approaches to future generations, together with contingent costs, limiting future expenditure decisions.

A2.8.1 Prelude to the literature review

Successive government changes to public services procurement has resulted in a changed relationship and re-defined boundary between the public and private sectors. Central to the advancement of the PPP debate and the application of PFI to the health sector, has been a desire to create a collaborative working relationship between the sectors, such that the combination of skills brings about higher quality public services. However, as noted by the NAO (2007), the shifting boundary requires new relationship skills to be learnt by both sectors; preventing a zero sum outcome requires cooperation at an organisational and individual level (McQuaid, 2000).

Interaction requires voice equality, collective planning and issue resolution; shared success should be a common goal. A joint understanding of the long-term objectives of the project may be a good starting point to build a relationship, but this requires goal clarity, an understanding of each other's needs, excellent communications and inclusiveness. The necessity for cooperative relationship behaviour remains an important tenet in the successful operation of a PFI project environment. Klein (2006) suggests that, as public resources become increasingly scarce, closer working relationships between public, private and voluntary sectors are now required, to ensure sufficiency of treatment within tightening fiscal constraints. Building relationship partnerships between the public and private sectors serves to overcome some of the barriers created by the arbitrary separation of services: however there is a requirement for both parties to be flexible and responsive to each other's nuances. Public sector values and public sector ethos (Paton, 2006) should be combined with private sector values, in order to achieve a clarity of purpose and a focus on patient centred outcomes.

The next chapter deals with the literature associated with values orientation, relationship behaviour and cooperation, in particular between individuals within a role-set context. It is asserted that the project leaders responsible for day-to-day project delivery influence the performance of the project, by virtue of how they interact and behave towards each other, through the use of behavioural cooperation mechanisms.

CHAPTER B: LITERATURE REVIEW

B1.1 Introduction

Chapter A2 introduced the reader to issues relating to the National Health Service (NHS) since its inception in 1948, and the development and application of the Private Finance Initiative within the NHS. Chapter B contains a review of literature associated with organisational behaviour, social psychology and general management, with particular emphasis on values, behaviour and cooperation. The literature review commences by considering inter-organisational relationships (IORs), with an emphasis on boundary relationships and, in particular, the role of individuals working at the boundary between the public and private sectors. It examines the importance of and influence of individuals' values orientation, concluding that orientation affects behaviour. Finally, the relationship between values and an individual's behaviour is considered in the context of relationship cooperation mechanisms.

The chapter commences with a short summary of the key issues associated with the application of PFI to the health sector and the relationship dynamic that has been established between the public and private sectors within projects.

B1.2 Private Finance Initiative Project Environment

Successive governments, through the wider application of public sector contracting, have brought the NHS into closer contact with the private sector, changing the nature of the relationship boundary between the sectors (DH, 2000; Timmins, 1995). The Private Finance Initiative (PFI) and Public Private Partnerships (PPPs) continue to play a small but important part in replenishing ailing property assets and also altering the nature of the relationship between the public and private sectors in the reform of public services (HM Treasury, 2006; Kings Fund, 2002).

As the relationship between the public and private sectors continues to change, there will no doubt be further re-definition of the boundary; however, there are currently structural and relationship issues that need to be addressed in the PFI and PPP arenas. Domberger (1998) posits that, as the boundary between sectors increasingly blurs, the longer-term benefits of contracting will only be delivered through relationship cooperation. Deakin (1994, cited in Corby and White, 1999) suggests that, over time, inter-sector dependence may develop into a constructive partnership where the public sector becomes increasingly reliant on the private sector to maintain public services.

Collaborative working, which involves the combination of skills and competencies, has the potential to deliver higher quality and better-managed public services (Nicholson, 2000). Ruane (2001) suggests that in order for a climate of partnering to develop in a contract-based relationship, the counterparts need to develop a range of attributes, including a high degree of trust, common objectives, a long-term outlook, alignment of goals and an inclusive communications process. Both sectors need to understand each other's nuances at an organisational and individual level: McQuaid (2000) suggested that a shift in the relationship dynamic needs to take place in order to enhance cooperation. The public sector will be required to accommodate the ethos of partnership, while the private sector must learn to embrace accountability (Green, 1995).

As outlined above, we now move on to consider the individual operating at the organisational boundary, including their values orientation, the behavioural implications of these values, and how cooperation mechanisms are influenced by behaviour.

B1.3 Introduction to Inter-organisational Relationships (IORs)

Inter-organisational relationship research has grown in importance since the 1950s, and is rooted in the works of Parsons (1960), Evan (1976) and Merton (1968), to cite some early examples.

As a boundary-relations issue, inter-organisational relationships affect all social systems. It is suggested that the growth of public and private sector contracting is reflective of the increasing interdependence and organisational interconnectedness between sectors (Roeber, 1973; Blunden, 1984; Schein, 1985; Timmins, 2001; Hall, 2002). Formalised contractual agreements blur the organisational boundary, and so change the structures within IOR relationships (Parker, 2000; Hall, 2002). The benefit of inter-organisational relationships is that they create an environment in which resources can be shared and knowledge transferred (Söllner, 1999): entering into a close organisational relationship is seen as a way of reducing risk and uncertainty (Ring and Ven de Ven, 1992). However, the complexity of the relationship is influenced by such factors as previous patterns of behaviour (Blunden, 1984), prior independent relationship length (Gummer, 1990) and the extent of proposed integration (Whetten, 1981; Ring and van de Ven, 1994; Barringer and Harrison, 2000; Hall, 2002). The inclusion of concepts such as solidarity, mutuality and

integrity within contracts can help reduce the threat of hold-up (Söllner, 1999: 220), a term that refers to situations where one party seeks to take advantage of relationship asymmetry (Kumar et al. 1995, cited in Söllner, 1999). Where repeated positive interaction enhances cooperation at a relationship level, leading to the development of long-term partnerships (Deakin et al. 2001; Ruane, 2001), simple spot contracts between organisations may gradually be replaced by contracts that seek mutual economic advantage (Giddens, 1984), especially in instances in which there is a decrease in the influence of the market.

Contracted relationships have generally evolved from within dominant economic paradigms (see section B1.4.1). As a result of the dominance of economic paradigms (Sheppard and Tuchinsky, 1996; Child and Faulkner, 1998; Wehner et al. 2000; Hall, 2002), which are rooted in agency and transaction cost economic theory (Lazar, 1997), relationship interaction and cooperation have been considered principally from the perspectives of efficiency, value and risk mitigation. Economic paradigms assume that an individual's behaviour will be rational – i.e. free of morals and values. Individuals are deemed to be self-centred, acting opportunistically in order to obtain the best outcome, and cooperative behaviour is presumed to be absent. Williamson (1975, 1985, cited in Hall, 2002) asserts that any cooperative behaviour should be considered a failure of the market place. Economic paradigms typically denigrate individual behaviour, failing to address the complexity of social relations within organisations, which, it is suggested, can be better explained by behavioural and social paradigms (Ahme, 1997; Barringer and Harrison, 2000).

B1.4 IOR Forms and Paradigms

The evolution of organisational forms *per se* is not of central importance here, save that inter-organisational relationships can be considered as a response to environmental conditions at a particular time (Stinchcombe, 1965, cited in Romanelli, 1991). Van de Ven and Garud (1989, cited in Romanelli, 1991: 96) draw on Etzioni (1989) to suggest that organisational forms 'arise dynamically through the cumulative interactions of entrepreneurs and organisations towards the establishment of a new industry system'. Cooperative inter-organisational relationships appear in many forms, including dyads, organisational sets, action sets and networks (Whetton, 1981; Jarillo, 1988 cited in Barringer and Harrison, 2000: 371), and relate to organisational

relationship types, such as joint ventures, consortia and alliances (Barringer and Harrison, 2000; Fulop, 2004). A brief discussion of each form follows.

Dyads are organisational collaborations, formed to achieve a common goal. Organisational sets – which will be returned to later in the discussion – refer to the linkages established by an organisation, and are closely linked to Merton's (1968) concept of role-sets. Action sets are coalitions of organisations working together for a specific purpose; while networks consist of all the interactions an organisation has with its environment, thereby subsuming dyads and sets.

The discussion that follows places these organisational forms within the context of the wide-ranging paradigms that are used to research inter-organisational relationships.

B1.4.1 Organisational research paradigms

Organisational research is undertaken from a wide range of perspectives and is therefore fragmented (Pfeffer, 1997; Child and Faulkner, 1998; Faulker and De Rond, 2000; Barringer and Harrison, 2000). An economic paradigm perspective has, however, been dominant (e.g. Bartlett and Ghoshal, 1993; Gulati, 1998; Lewin and Volberda, 1999; Barringer and Harrison, 2000).

Economic paradigms are but one perspective from which to examine inter-organisational relationships; other approaches involve the use of organisational, behavioural and social relationship models (Pfeffer, 1997; Barringer and Harrison, 2000). Positing the socially embedded nature of relationships within organisations, Granovetter (1985) suggests that economic actions are influenced by social ties between people – relating to the structure of society and its forms of cognition, and institutional and cultural factors. It is suggested that economic models fail to adequately address social and relationship behaviour interaction, exaggerating the influence of opportunism and self-maximisation between individuals (Young-Ybarra and Weirsema, 1999). Bartlett and Ghoshal, (1993) for example, posit that organisations are fundamentally social structures. This follows on from Merton (1968: 422-438), who argues that concepts such as status and role (which will be discussed in further detail later) serve to mesh culturally defined expectations with patterns of conduct and relationship that make up a social structure.

A brief account now follows of some of the most widely used economic, organisational and social relations paradigms, and the conclusion is reached that role-

set theory (Merton, 1968; Katz and Kahn, 1966) is an appropriate framework to discuss the individual relationships created at the boundary between public and private sector organisations.

Economic paradigms have dominated the IOR research landscape (see for example Bartlett and Ghoshal, 1993), and these include transaction cost theory, agency theory, resource-based theory, resource-dependency theory, game theory, behavioural theory and evolutionary theory.

An introduction to the formation of economic based relationships now follows. A number of the most widely recognised economic theories associated with inter-organisational relationships are then considered in more detail.

Fundamental to the economic rationale is the assumption that the human role in an organisation is essentially passive. Economic relationships are composed of a resource and governance dyad, in which it is generally accepted (Rangan et al. 2006) that markets economise on resource costs and firms economise on governance costs. Resource costs - being the object of exchange - vary between economic actors, being dependent on influences affecting both demand and supply: governance as the enabler of exchange is also a variable cost. Williamson (1991, cited in Rangan et al. 2006) suggests that the interplay between resource and governance costs creates three conditions associated with the 'make' or 'buy' decision. These are: (i) when governance costs related to buying are low coupled with higher resource costs associated with buying, then markets are expected to hold sway; (ii) when resource costs connected to making are lower than the governance costs of buying, then firms are expected to hold sway, and (iii) when high resource and governance costs are expected, then alliance structures are expected to hold sway.

It is assumed, although this is not always the outcome, that the benefits flow to the party that bears the resource and governance costs in the transaction. However, in certain cases external third party beneficiaries may gain from the transaction, i.e. there may be positive externalities (Rangan et al. 2006) generating public benefits. Where there is an underlying assumption of individual rationality combined with high governance costs in relation to collective actions, this results in the under-production of public benefits. On the other hand, where the private benefits are lower than the costs of transaction, private participation is unlikely in a public-private relationship.

Rangan (ibid.) suggests that resource and governance constraints are different but exist for both the public and private sectors: the public sector seeks maximum public benefits, while the private sector seeks profit maximisation and sustainability. This creates a number of conditions that include: (i) private sector participation in public sector contracting where the public sector resource costs are higher than the private sector and the public benefits are lower than those enjoyed by the private sector; (ii) when public benefits and public resource costs are lower than for the private sector, then the public sector will tend to self-perform, and (iii) where public benefits are greater than for the private sector but the resource costs are also higher, then there is scope for public-private collaboration (i.e. public private partnerships and PFI). The dynamic created by this third form of relationship is important, as the private sector may be reluctant to participate due to the higher benefits realisation risks that are associated with a lack of governance control over incurred resource costs. However, contracting structures that mitigate this issue can serve to reduce private sector uncertainty, and where there is suitable recourse against the public sector, collaboration will prevail even under conditions of uncertainty.

The discussion now continues with a consideration of a number of the most widely recognised economic theories.

Transaction cost theory (cf Coase 1937; Williamson, 1975, 1985), considers organisations to be situated in markets, adopting structures that maximise the efficiency of firms (Zajac and Olsen, 1993) and organising boundary-spanning activities to minimise the sum of their production and transaction (governance) costs, thereby increasing efficiency. The core behavioural assumptions are: (i) that human agents act with bounded rationality; and (ii) that human agents will act opportunistically, deviating from the spirit of an agreement when it suits their purposes (Williamson, 1985: 388). These behavioural conditions are combined with the attributes of the transaction itself - in terms of asset specificity – and influenced by later decision-making, which cannot be entirely predicted prior to the contracting process.

Williamson (1975, 1985) suggests that there are two modes of organising, which are influenced by markets and hierarchies, with the most efficient form prevailing for any given transaction. When, in the judgement of the firm's decision makers, the market

is functioning optimally, that is demonstrated by the simplest form of cost exchange transaction - the make or buy decision.

Individuals in complex and uncertain environments act with bounded rationality, as they cannot have access to information that would account for all eventualities at all times. Therefore, since contracts cannot be written to deal with all eventualities, opportunism may result, and governance structures may be required to assert control and restraint, and create sanctions. Opportunism is reflective of an individual position of self-maximisation, which can lead to behavioural uncertainty. Granovetter (1985) suggests that transaction cost theory does not, to any significant extent, account for the role of personal or social relations in building relationship trust and curbing opportunism. It is through friendly associations, and the pleasure people derive from social interaction, that trust builds in economic exchanges.

Agency theory (cf Eisenhardt, 1989; Hill and Jones, 1992; Jensen and Meckling, 1976, cited in Sheppard and Tuchinsky, 1996) is a development of transaction cost theory in that agency theory assumes both self-interest and bounded rationality. While in transaction cost theory there is a focus on the organisation's boundary, in agency theory there is no boundary distinction when considering cooperating parties. Agency theory is concerned with the implicit or explicit contracts governing the relationship between a principal and an agent due to (i) the desires or goals of the principle and agent conflicting, and (ii) the difficulties or expense of the principal validating what the agent is doing.

Positivist agency theory and principal-agency research (Eisenhardt, 1989) develop along two lines, but both concern the contract between the principal and the agent. Positivist agency theory is concerned with the identification of situations where the principal and agent are likely to have conflicting goals, and then the description of the governance arrangements that serve to limit the agents' self-serving behaviour. This has tended to focus on relationships between owners and managers in public corporations where governance arrangements for outcome-based contracts or information systems control opportunistic behaviour. Conversely, principal-agency research has been concerned with more singular relationships, which are subject to careful specification of assumptions, deduction and mathematical proof (p. 60).

Whereas positivist agency theory looks at varying contract structures, principal-agency theory seeks to identify a specific contractual arrangement that deals with variations including outcome uncertainty, risk allocation and information asymmetry.

Resource-based theory (cf Penrose, 1959; Learned, 1969; Wernerfelt, 1984, cited in Lewin and Volberda, 1999) is primarily internally focused, being concerned with rare and difficult to imitate internal resources that are key to a firm's sustainability and competitive advantage. Tangible and intangible resources, and tacit know-how, need to be identified, selected, developed, accumulated and deployed in order to generate superior organisation performance (Levin and Volberda, 1999). Barringer and Harrison (2000) note that inter-organisational relationships are created in order for organisations to deploy owned and accessed rare resources (i.e. assets and people), to achieve superior competitive advantage. Knowledge is seen to be the most crucial resource of a firm, such that firms should seek to maximise knowledge creation and integration (Cohen and Levinthal, 1990), and organisations should be designed and managed as learning organisations (Nonaka and Takeuchi, 1995).

Resource-dependency theory (cf Pfeffer and Salancik, 1978; Thorelli, 1986), focuses on externally acquired resources as distinct from the internally focused view of resource-based theory. The theory is rooted in an open-systems framework in which organisations need to engage with their environment to obtain and exchange resources, in order to survive and prosper. Scott (1987, cited in Barringer and Harrison, 2000) suggests that organisations form inter-organisational relationships to exert power or control over organisations that possess scarce resources, or which can fulfil a perceived resource need.

There are limitations to the theory, as no firm is self-sufficient and will need to engage with its environment to obtain necessary resources: accordingly, issues such as transaction cost, learning and firm competency development are left for other theories to address.

Game theory (cf Von Neumann and Morgenstern, [1947, 1953] 2007; Nash, 1950; Rappaport, 1966; Axelrod, 1984), is concerned with the prediction of outcomes of social situations – or games – involving two or more actors, whose interests are interconnected or inter-dependent (Zagare, 1984 cited in Child & Faulkner, 1998: 26). There is a presumption of individual rationality, and the influence that human

behaviour has on the social situation is discounted (Murnighan, 1994). In the 'Prisoner's Dilemma' game, the choice between cooperation and defection is made in the absence of knowledge of the other players' actions. This is an important feature of the game, as it assumes that commitment is not a pre-requisite of cooperation (Rappaport, 1989 cited in Romanelli, 1991: 82). In single shot interactions, self-interest promotes defection and self-maximisation. However, this is different in relationships with no determined end date, or where the 'shadow of the future' (Axelrod, 1984) places sufficient value on the returns from future exchanges. Players develop interactive cooperative strategies to protect against the threat of retaliation; the adverse consequence of defection is sufficient to maintain relationship cooperation (Heide and Miner, 1992: 267).

Behavioural theory (cf Cyert and March, 1963), develops IOR analysis from the perspective of the rational manager situated within the organisation. As noted by Chandler (1962, cited in Bartlett and Ghoshal, 1993), organisations need to be understood from the perspective of the busy men responsible for the destiny of the enterprise, using Weber's (1964, cited in Parker, 2000) theory of *verstehen*, or interpretative understanding of social behaviour, in order to gain an explanation of its course, causes and effects.

Acting rationally, managers aim to balance resource allocation processes, in order to satisfy multiple stakeholder demands, i.e. to satisfy the organisation's objectives while maximising their personal benefit (Lewin and Volberda, 1999). Processes are built around specific sets of relationships within managerial ranks: organisations are conceptualised as clusters – i.e. as roles and associated relationships – rather than as activities that can be split into sub units. Evolutionary theory (cf Winter, 1982 cited in Lewin and Volberda, 1999) extends Cyert and March's behavioural theory, with Winter (1982, cited in Lewin and Volberda, 1999) suggesting that organisations accumulate know-how and tacit knowledge in the course of their existence, attributes that result in both inertia and competence.

The second group of theories within this taxonomy are termed organisational theories; these are rooted in the works of Levine and White (1961), Evan (1976), and Aldrich and Whetton (1981). A number of the more influential theories in this category include strategic choice theory, contingency theory, exchange theory, learning theory and role-set theory.

Strategic choice theory (cf Child, 1972; Miles and Snow, 1978; Jarillo, 1989 cited in Barringer and Harrison, 2000: 374) developed from an economic rationale whereby organisations enter into inter-organisational relationships in order to increase competitiveness or market power. Organisations are not passive recipients of environmental influence but have the opportunity to reshape their environment. Adaptation (Mintzberg, 1979, cited in Lewin and Volberda, 1999) is a process that is both continuous and dynamic, and subject to both managerial and environmental forces.

Contingency theory (cf Burns and Stalker, 1961; Lawrence and Lorsch, 1967; Donaldson, 2001), states that an organisation's environment is the direct cause of variations in organisations, such that the role of managers is to seek the best fit with the environment.

Learning theories (cf Argyris and Schön, 1978; Kanter, 1984; Kogut, 1988; Hamel, 1991; Mowery et al. 1996; Tsivacou, 1997).

Economic theory suggests that firms form inter-organisational relationships to capitalise on opportunities for organisational learning and to acquire superior knowledge to enhance their competitive position (Barringer and Harrison, 2000: 378). For Jankowicz (2000), learning is directed towards adapting to and resolving problems presented by environmental turbulence, while for Tsivacou (1997) learning is a process of directing action towards benevolent outcomes for the maintenance and development of the organisation

Argyris and Schön (1978) posit that learning is both a single and double loop process: the former occurs when individuals correct error within governing variables, whereas double loop learning results from challenging and modifying organisational norms, rules and goals. Jankowicz's (2000) cybernetics analogy and use of the finite function model is appropriate in distinguishing organisational learning from a higher order state of organisation adaptation. To achieve an adaptive state, organisations require the capability to self-reflect - or in Tsivacou's terms (1997), they need to be self-referential: this occurs where the organisation is capable of choice and decision analysis at a strategic as opposed to operational level.

As social, as opposed to economic, entities Tsivacou (ibid.) suggests that organisations can, through self-reference, achieve the capacity to become self-

reproducing and self-organising: this occurs where learning is vested in the organisation rather than the individual, and where there is the presumption that learning is a journey without a destination. Learning therefore becomes a process undertaken by the organisation itself in a self-perpetuating cycle, occurring in such a way as to enhance its inherent capacities to respond to unexpected situations created by its environment. Learning is no longer understood as a process of knowledge acquisition, but as an organisational capacity to enact a meaningful world. It therefore involves cognitive change and transformation of the organisation's behaviour, both of which occurs when an organisation incorporates new modes of behaviour that arise through communicative interactions with the environment, or through new internal states of itself that it decides to select for its adaptation and survival (p. 260).

As for Argyris and Schön, Tsivacou (1997) suggests that learning is more than adjustments made by the learner. Rather, it extends to the development and application of new practices in problematic situations, resulting in single loop learning that progresses to double loop learning within the organisation. Learning therefore creates a context that predisposes the organisation to action, inducing attitudes and behaviours that can motivate change.

Role-set theory (see section B1.6 below) (cf Thibault and Kelley, 1959; Merton, [1949] 1968; Katz and Kahn, 1966), proposes the use of the role-set concept to examine role relationships. Role-sets consist of the roles and relationships that an occupant of a given status has by virtue of occupying that status. Status and role become concepts that serve to connect culturally defined expectations with the patterned conduct and relationships that make up a social structure (Merton, 1968: 422-438; Salaman, 1979).

The recurring actions of an individual, informed by role behaviour and their social conduct within that role, in interrelationship with others, will yield a predictable outcome. Interdependent behaviours comprise a social system in which each person plays a part, role performance being more a function of the social setting than the individual's personal characteristics. Lopopolo (2001) suggests that a role and its associated behaviour never remain static; these are constantly modified by the person occupying the role, as he or she adapts to the formal organisational setting and informal influences are exerted through association with other sets and work groups.

The principle theories within a social relations rationale include population ecology theory, institutional theory and social relations theory.

Population ecology theory (cf Aldrich and Pfeffer, 1976) posits that organisations are self-selecting in relation to resource scarcity and competition within their environment. Managers have little influence, such that structural intervention and other changes can result in a decrease in organisational survival rates. Organisational inability to adapt to a changing environment is a consequence of internal inertia, and organisational survival is a function of high reliability and specialisation.

Institutional theory (cf DiMaggio and Powell, 1983) focuses on why organisations in any environment exhibit similar characteristics (or population isomorphism). The reason why organisations are not able to respond to their environment is their embeddedness in their institutional context. Lewin and Volberda (1999) suggest that the more organisations are coupled to the prevailing organisational template, the greater the resistance to change.

Social relations theory (cf Granovetter, 1985) promotes the importance of the social context in which decisions are made. Granovetter (1985) argues that many attempts at rational economic action are actually embedded in social relations, and stresses the importance of the role and structure of personal relations in terms of generating trust and discouraging malfeasance.

However, paradigms that focus on the formation and evolution of organisations and inter-organisational relationships are not suitable in terms of explaining the behaviour of individuals in boundary situations – behaviour that is of central importance in this study. Economic paradigms generally under-socialise behaviour (Granovetter, 1985) constraining, or failing to recognise, the importance of social relations within or between organisations (Bartlett and Ghoshal; 1993; Young-Ybarra and Weirsema, 1999). The presumption of such factors as lack of trust, opportunism, self-maximisation and competitive behaviours, renders these models unsuitable for this research setting. Game theory and role-set theory regard the individual's relationships with others as important, and this suggests that these theories could be applied, and the role, status and inter-relationship aspects of role-set theory relate well to public and private sector boundary relationships. The focus on competition, possible defection and payoffs that is central to game theory, is beyond the scope of this

research project. It is, therefore, suggested that role-set theory is an appropriate perspective from which to consider boundary role persons (BRPs) (Adams, 1976) and the relationships created at the public private sector interface.

B1.5 Relating the Organisation and the Individual

Before returning to explain role-set theory in greater detail, the relationship between the organisation and individual is considered within the context of the boundary created between public and private organisations.

For the sake of clarity, a number of labels and definitions have been used. Boundaries define organisations (Pfeffer, 1997) and individuals acting in boundary roles (Katz and Kahn, 1966) forge the links between organisations. Individuals in roles at the boundary of an organisation also create links between the organisation and its environment (Aldrich and Herker, 1977). An individual operating at the organisational boundary will be referred to as a boundary role person, (BRP) following Adams (1976). BRPs are important, in that the personal relationships between them serve to shape and modify the evolving structure of inter-organisational relationships (Currall and Judge, 1995; Zaheer et al. 1998). A psychological distance between the individual and the organisation can arise as a consequence of the potential for dissonance between competing and cooperative behavioural norms, and this can influence the relationship between the BRP and their employing organisation. BRPs are also the 'face' of the organisation, acting as behavioural influencing agents, and they occupy a role which is the focus of analysis in this study (Katz and Kahn, 1966).

B1.5.1 The individual and the boundary environment

Individuals, when acting as boundary role persons, are important, as they link the organisation with its environment (Aldrich and Herker, 1977) for the purposes of effecting transactions (Adams, 1976). Boundary role persons have the potential to act as points of information transfer between organisations, as they tend to have different mental maps, languages, time frames and norms (Katz and Kahn, 1966). They also have the ability to mimic the actions of others, and the building of relationship trust gained through a better knowledge of the other party will reduce conflict, enhance cooperation (Gummer, 1990; McAllister, 1995) and lead to an increase in overall relationship performance (Dovidio et al. 2003). Boundary spanning relationship

groups translate different organisational coding schemes and channel information from one group to another (Hillebrand and Biemans, 2003), enhancing group integration. This potentially leads to the creation of a highly effective 'Third Culture' (Useem et al. 1963, cited in Chen et al. 1998), where there is a sharing of expectations between individuals working within a framework to deliver a mutually important outcome.

However, as noted by Adams (1976), organisational conditioning of the individual is an important issue. Organisations may seek to influence BRPs by setting the tone with regards to whether the individual should compete or cooperate. An organisation's structure and processes, including its employment relationships - act as sent roles - (Katz and Kahn, 1966), are considered to be a determinant of an individual's behaviour, due to the psychological interactions between the individual and the setting, within a given situation. If the culture of an organisation allows for BRP autonomy and trust, then the individual is more likely to cooperate and seek an optimal rather than a self-maximising outcome. Kelly and Stahelski (1970, cited in Adams, 1976) found that the nature of a relationship between BRPs from different organisations plays a bigger role than the behavioural expectations of the employing organisation. Where there is a high trust cooperative environment between counterparts and a low trust relationship between an individual and their employing organisation, for example, individuals can become tougher negotiators as they are less influenced by organisational norms and demands.

The implication of future interactions is also an important behavioural factor for BRPs, as long-term relationship equilibrium is important. This concerns both the functional dimension – the outcome – and the socio-emotional dimension, i.e. how hard it has been to achieve an outcome, as confrontation may make obtaining the same outcome next time much more difficult. The interplay between transaction length and the organisation's norms in terms of cooperation or competition, is important, as there needs to be congruence. A cooperative organisational norm in a one shot transaction may lead the BRP to concede unnecessarily. Equally, a competitive norm in repeated interactions may result in a BRP holding a negotiation position that results in a downturn in behaviour, as the length of, or importance of, future interactions is unknown. Where there is a lack of consensus within organisations in terms of how the BRP should behave towards a counterpart, BRP

behavioural confusion will result, as their ability to carry out instructions will be reduced. Good relationship fit between person, role and situation is, therefore, important, in terms of enhancing BRP behaviour (Lewin, 1935 cited in Chatman and Barsade, 1995; O'Reilly et al. 1991; Finegan, 2000) and creating a positive mood state (Argyle, 1994).

Consequently, where there can be a shared emotional state, people are drawn together; in essence, the better the fit between the individual and the requirements of the situation, the greater the potential for positive outcomes (Côté and Yehle, 1991) and for relationship cooperation to develop (Argyle, 1991). Stinchombe (1965, cited in Fichman and Levinthal, 1991) suggests that if people get on, they will trust each other and the relationship will be sustained.

New relationships benefit from an initial buffer period in which they have a level of protection from negative outcomes. Leblibci and Salancik (1982, cited in Fichman and Levinthal, 1991: 445) note that BRPs require 'the pledging, or binding of an individual to behavioural acts' to establish a relationship. Once committed to that relationship, the actor is bound to it, such that behaviours are carried forward into future interactions, creating behavioural inertia and resistance to change.

B1.6 Role-set Theory Expanded

A framework of role and role-set structures (Merton, 1968; Katz and Kahn, 1966: 171-198) is proposed because it contextualises the various relationships that are formed between the public and private sector project leaders and their subordinates. Drawn from the earlier work of Ralph Linton (Katz and Kahn, 1966: 171), the notion of roles provides the building blocks for social structures and relates to the requirements with which the system confronts the individual member. The term social structure combines the concepts of social status and social role; the former refers to the position occupied by a designated individual within a social system, and the latter refers to the 'behavioural enacting of the patterned expectations attributed to the position' (Merton, 1968: 422). Each status is associated with an array of roles, and a role-set is the complement of role-relationships that a person has by virtue of occupying a particular social status.

A person who occupies a particular status engages in wider relationships with their role partners, who occupy different locations in the social structure, each with their

own behaviour. The degree of concern for the other role-partners' behaviour, and the level of conflict or instability that may result, will be influenced by the individuals' values, moral expectations and the norms governing the role behaviour, such that close and stable role-sets will be more likely to occur where there is similarity in both values and role expectations. Value similarity may lead a person to select and occupy a particular status – i.e. position in a social system – because their shared values enable them to reject one position in preference for another, because they find that other position and the role-relationships that ensue more friendly. The role, the behavioural norms and the shared values combine to integrate the social system. People become tied together because of the functional interdependence of the roles they play; the normative requirements of any given role add an additional cohesive element, with values creating a further layer of integration (Katz and Kahn, 1966: 38).

In associating Linton's ideas about social status with the organisation, Katz and Kahn (1966) propose the concept of office as a way of locating each individual within the totality of ongoing relationships and behaviours that comprise an organisational setting. Office is a particular point in organisational space, where space is defined in terms of interrelated roles and the patterns of activities that link them. Office is a relational concept that defines each role position in terms of its relationship to others within the system as a whole. Each office relates to the activities and expected behaviours that constitute the role to be performed by the role-holder. An office is therefore closely or loosely associated with other organizational members through structure, workflow and technology, and these factors constitute the members' role-set; role behaviour is, therefore, inter-dependent with the behaviour of those in complementary positions.

Role behaviour refers to the recurring actions of an individual in relation to the repetitive actions of others, so as to yield a predictable outcome (p. 174). The interdependent behaviours comprise a social system in which the people play their parts. A role consists of one or more recurring activities within a total pattern of interdependent activities, which in combination produce the organisational output (p. 179). The interaction of the focal person with the role-set leads to repeated exposure to direct and independent social pressures, demands and expectations (Koch and Johnson, 1997). Each member endeavours to exert influence through their behaviour towards others, while conforming to group expectations as to how a role should be

performed (Lopopolo, 2001). Over time, new behaviours are learnt, resulting in a collective structure in which behaviour yields predictable outcomes. (Pfeffer and Salancik, 1980; Alexander, 1995; Pfeffer, 1997).

Role-set members develop beliefs and attitudes as to how the focal role should be performed, and these expectations define the role and expected behaviours of the focal person. Ongoing role-set interaction results in the expectations being 'sent' to the focal person, which in turn influences the performance of the role. The influence is heightened where mutual respect, liking and admiration exist between the individuals. If the focal person and role-set perceptions, beliefs and experiences are congruent, this will motivate the individual to behave in a manner consistent with the group's intent; by contrast, incongruence will result in strong individual resistance (Lopopolo, 2001). Initial encounters are, therefore, formative in terms of role assignment, subsequently setting the tone for all future interactions (Solomon et al. 1985; Lopopolo, 2001).

While the sent role may be the organisation's method of defining desired role performance, it is the received role that influences a member's actual behaviour; congruence between the sent and received roles results in positive motivational influence and behaviour. However, while members of a role-set may send role expectations, the received role may be at variance with them (see figure B1.6(a)), due to the focal members' differing perceptions and cognitions of the sent message. Individuals will have a conception of the office they hold and a set of beliefs and attitudes as to how that role should be performed. In effect, a person acts as a 'self sender', i.e. sending and receiving their own expectations of role performance. Each person has a conception of the office they hold and a set of attitudes and beliefs about what is acceptable and unacceptable behaviour in that office: the occupier of a role comes to that role in a state of 'role readiness'. An individual's role readiness is affected by prior socialisation that is further supplemented by organisational processes – including selection and recruitment (Wiener, 1988; Pratt and Beaulieu, 1992) – that influence the person's value system and the situational behaviour that results.

Role performance becomes increasingly complex when the focal person becomes involved in more than one sub-system. This occurs, for example, when an individual interacts across the organisation boundary (Merton, 1968: 374-376; Katz and Kahn,

1966). Each sub-system has its own priorities and subculture that expose the focal person to a role-set comprised of members from different organisations who may have widely different conceptions of sent roles. It is, therefore, possible for one person to hold more than one office at any one time.

In relating the above concepts, the notion of 'role episode' is created (p. 182), which comprises: role expectations, which are evaluative standards applied to the behaviour of any person occupying a particular office; sent role, which comprises the communication processes stemming from the role expectations and sent by role-set members to influence the focal person; received role, which is the focal person's perception of the role sent to him, and role behaviour, which is the focal person's response to the information and influence received.

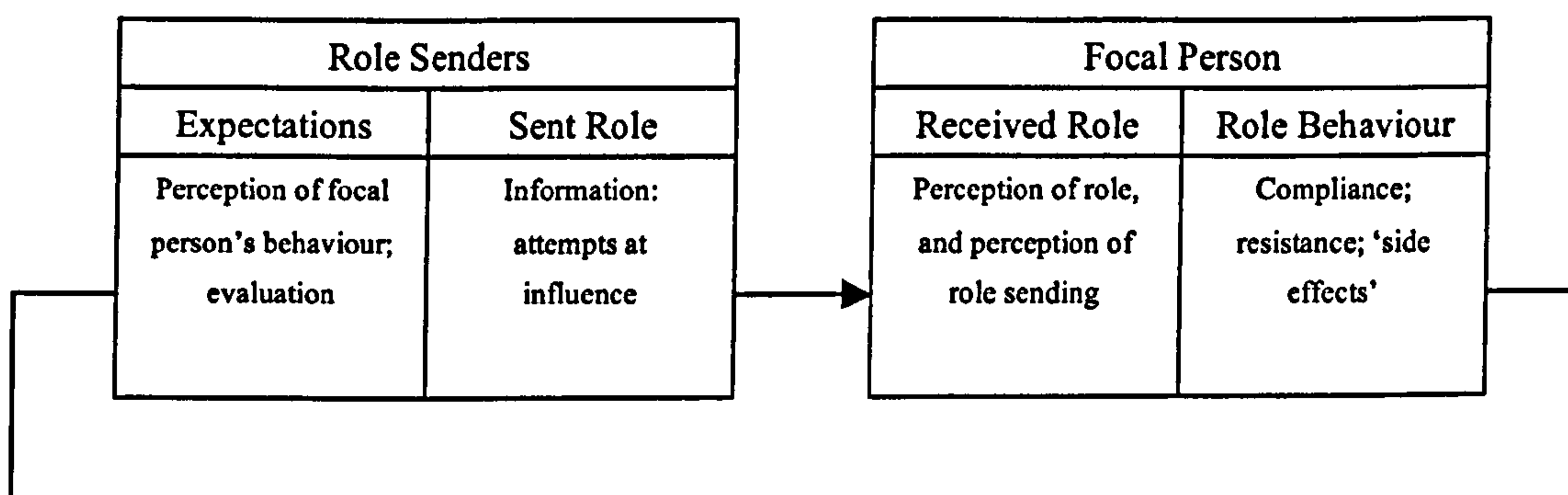


Figure B1.6(a): A model of the role episode (Katz and Kahn, 1966: 182).

The concepts of role sender expectation and sent role relate to the motivations, cognitions and behaviour of the members of the role-set, while the concepts of received role and role behaviour relate to the motivations, cognitions and behaviour of the focal person. In creating the conceptual model above, Katz and Kahn (1966) acknowledge the over simplification of the complex role-set relationship dynamic. The model presupposes the treatment of role expectations as if only one role sender existed who was consistent with their expectations, or as if multiple role senders had consensual expectations. The inter-role conflict occurs when the sent expectations of one role are in conflict with those of another role played by the same person, or in terms of person-role conflict when the requirements of a role violate the needs and values of the focal person.

There is a need to address a second limitation of the model, where the act of role sending and role receiving takes place in a wider organisational and relational setting.

The figure below sets the role senders and focal person in the wider context of: the role; the situation that is influenced by the organisational setting; the personalities of the persons acting as role senders, and the interpersonal relationship dynamic that pre exists between the role-set members.

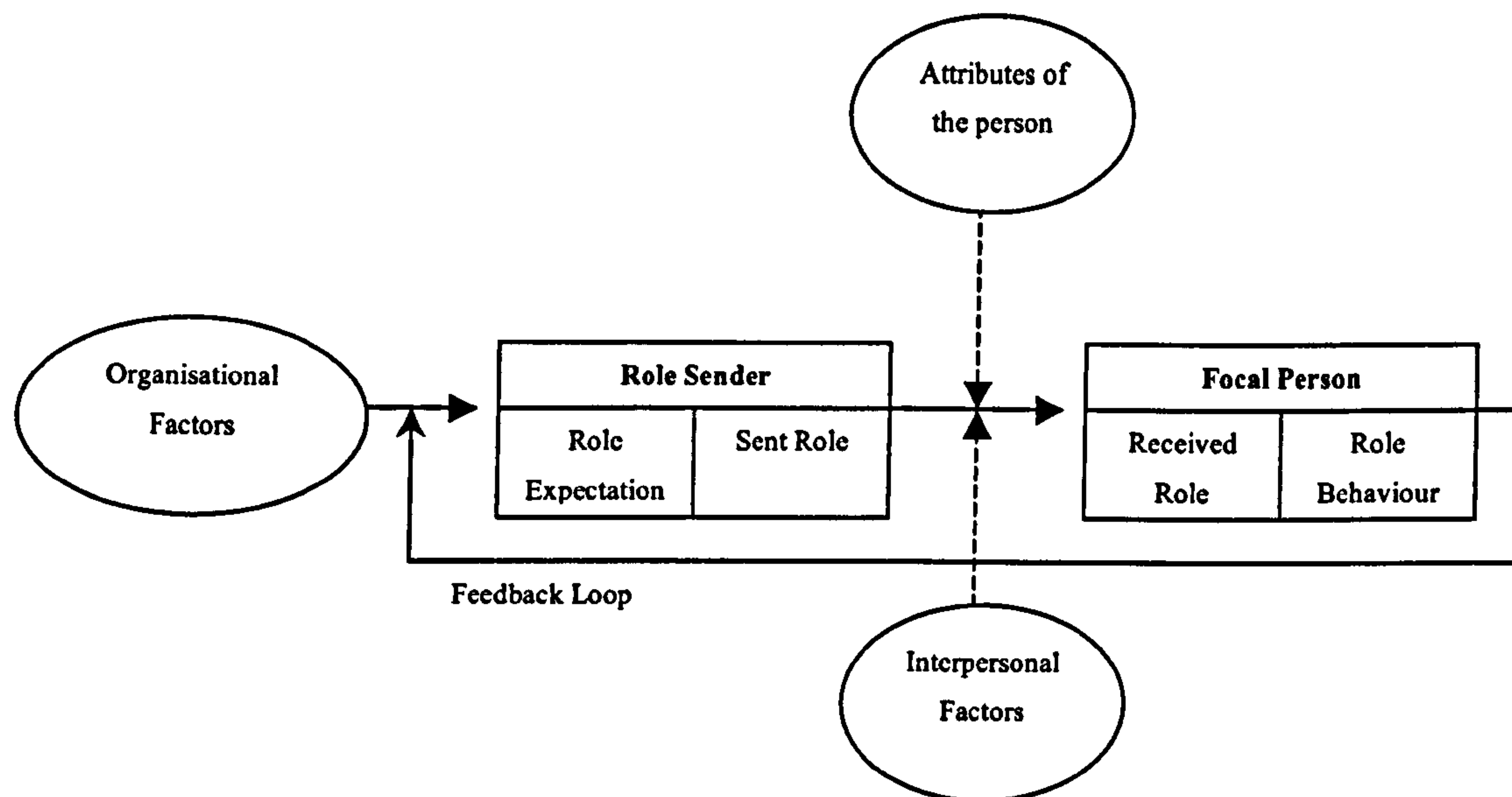


Figure B1.6(b): Theoretical model of factors involved in the taking of organisational roles (Katz and Kahn, 1966: 187).

In summarising Katz and Kahn (1966: 197), the concept of role acts as a link between the individual and setting. Each person is related to other members of a role set through the functional requirements of the system, which are heavily influenced by the expectations role set members have of the focal person in that role set. Role episode is the process by which the expectations of members of a role set are linked to the behaviour of the focal person. This is comprised of the expectations of the role set members in terms of the activities they expect of the focal person, in order for them to perform their own roles or maintain their own satisfactions. These expectations are sent – communicated – by the role senders to the focal person in terms of influences to their role behaviour. The focal person receives the sent role expectations, which may or may not be distorted, and it is this received role information that acts as a source of influence and behavioural motivation. Finally, the focal person acts by behaving in the role through a combination of compliant and non-compliant

behaviours in response to the role senders' expectations. These behaviours are acknowledged by the role senders in terms of their expectations and needs, and a further response cycle commences.

B1.7 Section Endnote

The preceding discussion has been concerned with the relationships created by individuals acting as boundary role persons at the interface between public and private sectors organisations. Role theory is proposed as an appropriate framework to review relationship interaction and behaviour between project leaders when performing boundary spanning roles. Role norms and values create an interrelated social and organisational system; role relationships create interdependence between individuals in an organisational setting; norms establish modes of acceptable behaviour for organisational members, while values provide more general justification for ideologies or aspirations (Katz and Kahn, 1966: 52). Generalised values can become organisational norms when specific behaviours are identifiable and enforceable, such as when organisational members hold common beliefs and attitudes about aspects of the system and its functioning. Behavioural interrelationships form the role system that is maintained by the relationship output requirements, and by organisational norms and individuals' shared values.

Having established a relationship between role and values, the discussion now moves on to discuss values in greater detail. An individual's values orientation is subsequently measured and considered in terms of how it influences their use of cooperation mechanisms in relationship engagement situations (Chen et al. 1998).

B1.8 Values: An Introduction

Values research is important within anthropology, sociology, psychology and philosophy (Hitlin and Piliavin, 2004; Oishi et al. 1998; Braithwaite and Scott, 1991). According to McDonald and Gandz (1992), values research can be traced to Alexander Shand's theory of character and emotion (cf Shand 1896, 1914), where different configurations in the organisation of sentiments result in differences in people's attitudinal and behavioural responses to the world. Another early example is Spranger's 1928 classification (Rohan, 2000) of six types of men, which posited that values are defined as constellations of factors including likes, dislikes, viewpoints, and rational and irrational judgements, and that there are five types of value, namely

economic, theoretical, political, aesthetic and social. Once a value system is internalised by an individual, it becomes consciously or subconsciously a standard or criteria for guiding one's action: value types are possessed by an individual in differing proportions, however only one value dominates at any one time.

At a sociological level, Parsons and Shils's (1951) general theory of action defines values as normative principles shared by members of a society; while from an anthropological perspective, Kluckhohn and Strodtbeck's (1961) seminal work regarding variations in values orientation, places value as an essential core of culture.

Widely recognised as seminal (Schwartz and Bilsky, 1987; Braithwaite and Scott, 1991; Rohan, 2000), Milton Rokeach's ([1973] 1979) psychological values work postulates that values are determinants of human behaviour. From a philosophical perspective, values are seen as ways to live, although the association of values and behaviour is not universally accepted. Skinner (1971, cited in Homer and Kahle, 1988), for example, suggests that values are simply a side effect of physical phenomena in the world, and have no bearing on a person's behaviour.

It is, however, widely accepted that there is a key relationship between values and behaviour (Kluckhohn and Strodtbeck, 1961; Rokeach, 1979; Whiteley and England, 1980; Schwartz and Bilsky, 1987; Triandis, 1989, 1993, 1996). An individual's values orientation is a strong determinant of behaviour towards others (Moorman and Blakeley, 1995; Wagner, 1995), providing a sense of common direction and guidelines for his or her day-to-day behaviour (Deal and Kennedy, 2000: 21).

The following section considers the interplay of personal and societal perspectives within values research. While it is acknowledged that values orientation is influenced by societal and cultural factors, this is considered to be beyond the scope of this research.

B1.8.1 Personal and social perspectives

The importance of stating whether research is being conducted at a societal or individual level of analysis is accepted (Triandis et al, 1985; Braithwaite and Scott, 1991; Rohan, 2000). The focus of research in this study is from a psychological perspective, and is concerned with the values and values orientation of the individual. However, in acknowledging a separation of social and personal perspectives, it is accepted that a person's attitudinal response and behaviour is influenced not only by

an individual's own value system, but also by the perceptions of others' value systems, through group and cultural associations (Oyserman et al. 2002a). Moretti and Higgins (1999, cited in Rohan, 2000) posits that a person's performance of a role may be influenced not only by their own values system but by their perception of wider social values systems. A person may, therefore, use information from other people to regulate their own behaviour, and float between their own person specific attributes and other social order attributes related to the group (Gouveia et al. 2002). Rohan (2000) suggested that a person's personal and social value systems are intrapsychic, i.e. they are cognitive processes. While a person will only have one personal value system, they may have many social value systems, and these value systems will be structured in the same way.

Potential exists for conflicting information to be received by the focal person, such that they may not know whether to cooperate or compete: this type of dilemma is consistent with the idea that role concepts are both sent and received, influencing the person's performance of their role (Katz and Kahn, 1966). Under normal, non-conflict situations, there will be an alignment between information received from the wider social group and one's own value system. Behavioural responses will occur effortlessly, with little conscious awareness. However, as noted by Wegner and Bargh (1998, cited in Rohan, 2000: 268), more conscious thought is required when making a decision that involves an entity that is not easily categorised – categorisation being something that happens when swift analytical reasoning from values priorities is possible. Difficulties could arise when there is a choice between behaving according to one's own value priorities or another's, dissimilar, value priorities. However, value priorities still guide attitudes and behavioural decision-making.

B1.9 Defining Values

Values pertain to what is considered desirable in determining a person's future behaviour while justifying past actions (Schwartz and Bilsky, 1987; Braithwaite and Scott, 1991). Values are both a powerful explanation of, and influence on, human behaviour (e.g. Ajzen and Fishbein, 1977, 1980; Schwartz and Bilsky, 1987; Homer and Kahle, 1988; Azjen, 1991; Schwartz, 1996; Rohan, 2000; England, 2001; Davidov et al. 2008).

Prior to Rokeach's ([1973] 1979) seminal work on the nature of human values, related research lacked a convergence of views at a conceptual level, and there was no

consensual definition. After Kluckhohn (1951, cited in Schwartz and Bilsky, 1987), values research rejected the notion of value as an absolute attribute of an object: i.e. value is considered in terms of being an attribute of a person 'doing the valuing', or a person 'receiving the valuing' (Braithwaite and Scott, 1991; Rohan, 2000).

A second conceptual issue relates to the distinction between value as 'the desirable' and value as 'the desired'; simply, the difference between what one 'ought to do' and what one 'wants' to do (Braithwaite and Scott, 1991; Rohan, 2000). Elements that constitute what is desirable are wide ranging, from interaction with others, to the way a person thinks the world should be: Kluckhohn (1951, cited in Schwartz and Bilsky, 1987). This position captured the emerging view that values are person-centred and that they pertain to the desirable: a value 'is a consensus, explicit or implicit, distinctive of an individual or characteristic of group, of the desirable, which influences the selection from available modes, means and ends of action' (cf Kluckhohn 51: 395, cited in Braithwaite and Scott, 1991: 661).

During the 1960s, values were considered to be individual as well as social phenomena (Hitlin and Piliavin, 2004), and were conceived of as general beliefs that have a motivational function. They were not merely evaluative – for example in the work of Williams (1968 cited Peng et al, 1997), in which value was seen in terms of being criteria or standards of preference – considered prescriptive and proscriptive, guiding actions and attitudes (see Allport 1961; Smith 1963; Kluckhohn 1951, cited in Braithwaite and Scott, 1991: 663 for a discussion of these issues).

Rokeach ([1973] 1979) advanced Kluckhohn's definition of belief, separating the concepts of attitude and value. Beliefs were considered to be more than schematic cognitions (conceptual patterns of the mind): they were predispositions to action that are capable of arousing affect around the object of the belief. Attitudes and values were defined in terms of the types of beliefs that compose them. Values referring to a single proscriptive or prescriptive belief that transcends specific objects or situations, whereas attitudes refer to an organisation of several beliefs, focused on a specific object or situation. Together, they constituted the value-attitude system that is embedded in the wider belief system (Braithwaite and Scott, 1991: 663-4).

The developing conceptual consensus enabled Rokeach ([1973] 1979) to focus on the attitude-value relationship. He defines a value as 'an enduring belief, that a specific

mode of conduct (instrumental values) or end-state (terminal values) of existence, is personally, or socially preferable, to an opposite or converse mode of conduct or end-state of existence'. This can be associated with: Kluckhohn's (1951, cited in Braithwaite and Scott, 1991) modes, means and ends of action; Scott's (1965, cited in Braithwaite and Scott, 1991) identification of values as being sufficient final ends, and Fallding (1965, cited in Braithwaite and Scott, 1991), who considered values to be associated with satisfactions that are self-sufficient.

Rokeach (1973, cited in Braithwaite and Scott, 1991: 662) also asserted that sets of values form value systems, defining these as 'enduring organisations of beliefs, concerning preferable modes of conduct or end-states of existence, along a continuum of importance'. He regarded value systems as being part of a functionally integrated cognitive system, in which the basic units of analysis are beliefs, and in which clusters of beliefs form attitudes that are functionally and cognitively connected to the value system: he argued that values, which are 'considered to be determinants of attitudes, are more resistant to change, such that favourable attitudes emerge towards objects (e.g. people), that are instrumental in the attainment of important values' (Braithwaite and Scott, 1991: 663). This view is supported by Homer and Kahle (1988: 638) in that both values and value systems are considered to be adaptation abstractions, i.e. 'behaviour adapting to situation and environment, that emerge continuously from the assimilation, accommodation, organisation and integration of environmental information, in order to promote interchanges with the environment, favourable to the preservation of optimal functioning'. Behaviour is, therefore, in part, conditioned by the interaction of the person with the environment (Hui, 1988).

Cognitions, and therefore values, guide individuals in terms of which situations they should enter and what they should do in these situations (Homer and Kahle, 1988). A person, therefore, interacts with factors – including aspects of the situation, and their relationship and commitment to the organisation – in order to effect and condition a behavioural response (O'Reilly et al. 1991; Arygle, 1994; Finegan, 2000). Situations place differing demands on individuals, and those with the necessary skills to meet these demands are more likely to behave in predictable ways (Chatman and Barsade, 1995). The better the person-situation congruence, the greater the individual's effectiveness in that situation, and the greater will be their desire to seek out similar situations in the future.

The dissonance between values that are conceived in term of what one ought to do (the desirable), and what one wants to do (the desired), is widely acknowledged (Braithwaite and Scott, 1991; Schwartz and Bilsky, 1987; Schwartz, 1996). Value priorities are generally accepted as being concerned with the desired. As noted by Schwartz (1996: 2), value priorities are responses to three universal requirements of human existence: (i) the goal type that is expressed by the value, i.e. terminal goals or end-states, or modes of behaviour; (ii) the interests that are served by the attainment of the value; and (iii) the content of the value that is associated with the type of motivational concern that the value expresses. This will be returned to for further discussion. As conscious goals (Schwartz and Sagiv, 1995; Roccas, 2002, cited in Hitlin and Piliavin, 2004: 361), values are positive and important facets of human existence, and they need to remain stable in order to act as guiding principles in a person's life. This conception remains consistent with Kluckhohn (1951, cited in Braithwaite and Scott, 1991) and Rokeach's ([1973] 1979) suggestions that it is advantageous to see people as constellations of values rather than having fixed traits, or positive or negative enduring dispositions.

Rohan (2000: 263) takes Schwartz and Bilsky's (1987; 1990) priority conception of values as guiding principles in a person's life, and re-constructs them as guides for 'best possible living'. In this conception, values are conceived as being more than guides to survival. As guides for goodness, value priorities relate to the principles of moral and ethical living (Rohan, 2000: 263). Values are associated with what a person ought to do, rather than what they want to do. Rohan (2000: 263) cites Spinoza ([1644] 1985), stating that that tests of goodness are individual: 'it is clear that we neither strive for, nor will it, neither want anything because we judge it to be good; on the contrary, we judge something to be good because we strive for it, will it, want it, desire it'. This suggests that 'ought' and 'want' aspects of value priorities should be integrated in such a way that disputable notions of good can be avoided.

It is further suggested (Rohan, 2000: 263) that the ought and the want can be brought together if they are 'viewed as evidencing the dynamic organisation of judgements about the capacity of entities, i.e. things or people, to enable the best possible living'. From Aristotle comes the term *eudaimonia*, meaning human flourishing – i.e. actualising one's potential – which he proposed to be the ultimate human goal to which all human action is directed. Value priorities can provide a guide to the best

possible way of living. As posited by Schwartz and Bilsky (1987; 1990), the two opposing motivational dimensions structuring a value system are concerned with the fundamental problem of the 'ought and want' that human beings must resolve. Value systems can be viewed as a way of ordering which requirements or desires are more or less important to best possible living (Rohan, 2000).

While value priorities should, as far as possible, be stable and enduring, in order to serve as guiding principles in a person's life (Schwartz and Bilsky, 1987; 1990; Schwartz and Sagiv, 1995), Rohan (2000) suggests that a person's value priorities are likely to determine a person's judgement in response to changes in circumstances and environmental conditioning.

Acknowledging the link between values orientation and behaviour, the next section now considers how values can be classified using the widely acknowledged individualist-collectivist dichotomy. The distinction of societal versus individual level analysis is acknowledged in section B1.10, and the implications for self and group relationships are further explained. In addition, the measurement of values is considered, and the relationships between some of the more widely used instruments is looked at in particular. A more detailed chronology is contained in appendix B; further detail and applications of the instruments are contained in the research methodology chapters C1-C4. Classifying an individual's values orientation is considered to be important in this study, as it enables individuals to be categorised in terms of how they use various cooperative behavioural mechanisms.

B1.10 Individualist-Collectivist Dichotomy

B1.10.1 Introduction

The individualist-collectivist (I-C) values orientation classification is widely used (Kim et al. 1994; Oyserman et al. 2002a,b); it is a popular, although challenged, typology for cultural and individual level analysis, having been defined by many (e.g. Hofstede, 2001; Triandis et al. 1985, 1995; Schwartz and Bilsky, 1987; Singelis et al. 1995; Probst et al. 1999). Individualist-collectivist values orientations, as defined by (Triandis, 1993: 156) reflect the 'shared attitudes, beliefs, norms, roles, values, and other such elements identified among those who share a language, historic period, and geographic location'. While individualism-collectivism may tap the core of a culture, its validity for cross-cultural studies has been challenged more recently (Fiske, 2002;

Kitayama, 2002). It is suggested that the attitudinal-values approach fails to account for all aspects of cultural variation including: language, history, customs, emotion and motivation and that different societal groups may assign different meanings to abstract traits and values in attitude surveys.

Discussion associated with the individualist-collectivist dichotomy (e.g. Hui and Triandis, 1986; Wagner and Moch, 1986; Triandis, 1993) can be traced back, to include: Adler's (1938) *Gemeinschaftsgefühl* or social interest distinction; Weber's (1947) communal and associative social relationships; Durkheim's (1947) mechanistic-organic solidarity; Parsons and Shils's (1951) self and collective orientation adapted from Weber; Töennies' (1957) separation of *Gemeinschaft* (collectivist) and *Gesellschaft* (individualist) orientations; Kluckhohn and Strodtbeck's (1961) collaterality versus individualism; Hofstede's, (2001) cultural classification of individualist versus collectivist behaviour and Triandis's (1972, 1980, 1983, 1988) intra cultural level analysis of individualist and collectivist behaviour.

Recognising the importance of stating the level at which analysis is to be carried out, Triandis et al. (1985) proposes the use of idiocentric and allocentric orientations to reflect the increased analysis granularity of individualist and collectivist orientations at the psychological level. In addition, the distinction enables idiocentric individuals to be discerned in collectivist cultures (Triandis, 1999). This typology can be related to Mead's cooperation versus individuality (cf Mead, 1967), Kluckhohn and Strodtbeck's collaterality versus individuality (cf Kluckhohn and Strodtbeck, 1961), and the more general cultural level individualist versus collectivist distinction (e.g. Hofstede, 2001). While acknowledging the proposed psychological labelling of idiocentric and allocentric, the writer uses the generally accepted individualism and collectivism labels.

B1.10.2 The individualist-collectivist orientation

The individualist-collectivist construct (e.g. Triandis, 1980, 1989) reflects an individual's values orientation, in that it relates to the priorities or preferences expressed by a person for particular goals over others, and these ultimately guide behaviour (cf Kluckhohn, 1951; Rokeach, 1973). Central to the individualist-collectivist dichotomy is a presumed conflict between personal and in-group interests

(Schwartz, 1990, 1992; Triandis, 1988, 1990, 1996, 2002), as the goals that motivate the individualist are unlikely to serve those of the collectivist. Gouveia et al. (2002) acknowledge the behavioural implications of individualist-collectivist values orientation, but challenge the presumption that conflict will exist by virtue of the dichotomy, and suggest that values orientation can be defined in terms of both personal and social orientations. A person's behaviour is influenced by person specific attributes and social order attributes relating to their social group: an individualist's values orientation maintains contractually based personal relationships where behaviour tends towards self-maximisation. Social values are comprised of sub-level and inter-actional normative values, and the former are adopted by individuals who emphasise factors including: (i) social life; (ii) group stability and, (iii) respect for social norms. While inter-actional values, by contrast, focus on factors such as: (i) common fate and compliance; (ii) peers being central to an individual's happiness and, (iii) the importance of true friendship and an active social life.

Triandis and Schwartz's acknowledgement of the co-existence of individualist and collectivist tendencies is accepted here, and not earlier definitions of construct polarities.

Individualist and collectivist orientation has been characterised (Wagner and Moch, 1986; Schwartz, 1990, 1992; Triandis, 1988, 1990, 1996, 2002) in terms of: self and group relationships; the structure of goals; behaviour being a function of norms and attitudes, and the emphasis on relatedness versus rationality. Individualists and collectivists view the definition of self differently: individualists see the self as autonomous and independent of the group, and use the individual as the unit of analysis of social behaviour, while collectivists are defined by, and interdependent with, their group. Individualists are more concerned with their own success, whereas collectivists are less concerned with personal than with wider group success.

Individualists and collectivists relate to goals differently, the presumption being that goals that serve the needs of the individualist are unlikely to serve the needs of the collectivist. For individualists, in-group goals do not always correlate with personal goals, and personal goals have primacy for the individualist. Collectivists, however, usually have compatible personal and in-group goals, such that should there be conflict, collectivists sublimate their personal goals to fit those of the group.

Behaviour is a function of social norms and personal attitudes. An individualist's behaviour is principally conditioned by personal considerations, including needs, rights and contracts. Collectivist behaviour is more conditioned by the social norms of the group (Bontempo and Rivera, 1992 cited in Triandis, 1993), being dependent on fitting in and having good in-group relationships. Individualists, however, are less concerned with fitting in to the group, being more concerned with satisfaction of self.

Emphasis on relatedness and rationality is different for individualists and collectivists in terms of the needs of the group versus the requirement for social exchange beyond it. An emphasis on relatedness means that priority is given to relationships – i.e. the needs of others – even when such relationships are not advantageous to the individual. Rationality in turn relates to the careful computation of the costs and benefits of relationships. Collectivists emphasise unconditional relatedness, being more in tune with in-group needs. Individualists, however, emphasise rationality, paying more attention to the advantages to be obtained from, and costs of, a relationship.

Individualists are more concerned with the profit and loss of a relationship, while collectivists are concerned with the needs of others and the loyalty associated with the relationship. Individualists tend to favour exchange-based relationships, while collectivists tend to favour communal-based relationships.

Before continuing with the implications of the individualist-collectivist dichotomy, a short interjection is required to define the relationship between self and group.

B1.10.2.1 Relating self and group

Individualists and collectivists define the self in terms of independence or interdependence with a wider group, and this difference can be thought of in terms of goals and relationship emphasis (Triandis et al. 1989, 1995; Markus and Kitayama, 1991).

A group is a set of individuals who are perceived as a group, either by themselves or others. This is most likely to occur when (i) the individuals are similar, (ii) there is a common fate – owing to having the same location, economic activity or boundary, and (iii) the group boundary is stable and impermeable (Triandis, 1989). An in-group would, therefore, be characterised as having common norms, goals and values that shape the behaviour of its members; whereas an out-group is a group with dissimilar attributes to the in-group.

Returning to the individualist-collectivist discussion, Schwartz (1990) provides an explanation as to why the notion of a dichotomy between individualist and collectivist interests is not sufficient. Firstly, goals can serve the interests of either the individual or someone broadly considered to be part of the wider collective; however, some goals serve both individual and collective interests. Secondly, the dichotomy fails to recognise goals that are collective in nature but which do not serve the in-group's interests: e.g. goals that relate to social justice or equality might not favour the in-group. Thirdly, the dichotomy presumes that individualist and collectivist values form two distinct syndromes that are in polar opposition.

B1.11 Measuring Values

B1.11.1 Introduction

This section considers the development of value measurement. The intention is not to consider in detail the multiplicity of scales and instruments that are available: for that, the reader is directed to a wide range of sources including Braithwaite and Scott (1991); Oishi et al. (1998); Schwartz and Bilsky (1987); Triandis (1989); Rohan (2000); England (2001); Reallo et al. (2002); Oyserman et al. (2002a), and Hitlin and Piliavin (2004).

Appendix B provides a summary of the chronology of values measurement and application from the early part of the last century. The following discussion is therefore limited to values measurement issues that concern this study only, with particular emphasis on the measurement of values labelled by the individualist-collectivist orientation.

B1.11.2 Values measurement development

There is a long history of values measurement that can be traced back to: Spranger's 1928 classification of six types of men; England's development of value types (McDonald and Gandz, 1992); Allport's values prioritisation work; Morris's ways to live (Rohan, 2000); Osgood et al.'s personal value system (England, 2001), and the seminal work of Rokeach (1973).

The *AVL Study of Values Instrument* (cf Allport, Vernon and Linzey, 1931, cited in Rohan, 2000), can, perhaps, be considered the first instrument to measure value types, its development having been heavily influenced by Spranger's work. The AVL

instrument provides an indication of the relative priorities people place on six value types, by measuring the effect of a person's value priorities on their answers to a series of questions.

Osgood et al. (1957, cited in England, 2001) developed the *Personal Values Questionnaire*, PVQ, which provides a description of a person's value system through the measurement of meaning. Meaning is related to understanding ways of behaviour, and assessed through sixty-six sets of bi-polar adjectives that are grouped into five classes: the goals of business organisations, the personal goals of individuals and groups of people, ideas associated with people, and ideas about general topics.

The varying conceptions of value are generally agreed to have been brought to a consensual position through Rokeach's (1973) seminal work associated with the nature of human values. Rokeach developed the *Rokeach Value Survey* (RVS), which included 36 value types in two distinct groupings. The first relates to goals as terminal values or end-states, while the second grouping relates to modes of conduct or ways of behaving, and these are labelled as instrumental values. The fundamental separation of means and ends proposed by Rokeach has not been universally accepted; for example, Dewey (1957, cited in Schwartz and Bilsky, 1990) notes that ends can readily become the means.

Although the RVS does not have any underlying value theory structure (Rohan, 2000), it has become influential to the development of instruments that measure values (e.g. Triandis et al. 1985; Schwartz and Bilsky, 1987, 1990; Schwartz, 1990, 1992, 2001; Triandis, 1989; Bilsky and Schwartz, 1994; Triandis et al. 1995; Finegan, 2000). The lack of underlying theory makes it impossible to understand the consequences of relationship prioritisation between value types. This is due to a number of deficiencies, including: (i) the single-item measurements of values may be influenced by meaning and linguistic interpretation; (ii) the prioritisation of the two-group value model into terminal and instrumental categories does not account for values being concerned with the desirable and desired (Braithwaite and Scott, 1991; Kitwood and Smithers, 1975); (iii) the four-group sub-scales lack the specificity required to draw meaningful conclusions and, (iv) the ipsative measurement does not allow for respondent intercomparisons, unlike the use of Likert scales.

Utilising Rokeach's work on value types, Schwartz and Bilsky (1987, 1990) initially developed an underlying theory of values associated with the Schwartz Value Survey that focuses on the motivational concerns embodied within each value. It was suggested that people only differ in terms of the relative importance they place on a universally important set of value types. Dewey's association of ends with means was also supported by Schwartz, who found no requirement for distinguishing ends from means, as the same values can express motivations for both.

The ranking of values found in RVS also holds true within Schwartz's SVS, which is operationalised in appendix C1. Rokeach was concerned with the real world notion that values are often in competition with one another, arguing that individuals are required to choose between values (Hitlin and Pilivin, 2004). The notion of values conflict is also evident in SVS, where the circular presentation of value types indicates value domain association.

SVS requires respondents to rate 56 items as guiding principles in one's life. It is important to note that the ranking versus rating debate that had previously existed, was now considered of less importance. From the extensive study conducted by Schwartz (1992), for example, it is suggested that rating was more beneficial in terms of assessment of a respondent's value priorities because: it allows for better statistical analysis; longer lists of values can be considered; negative values can be discerned, and respondents are not forced to discriminate among equally important values.

The 10 value domains constituted by the 56 items presented by SVS, can be summarised as two opposing dimensions, which are cast in terms of value conflicts. These are openness to change versus conservation, and self-enhancement versus self-transcendence. The former dimension relates to the conflict as to whether the individual will follow their own intellectual and emotional interests in both predictable and uncertain directions, or preserve the status quo and the certainty it provides in relationships with close-others, institutions and traditions. The second dimension relates to a conflict between being concerned about the consequences for the self of one's own and other people's actions, and being concerned about the consequences of one's own and other people's actions in terms of their effect on the social context (Schwartz, 1992: 43). Rohan (2000) suggests a re-labelling of the dimensions, such that openness to change versus conservation becomes opportunity versus organisation, while the self-enhancement versus self-transcendence dimension

becomes individual versus social outcomes. People who have a greater focus on the social context of an engagement may believe that human beings are essentially good.

It is asserted (Schwartz and Bilsky, 1987; Oishi et al. 1998; Schwartz, 1990, 1992) that the value priorities obtained from SVS gauge individualist and collectivist values orientations, the measurement of which is long established (e.g. Hofstede 2001; Triandis 1989, 1990; Oyserman, 2002a). At a societal level, Hofstede (2001) identified four dimensions of cultural identity, including individualist and collectivist orientations: Triandis's (e.g. 1989, 1990) development of individual and collectivism (INDCOL) responds in some ways to the validity of the individualism and collectivism concerns (e.g. Oyserman et al. 2002a; Fiske, 2002), enabling measurement at both a societal and individual level. (The reader is directed to appendix C2 for further information relating to the INDCOL instrument). The four-dimensional, 32-item scale identifies what Triandis refers to as vertical and horizontal components of individualist and collectivist values orientation, and introduces power, achievement, benevolence and universalism into individualist and collectivist orientations. This produces a number of states (Singelis and Triandis et al. 1995), including: (i) horizontal collectivism as a function of benevolence and collectivist values; (ii) horizontal individualism as a function of universalism and individualist values; (iii) vertical collectivism as a function of power and collectivist values, and (iv) vertical individualism as a function of achievement and individualist values.

Horizontal collectivism is a pattern in which the individual sees the self as an aspect of the group, and in which the concept of the self is closely tied to and interdependent with others in the in-group. Equality for in-group members is seen as a value. Horizontal individualism is a pattern characterized by a self-concept that is autonomous; however, the individual is seen as equal in status to others. Self-reliance is seen as a virtue. Vertical collectivism is a pattern in which individuals view the self as an aspect of the group. Again, the self is closely tied to the members of the in-group, but the members of the in-group differ from one another, particularly with regard to social status. Inequality is accepted and people do not see each other as the same. Sacrificing for the good of the group is a key feature. Finally, Vertical individualism is a pattern in which the individual sees the self as autonomous, but expects inequality. Excelling in competition would be seen as important (Probst et al. 1999).

There is association between the value orientations obtained from SVS and INDCOL dimensions (Triandis, 1989; Schwartz, 1990, 1992; Triandis et al. 1995; Oishi et al. 1998). Individualist values orientation has been found to be strongly associated with self-direction values, fairly strongly associated with hedonism and stimulation, and less associated with enjoyment and power values types. Collectivists have been found to be strongly associated with conformity values, closely associated with tradition values and less strongly associated with pro-social and benevolence values. Universalism and security values are fairly important to both individualist and collectivists.

B1.12 Section Endnote

The preceding discussion has considered the widely accepted association between values, attitudes and behaviour. What constitutes value and value systems has been considered and the ways value and value systems are measured have been discussed; the long-standing individualist-collectivist categorisation has been analysed. The consensual position that was reached following Rokeach (1973) has been identified, and the importance of this seminal work on the nature of human values to values research has been acknowledged. The initial thirty-six-item RVS scale and the implications for the subsequent theory proposed by Schwartz that resulted in the Schwartz Value Survey have been outlined. The association between the individualist and collectivist dichotomy, the use of INDCOL (e.g. Triandis, 1993), and the increased granularity provided by assessing value types at an individual level using SVS (Schwartz and Bilsky, 1987, 1990), have been discussed, while also acknowledging the limitations of a number of the studies.

The final section within the literature review considers the link between behaviour and cooperation, in particular within cooperation mechanisms (Chen et al. 1998) used by individuals during relationship interaction. It is concerned only with the antecedent conditions associated with the potential to form relationship cooperation. It does not consider in any detail the actual process of initial relationship cooperation formation, evolution, maturing, sustaining or dissolution; any reference to these wider issues is simply for clarity of the primary discussion. For further discussion of these issues, the reader is directed to a wide number of sources associated with relationship cooperation after initial formation including: Chen et al. 1998; Child and Faulker,

1998; Lewin and Volberda, 1999; Barringer and Harrison, 2000; Faulkner and DeRond, 2000; Deakin and Mitchie, 2001 and Hall, 2002.

B1.13 Behaviour and Relationship Cooperation

Before considering behavioural cooperation mechanisms, relationship cooperation is discussed and contextualised in relation to this research setting.

B1.13.1 Bounding relationship cooperation

‘People have cooperated since the time evolution enabled them to make decisions and take actions’ (Ridley, 1996 cited in Child and Faulker, 1998: 65). Relationships between individuals are advanced through ongoing and repeated interaction, unexpected events triggering cooperative actions that result in the evolution of relationship engagement rules (Child and Faulkner, 1998). Rules lead to regularity of behaviour between members, such that norms influence member-to-member relations at the time of engagement, and set engagement rules for future interactions, to create an environment for cooperation to be sustained (Thibaut and Kelley, 1967).

It is accepted that behavioural cooperation between individuals is a social, rather than economic, process (e.g. Dawes, 1980; Clemmer et al. 1998), and that psychological factors are important to the behaviour and development of cooperation between individuals. While it can be intuitively appealing to think that some individuals simply have a ‘willingness to cooperate’ (Organ, 1990), human interaction does require experience and adaptability in order to be mutually involving. In other words, the mutual reaction between two individuals is a series of responses to the intention and meaning of the behaviour that creates social factors and the consequent relationship (Barnard, 1968).

Human beings do, however, tend to view the world from their own perspective, as we all have a unique value system and frame of reference that is based on our past experiences (Sedwick, 1974; Triandis, 1996). Invariably, we assume that others think, act and have similar behaviours to ourselves: accordingly, we often fail to see the other person’s point of view and do not understand that the other person’s objectives may be different from our own (Segall et al. 1998). People with similar experiential backgrounds do, however, tend to assume that others have been treated in a similar manner and are therefore likely to interact on this basis (Argyle, 1991).

Values orientation, in conjunction with a person's attitudes, is a strong determinant of an individual's behaviour, providing a sense of direction and guidelines for their day-to-day relationship with others (Rokeach, 1979; Argyle, 1991; Moorman and Blakeley, 1995; Wagner, 1995; Probst et al. 1999; Deal and Kennedy, 2000: 21). Orientation therefore directly influences both the degree of cooperation between individuals and the use of cooperation mechanisms (Chen et al. 1998).

B1.13.2 The implications of values orientation and cooperative behaviour

The following section now considers the implications of values orientation, using the individualist-collectivist system of categorisation. The behaviour of boundary spanning persons in relation to behavioural cooperation mechanisms is also discussed.

It is acknowledged that the behaviour of boundary spanning persons serves to shape and modify the evolving structure of a cooperative relationship (Currall and Judge, 1995; Grimshaw et al. 2005b: 46). Behaviours in turn are strongly influenced by an individual's values, of which the individualist-collectivist orientation is particularly significant (Smith et al. 1995).

Collectivists tend to have a more cooperative disposition. They are motivated to understand and uphold group social norms that are sustained through group interaction, but they have an expectation of cooperative behaviour in return. However, if required to, they will respond individualistically if others initiate such behaviour. Collectivists tend to be more malleable, behaving cooperatively in collectivist cultures and non-cooperatively in individualist cultures. The heightened self-interest orientation and lack of cooperative behaviour of individualists, even in cooperative situations (Chatman and Barsade, 1995), reflects their less adaptive disposition, being more concerned with personal goals and attitudes, while expecting others to behave in a similar, self-interested way.

When individual and organisational behaviours lean towards collectivism, there is a greater propensity for cooperation and the safeguarding of collective wellbeing (Earley, 1989; Moorman and Blakely, 1995); whereas, if orientated toward individualism, lower levels of cooperation result. Where collectivism persists, organisations may expect a higher emotional commitment from the individual, who in return assumes a broader responsibility for the other members. However, where an imbalance occurs and organisations fail to display overt responsibility, there is a

tendency for a shift in values towards individualism. Accordingly, the level of involvement and the ‘moral’ relationship (Hofstede, 2001) between individuals increases in organizations with more collectivist values, but becomes more calculative in organisations where individualism prevails.

Kelly and Stahelski (cited in Chatman and Barsade, 1995) note that collectivists modify their behaviour more than individualists, such that they move to accommodate the cooperative or individualist norms that are emphasised by a particular social setting, as they are more concerned with fitting in and more willing to go along with others – whereas individualists have a greater difficulty in enacting cooperative roles. Cooperative individuals have a more cooperative nature when working in an induced, cooperative environment, and they tend to vary their behaviour depending on whether the culture is orientated towards individualism or collective cooperation (Pfeffer, 1997).

Collectivists generally have a propensity towards conflict avoidance, preferring to compromise and negotiate in order to achieve mutuality and achieve a win-win outcome (Steensma et al. 2000), whereas individualists, tending to be more hedonistic, competitive and achievement-oriented, can shift towards a zero-sum relationship outcome, relying on the contractual process and legal systems to enforce a relationship. The individualist’s preference of relying on contractual safeguards to control a relationship may, over time, have a negative effect and increase the likelihood of opportunistic behaviour, the very aspect of a relationship that cooperation should be reducing.

B1.14 Cooperative Behavioural Mechanisms

The final section of the literature review discusses how a person’s values orientation influences behavioural factors (Chen et al. 1998), including: trust; accountability; self versus group identity; goals; communications and rewards.

B1.14.1 Distinguishing trust from relationship cooperation

Before discussing each behavioural cooperation mechanism in detail, the complex relationship between trust and cooperative behaviour is first considered. Faulkner and DeRond (2000) suggest that trust has been misconceptualised as being equivalent to cooperation; or, as posited by Deutsch, has been seen as a pre-requisite for the development of cooperative behaviour. As a psychological influencer of cooperation,

trust acts as a relationship stabiliser, increasing behavioural tolerance between individuals. It is considered here as one of the behavioural mechanisms, as noted by Chen et al. (1998), that are influenced by an individual's values orientation, which influences cooperative behaviour in relationships. It is widely accepted that trust is an antecedent to, and a consequence of, cooperative behaviour and cooperative relationships (e.g. Heide and Miner, 1992; Ring and Van de Ven, 1994; Smith et al. 1995; Chen et al. 1998; Zaheer et al. 1998; Faulkner and DeRond, 2000). As an antecedent to relationship cooperation, trust is unlikely to come into effect without the parties having some certainty regarding the outcome of a relationship or future exchange (Child and Faulkner, 1998: 45).

B.1.14.2 Trust as a cooperative behavioural mechanism

There are many defining characteristics of trust. However, Child and Faulkner (1998: 45) suggest that there is general agreement that trust refers 'to the willingness of one party to relate with another, in the belief that the other's actions will be beneficial, rather than detrimental to the first party, even though this cannot be guaranteed'. Factors associated with trust include: goodwill and reciprocity (Messick and Brewer, 1983); confidence in others (Moorman and Blakeley, 1995); morality and integrity (Ring and Van de Ven, 1994); reliability and integrity (Morgan and Hunt, 1994); obligation and fulfilment (Zaheer et al. 1998), and reliance on commitments (Mavondo and Rodrigo, 2001).

High levels of trust between partners lead to an increase in the strength of relationship ties, resulting in a number of benefits including: (i) the promise of a mutually higher economic payoff; (ii) a reduction in the negative effects of bounded rationality and opportunism, leading to a reduction in transaction costs, and (iii) a reduction in the temptation of either partner to take advantage of the other because of goodwill (Ring and Van de Ven, 1992; Ring, 1996; Currall and Judge, 1995; Child and Faulker, 1998). The trusting behaviours that develop between individuals may be viewed as a family of behaviour types, all of which are manifestations of 'behavioural reliance on another person under a condition of risk' (Currall and Judge, 1995: 153; Ring and Ven de Ven, 1994). This conception focuses more on the economic aspects of the deal, rather than the ways counterparts regard and relate to each other, or are concerned with confidence in future outcomes and opportunism. However, as relationships evolve over time, trust can increase between individuals as a

consequence of repeated, positive interactions and outcomes, and as a result of individuals being more focused on relatedness and mutual goodwill (Thibaut and Kelley, 1967; Ring and Van de Ven, 1992; Ring, 1996; Chen et al. 1998).

Forms of trust have been variously considered from a wide range of perspectives. Barney and Hansen (1994, cited in Faulker and De Rond, 2000: 31) suggest that a weak form of trust arises as a consequence of opportunism and limited governance. This increases to a semi-strong form when there are agreements in place that create a structure of governance. Finally, strong-form trust emerges in response to the existence of norms that guide each partner's behaviour.

The issue of who trusts who is important. As noted by Zaheer et al. (1998), trust has its basis in individuals. It is not the organisation, at a macro level, which instils trust in another organisation; it is the individual, at a micro level, acting as an agent of the organisation, who imbues a level of trust in an individual from another organisation. Boundary spanning persons serve to shape and modify the evolving structure of a cooperative relationship.

The development of trust within relationships is a consequence of a number of factors, including (i) the general trusting nature of one person towards another, (ii) the display of a positive attitude towards another, (iii) the perception of normative pressures that imbue trust in another, and (iv) a history of past relationship exchanges that were regarded as trustworthy (Currall and Judge, 1995). This study takes the view that trust is socially embedded and rejects the economic view of trust as indebtedness and obligation (Powell, 1990; Ring and Van de Ven, 1994). Trust is strengthened if repeated exchanges give rise to positive outcomes. In classical contracting environments, individuals tend to act opportunistically and are self-centred, and forms of trust are fragile (Ring and Van de Ven, 1994).

However, trust not only grows and develops between friends, but can also change from being fragile to resilient where there are repeated encounters in which there is a presumption of goodwill between counterparts (Ring and Van den Ven, 1992; 1994). The development of behavioural norms establishes person-to-person equity and reciprocity that become embedded in informal social processes, cooperativeness creating an expectation that the future will result in proportional benefits to the partners. Resilient forms of trust survive minor transgressions between partners, even

when expectations are not met. As mutual values and behavioural norms develop, the goodwill that develops between individuals reduces the need for governance structures and a formal contract; this set of understandings is compatible with Etzioni's ideas about the development of moral communities, Ouchi's views on the social glue of clans, and Granovetter's work about antecedents to social relations (Ring, 1996). Resilient forms of trust develop where partners to an exchange, or relationship, demonstrate loyalty and integrity towards each other, and have an open communications style and good interpersonal skills – described by MacNeil (1980, cited in Ring, 1996: 157) as 'whole body' communication. Over time, the psychological bonds between individuals become more significant than the legal contract, and personal behaviours replace role behaviours (Ring and Van de Ven, 1994). However, new personnel in a role may not enjoy the same level of flexibility or efficiency of outcome. The psychological clock needs to be restarted for the new relationship: a formal structured relationship replaces the informal one, and problems are resolved according to the original role definitions, at least in the short-term.

In Zaheer et al. (1998) interpersonal forms of trust exist to the extent that a boundary spanning person places trust in a counterpart. Rotter's (1971, cited in Zaheer et al. 1998: 143; Marchington et al. 2005b: 135) separation of relational and dispositional trust is at the root of Zaheer et al.'s conception, in which the latter distinguishes between (i) trust that is associated with a counterpart in a dyadic relationship and (ii) general expectations about the trustworthiness of others. The implication is that high levels of relational trust in a dyadic counterpart do not imply blindly trusting all others within a relationship or exchange. As further suggested by Ring and Van de Ven (1992), relational trust is likely to be based on the experience of interaction with a particular exchange partner.

The idea that trust relates to individuals and not organisations is also evident in the cognition and affect-based conceptions posited by McAllister (1995). Trust is construed initially as a cognitive process, with cognition-based trust being based on the knowledge a person has of others and the evidence of their trustworthiness. Motivated by self-interest, individual rationality pursues a self-maximising position as long as the exchange outcomes are equitable and adhere to rules of transacting (Chen et al. 1998). A second conception is that of affect-based trust, which is founded on the basis of emotional bonds between individuals. These bonds express a genuine concern

for the welfare of partners, a feeling that relationships have intrinsic virtue and a belief that these sentiments are reciprocated (p.49). Affect-based trust is most likely to develop through intensive relationships between people on a person-to-person basis, over a longer period of time. McAllister's conception of affect-based trust acknowledges the relational characteristics of trust described by Zaheer et al. (1998), and the strong-form basis of trust outlined by Barney and Hansen (1995, cited in Zaheer et al. 1998). The ability to communicate well and to avoid or quickly clear up misunderstandings, is a pre-requisite of moving from cognition to affect-based trust.

Child and Faulkner (1998) suggest that even if, at its conception, a relationship is based on cognitive trust, it has the potential, as it matures, to increasingly incorporate affect-based trust dynamics, through the development of friendship ties and an increasing understanding of the expectations of others with regards to the relationship or exchange; this is what Lane (Child and Faulkner, 1998) refers to as calculative trust, in which each partner weighs up the costs and benefits of a particular course of action. This conception is based on the presumption that people will do as they say and that the sanction costs are higher than the potential rewards. Cognition based trust flows from partners adhering to their role responsibilities and sharing outcomes equitably (Chen et al. 1998).

If a newly formed relationship survives and both parties increase their mutual knowledge of each other, there is the potential for the partners to realise that they share mutual expectations about the future. According to Lane (Child and Faulkner, 1998), knowledge or understanding-based trust is formed on the basis of shared cognitions – i.e. a common way of thinking – such that both parties have some predictive capacity about each other's actions. Knowledge-based trust relies on information, rather than deterrence. The rationality of calculative-based trust is somewhat reduced in cognitive-based trust, as this trust is founded on the security and comfort that the partner is well understood and has demonstrated that they share important assumptions with the other. Lane adopted the term identity-based trust, which is based on a sharing of personal identity, and in which partners have a common values system and concept of moral obligation. Similar to affect-based trust, identity-based trust develops incrementally over time, within long-standing relationships. Being more inter-personally focused, each party in effect understands

the other's needs and wants; Lewicki and Bunker (1996, cited in Child and Faulkner, 1998: 49) denoted this form of trust as identification-based trust.

The final conception to be considered is that of Sako (1998, cited in Faulkner and DeRond, 2000: 31), who suggests that there are three forms of trust: (i) contractual trust, associated with the expectation that the partner will carry out its contractual agreements; (ii) competence-based trust concerning whether the partner is capable of doing what it says it will do, and (iii) goodwill-based trust, in which the partner makes a commitment to take initiatives for mutual benefit, but not to take unfair advantage of the other partner. Trust is construed in a similar way to Barney and Hansen (*ibid*), in that it acts as a social norm that lessens the requirement for hierarchical control against opportunism. Irrespective of the governance regime, higher levels of mutual trust increase relationship performance.

From the varying conceptions of trust discussed above, it is accepted that trust is an antecedent condition to cooperation. Individualist values orientation, reflective of cognitive or fragile forms of trust, is centred in opportunism, self-interest and self-maximisation. By contrast, concern for the welfare of others, close partner relationships, goodwill and equality of outcome – qualities that are central to collectivist values orientation – are evident in affect-based, strong-form and relational-based trust, where the individual subverts their own interests to the collective and shows concern for partners over the longer term (Chen et al. 1998). This section now continues to discuss additional behavioural cooperation mechanisms that include: (i) accountability; (ii) super-ordinate goals; (iii) communication processes; and (iv) reward allocation.

B1.14.3 Relationship accountability as a cooperative behavioural mechanism

Values orientation influences the degree of accountability between individuals and their group (Chen et al. 1998). Where identification, task visibility and accountability are not clear, Wagner (1995) suggests that masking agents, relating to the size of the group, personal deceit and unreliable performance assessment, come into effect. These masking agents encourage individual social loafing, a situation in which someone enjoys the public good without paying the appropriate cost (Messick and Brewer, 1983; Wagner, 1995). This is a similar condition to rational free riding,

where an individual avoids cooperating in order to pursue personal goals (Chen et al. 1998).

Individualists tend to establish close individual ties with in-group members, usually those members of their in-group with whom they share opinions and beliefs. On the other hand, collectivists, who are fundamentally altruistic, sympathetic and quick to assist others, are more inclined to accept collectivist attitudes, norms and values (Chatman and Barsade, 1995; Reallo et al. 1997).

B1.14.4 Super-ordinate goals as a cooperative behavioural mechanism

Lewin's (1935, cited in Chen et al. 1998) seminal work posited that values orientation is reflective of the degree to which a person seeks attainment of personal goals, or adapts their self-interest to that of the wider group. Within Deutsch's notion of a 'promotively interdependent' relationship (1949, cited in Chen et al. 1998), shared goals create goal interdependence and diminish relationship tension, thereby enhancing cooperation (Korsgaard et al. 1995; Cox, 1996; Simon, 1997; Chatman et al. 1998). Goal interdependence requires the existence of independently defined individual goals, knowledge of each other's goals and an understanding of the relationship between each other's goals. Goal alignment enhances resource and information sharing, improves relationship productivity, and promotes the expectation of future collaboration, ensuring the satisfaction of mutual goals (Tjosvold, 1988).

Cooperation between individualists in group settings is only obtained where a personal goal cannot be achieved on an individual basis; at all other times, for the individualist, cooperation simply diverts resources away from the satisfaction of their personal pursuits. Collectivists, however, seek goal rewarding activities that enhance overall group performance, irrespective of the personal implications (Wagner, 1995; Chen et al. 1998).

B1.14.5 Communication as a cooperative behavioural mechanism

Communication is the basis for, and enhancer of, all future behavioural interaction between individuals (Argyle 1991; Lazar, 1997; Chen et al. 1998; Hall, 2000). It relates to issues including choice, moral sanction, conformance, development of group norms and conformity pressures between individuals. Values orientation gives rise to different communication strategies for individuals, in terms of preference for high or low context communication; i.e. whether there is a propensity for face-to-face

or telephone contact (Chen et al. 1998). Collectivists prefer high context interchange, whereas individualists have a preference for low context exchange relationships.

Differences in communication styles correspond with the individualist versus collectivist rationality and the task versus relationship nature of individuals. As posited by Chen et al. (1998), the partial communication mediums preferred by individualists de-contextualize the situation, removing sources of social meaning, feelings and the interactions that are contained in face-to-face exchanges. These social cues appear to be more important to collectivists than individualists: collectivists require greater social and emotional cues in relationship building, as distinct from individualists, whose primary concern is relational efficiency and job achievement. Furthermore, collectivists require a contextual setting, both to convey their meaning and to infer the other's meaning, and they have a less direct and receiver centric approach. Individualists, however, use a direct communication style, enabling them to clearly express and solicit information about desires, concerns and preferences.

B1.14.6 Reward allocation as a cooperative behavioural mechanism

Individualists and collectivists view reward allocation differently (Dawes, 1980; Chen et al. 1998; Probst et al. 1999; Söllner, 1999), such that the payoff shifts in response to the predominant goals of the organisation and in response to the group boundary. Collectivist organisational cultures are predominately communal and equality based, whereas individualist cultures tend to be more exchange based (Triandis, 1996). Member satisfaction will have an impact on the degree of relationship defection (Thibaut and Kelley, 1967), while cooperation in relationships can be maintained through reward mutuality.

Individualists use the principal of equity more consistently across a range of social situations, whereas collectivists use the principal of equality within close group relationships, and adopt the principle of equity when dealing with non-group members. The individualist rationale entails the belief that performance and productivity will increase when participants to a joint endeavour benefit in proportion to their contribution. By contrast, the collectivist believes that differential reward structures promote self-interest, widening status gaps and threatening group harmony (Chen et al. 1998).

In terms of anticipation of future interaction, referred to by Axelrod (1984) as the long shadow of the future, collectivists are influenced more by relationship length and reputation than individualists. Over time, collectivists are prepared to shift from equity to equality-based relationships, inducing relationship harmony that initiates a cycle of reciprocity. Interaction, in effect, leads to the formation of a quasi group (Chen et al. 1997), as the long-term fate of the parties becomes intertwined. Future interactions may lead to either reciprocal reward or punishment. Only if future rewards are valued enough in the present will the threat of retaliation matter and defection be deterred (Heide and Miner, 1992; Parkhe, 1993). Luce and Rafia (1957, cited in Thibaut and Kelley, 1967) suggest that member payoff shifts over time: for example, when members reach satiation and experience fatigue as a result of a transaction, each successive interaction diminishes the payoff return, while increasing transaction costs. Relationships should, therefore, not be viewed as an economic game in which one single best or dominant solution exists. Multiple payoffs can be achieved as members move from one payoff cell to another, as new information enables a calculated view of future interactions (Thibaut and Kelley, 1967). Campbell and Harris (1993, cited in Deakin et al. 2001) suggest that, over the longer term, cooperation does not necessarily imply the negation of self-interest and a relationship built solely on altruism.

If the consequence for both parties is an increase in transaction costs due to relationship failure, the alternative position of cooperating to maximise joint gains is sensible. Both parties should seek to protect their individual positions, while planning for the longer-term, such that the gradual alignment of self-interest results in collective self-interest. However, the notion of collective self-interest needs to recognise the potential for exploitation by the other; Deakin et al. (2001) question whether collective self-interest is sustainable after a contract commences and costs are sunk.

B1.15 Literature Review End-section

The literature end-section summarises the PFI discussion contained in chapter A2, together with the literature review contained in chapter B. It contextualises the application of PFI within the NHS and the implications for boundary spanning person behaviour in relation to a number of issues including: (i) the role of a boundary spanning person within an organisational setting; (ii) the relationship between values

orientation and behaviour; (iii) how boundary spanning person behaviour is influenced by values orientation, and (iv) how values orientation influences a boundary spanning person's use of various cooperation mechanisms.

The section draws a number of conclusions associated with the literature; implications for boundary spanning relationship behaviour are subsequently considered, and these form the basis for the aims and research questions discussed in part C.

B1.15.1 Summary and conclusions

Chapter A2 discussed the evolution of the welfare state and the NHS, contextualising the small but important part PFI continues to play in updating and providing new NHS hospital facilities quickly and within defined spending limits (HM Treasury, 2006; 2007). While not universally liked (Webster, 2002) and considered controversial (Ghobadian et al. 2004: 33), or discredited (Paton, 2006: 8), PFI has been part of the modernising agenda, being actively pursued by the incumbent government (Ruane, 1997; Sachdev, 2001), which has continued to bring the public, private and increasingly important voluntary sectors into closer working relationships (Department of Health, 2000).

Projects created by PFI result in long-term contractual relationships and a blurring of the boundary between public and private sector organisations. Importantly, it is the individuals who undertake roles within these different organisations who ensure the day-to-day delivery and performance of a contract. It has been suggested that, over time, inter-sector reliance will increase (Colling, 1999), such that it will become increasingly difficult to distinguish between the service and delivery sectors.

The implications of blurring the boundary are important, as public and private sector organisations may come into conflict due to the differing sector and organisational demands of each relationship partner. Contractual opportunism and lack of congruence between partner motives may result where private sector profit maximisation and public sector risk transfer requirements diverge. The National Audit Office (2004) – among others – has highlighted that a spirit of partnership is key to mutual long-term success, and that this requires open communications, resource co-location, and clearly defined roles and responsibilities. As suggested by Nicholson (2000), a combination of available skills and competencies, brought together through collaborative working, is necessary to deliver high quality, well-managed public

services. PFI as a form of public private partnership requires a shift in the relationship dynamic between public and private sector organisations and individuals (McQuaid, 2000), in order for cooperative partnering to develop; Ruane (2001) suggested that a high degree of mutual partner trust, common objectives and a long-term outlook are important factors in integrating the different sectors. The conclusion drawn is that relationship interaction by persons operating at the organisational boundary is an important factor in the day-to-day performance of a PFI project.

The literature review in chapter B considered the wider implications of relationship behaviour further. Inter-organisational relationships were considered from the perspective of a number of economic and social paradigms. The generally under-socialised behavioural perspective of economic models renders these paradigms unsuitable for this research setting. Individuals working at the organisational boundary were identified and labelled boundary spanning persons (Adams, 1976). Social paradigms were considered to provide a suitable perspective from which to study boundary person behaviour, and role-set theory was identified as an appropriate theory to underpin relationship behavioural interaction.

The importance of boundary role persons was established, as their behaviour and inter-relationships serve to shape and modify the evolving structure of inter-organisational relationship cooperation (Currall and Judge, 1995; Zaheer et al. 1998). Behaviour was identified to be a function of a range of factors, including social and psychological influences; the focus of this study is stated as the individual. Values and values orientation were considered as motivational goals (e.g. Schwartz and Bilsky, 1987), or, as labelled by Rohan (2000), as guides to the best possible ways of living. The relationship between a person's values orientation and their attitudes and behaviour was established, and this suggested that a link between values orientation and relationship cooperation exists.

The individualist-collectivist values orientation dichotomy was discussed as a valid categorisation for assessing values orientation within the individual. A chronological approach to values measurement was taken and the importance of Rokeach's seminal work was outlined; the potential suitability of the INDCOL (e.g. Triandis, 1995) and SVS (e.g. Schwartz and Bilsky, 1987) instruments was put forward for further consideration. A person's values orientation was related to the individualist-collectivist categorisation, and it was suggested that a person's values orientation

influences their use of various cooperation mechanisms, determining cooperative behaviour between individuals.

The literature reviewed suggests that the boundary spanning person is an important factor in the performance of relationships: behaviour between individuals is influenced by a psychological process of values orientation that relates to the use of cooperation mechanisms that affect an individual's behaviour during relationship engagement.

CHAPTER C1: RESEARCH FRAMEWORK

Chapters C1 to C4 are concerned with the research methodology. Chapter C1 deals with the research framework, including its ontological standpoint, theoretical framework, research objectives, research questions and data requirements. Chapter C2 deals with the design of the research and proposes that a case study approach is adopted. Chapter C3 concerns the data collection process, including the use of the Schwartz Value Survey and repertory grid interviews. Chapter C4 is concerned with data analysis.

C1.1 Introduction

This chapter includes steps 3 to 5 of the research process concerning ontological standpoint, theoretical framework and research objectives, and concludes with a description of the research questions and data collection requirements. The theoretical underpinnings of the Schwartz Value Survey and the repertory grid interview are explained.

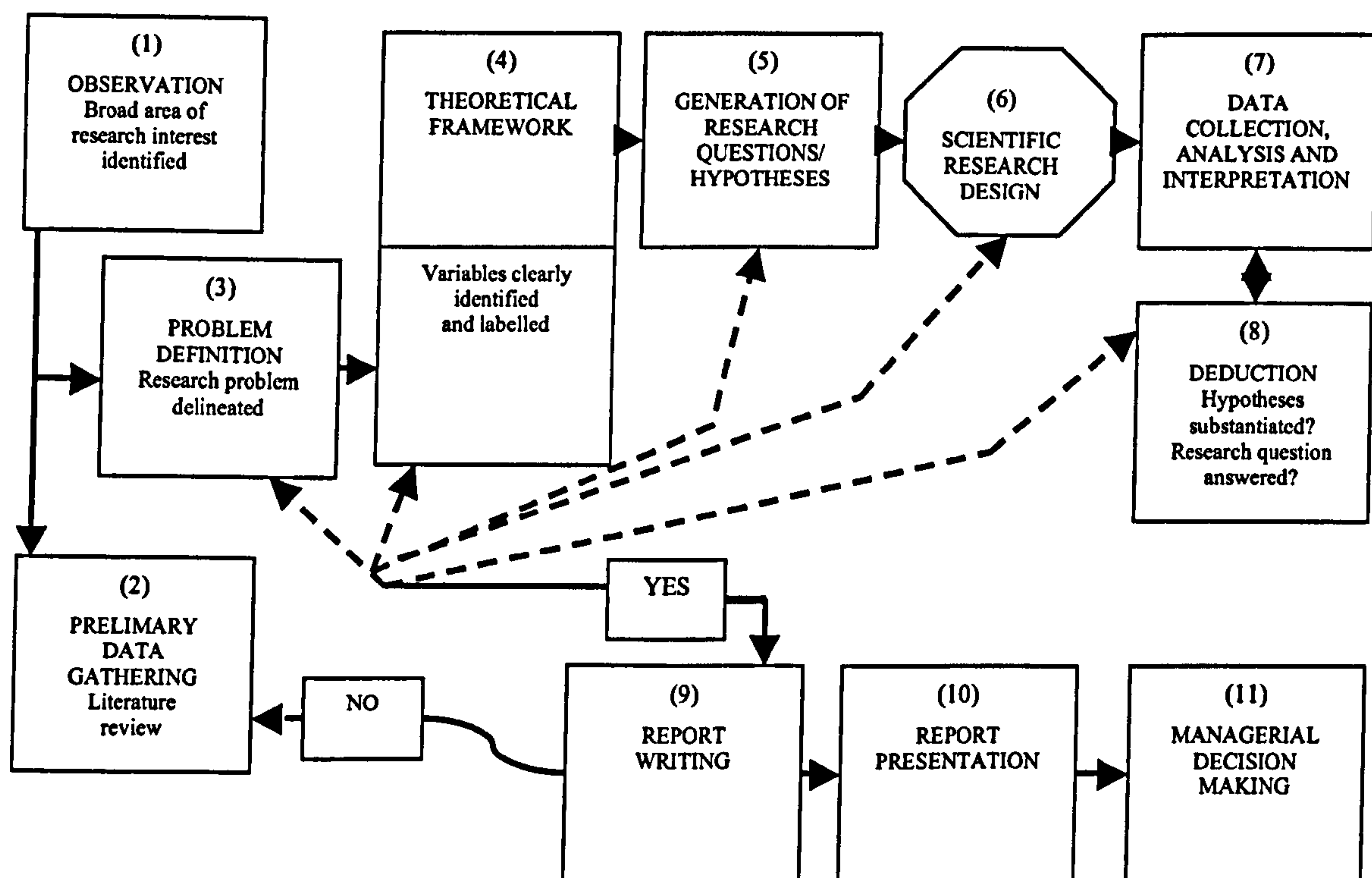


Figure C1.1: The research process for basic and applied science adapted from Sekaran (2000: 54)

C1.2 Research Philosophy

All philosophical positions and resultant methodologies contain a view of social reality that in turn determines what can be regarded as legitimate knowledge; ontology therefore shapes epistemology (Williams and May, 2000). Social science research is approached via explicit or implicit assumptions about the nature of the social world and how it might be investigated. Ontology is concerned with whether the reality to be investigated is external to the individual and therefore an imposition on individual consciousness, or the product of an individual's consciousness. Epistemological thinking relates to whether reality is a given in the world or the product of one's mind, and is concerned with how one might understand the world and communicate this knowledge to others.

A research position may therefore be one of action or structure, and focus on the individual, or relationships, or social groups. Combined together, assumptions that relate to ontology, epistemology and human nature directly influence a researcher's choice of methodology (Williams and May, 2000; Burrell and Morgan, 2001).

Ontology and epistemology are considered next. This is followed by a discussion of issues of incommensurability associated with the underlying positivism of the Schwartz Values Survey, and a consideration of constructivism that is associated with personal construct theory and repertory grids.

C1.2.1 The nature of reality

Although a positivist epistemology has been adopted (Denzin and Lincoln, 1998a), such that social phenomena can be subjected to the same kinds of explanatory goals as physical phenomena, alternate epistemological traditions are acknowledged, in order to reflect the potential for differences in the social and physical worlds. A positivist epistemology is explained as (i) an ontological position in which the world is real, hard and tangible, and external to the individual (Burrell and Morgan, 2001). Its focus is the analysis of relationships and regularities between various elements, and it is concerned with identifying and defining these elements and discovering of ways in which the relationships between them can be expressed. Positivist epistemology is (ii) a system of thought that explains and predicts what happens in the social world by searching for regularities and causal relationships between constituent elements; (iii) an account of human nature in which man is completely determined by the situation

or environment in which he is found; (iv) a methodology that lays emphasis on systematic protocol and technique; (v) a process that follows those of the natural sciences, focusing on testing hypotheses through scientific endeavour and quantitative techniques. Positivist epistemology asserts that knowledge of the social world is derived through our senses, and that things in the world have an existence independent of our thoughts about them. Merton (1957, cited in Burrell and Morgan, 2001: 107) called this view, which attributes independence to the observer, who can observe without influencing the situation, the observer position. Observer effect, whereby the observed alter their behaviour in response to being observed, is generally recognised as being an important issue in case study research. Denscombe (1998) noted that this interaction effect could be minimised if the researcher spent time in and around the people being studied, to become 'part of the furniture'.

C1.2.2 Value positions in research

Traditionally, objectivity and value freedom were regarded as equivalent; more recently this has come to mean that objectivity is achieved by pursuing lines of scientific enquiry within the parameters of particular values, while acknowledging one's own values and those of the people who are being researched (May, 2001). Recognising the difficulties of value free research, Nagel (May, 2001: 54) distinguishes between characterizing and appraising values, the former being a routine part of social scientific research concerned with estimating the extent to which something is present, while the latter expresses approval or disapproval of some moral or social ideal. The issue becomes one of accepting that values are inherent to the human condition: instead of seeking to eliminate values, it is accepted that judgement will be influenced by values.

C1.3 Integrated Theoretical Framework

C1.3.1 Research Aim

As considered in section A1.2 and stated in the research aim in A1.2.3, a review of public and private sector relationships in the context of NHS change concluded that boundary redefinition and collaborative relationship development is increasingly required to deliver public sector reform.

Public and private sector leaders are required to interact at a boundary, and jointly manage a variety of demands that are created by organisations and individuals

embedded in the different sectors. Project leaders experience relationship tension due to the different ethos of the public and private sectors; the former being embedded in values of probity and accountability, while the latter is more concerned with shorter term profit maximisation. By combining public and private sector skills and competencies in collaborative working arrangements and practices, well-managed public services will potentially be delivered.

The behaviour of individuals within interactions between the public and private sectors, is important, as it shapes and modifies the inter organisational relationships that are created in PFI projects. An individuals' values orientation influences the use of behavioural cooperation mechanisms, which in turn affect relationship behaviour.

The aim of applying values and cooperation mechanism literature to this research setting is to examine how behavioural cooperation mechanisms are influenced by individuals' values orientation in public to private sector relationships.

The study is not concerned with subjective accounts and individual meaning, and it assumes that differences in individuals' values orientation can be objectively measured by using recognised instruments.

C1.3.2 Overview of the theoretical framework

A theoretical framework can be explained as a set of interrelated constructs, definitions and hypotheses; these present a systematic view of the phenomena by specifying relationships among variables, with the purpose of explaining natural phenomena (Hussey and Hussey, 1997). In operationalising a construct through the use of quantitative and qualitative measures, we seek to find observable phenomena from which the construct can be inferred.

The framework was drawn from a number of sources, including organisational behaviour and social psychology, and values and cooperation literature: the theoretical perspectives are outlined below in table C1.3.2(a).

Theory	Contribution to Research
Role-Set Theory (Katz and Kahn, 1966; Merton, [1957] 1968)	Provides a structure in which to examine roles, people occupying a role and wider role relationships.
Values orientation (e.g. Triandis et al. 1988; Triandis 1995, 1996; Schwartz 1987, 1992, 1995)	Enables the actors' values orientation to be examined.

Cooperative behaviour mechanisms (Chen et al. 1998)	Enables the mechanisms that foster cooperation between actors to be studied.
---	--

Table C1.3.2: Overview of research framework

The literature review contained in chapter B considered inter-organisational relationships and cooperative relationship behaviour paradigms, concluding that role-set theory was a suitable framework with which to examine cooperative behavioural interaction between boundary role persons. Both public and private sector project leaders perform their roles and occupy their positions in relation to others; they are guided, influenced and directed by internal and external forces. Role-set theory acknowledges that the affects of project leaders (as focal agents) are created through interactions with close associates during the day-to-day management of a project, and enables their role to be considered within the wider context of their network of influences (role-sets).

An adaptation of the Chen et al. (1998) model shown below, which relates values orientation to cooperative behaviour through values expressed as goal relationships, is proposed; this adapted model is included in figure C1.3.2(b).

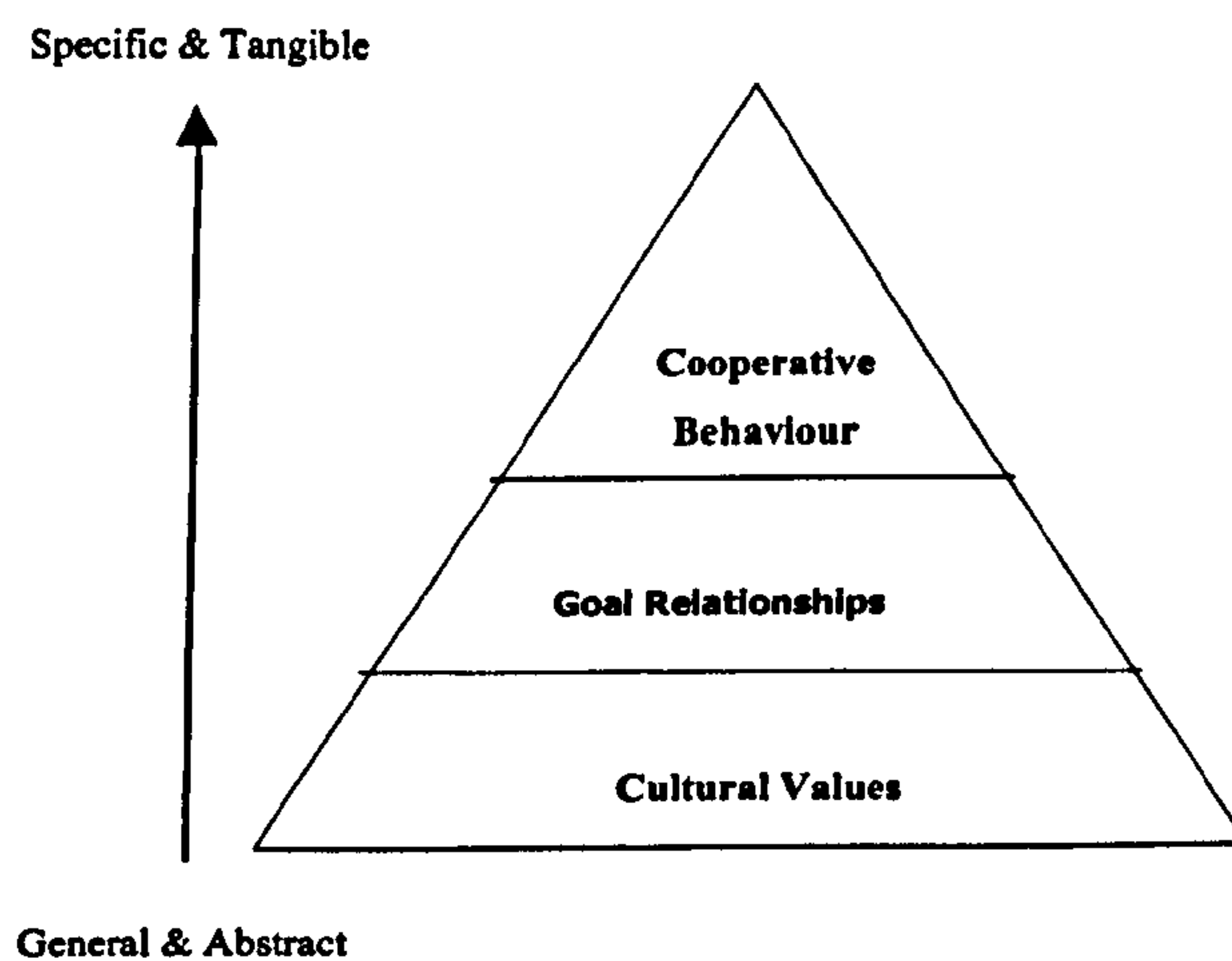


Figure C1.3.2(a): Contingent model of cooperation (Chen et al. 1998)

This study uses the definition of values proposed by Rokeach (1973) and accepted by Schwartz et al. (1987), in which values are conceived as motivational goals that transcend specific objects or situations and act as guiding principles of a person's life.

The relationship that a PFI project establishes between the public and private sectors brings the behavioural cooperation mechanisms identified earlier in the literature review in section B1.14 into greater focus and importance. These behavioural cooperation mechanisms are influenced by an individual's values orientation, as shown in the model below.

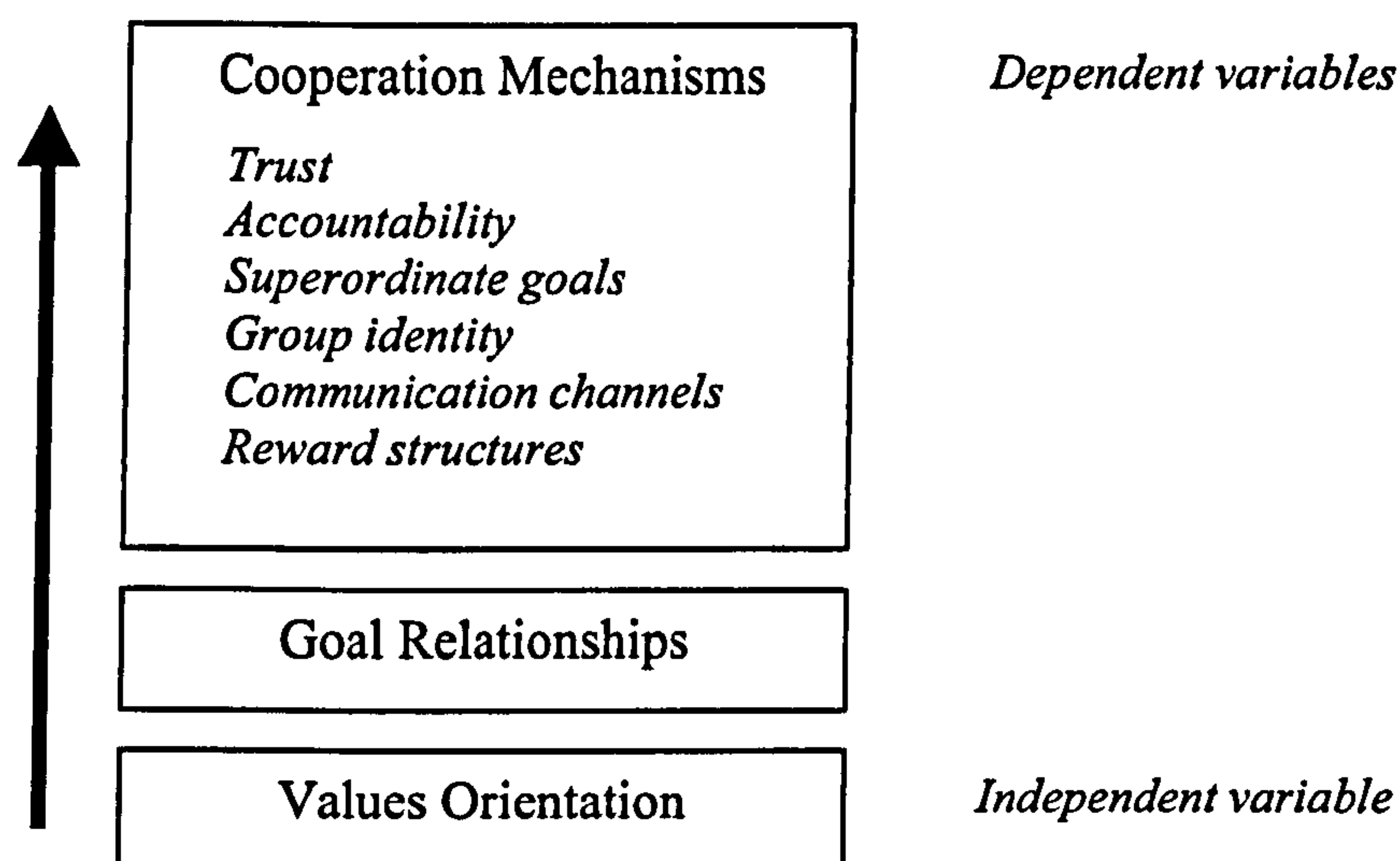


Figure C1.3.2(b): Model of cooperation adapted from Chen et al. (1998)

The discussion now moves on to consider the implications, for the study, consequent on the relationship between individuals' values orientation and their use of behavioural cooperation mechanisms.

C1.3.3 Study implications

The complexity of PFI project environments raises a number of issues for the study. In PFI projects, public and private sector individuals are required to work together over many years to deliver a mutually important outcome, while balancing the day-to-day demands that are placed on them by their public or private sector employer. As we saw in chapter B, an individual's values orientation influences the use of behavioural cooperation mechanisms (Chen et al. 1998) during relationship engagement. Chapter A2 considered how changes in the NHS have blurred the boundary between the public, private and, increasingly, the voluntary sectors (e.g. Rhodes, 1994; Marchington et al. 2005a). Ferlie et al. (2007) suggest that the different motives of these sectors result in an inevitable clash, since issues of accountability and probity drive the public sector, while the private sector sees efficiency and

effectiveness as having greater importance. Others (Ghobadian, 2004; Paton, 2006) suggest that reconciliation between the sectors is impossible due to fundamental differences in their value patterns: the public sector is underpinned by the ethos of service, while the private sector is underpinned by the ethos of profit maximisation. It is suggested that the value patterns of public and private sector employees may be represented broadly in terms of individualist and collectivist values orientations, with the private sector being more individualist and the public sector more collectivist. These contrasting, and to some extent opposing, positions (Sachdev, 2001; Ruane, 2002) mean that relationships between the public and private sectors need to be considered from the perspective of differing relationship engagement behaviours. Several factors, however, including the degree of change in the public sector – and the health sector in particular – combined with employee movement between sectors as a consequence of PFI, may be influential.

In broad terms, individualists adopt a relationship engagement position that is focused on the self, whereas collectivists focus on wider collective relationships: each behavioural cooperation mechanism influences the individual, as shown in the following table:

Behavioural cooperation mechanism	Individualist values orientation	Collectivist values orientation
Trust	Cognition based (builds from knowledge of role performance and accomplishments)	Affect-based (builds from social-emotional bonds between partners that go beyond a regular business and professional relationship)
Accountability	Individual based	Group based
Superordinate goals	Goal inter-dependence	Goal sharing
Group identity	Self-enhancement	Group complementarity
Communication channels	Partial channel	Full channel
Reward structures	Equity based	Equality based

Table C1.3.3: Overview of values orientation influencing effects on cooperation mechanisms from Chen et al. (1998)

The research questions outlined below consider specific aspects of the interplay between an individual's values orientation and a range of behavioural cooperation mechanisms. The findings associated with the research questions are discussed in detail in chapter D. Initially, the relationship between the research questions is discussed.

C1.4 Research Questions and Data Requirements

The research questions discussed below have been developed in a logical progression. First, the values orientation of individuals is established and differences between respondent's profiles are considered. Second, constructs are elicited from all respondents and, following their allocation to *a priori* categories, their relative importance for individuals is discussed. Questions three and four examine specific aspects of the relationship between values orientation and behavioural cooperation categories. Finally, individuals' values alignment is considered in the context of the potential formation of role-sets.

Research question 1: (i) determines the values orientation of each respondent and (ii) compares the values orientation of the public and private sectors.

Question 1 focuses on an individual's values orientation and the consequent influencing effect of this on their use of behavioural cooperation mechanisms, and it is posited that certain orientations lead to closer or more distant contact relationships. Values that tend to serve the interests of the individual are self-direction, stimulation, hedonism, achievement and power; while values that favour the collective group are benevolence, tradition and conformity. Boundary values including universalism and security have components that serve both types of interests (see Triandis, 1995, for a mapping of individualism and collectivism). Benevolence, universalism and conformity values relate strongly to cooperative behaviour, while power values – which emphasise competitive advantage and gain at the expense of others – relate most strongly to non-cooperation (Schwartz, 1996). Cooperation between individuals tends to be facilitated when an individual attributes higher importance to benevolence and lower importance to power values.

Relationship congruence between an individual and their situation leads to positive behaviour and outcomes, due to the psychological interaction of the individual's values system and situation (O'Reilly et al. 1991). Creating an environment

conducive to cooperation facilitates the cooperative behavioural nature of individuals (Pfeffer, 1997). Organizations can influence individuals and bring about desired relationships (Pratt and Beaulieu, 1992) by creating conditions that reinforce values systems. These conditions are created through procedures, customs and everyday language (Weiner, 1988). An individual's values orientation will sometimes lean towards conflict as opposed to cooperation, and behavioural tendencies that are directed towards short-term individual gain will fail to create an environment where long-term mutual gain results (Steensma et al. 2000). Values guide an individual's behaviour (Triandis, 1996), influencing the way they engage with other human beings and the wider world, and determining relationships between the individual and wider collectives.

It was considered that the question required individuals' values orientation to be established using the Schwartz Values Survey, to enable individuals' values orientations to be examined in terms of: (i) their individual values domain, and (ii) summated two-dimensional self-enhancement and self-transcendence model axes.

From the literature review summarised above, it was hypothesised that: (i) the private sector will accentuate power and achievement values, while the public sector will accentuate higher benevolence, conformity and universalism values, and (ii) the private sector will express greater individualism through self-enhancement values and the public sector will express greater collectivism through self-transcendence values.

Research question 2: (i) elicits constructs from respondents and allocates them to the *a priori* cooperation mechanism categories (trust, accountability, group identity, superordinate goals, communication channels and rewards); (ii) determines the relative importance of the cooperation mechanisms for respondents, and (iii) examines the relationship between the achievement values domain and superordinate goals.

Self-enhancement oriented and self-transcendent oriented individuals approach goal setting and completion in differing ways, such that the introduction of a superordinate goal is asserted by Chen et al. (1998) to be a behavioural cooperation enhancer. In sustaining a PFI project relationship, the approach to a common goal may be an important factor in building a cooperative environment between project leaders. Self-enhancing individuals tend to regard goals independently, only accepting

interdependence when the fate of their individual goals is related to a wider, higher order project goal; whereas those with self-transcendence values orientation tend to emphasise the common fate of those involved in achieving a goal.

After constructs are elicited and allocated to the *a priori* cooperation mechanisms it is hypothesised from the literature above that: (i) individuals oriented towards self-enhancement (individualism), and particularly achievement values, will be more concerned with self-oriented goals, and (ii) individuals with self-transcendence (collectivism) oriented values will be more concerned with collective oriented goals.

Research question 3: focuses specifically on public and private sector project leaders, examining the relationship between their values orientation and (i) their preference for short or long-term goals, and (ii) their personal or collective oriented goals.

Cooperative behaviour is influenced by goal congruency (Argyle, 1991; Wehner et al. 2000) and the dynamic between relationship commitment and the desire to defect for short-term gain (Axelrod, 1984). The degree to which long-term orientation exists is influenced by the value placed on future interactions – ‘the shadow of the future’ (Axelrod, 1984) – and this, in turn, is influenced by the values orientation of individuals (Chen et al. 1998). Having different orientations in relation to satisfying self versus collective needs, individualist oriented and collectivist oriented individuals relate differently to goal setting; the former tending to seek individual over group satisfaction in the shorter term, and the later vice versa (Chen et al. 1998).

The advantages of blurring the public and private sector boundary for project leaders are a reduction in conflict, enhanced cooperation and the potential for joint teams and work programmes to develop (Zaheer et al. 1998). Where tensions exist within an organisation, individual relationship negative behaviour can result (O’Reilly et al. 1991); however, when individual and organisational values are aligned, positive situational outcomes will result.

Where value congruence exists between an individual and members of a project group – as distinct from their employing organisation – the individual may be considered to fall outside the employing organisation’s boundary (Meek, 1988). This may result in new groups being constituted (Alderfer and Smith, 1982) and a new project culture being created. The creation of a new group and identity affects self-enhancement oriented (individualist focused) and self-transcendent oriented (collectivist focused)

individuals differently. For a new situation to appeal to the former, it should complement self-identity; whereas for the latter, the structure of the group should complement collective interests and goals.

Over time, as cooperation develops and individuals make a conscious commitment to act in ways that reduce adversarial behaviour, the influence of the contract diminishes (Deakin et al. 2001). Individuals can cooperate without self-maximisation being the objective (Dawes, 1980): for example, smaller payoffs will satisfy an individual in circumstances where he or she places a higher value on other people's emotional needs, for the benefit of his or her relationship with them. The short-term nature of budget and planning cycles in business needs to be reconciled with the long-term nature of PFI projects.

The following issues may arise: (i) are cross organisation boundary working groups evident? (ii) have work processes been aligned and integrated? (iii) are regular jointly attended goal setting and project work groups in place? and (iv) is there evidence of cross organisation boundary training programmes?

The question explored whether there was congruence in goal setting processes, such that short-term gains were balanced with long-term returns. It is expected that there will be polarisation, with the private sector valuing short-term self-maximisation, whereas the public sector will focus on the longer-term. Repertory grid cluster and principal component analysis, together with Honey content analysis, will be used to consider the nature of goal setting by project leaders within each project.

From the literature summarized above it is hypothesized that: (i) private sector project leaders would focus on short-term goals, and public sector project leaders would focus on long-term goals, and (ii) private sector project leaders would focus on personal goal satisfaction and self-maximisation, and public sector project leaders would focus on collective goal satisfaction for mutual benefit.

Research question 4: examines the relative importance of cooperation mechanisms in guarding against short termist behaviour in relation to the values orientation of the public and private sector project leaders.

When individuals interact in a social dilemma, there is a potential for self-maximisation in the short-term that recognises an individual's utility can be valued in monetary and non-monetary terms (Murnighan, 1994). Defection and self-interest are

assumed to be the normal reaction when the sanction costs for defection are less than the short-term gain (Child and Faulkner, 1998). A number of conditions counter this position including: (i) an increase in the value of future interactions; (ii) an increase in social concern and trust in others; (iii) an adoption of group social norms, and (iv) an increase in levels of communication and interaction between individuals (Argyle, 1991). Norms influence relationship engagement behavioural interaction, in effect creating a self-sanctioning environment (Thibault and Kelly, 1967). Project leaders are required to consider the impact of short-term self-maximisation in the context of a long-term project relationship, and ask: what behavioural mechanisms, processes and sanctions exist to restrain short-termist behaviour?

From the literature summarised above, it is hypothesized that the project leaders' summated two-dimension values orientation would: (i) reflect high self-transcendence, and (ii) reflect that high importance is given to trust, group identity and communication cooperation mechanisms.

Research question 5: (i) examines the relationship between the values orientation and the elicited constructs to the *a priori* group identity cooperation mechanism category, of the public and private sector individuals, and (ii) examine the extent of public and private sector role-set formation within each project.

The existence of integrated working, or the evolution of 'third way' relationships, would be considered to be evidence of joint working within and across the sector boundary within a project. The degree to which one person views another as an in- or out-group member influences relationship cooperation (Korsgaard et al. 1995); cross-sector management of a PFI project requires considerable interaction between project leaders and their close working associates. Issues including relationship proximity, frequency of interaction, and values orientation, all affect initial cooperation formation and longer-term maintenance costs (Chen et al. 1998). Where project leaders positively seek to work in close proximity – resulting in repeated interactions – there is potential for a strong relationship to grow and a new group to be created (Useem et al. 1963, cited in Chen et al. 1998). The evolution of the individual's relationship will, as noted by Wehner et al. (2000), progress through increasing degrees of interconnectivity, influenced by the role, role-set and psychological relationships between project leaders and role-set members. The extent to which relationship cooperation develops is affected by the nature of the direct and indirect

role-set influences on the focal agents (project leaders), and a change in the role-set composition (such as the creation of a cross-project group) may directly influence cooperative behaviour (Koch and Johnson, 1997).

Greater emphasis on self-direction as a value type was considered to be an indicator of an individual's propensity to reject stereotypes, and their preference for making independent judgements based on their own experience; in conjunction with higher self-transcendence values, this would be considered an indicator of a desire for closer contact with others (Schwartz, 1996). The similarity of individuals' values orientations was related to the principal component and cluster analysis that was undertaken on the repertory grid data.

From the literature summarised above, it was hypothesized that: (i) higher openness-to-change than conservation values orientation would be found, and (ii) a higher self-direction values domain would exist, in combination with a higher self-transcendence values orientation.

Having concluded a discussion of the research questions, the discussion now progresses to consider methodological issues, commencing with a brief discussion of the mixed methodological approach to this study. Subsequently, in section C1.5.1, the discussion considers how individuals' values orientations are established, and in sections C1.5.2 and C1.5.3, there is a discussion of the personal construct theory and repertory grid interviews that are used to elicit individuals' constructs.

C1.5 A Mixed Methodological Approach to Research

The challenge of pluralism in research is recognised. Different perspectives are used in the analysis of phenomena: quantitative research focuses on generalisability and external validity, whereas qualitative research is principally concerned with accuracy in reflecting the meanings of the people who are investigated (Williams and May, 2000). However, once the connection between methods is removed and philosophical incommensurability (Kuhn, 1970) issues are resolved, the combined use of a Schwartz Values Survey, which has an underlying positivist tradition, and a repertory grid interview, which uses a constructivist philosophical position, is acceptable; any previous distinction is purely convention.

In support of adopting a mixed methodological approach, Whyte's (1943) *Street Corner Society* is cited by Williams and May (2000) as an example of a study that

suggests that ‘the issue is not one of qualitative versus quantitative but rather what is to be quantified and how are the measurements to be integrated with the descriptions and analyses of behaviour’ (p. xii).

The discussion of mixed methodologies now continues by first addressing the quantitative aspects of this study, where the Schwartz Values Survey instrument is used to assess individuals’ values orientations. The discussion then continues to consider the qualitative aspects of the methodological approach, which is used to elicit individuals’ personal constructs in relation to the *a priori* behavioural mechanism categories established in the literature review contained in chapter B.

Initially, the theory of personal constructs (Kelly, [1955] 1963) is briefly discussed, before considering in detail the association between personal construct theory and the use and analysis of the repertory grid technique. This study adopts the approach to repertory grid use proposed by Jankowicz (2004); this structured and systematic approach is subsequently explained.

C1.5.1 Establishing values orientation

In the form of conscious goals, values relate to three universal requirements of human existence, including: (i) biological needs; (ii) the requirement for coordinated social interaction; and (iii) the demands of group survival and functioning. From these three universal values, Schwartz (1996) derived 10 motivationally distinct value types or domains (excluding the spirituality domain), in which each value is represented by the central goal it expresses (see table C1.5.1). The Schwartz Value Survey instrument contains 57 distinct single values presented in 10 motivational domains, which include both instrumental values (desirable behaviours) and terminal values (desirable end states).

Motivational domain/ type of value	Individualism (I)/ collectivism (C) or mixed focus (M)	Goal representation (single values that represent each domain)
Power	I	Attainment of social status and prestige, control or dominance over people and resources (social power, authority, wealth, preserving my public image, social recognition)
Achievement	I	Personal success through demonstrating competence according to social standards (successful, capable, ambitious, influential,

		intelligent, self respecting)
Hedonism <i>Formerly labelled enjoyment</i>	I	Pleasure and sensuous gratification for oneself (pleasure, enjoying life)
Stimulation	I	Excitement, novelty and challenge in life (daring, a varied life, an exciting life). Variety is required in order to perform optimally
Self-Direction	I	Independent thought and action-choosing, creating, exploring (creativity, freedom, independent, curious, choosing own goals, self respect)
Universalism	M	Understanding, appreciation, tolerance and protection for the welfare of all people and for nature (broadmindedness, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment)
Benevolence	C	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact (helpful, honest, forgiving, loyal, responsible, true friendship, mature love)
Tradition	C	Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self (humble, accepting my portion in life, devout, respect for tradition, moderate)
Conformity <i>Formerly labelled restrictive conformity</i>	C	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms (politeness, obedience, self-discipline, honouring parents and elders)
Security	M	Safety, harmony and stability of society, or relationships, and of self (family security, national security, social order, cleanliness, reciprocation of favours, sense of belonging, healthy)

Table C1.5.1: Individual values allocated to motivational domains

The 57 items are presented in two lists that contain instrumental values – modes of behaviour (items 1 to 30) and terminal values or desired end states (items 31 to 57). Following reliability testing using Guttman-Lingoes *Smallest Space Analysis* (SSA) (Guttman, 1968), a multidimensional scaling technique, the motivational domain

relationships were established. A Cronbach alpha inter-reliability coefficient was calculated above 0.7 for the SVS instrument (Schwartz, 1992).

The 10-segment value domain model can be considered as two higher order value dimensions (see figure C1.5.1). The first higher order value dimension is labelled as openness-to-change versus conservatism, and the second, as self-enhancement versus self-transcendence. These terms are expanded below.

Openness-to-change versus conservatism: this dimension opposes self-direction and stimulation with security, conformity and traditional values. It represents the conflict between one's own independent thoughts, actions and attitudes to change, and submissive self-restriction, preservation of traditional practices and protection of stability.

Self-enhancement versus self-transcendence: this category places power, achievement and hedonism in opposition to universalism and benevolence values, reflecting a conflict between accepting others as equals and being concerned for their welfare, and the pursuit of one's own relative success and dominance over others.

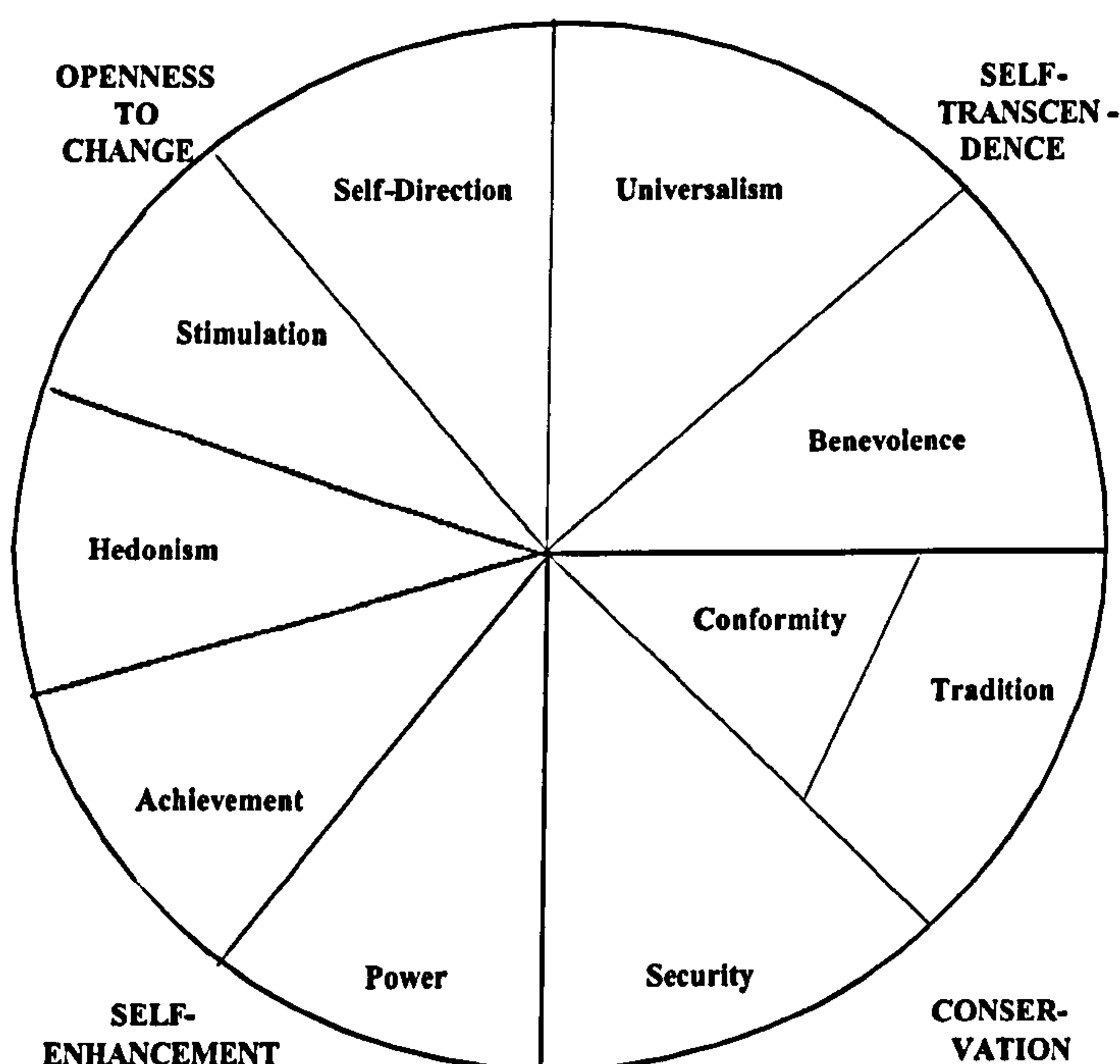


Figure C1.5.1: Model of relations among motivational types of values (Schwartz 1992, 1994, 1996)

C1.5.2 Introduction to personal construct theory

To assist the reader, an overview of Personal Construct Theory (Kelly [1955] 1963) is now provided as an introduction and setting for discussing repertory grid. It is intended only as a brief account, such that the reader is directed to the original works of Kelly ([1955]1963), Bannister and Fransella (1971), and more recently Jankowicz (2004) and Fransella et al. (2004), which contextualise the relationship between Personal Construct Theory and repertory grid.

Personal Construct Theory is embedded in the philosophical roots of constructive alternativism (Kelly [1955] 1963: 3), where Kelly (*idem*) posited the construction of man-the-scientist, a role of prediction and personal control over the course of events in which he is involved. It is posited that man looks at the world through transparent patterns – constructs – that he creates, and then attempts to fit over the realities of which the world is composed. The underlying philosophical position of constructive alternativism makes the assumption ‘that all our present interpretations of the universe are subject to revision or replacement’ (p. 15).

The central tenets of personal construct theory (Bannister and Fransella, 1971) are stated in the form of a fundamental postulate and eleven corollaries that amplify or elaborate certain positions within the theory to a greater level of detail. The fundamental postulate (Kelly, [1955] 1963: 46-47) is that ‘a person’s processes are psychologically channelled by the ways in which he anticipates events’; the fundamental postulate being an assumption, so basic that it antecedes everything which is said in the logical system which it supports.

In deconstructing the fundamental postulate, Kelly (*idem*) described each element: person refers to the individual person; processes refer to the subject of psychology being assumed from the outset to be a process; psychologically means that processes are being conceptualized in a psychological manner; channelized refers to a person’s processes operating through a network of pathways as distinct to fluttering about in some vast emptiness; ways refers to channels being established as means to an end; he refers to the way in which the individual man chooses to operate, rather than upon the way in which the operation may be carried out; anticipates refers to the predictive and motivational feature of Personal Construct Theory and finally events refers to man’s desire to anticipate real events.

A summary of each of the corollaries now follows from Kelly ([1955] 1963: 46-104).

Construction corollary: a person anticipates events by construing their replications; where construing means a person places an interpretation upon what is construed. In construing a person notes features in a series of elements, which characterize some of the elements and are particularly uncharacteristic of others.

Individuality corollary: persons differ from each other in their construction of events. No two persons can play precisely the same role in the same event, no matter how closely they are associated, but they can share in each other's experience. While there are individual differences in the construction of events, persons can find common ground through construing their neighbours experience along with their own.

Organisation corollary: each person characteristically evolves, for the convenience in anticipating events, a construction system embracing ordinal relationships between constructs. Different constructs sometimes lead to incompatible predictions; man therefore finds it necessary to develop ways of anticipating events, which transcend contradictions.

Dichotomy corollary: A person's construction system is composed of a finite number of dichotomous constructs. The construct denoting an aspect of the elements lying within the range of convenience, as some elements are similar to others and some are in contrast.

A construct is seen as having an affirmative and an opposing or negative pole, as distinct from seeing a construct as a concept or category of a unipolar type. The notion of construct bipolarity allows us to consider relationships between the two poles; they can be correlated or logically interrelated.

Choice corollary: a person chooses for himself that alternative in the dichotomized construct through which he anticipates the greater possibility for extension and definition of his construct system.

We assume, that when a person is confronted with the opportunity to make a choice, he will make the choice in favour of the alternative, which seems to provide the best basis for anticipating the ensuing events.

Range corollary: a construct is convenient for the anticipation of a finite range of events only, i.e. for those things that the construct was specifically developed.

Experience corollary: a person's construction system varies as he successively construes the replication of events.

A personal construct system is not a collection of treasured and guarded hallucinations but is the person's guide to living. It is a repository of what has been learnt, a statement of intents and the values by which he lives.

Modulation corollary: the variation in a person's construction system is limited by the permeability of the constructs within whose range of convenience the variants lie. Kelly argued that man is a form of motion not a static object, as such constructs can assimilate new elements within their range of convenience. In facing a new situation, a person whose constructs tend to be permeable will use their constructs to make sense of the new events. A person with impermeable constructs may tend to not seek out new situations, as these will be forced into the existing system, whether they are a good or bad fit.

Fragmentation corollary: a person may successively employ a variety of construction subsystems that are inferentially incompatible with each other.

This is a further parameter of change that suggests that change may not need to be logical. A construct system is a hierarchy with a series of subsystems that have varying ranges of convenience. Conclusions about the same series of events can be drawn at levels that are not necessarily consistent with or related to each other.

The fragmentation corollary is, in part derived from the modulation corollary.

Commonality corollary: to the extent that one person employs a construction of experience, which is similar to that employed by another, his psychological processes are similar to those of the other person.

This is the opposite of the individuality corollary and suggests that people are similar because they construe and see the implications of events in similar ways.

Sociality corollary: to the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person: all interpersonal interaction is transacted in terms of each person's understanding of the other.

The discussion now proceeds to consider repertory grid in the context of Personal Construct Theory and expands the procedures associated with developing, using and analysing single and multiple repertory grids.

C1.5.3 An introduction to repertory grid interviews

The following outlines the structure, use and analysis of single and multiple repertory grids (see section C4.4). This is not to be considered a full account of repertory grid but serves to introduce repertory grid in terms of its use in this study. A considerable and comprehensive range of material is available regarding the development, wide application and analysis of repertory grids; the reader is, therefore, guided towards the following texts, which have been consulted by the writer: (Cassell and Symon (1999); Easterby-Smith et al. (1996); Fransella et al. (2004) and Jankowicz (2004; 2005). The commentary below is, however, principally drawn from Jankowicz's (2004) *The Easy Guide to Repertory Grids* and Jankowicz's (2005) *Business Research Projects*.

Derived from Kelly's [1955] (1963) personal construct theory, repertory grid is an established psychological technique (Easterby-Smith et al. 1996) that enables the quantification of qualitative data and the statistical and interpretive assessment of interview content (Cassell and Symon, 1999: 84). As a bridge builder between qualitative and quantitative research techniques (Jankowicz, 2004), a repertory grid enables qualitative data to be expressed and analysed in a demonstrably reliable way, while quantitative information stays true to and precisely conveys a person's personally intended meaning. It is suggested by Jankowicz (2004: 16) that normal interviewing does not reach the same level of detail and is unlikely to have the same level of precision as a repertory grid interview. Due to its greater comparative efficiency, flexibility and increased potential for objective validity and reproducibility (Cassell and Symon, 1999: 72), a repertory grid is a good technique when confronted with time-pressured respondents.

The basic constituents of a grid are: (i) a topic; (ii) the elements; (iii) the constructs, and (iv) ratings. The discussion below now considers each in turn.

Constructs: are the most important part of a repertory grid, being the basic units of description and analysis. We construe by means of our constructs; they tell us how a person thinks. To construe is to make sense of something, i.e. to have a personal

understanding of it. Dichotomous corollary constructs always represent a contrast. The process of construct characterisation will be considered in more detail below.

Topic: a grid is always applied in relation to a topic with the intention of eliciting just those constructs which the person uses in making sense of that particular 'realm of discourse', that particular slice of experience. By discovering the constructs you can discover how the person thinks about that topic. Constructs have a 'range of convenience', i.e. they are more likely to be used for one topic more than another, and then there are constructs that a person does not possess, that lie outside their repertoire.

Elements: a number of examples (elements) relating to a topic are presented to a respondent in order to elicit constructs and discover how the respondent puts the elements together. The rating of elements in relation to a construct tells us what a person thinks about a topic. The choosing of elements is a very important part of undertaking a repertory grid interview, as this process indicates the realm of discourse and helps to determine the kinds of constructs that will be obtained by hinting at the range of convenience. The elements should evenly cover the whole field of the topic, whether chosen by the respondent or interviewer.

Ratings: repertory grid interviews let respondents express their views on a topic by means of their own constructs and not the interviewer's. Once constructs are elicited, the grid enables the interviewer to identify exactly what the respondent means when they use certain terms. The repertory grid is a presentation of patterns and relationships between respondents' constructs by virtue of the rating of elements (Fransella et al. 2004: 134). The rating of elements on each construct provides an exact picture of what a person wishes to say about each element within the topic. Constructs tell you how a person thinks and the rating of elements tells you what the person thinks. It is asserted by Fransella et al. (2004: 149) that the rating of constructs is a predictor of respondent behaviour, following the central tenet of personal construct theory that thinking and behaviour do not function separately.

Now that the constituent parts of a repertory grid have been outlined in brief above, the discussion moves to discussing the grid elicitation process itself. This procedure consists of a number of discrete steps that are now explained: (i) the interviewer and interviewee reach agreement of the topic; (ii) the interviewer and interviewee reach

agreement of a set of elements; (iii) an explanation of the purpose of the interview is provided and that the interviewee will be asked to compare the elements using a systematic procedure; (iv) using three elements – perhaps identified using a roman square – the interviewee is asked to say which two elements are the same in some way and different from the third; there are no right or wrong answers; (v) the interviewee provides an explanation as to what is in common between the two elements as opposed to the third; this is recorded by the interviewer on the repertory grid interview sheet, the thing that connects the two elements is noted on the left and the opposed thing that is different to the two elements is recorded on the right of the grid sheet: this is the person's construct; (vi) the interviewer should ensure that the contrast is clear and that the distinction is a truly bipolar expression; (vii) the interviewer presents the construct in the form of a ratings scale to the interviewee – 1 representing the left hand end of the scale and 5 representing the right hand end of the scale; (viii) the interviewee is requested to rate each of the three elements, using the 1 to 5 scale against the construct making sure that the directionality of the scale is being maintained; (ix) the interviewee now rates the remainder of the elements against the construct and (x) the above procedure is repeated to elicit as many new constructs using different triads of elements. At the end of the interview it is appropriate to draw the interviewee's attention to all the elicited constructs and ask the interviewee to identify a catch-all construct that may not have been expressed but represents the full set of elements.

After a repertory grid has been elicited an analysis procedure will follow, this is discussed below.

Repertory grid data can be analysed by: (i) statistical methods (correlation, cluster and principal components analysis) that look at the mathematical properties of the grid itself and (ii) more interpretive methods that involve the constructs and their labels and how the constructs abstract each element (Cassell and Symon, 1999: 77). However, before statistical analysis of a repertory grid takes place the first stage is to undertake a basic descriptive procedure of the elicited grid, using: (i) process analysis; (ii) eyeball analysis, and (iii) construct characterisation. In describing the structure of the grid we are concerned with relationships between the elements and between the constructs. This can be undertaken by looking at simple element and construct

relationships or by using the statistical techniques of cluster and principal components analysis.

Process analysis is undertaken in terms of the context in which the grid was elicited. For example, how did the interviewee react to the reasons for wanting to undertake the grid, how did the interviewee respond to the elements being proposed, what was interviewee's response to the catch-all question? Are there constructs that required more thought to elicit? Finally the constructs, what are they saying? Now the ratings procedure; how difficult was this for the interviewee to complete?

Now considering the eyeball analysis procedure. This involves reviewing the grid as a whole and becoming more familiar with the content; this can be undertaken using a six stage procedure that includes: (i) noting the topic of the grid, what is the interviewee thinking about, are there any qualifying phrases? (ii) noting the elements, is there any information regarding how the elements were agreed? (iii) how many constructs were elicited, what are the constructs that are being used by the interviewee to describe the topic? (iv) consideration of the element ratings on each of the constructs, how are the ratings being used? Consideration of each element in terms of each construct, how has the rating scale been applied? (v) consideration of the element ratings applied to the supplied construct, can these be compared with the other elicited constructs? and (vi) drawing conclusions by summarising the main points.

After process and eyeball analysis, construct characterisation can be undertaken. Depending on how they exert control over elements, constructs can be classified as: (i) core versus peripheral; (ii) propositional versus constellatory and (iii) pre-emptive. Core constructs remind the person who they are and what really matters to them, whereas peripheral constructs summarise their feelings, understandings and knowledge about a topic. A propositional construct, often peripheral, offers simple descriptions of basic and at first glance, superficial element characteristics, whereas a constellatory construct implies the position of an element on other constructs very strongly. A pre-emptive construct is a construct that pre-empts its elements for membership; their relationship with other constructs is fixed, such that as far as the interview is concerned they make the other constructs redundant.

Before considering cluster and principal components analysis in detail the procedure for a simple analysis of a grid is outlined.

The procedure for comparing element ratings against each construct involves assessing the differences in the element ratings, such that the simple element analysis involves summing the differences between element ratings using the following procedure: (i) calculating the absolute differences in ratings on the first pair of elements on the first construct; (ii) summing down the grid sheet column for all the absolute differences between pairs of constructs; (iii) repeating for all pairs of elements; (iv) comparing the sums of differences; (v) discussing the relationships with the interviewee; (vi) examining any relationships with the supplied elements. If there is a requirement to compare the element ratings across a number of grids the percentage sum of difference and percentage similarity score should be calculated to account for grids with varying numbers of constructs (see Jankowicz, 2004: 101 for the calculation).

A similar procedure – as for elements – can be undertaken for simple construct analysis. Step (iii) above requires an additional procedure involving checking for reversed/unreversed constructs. This takes account of the constructs being bipolar in nature and that the element triad elicitation procedure places the thing that accounted for two elements being in common at the left hand end of the construct, while the right hand end of the construct notes the thing that was different. The smallest and largest sum of differences should now be considered that reflect the two constructs being used most similarly and the two being used most dissimilarly by the interviewee. Where the smallest sum of difference comes from the reversed comparison then the construct poles must be swapped before reporting (see Jankowicz, 2004: 115 for the percentage similarity calculation).

The discussion now moves to a consideration of the statistical procedures of cluster and principal components analysis.

Cluster analysis is a procedure for highlighting the relationships in a grid so they become more visibly recognisable. The cluster analysis procedure (for elements) involves the following steps: (i) examining the elements to see which have been reordered; (ii) examining the shape of the element dendogram to see how many major branches are present; (iii) identifying for each cluster the construct similarities and

differences; on which constructs do these elements have similar ratings and where do they differ? (iv) determining what this means in terms of how the interviewee is thinking about the topic; (v) locating the hierarchy of percentage similarity scores between pairs of elements and finally (vi) examining each percentage similarity score and discussing it with the interviewee.

A similar procedure should also be undertaken for the construct relationships.

Principal components analysis is undertaken to examine the patterns of variability in the grid by iteratively (i) calculating the extent to which ratings in each row of the output table are similar to each other using the correlation value between each row and the other row and (ii) allocating as much as possible of the total variability to each distinct pattern using as few different patterns as possible. The principal component graphical output from a software package plots the constructs as straight lines whose angle, with respect to each component, reflects the extent to which the construct is represented by that component and whose length reflects the amount of variance in the ratings of that construct.

The analysis procedure involves several stages that include: (i) determining how many components are present to account for greater than 80% of the variance (p. 134); (ii) examining how tightly the lines representing the constructs are spread; (iii) identifying any similarities in the meaning of the constructs; (iv) noting the position of any meaningful groups with respect to the two principal – vertical and horizontal axis – components and (v) checking interpretations with the interviewee.

The above discussion has been concerned with the analysis of single grids; the issue of multiple grids is now considered to account for different numbers of constructs being elicited in different grids. The type of approach is dependent on the how the interviewer intends to use the information and secondly, the number of grids involved. Where there are many grids to be compared content analysis enables multiple grid comparison to be undertaken. Whereas the unit of analysis in single grid analysis is each grid, multiple grid analysis undertakes the analysis at the level of each construct.

The basic procedure, termed the core-categorisation procedure, involves constructs being compared with each other and allocated to a category. The interviewee may simply have devised the categories such that a reliability check should be carried out on the constructs allocated to each category; this ensures that stability, reproducibility

and accuracy are accounted for. Stability considers the extent to which the results of the content analysis are invariant over time; reproducibility considers the extent to which people make the same sense of constructs and accuracy reflects the consistency of constructs being allocated to a category definition.

The generic procedure follows defined steps that include: (i) identification of the categories; (ii) allocation of constructs to the categories by the interviewer; (iii) results tabulation; (iv) a reliability test of the allocation procedure by an independent third party (p. 155); (v) summarising the results by identifying the meaning of the category headings; followed by identifying constructs that are examples of the category headings and finally (vi) reporting the number of constructs in each category.

If there is a hypothesis that needs to be tested a differential analysis procedure can be conducted that involves reporting – using percentages – whether the constructs of one subgroup are differently allocated across the constructs than another subgroup.

In undertaking the basic content analysis the procedure generalises across a whole sample and does not use the element ratings from each elicited grid, it therefore loses the specifics of what each person has been saying about a topic using their specific individual constructs. Honey's technique (p. 170) aggregates different constructs across a sample and provides a way to make use of some of the individual meaning being conveyed in each individual's ratings. An overall summary construct is supplied to the interviewee at the time of the interview and the elements rated.

In aggregating constructs across the sample, Honey's content analysis labels each construct with (i) a percentage similarity score (as discussed above) and (ii) an acknowledgment that percentage similarity scores are relative, i.e. different people have different ranges of percentage similarity scores for any topic; the scores are placed among high, intermediate or low values for that individual. Using both indices enables the overall construct to be compared with the other constructs in each grid to identify the constructs that are most and least strongly matched to the overall construct. The aggregated sets of constructs for the whole sample represent the categorised views of all the individuals, while also preserving information about each individual's views of the topic.

The procedure involves the following steps: (i) obtaining ratings on the overall construct; (ii) computing the sums of differences for each construct against the overall

construct, checking for reversals as discussed above; (iii) labelling each construct with both indices; (iv) identifying the categories; (v) allocating the constructs to the categories; (vi) tabulating the results; (vii) establishing the reliability of the category system as noted above; (viii) summarising, first the meaning of the category system, and then finding examples of each category heading. This procedure is completed by ordering – within each category – and using the percentage similarity score, followed by the high-intermediate-low indices to identify salient constructs where there is group wide consensus. If required, identify sub themes in each category by grouping constructs by the meaning they express and finally (ix) producing a summary table including a frequency distribution of constructs allocated to each category heading. Complete any differential analysis as outlined above if required.

The research methodology discussion now continues in chapter C2 with a consideration of the design of the research.

CHAPTER C2: RESEARCH DESIGN

C2.1 Introduction

The research design forming part 6 of the research process (Sekaran, 2000: 54) can be considered as the 'science and art of planning procedures for conducting studies so as to obtain the most valid findings' (Vogt, 1993, cited in Hussey and Hussey, 1997: 114); for Yin (1994), research design is defined as an action plan or blue print. According to Andersen (1995), the development of a design strategy is a process of clarifying the interpretation of reality. For Williams and May (2000), research can be considered as the methodical investigation of a subject or problem in which the choice of methods will be dependent on factors such as the nature of the phenomenon and the resources available.

The research design is outlined in figure C2.1 using the Sekaran (2000: 122) research design template.

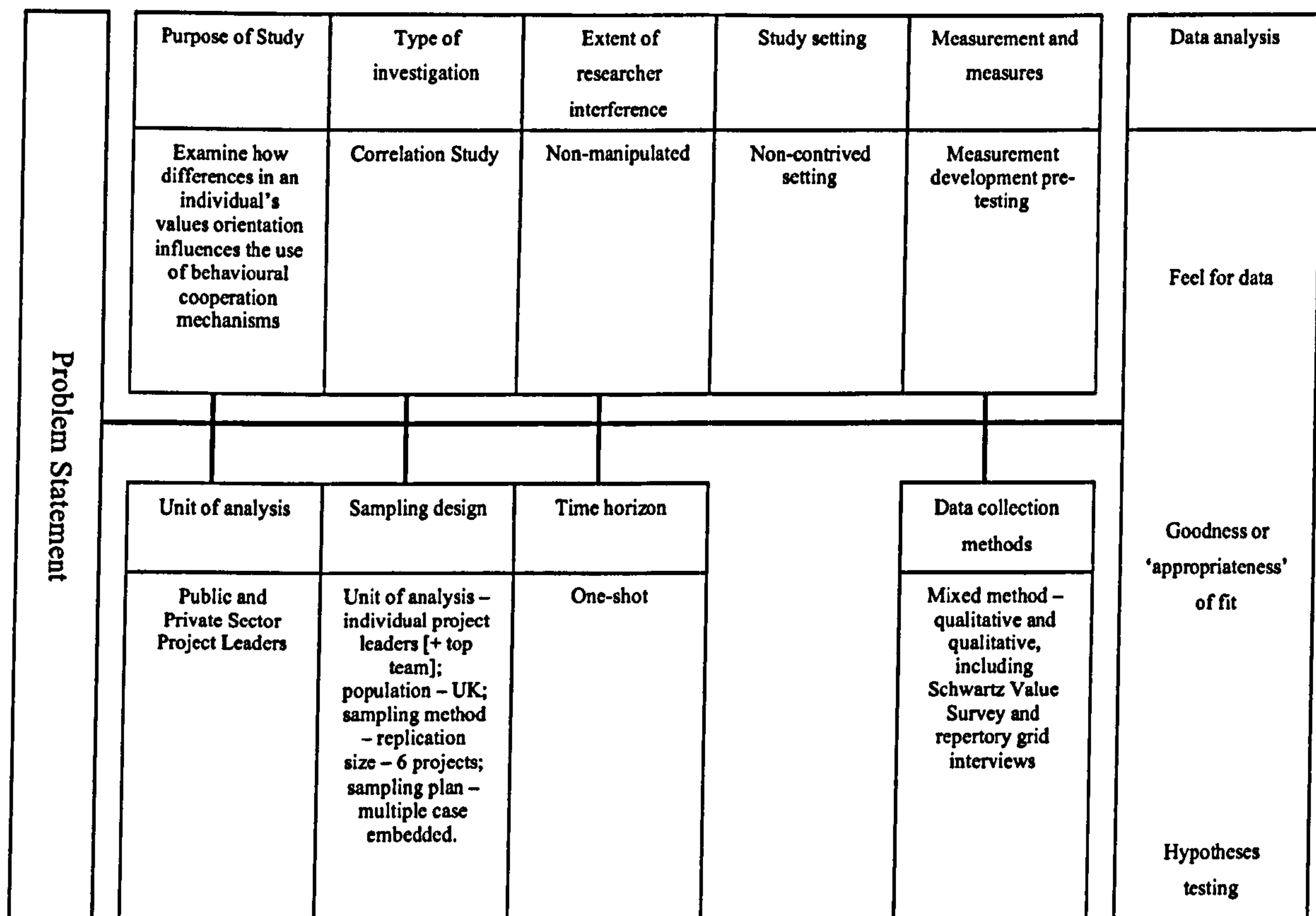


Figure C2.1: Research design adapted from Sekaran (2000: 122)

The research design chapter presents the following information: (i) type of investigation; (ii) extent of researcher interference; (iii) study setting; (iv) time horizon; (v) unit of analysis; and (vi) sampling design.

C2.1.1 Purpose of Study

The study was concerned with investigating how, within public and private sector relationships in PFI projects, individuals' values orientations influence the use of behavioural cooperation mechanisms. The assertion is that individuals from both the private and public sectors would hold either opposing or similar values orientations that would tend towards either individualism or collectivism. The consequence would be that differences in values orientation would result in behavioural cooperation mechanisms being used in different ways during relationship engagement. The study did not extend to consider the affect of outcomes of various cooperation mechanisms on the actual formation and evolution of cooperative behaviour.

The relationship between the variables that were examined is outlined in figure C2.1.1 below (Hussey and Hussey, 1997: 121-124).

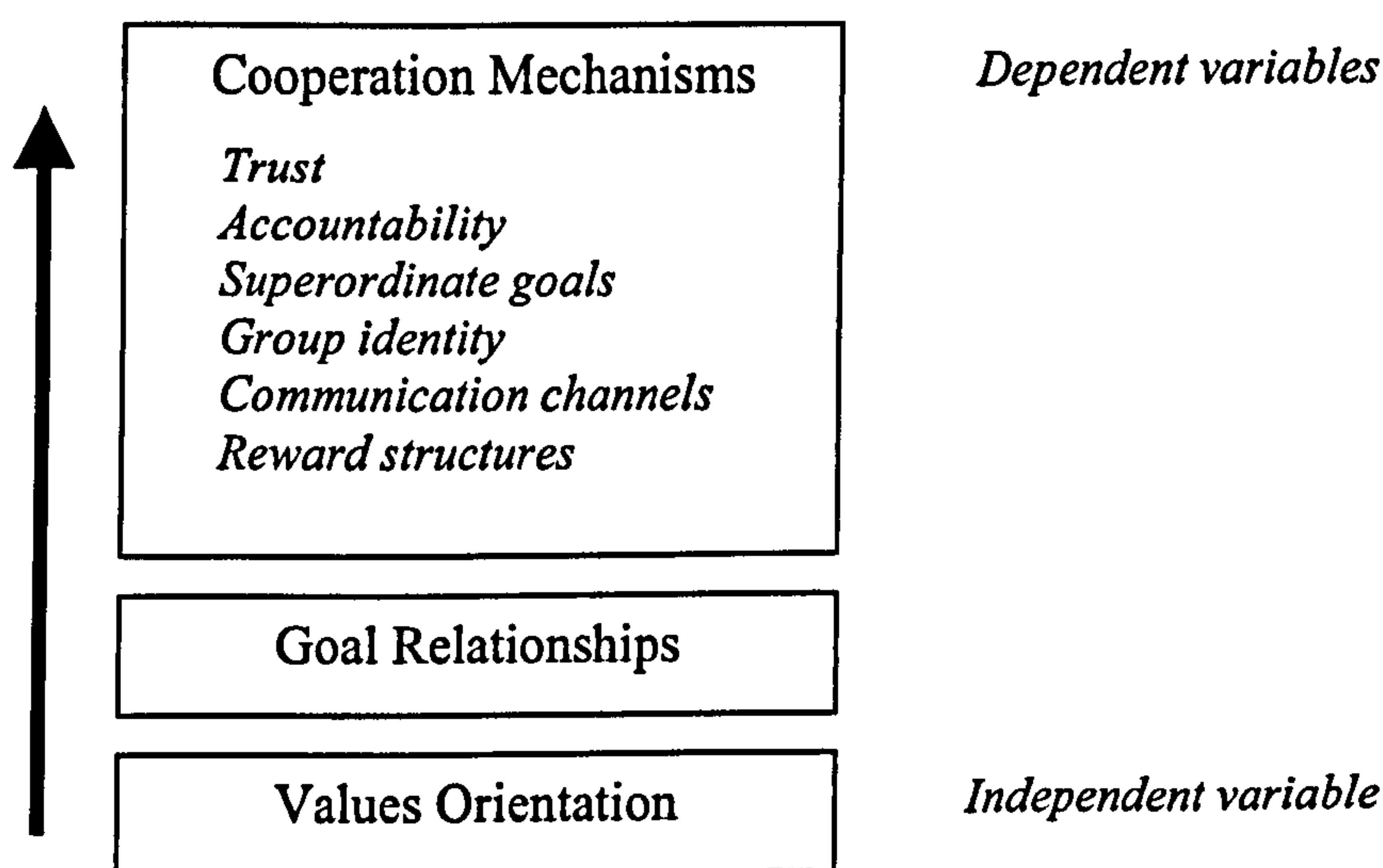


Figure C2.1.1: Relationship between variables

C2.1.2 Type of investigation

The study focuses on individuals' values and how orientation influences the use of relationship cooperative behavioural mechanisms. In order to examine the relationship five types of research strategy were considered (Denscombe, 1998; Strati,

2000), including: (i) survey; (ii) experiment; (iii) action research; (iv) ethnography and (v) case study.

The positive and negative aspects of each research strategy that led to the use of an explanatory case study strategy being proposed (Yin, 1993; 1994; Strati, 2000), are outlined below.

	Positive Aspects	Negative Aspects
SURVEY	<p>Data produced based on structured real world observations;</p> <p>Wide breadth and inclusive coverage ensures representative sample;</p> <p>Good generalisability;</p> <p>Relatively low and predictable cost to administer in relation to other strategies.</p>	<p>Focus can over-emphasise data as distinct from theory;</p> <p>Approach tends to support use of quantitative data only;</p> <p>The significance of the data can be neglected;</p> <p>Lack of depth and detail, as distinct to say a case study approach;</p> <p>Wide coverage places high responsibility on the ability to check honesty of recipients.</p>
EXPERIMENT	<p>Enables isolation of individual factors to observe effect in detail, resulting in high levels of precision;</p> <p>Studies are easily repeatable due to convenience of laboratory setting;</p> <p>Allows (i) theory testing, (ii) discovery of new relationships or properties associated with the object under investigation.</p>	<p>Use of control groups and ethical considerations;</p> <p>Laboratory settings are artificial and could be considered as detached from the real world;</p> <p>Matching the research subjects and control group can be problematic;</p> <p>Researcher is able to control variables under examination.</p>
ACTION RESEARCH	<p>Hands-on approach to deal with real world problems;</p> <p>Practical and applied;</p> <p>Supports change;</p> <p>Iterative cycle of change, feedback and review.</p>	<p>Research needs to be part of practice and not an adjunct;</p> <p>Due to the research being conducted as part of normal activities it is difficult to manipulate variables or exert control;</p> <p>There can be ethical considerations in the context of the work place or research setting;</p> <p>Data ownership can be problematic between researcher and participants;</p> <p>Caution is required with regards to the vested interests of researcher.</p>

ETHNOGRAPHY	Holistic approach to people or cultures; Routine events are worthy of research, written accounts become a construction as opposed to a description; Provides detailed data, directly observed and empirically grounded.	Time consuming as extended periods are required within the environment to be researched; Can be too much story telling at expense of analytic insight; Ethical concerns; Poor reliability.
CASE STUDY	Not bounded by physical/environmental factors but by activities, processes and relationships; Can deal with relationships and social processes in a way denied by survey approach; Holistic approach rather than based on isolated factors; Encourages multiple methods to capture the complexity of the situation; Fosters use of multiple sources of data, enabling triangulation; Suits small scale research by concentrating effort at a low number of locations; Supports both theory building and testing.	Poor generalisability; Preconceptions of 'soft' data production, concerned with process and not outcome; Can be difficult to define the boundaries of the case; Negotiating access to case study settings can be difficult; Ethical considerations in connection with accessing people in the work setting, and confidentiality in relation to document review.

Table C2.1.2: Comparison of research strategies (Denscombe, 1998)

C2.1.2.1 Relating the research strategy and data collection requirements

Each of the research strategies outlined in the table above were evaluated in terms of how the data requirements for this study would be met, prior to the adoption of a case study approach; these are discussed in greater detail below.

Survey: the use of a survey methodology would potentially have been possible; however, it was ruled out for the following reasons: (i) there were too few health PFI projects established when the research study commenced and (ii) the writer was employed, at the time the research study began, by a private sector company involved in health PFI project delivery.

This raised a number of issues relating to the writer's association with a private sector company directly involved in developing and delivering health PFI projects, including commercial confidentiality, such that private sector respondents from other

companies may have declined to complete questionnaires. Additionally, public sector respondents may have considered the information to be privileged as the writer was directly involved in the procurement of health PFI projects.

While a survey approach could have been adopted, it was ruled out on these practical grounds.

Experiment: an experimental approach was considered neither appropriate nor practical: PFI project environments are live, day-to-day situations involving planned and reactive responses, and constructing a laboratory environment with a control group would not have been beneficial in terms of researching this very active and practical project environment; this strategy was not considered further.

Action research: it was not possible for the researcher to become an active agent within each project, as the writer was an employee of a private sector bidding organisation at the time. It was further considered that an action research strategy would be unacceptably disruptive to normal project working, and the writer may have gained access to confidential information; accordingly, action research was ruled out.

Ethnographic research: the practicalities and data requirements of the study ruled out an ethnographic approach due to the following concerns: (i) the narrative constructed from project member observation would not have provided the values orientation data; (ii) there would have been disruption to normal project working and potential access to confidential information, and (iii) due to time and geographic location constraints, it would not have been practical to spend the extended periods within each project environment that were necessary.

Case study: was considered potentially appropriate to this research setting for a number of reasons. An important benefit of case study – by comparison with a survey design - is that case study provides the opportunity to study in-depth the small number of individuals within the six projects and compare the findings between cases. Using a multiple case design enables analytic generalisation (Yin, 1994), where empirical results from a case are compared against underlying theory: where the findings from two or more cases support the theory replication can be claimed.

C2.1.2.2 Benefits of a case study design

A general discussion now follows regarding the use and benefits of a case study research strategy before considering its application to the research study in section C2.1.3 below.

Yin (1994) suggests that case studies are appropriate when a number of conditions are satisfied. The first requirement is to differentiate between the type of research questions to be addressed by the study. The ‘how’ type research questions that are used in this study - such as ‘how does values orientation influence the use of behavioural cooperation mechanisms?’ - are appropriate to explanatory case study designs. The second requirement relates to the extent of control the investigator has over the actual behavioural events, such that case studies lend themselves to the examination of contemporary events where relevant behaviours are not manipulated (p. 8) (see section C2.1.4 for further discussion regarding the extent of investigator interference). The third condition is that there is a focus on contemporary as opposed to historical events.

An important benefit of case study design is that it allows the researcher to concentrate on specific aspects of an organisational setting, enabling a more in-depth examination (Brewerton and Millward, 2000; Strati, 2000), i.e. the multiple PFI project environments being considered by this study. For Hartley (cited in Casell and Symon, 1999: 208) a case study design is considered to be ‘meaningful and rich as compared with the sometimes dustbowl empiricism of qualitative techniques’; while for Brewerton and Millward (2000: 53) it yields information that is considered ‘rich and enlightening’ and that may provide new leads and questions from a ‘well-circumvented and captive group’.

C2.1.2.3 Considering triangulation

As a research strategy, case study design enables qualitative and quantitative methods to be combined in the investigation of a phenomenon; as noted by Brewerton and Millward (2001: 55) the combination of methods ‘offers the promise of getting closer to the whole of the case in a way that a single method study could not achieve’. Yin (1993) considers that case study research design emulates scientific method; it is also accepted, following Brewerton and Millward (2001), that quantitative case study analysis requires a certain amount of qualitative data in order to back up or illustrate

the quantitative findings. The use of a wide range of methods to link quantitative and qualitative sources (Miles and Huberman, 1994; Scholz and Tietje, 2002) is considered to be one of the major strengths of a case study approach; Jick (cited in Andersen, 1995: 44) refers to this as a combination of methodologies in the study of the same phenomena, while Denzin (cited in Hussey and Hussey, 1997) describes a process of triangulation in which 'the combination of methodologies in the study of the same phenomena' should lead to greater validity and reliability through convergent lines of enquiry.

Acknowledging that triangulation needs to be approached with care (Andersen, 1995), the following evaluation types identified by Yin (1994) and Hussey and Hussey (1997) were considered: (i) data-based (from various sources); (ii) methodological (using quantitative and qualitative collection methods) and (iii) theoretical (inter-disciplinary). Investigator triangulation was not considered appropriate to this research setting. The benefits of adopting a case study methodology can be summarised as: (i) there is a greater in-depth examination of a particular situation; (ii) the information provides new leads or raises questions that had not been thought of, and (iii) the people involved usually comprise a fairly bounded and captive group.

C2.1.2.4 Key steps in case study research

There are several practical steps in developing a case study design (see for example Cassell and Symon, 1999: 214-222 for further description): these are considered below.

Choosing the case study: is the case a representative or extreme example of the phenomena to be investigated?

Gaining and maintaining access: issues include: (i) how will access be obtained and maintained as key individuals can change over time; (ii) who are the gate-keepers; (iii) is an organisational research sponsor required, and (iv) who are the stake-holders for your research?

Initial theoretical framework: depending on the state of current literature, the initial focus of the study may be narrow or open-ended; however structure is needed to ensure that the researcher is not drawn into narrative and story telling as distinct from theory building.

Data collection: given the wide range of data collection sources available to the researcher, a systematic approach is required. This can start with an overview and organisation orientation before developing a more detailed engagement strategy; data collection needs to be systematic.

Managing data: the researcher needs to be able to decide when to stop collecting more data, and this should be when no significant new knowledge or ideas are being gained in support of the study.

Data analysis: collection and analysis are developed as part of an iterative process that allows theory development to be grounded in empirical evidence. Careful description of the data is initially required before proceeding to examination or interrogation, during which the researcher is looking for unusual, disconfirming and contrasting data. Writing up should be cognisant of internal validity issues and undertaken by checking theory against various sources of evidence, including literature, so as to prevent early bias developing.

Concluding the case study: at an appropriate point following collection of sufficient data, the researcher will need to exit the case; providing a short report to organisational members and key informants may conclude this.

Accordingly, it was concluded that a case study design was considered appropriate for the study, as it would enable examination of the relationships within each PFI project. The relevance of the case study design to the research is now considered.

C2.1.3 Relevance of case study design to research study

As noted by Miles and Huberman (1994: 172) an aim of studying multiple cases is to increase generalisability, while at a deeper level 'the aim is to see processes and outcomes across many cases to understand how they are qualified by local conditions, and thus develop more sophisticated descriptions and powerful explanations'. As pointed out by Glaser and Strauss (cited in Miles and Huberman, 1994: 173) multiple case research designs enable the researcher to find affirming, as well as negative, cases to strengthen a theory.

In adopting a case oriented strategy, Yin (1994) suggests that case replication enables a theoretical framework to be used to study one case in-depth, and then successive

cases are examined to see whether the patterns found match previous cases. In selecting cases Gillham (2001: 1) notes that a case can be any 'unit of human activity embedded in the real world'. Case selection in terms of this research study is considered further in section C2.1.5 below.

In examining individuals' values orientation influencing behavioural cooperation mechanisms, the writer established from the literature *a priori* cooperation mechanisms that may be influenced by individuals' values orientations. Use of a multiple case research design enabled a detailed analysis and description of one case and inter-case comparison as posited by Yin (1994).

It was proposed that multiple methods of data collection were used: assessment of values orientation were completed using the Schwartz Values Survey instrument, and repertory grid interviews were used to obtain individuals' constructs, to establish the hierarchy of cooperation mechanisms for individuals. In combination, this multiple methods approach contributed to the issue of triangulation discussed above.

The relationship dynamic - the extent of values orientation influencing the use of cooperative behavioural mechanisms – within one case was not considered sufficient to explore the phenomena. As Yin (1993) notes, the unit of analysis is significant in terms of relating the findings to specific theoretical propositions, and accordingly the use of a range of cases enabled the propositions from one case to be generalised to other cases, thereby increasing the validity of the findings.

In support of the multiple-case design adopted for this study, a key constraint was the small number of available cases at the time of commencing the research; this was principally due to the underdeveloped PFI market place and commercial considerations preventing the writer access to a number of projects. In selecting each case, a number of issues were considered including: (i) was the project sufficiently large and at stage of development to incorporate a range of complex issues that may occur during the normal day-to-day activities project leaders would be engaged in; (ii) was it generally representative of the wide number of PFI health project occurring in the UK health sector at that time, and (iii) were the project leaders likely to be sufficiently experienced and representative of those developing and managing PFI projects in the embryonic market place at the time. From the available projects only a

small number were considered suitable for this research; this is addressed further in section C2.1.6 below.

As the study was concerned with examining the relationship between individuals' values orientation and their influence on the use of cooperation mechanisms, Yin's (1993) approach to an explanatory case study was considered appropriate, as this study was developed from the theoretical positions of Katz and Kahn (1966), Schwartz and Bilsky, (1987) and Chen et al. (1998). This enabled Yin's (1994) approach to pattern-matching techniques (see section C4.1) to be used to examine the similarity of values orientation patterns for respondents in relation to the hierarchy of cooperation mechanisms used during relationship engagement; further, the multiple-case design enabled prediction of similar results to other cases within the study.

C2.1.4 Study setting and extent of researcher interference

The problem of gaining access to live project environments was a prime concern. However, it was considered beneficial that the writer had previously worked for the NHS and at the start of the study had worked in health projects within the private sector. At the outset, private and public sector individuals associated with the projects were contacted, in order to discuss possible access arrangements as it was accepted that the writer's prior business relationships with the majority of the project leaders and, in some cases, team members, might have an influence on the data collected.

The structure of the study was discussed, and assurances were given that the data would exclude commercially sensitive information. The writer sought to limit interference with the normal working of the projects' day-to-day operations by, for example, meeting with respondents at times that suited their normal working patterns; this resulted in a non-contrived study setting. In addition, a suitable confidential environment was used when discussing the project and undertaking data collection. It was therefore considered that this resulted in limited disruption to the project, meaning that it can be deemed a correlation study.

Due to the wide geographic spread of projects across England, data was collected on a 'one shot' basis at each project location.

C2.1.5 Unit of analysis

Yin (1993) notes that no issue is more important than defining the unit of analysis correctly. This study was principally concerned with behavioural interaction between public and private sector project leaders within a PFI project environment; however it is acknowledged that project leaders do not operate in isolation. The leaders and their key work associates interact within and across the organisational boundary within what Katz and Kahn (1966) termed role-sets, each project acting as a discrete case.

Project variability was considered and it was concluded that the projects were the same such that aggregation of the data was acceptable.

C2.1.6 Sampling design

The sampling design considered two aspects: (i) project selection and (ii) respondent selection; these are discussed in detail below.

The sampling design was adapted from Yin (1994) and Sekaran (2000), where four types of design were considered, including: (i) single-case holistic; (ii) single-case embedded; (iii) multiple-case holistic, and (iv) multiple case embedded. As the study contained six individual cases (projects), a multiple embedded case design was used: this is asserted by Yin (1994: 45) to be more robust and to lead to more compelling evidence, by comparison with a single case approach. Replication logic enables the selection of the most suitable and appropriate cases, as opposed to inferring that findings from a sample will apply to a population (Yin, 1994). Where there was the opportunity to predict and compare the findings from one case to another using literal replication (Yin, 1994: 49), multiple case replication logic supported case selection.

The first aspect, project selection, entailed identifying acute health sector projects in England that commenced between 1997 and 2002, and that had an initial capital budget of more than £65m. At the time the research study started, a limited number of acute health sector PFI projects had been initiated. The writer initially identified four of these projects as suitable, as the employer was involved in the procurement and provision of their project. When the writer left the project sponsor's employment one of the projects withdrew from the research study; a further three projects were subsequently identified that met the project criteria noted above.

In terms of the second aspect, respondent selection, the relationship between the public and private sector project leaders was the principal area of interest, as this issue caused the writer's employer considerable organisational and managerial problems. The sampling frame was therefore small and restricted, and focused on the project leaders and their key work associates from the public and private sectors in each project. The limited access to not only projects but also project leaders raised issues of probability and non-probability sampling. The purposive judgement approach adopted with regards to non-probability sampling acknowledges that the use of targets does, to some extent, reduce the generalisability of results. Rather than simply relying on job title, a discussion took place with representatives from all of the organisations, to ensure that the correct role holder was identified and selected. Project leaders for the public and private sectors were selected using the key informant processes drawn up by Kumar et al. (1993) and Patterson and Spreng (1997): the project leaders identified their key work associates. Individuals were selected due to their role and because they had detailed knowledge of some of the largest and most complex health PFI projects under procurement in the health PFI sector at that time. It was posited that the relationship issues under consideration could relate to wider public and private sector contracting, such that, with further investigation, it may be possible to draw generalisations from each case.

CHAPTER C3: DATA COLLECTION

This chapter considers data collection as step 7 of the research design process, in accordance with Sekaran (2000). In pursuance of the research questions outlined in section C1.6, data was obtained from two sources; an individual's values orientation was established using the Schwartz Value Survey, and their behavioural constructs were elicited from repertory grid interviews, to validate the behavioural cooperation mechanisms identified in the literature review in chapter B; this satisfies the recommendation by Yin (1994) and Riege (2003) that multiple sources of evidence are explored. After data collection, respondents were invited to review the data, to ensure that there were no errors or omissions in the information.

C3.1 Measurement of Values Orientation

A review of ways to measure individuals' values orientations in section B1.11 identified a number of potentially suitable instruments; a chronological summary of recent single and multi-item scales has been included in appendix B. In this section we review these measurement instruments and justify the choice of SVS.

C3.1.1 Process of initial scale selection

The data relating to the assessment of an individual's values orientation required a scale to be selected from the large number available; this raised issues of potential scale limitation and bias. After considering the limitations of the available scales, the option of developing a scale specifically for PFI health project managers was considered. This was discounted, as only values orientation needed to be ascertained in order to enable a comparative analysis between individuals with regards to how their values orientations influence their use of cooperation mechanisms. Many scales were deemed unsuitable due to the scale's focus and due to the requirement for values orientation to be: (i) identified in terms of motivational goals, as found in the adapted Chen et al. (1998) model and (ii) identified in terms of individualist and collectivist orientation. Potential scales were selected that (i) enabled values orientation to be assessed independent of any specific constraint, i.e. work or home life; (ii) allowed values to be assessed at an individual level; (iii) enabled values to be assessed without the constraint of a country or particular group. This initially suggested that INDCOL, the self-administered subjective variant of INDCOL (S[INDCOL]), and SVS were scales worthy of further consideration. The SVS identifies universal values orientation

rather than a specific values subset (e.g. work). INDCOL and the simpler self-administered S[INDCOL] variant of the scale, assess an individual's values orientation in terms of individualism and collectivism. Both SVS and INDCOL have principally been used at a macro analytic level, i.e. within studies of intra country groups and inter country studies.

The use of SVS, S[INDCOL] and INDCOL in this setting was discussed with both Professor S. Schwartz and Professor H. Triandis (personal communications, April 2004): accordingly, the conceptual difficulty of which scale would be most suitable necessitated that they were all considered in terms of potential suitability. Accordingly, all three were taken forward to pre-testing and piloting.

Scale	Use	Reference
57-item Schwartz Value Survey (SVS)	Assesses an individual's universal values orientation	Schwartz and Bilsky, 1987; 1990; Triandis et al., 1990; Schwartz, 1992
24-item S[INDCOL] Scale	Self-administered instrument that assesses individualist and collectivist values orientation	Triandis, 1996; Singelis et al., 1995; Triandis and Singelis, 1998
32-item INDCOL Scale	Assesses vertical and horizontal dimensions of individualist and collectivist values orientation	Triandis, 1996; Singelis et al., 1995; Triandis and Singelis, 1998

Table C3.1.1: Summary of initial scale selection

C3.1.2 Scale pre-testing

Pre-testing was undertaken prior to selecting the most appropriate scale. As noted by Sekaran (2000), pre-testing ensures that respondents understand the content and wording of the questions, and that questions are unambiguous. A preparatory review was undertaken for each scale: the language and content of the multidimensional SVS scale was reviewed to ensure its suitability for this research setting. This involved discussing SVS development with Professor S. Schwartz (personal communication, April 2004), who confirmed that the instrument had been extensively used with UK respondents. Subsequently, the scales were reviewed through discussions with

academic supervisors, research colleagues and business associates, and the content and language were considered to be appropriate for a UK application.

A discussion with Professor H. Triandis (personal communication, April 2004) indicated that INDCOL and S[INDCOL] scales had not at that time been used in a solely UK application; however UK respondents had been included in wider global studies. It was suggested by Professor Triandis that some reworking of question content and language could be required to address the potential for low construct reliabilities being obtained due to respondents failing to understand, or misinterpreting, the questions.

C3.1.3 Pre-testing and piloting

Prior to piloting, INDCOL and S[INDCOL] were pre-tested with a Doctor of Business Administration (DBA) peer group and a representative sample of the research population. Debriefing sessions were conducted in order to assess their reactions to the questionnaire and to changes that were made to its content and structure; alterations were subsequently made to S[INDCOL] and INDCOL scales. Question 2 was reworded in the S[INDCOL] scale to clarify the use of the term co-workers. Questions 14, 17, 20, 23 and 29 were reworded in the INDCOL scale to clarify terms such as co-workers, work-groups and honours. The amended scales were returned to the pre-testing group to verify that the changes were appropriate and possible to understand, and subsequently taken forward to the pilot stage.

A pilot group of eighteen representative individuals considered to have expert knowledge in health and PFI was identified; each of them: (i) had worked in either the public or private sectors; (ii) had management experience of large scale projects; and (iii) had experience of outsourcing.

The scales were circulated to the expert group for completion between March and April 2004. A procedure for anchoring the instrument content was carried out, in accordance with Schwartz (1992: 49), in which each respondent was asked to identify and rate the most and least important values, thereby reducing or eliminating the potential for scale shift. Fifteen responses were initially received; the three non-respondents were contacted on two further occasions in late April 2004, resulting in one further submission and two failures to submit. All of the respondents who submitted their scales had completed S[INDCOL] and INDCOL; however, one SVS

and one INDCOL response were only partially completed and these were subsequently excluded from the analysis.

C3.1.4 Pilot documentation

Each respondent was provided with the following: (i) text instructions outlining the purpose of the scales and how to complete them; (ii) the SVS scale, and (iii) the S[INDCOL] and INDCOL scales. S[INDCOL] and INDCOL were issued together, and the respondents were requested to complete the S[INDCOL] first to obtain an indicative self-assessment of their individualist-collectivist values orientation. Respondents were requested to provide feedback on the documents: they were asked to point out any jargon they encountered in the introductory sections of the individual questionnaires, and to indicate if they needed any additional supporting text relating to the nature of the study (e.g. regarding ethics, or whether they would be able to gain access to key findings).

Specific comments relating to the SVS scale included: (i) the scale was liked by the majority of respondents and considered easy to complete; (ii) the values list was long but thought provoking; (iii) in question 13, 'country' should replace 'nation'; (iv) 'feeling well' should be added to question 42; (v) 'reputation with others' should be added to question 44; (vi) 'carrying out instructions' should be added to question 45; (vii) 'meeting own desires for pressure' should be added to question 46, and (viii) the guidance for respondents should be re-ordered.

Comments relating to S[INDCOL] included that the scale: (i) was wordy and time consuming to complete, and (ii) contained considerable statement ambiguity (many respondents commented on this). A number of respondents failed to add up the figures relating to individualism and collectivism, thereby negating the benefits of the instrument as a self-assessed, introductory tool. Although S[INDCOL] had been utilised because it is purported to be a simple, self-assessed introduction to a respondent's tendency towards individualist or collectivist values orientation, the majority of respondents found the scale to be of limited value, and it was not taken forward for use in the study.

Comments relating to INDCOL included that the scale was: (i) difficult to understand in parts; (ii) subjective; (iii) time consuming to complete, requiring constant checking

back, and (iv) confusing, such that the individualist-collectivist dimension indicator at the extreme right of each question need to be deleted.

C3.1.5 Scale purification

At this stage, only the reliability of the scale was tested. This was achieved by examining the Cronbach's alpha coefficient, in which the benchmark was set at 0.7 and the corrected item-to-total correlation (CITC) benchmark was set at 0.3 (Hair et al. 1998: 118); the results are contained in appendix A1.

As the SVS scale was used to identify the values orientation of individuals, Cronbach's alpha coefficient was calculated only for the questions within each of the ten values domains that were relevant. The CITC value for item 51 and the Cronbach alpha coefficient for individual items 25, 26 and 32 were marginally below the respective benchmark. However, as the pilot sample size was relatively small and as all values domain alpha coefficients exceeded the 0.7 benchmark, it was considered acceptable to retain all items. The purified SVS instrument is contained in appendix D.

INDCOL can be assessed as a four dimensional scale or as a summated individualism and collectivism two-dimensional scale. Although values orientation was to be assessed in terms of individualism and collectivism – i.e. it was to be two dimensional – it was considered appropriate to assess the reliability of both scales, following the discussions that had taken place with Professor H. Triandis. Although the Cronbach alpha coefficient exceeded 0.7 for the two-dimensional analysis, some purification was deemed necessary due to negative and small CITC values. Cronbach's alpha coefficient was improved from 0.76 to 0.87 by removing questions 1, 6, 18, 21 and 25. This reduced the weighting of the horizontal-individualism dimension, as five of the eight scale items were removed. The horizontal-collectivism dimension alpha coefficient was improved from 0.81 to 0.88 by removing questions 2, 13, 16 and 22. Discussions with Professor H. Triandis indicated that this need for modification was not uncommon when using the INDCOL scale, and that additional measures should be developed to test any changes that are made due to the locality, as responses may be due to respondent sample peculiarities. By removing questions 5, 25 and 32, it was possible to improve the alpha coefficient for the horizontal-individualism construct from -0.02 to 0.64 in the four dimensional assessment of reliability. The vertical-

collectivism construct alpha coefficient was marginally improved from 0.85 to 0.88 by removing question 13. The horizontal-collectivism construct alpha coefficient was marginally improved from 0.62 to 0.77 by removing questions 2 and 16. The vertical-individualism construct alpha coefficient was 0.88.

C3.1.6 Pilot conclusions

The instability of INDCOL as a four-dimensional scale was considered a particular concern, although acceptable reliability coefficients above 0.7 were obtained when it was used as a two-dimensional scale. However, the instrument became unstable when analysed at a four-dimensional level, requiring a number of items to be removed – principally from the horizontal-individualism dimension – in order to achieve acceptable instrument reliability. It was concluded, in discussion with academic supervisors, that instrument development was beyond the scope of this study. The pilot study indicated that both S[INDCOL] and INDCOL were potentially unstable and lacking in benefit, and neither was considered suitable for this research. SVS was, however, deemed an appropriate instrument with which to assess an individual's values orientation and was selected for use.

C3.2 **Measurement Quality and Accuracy of SVS Scale**

This section concerns the reliability and validity of the SVS scale, as issued to 33 individuals. Questionnaires were completed and returned between June and December 2004; the responses are contained in appendix E.

C3.2.1 Validity and reliability

This section considers the reliability of SVS in advance of issues of validity, as recommended by Spector (1992), who noted that one should first establish the essential property of reliability before examining scale validity. Reliability is concerned with the degree of stability and consistency when a scale is used repeatedly, and this can be assessed by a process called test-retest, which establishes internal consistency reliability.

Test-retest reliability: concerns a scale's reliability to measure consistently over time. This requires the same scale to be re-administered to ensure that the scale remains reliable over time. The SVS scale is a widely used and reliable scale (e.g. Schwartz 1992, 1994, 2001; Schwartz and Bilsky, 1987, 1990; Schwartz and Sagiv, 1995; Schwartz et al., 1997); as a consequence of respondent time pressure and business

commitments, no test-retest analysis was undertaken in this study. However, as noted by Schwartz (1995: 107-108), values must show moderate stability if they are to serve as meaningful guiding principles in life. Many theorists assume that value priorities are relatively enduring and that, barring extraordinary events, the meaning that individuals attribute to a value remains consistent when subjected to a test-retest procedure.

Internal-consistency reliability: relates to situations in which an estimation of reliability is made following a single administration of an instrument. Two methods are available to assess a scale's internal consistency, namely Cronbach's (1951) coefficient alpha and split-half reliability methods. In split-half reliability tests, as the name suggests, a single pool of items is randomly split to create two parallel scales, and the correlation between them is assessed; high correlation can be taken as an indication of internal consistency. SVS has been shown to have good split-half reliability results (Schwartz, 1992; Schwartz and Sagiv, 1995; Schwartz et al. 1997, 2001), such that further testing was not considered necessary.

Due to the multidimensional nature of the scale, Cronbach's alpha coefficient (Cronbach, 1951) was used to test for scale internal reliability, to ensure that multi-item scales correlate with each other (DeVellis, 2003). This test was performed using SPSS version 11.5. Where the coefficient alpha value was found to be below 0.7 for inter-item reliability, or where the item-to-total value was found to be below 0.3, the item was removed (Cronbach, 1951; Spector 1992). With the exception of two values domains, the coefficient alpha test results were in excess of 0.7 for inter-item reliability. This was not considered to be of concern, as the two-dimensional alpha coefficient test results were in excess of 0.8.

Validity tests – being concerned with whether an item in the measuring instrument actually measures what it purports to measure – examine whether a variable is the underlying cause of item co-variation (Spector, 1992; Oppenheim, 2001; DeVellis, 2003). Tests for validity are content-, criterion- and construct-related.

Content validity is concerned with whether items or questions are representative of the content domain to be measured (Churchill 1979; Oppenheim, 2001; DeVellis, 2003). As a consequence of the wide application of the SVS scale (e.g. Schwartz 1992, 1994, 2001; Schwartz and Bilsky, 1987, 1990, 1994; Schwartz and Sagiv, 1995;

Schwartz et al. 1997), reliance was placed on the validation process during its initial development, which was considered to provide acceptable evidence of content validity. Post scale purification revisions are noted in section C3.2.2.

Criterion-related validity: is confirmed when the measure differentiates individuals on a criterion it is expected to predict. This can be established by: (i) concurrent validity that indicates how well a scale correlates with other measures administered at the same time, and (ii) predictive validity that indicates how well a test can predict some future criterion. Neither concurrent nor predictive validity was considered a requirement in this research setting, as an individual's values orientation acts as an influencing affect on cooperation mechanisms and not directly as a predictor of some future behaviour.

Construct (nomological) validity: indicates how well a scale links with underlying theoretical assumptions about a construct being directly concerned with the theoretical relationship of one variable to another (DeVellis, 2003). Construct validity can be assessed in two ways: (i) convergent validity is established when the scores obtained by two different instruments that measure the same concept are highly correlated (Sekaran, 2000); (ii) discriminant validity is established when, based on theory, two variables are predicted to be uncorrelated and this is confirmed by measurement (Sekaran, 2000). Confirmatory and exploratory factor analyses were considered, the former enabling a test of whether a relationship exists between the observed variables and the underlying latent constructs, and the latter enabling the underlying factor structure to be identified. Due to a sample size of 33, it was deduced from Hair et al. (1998) that neither procedure was suitable.

SVS scale validity has been tested extensively using Guttman-Lingoes' *Smallest Space Analysis* (SSA) (Schwartz and Bilsky, 1990), a multidimensional scaling technique based on an *a priori* hypothesized dimensional solution, which enables the structural analysis of similarity data (Guttman, 1968, 1977). The *a priori* theoretical specification of the items that are expected to constitute the contents of a values region enables boundaries to be drawn in relation to the points that fill the two-dimensional space (Schwartz and Bilsky, 1990). The use of SSA has resulted in values domains being delineated across a wide range of situations, affirming that human values are organised and dynamically related to each other (e.g. Schwartz and Bilsky, 1987; Schwartz, 1990; Schwartz, 1992; Schwartz and Sagiv, 1995; Schwartz

et al. 1997). Accordingly, SVS is considered a valid scale for this research application.

C3.2.2 Scale purification at the research stage

The piloted SVS scale required purification, using the same procedure that is outlined in section C3.1.5, in order to obtain acceptable Cronbach coefficient alpha results; these are contained in appendix A2. Item 44 was removed from tradition, item 22 from security, item 16 from self-direction, and item 37 from the stimulation values domain. The purification process required only one item to be removed from each of the above values domains, and it was considered that such minor changes did not disrupt the distribution of values items at the two-dimensional values domain level. After the items were removed and the reliability values were obtained, the scale was reviewed with representatives of the pre-testing group; it was confirmed that the distribution of scale items was acceptable and that scale validity was maintained.

C3.2.3 Reliability of linear combinations in summated scales

When summing scales with individual measures, the composite reliability value should be calculated – as opposed to summing the individual dimension alpha coefficient reliabilities – as the measures are of different traits. The individual descriptive statistics for each domain composite reliability values are shown below in tables C3.2.3(a) and C3.2.3(b); the figures have been calculated using the formula from Nunnally and Bernstein (1994).

$$r_{YY} = 1 - \frac{\sum \sigma_i^2 - \sum r_{ii} \sigma_i^2}{\sigma_Y^2}$$

Values Domain	Axis	Dimension	N	Mean		Variance
			Statistic	Statistic	Std. Error	Statistic
Conformance	Con	1	33	3.8864	0.11847	1.172
Tradition			33	2.1894	0.21788	1.567
Security			33	3.7879	0.17344	0.993
Self-direction	OTC	2	33	4.4848	0.17974	1.066
Stimulation			33	4.8485	0.16208	0.867
Hedonism	SE	3	33	3.9394	0.21342	1.503
Achievement			33	4.6364	0.22642	1.692
Power			33	2.6288	0.21953	1.590
Benevolence	ST	4	33	4.4909	0.20002	1.320
Universalism			33	3.7614	0.17274	0.985

Table C3.2.3(a): Descriptive statistics for SVS values domains

Two-dimensional Values Domains	Axis	Dimension	N	Mean		Variance
			Statistic	Statistic	Std. Error	Statistic
Conformance Tradition Security	Con	1	33	9.8636	0.48082	7.629
Self-direction Stimulation	OTC	2	33	9.3333	0.25087	2.077
Hedonism Achievement Power	SE	3	33	11.2045	0.54373	9.756
Benevolence Universalism	ST	4	33	8.2523	0.30718	3.114

Table C3.2.3(b): Reliability values for each SVS values domains

The Cronbach alpha reliabilities for each of the dimensions representing the SVS two-dimensional domains, which are indicated below, were found to be in excess of the 0.7 benchmark; this was considered acceptable. Consequently, the revised SVS scale was accepted as a reliable and valid scale for this research application.

$$r_{\text{Dim 1}} = 1 - \frac{(1.172 + 1.567 + 0.993) - (0.717 \times 1.172 + 0.676 \times 1.567 + 0.654 \times 0.993)}{7.629}$$

$$1 - \frac{3.732 - 2.549}{7.629} = 0.84$$

$$r_{\text{Dim 2}} = 1 - \frac{(1.066 + 0.867) - (0.684 \times 1.066 + 0.731 \times 0.867)}{2.077}$$

$$1 - \frac{1.933 - 1.363}{2.077} = 0.725$$

$$r_{\text{Dim 3}} = 1 - \frac{(1.503 + 1.692 + 1.590) - (0.602 \times 1.503 + 0.894 \times 1.692 + 0.734 \times 1.590)}{9.756}$$

$$1 - \frac{4.812 - 3.584}{9.756} = 0.874$$

$$r_{\text{Dim 4}} = 1 - \frac{(1.320 + 0.985) - (0.880 \times 1.320 + 0.802 \times 0.985)}{3.114}$$

$$1 - \frac{2.305 - 1.951}{3.114} = 0.886$$

C3.2.4 Section concluding comment

Although four items were removed from the 57-item SVS instrument, these were evenly distributed and did not unduly influence the two-dimensional domain reliability results. As the analysis was principally concerned with the domains of: (i) openness to change versus conservatism and (ii) self-enhancement versus self-transcendence, it was considered important to assess reliability of the multi item scales using the process defined by Nunnally and Bernstein (1994). The results of the four dimensions were found to be in excess of 0.7 and are deemed to be acceptable.

C3.3 Interview Data Collection

The purpose of this section is to outline the repertory grid interview methodology to aid reader understanding of how a repertory grid interview was: (i) prepared; (ii) structured; (iii) undertaken, and (iv) reviewed, following Jankowicz (2004). The writer acknowledges that a range of validated scales could be used to examine each *a priori* cooperation mechanism: however, only cooperation mechanism relative importance was required.

The content below is limited to that which is associated with the development of the research methodology. Each respondent was provided with information in advance of the interview; this information is contained in appendix H.

The basic repertory grid interview was concerned with obtaining a range of constructs from respondents that relate to various relationship situations that occur in the day-to-day operation of a PFI project. The constructs were used to confirm the behavioural cooperation mechanism independent variables shown in figure C2.1.1. Triangulation was undertaken, using the individuals' values orientation data that was obtained from SVS, in order to assess values orientation influencing effects on cooperation mechanisms.

Inter grid comparison of the individuals' construct systems was undertaken using the Web Grid III software developed and hosted by Calgary University, Canada.

C3.3.1 Data collection methods

Multiple sources of evidence are available to the case study researcher – including, for example, documents, archive records, direct and participatory observation, and artefacts (Yin, 1994). A mixture of qualitative and quantitative evidence enables convergent lines of enquiry or triangulation; methodological pluralism, as noted by Gill and Johnson (2002), leads to greater validity. As argued by Hammersley (1992, cited in Silverman, 2000), 'the process of inquiry in science is the same whatever method is used, objectivity should be the common aim of all social science'. Additional qualitative data was obtained from repertory grid interviews, and the benefits and dis-benefits of this method, as opposed to a semi-structured interview approach, are considered in the table below.

Method	Benefits	Dis-benefits
Repertory Grid Interview	Quantifies qualitative data, allowing quantitative techniques to be used in analysis, e.g. factor analysis; Enables the interviewer to get a mental map of how the interviewee views the world; Can be useful where question formulation is difficult or if the interviewee is unable to structure	There can be difficulties in eliciting initial elements and constructs; Interviewees can find it difficult to compare and contrast elements on the basis of the triad approach; A minimum/maximum number of elements are required (typically 8 to 15); Interviewees can find it difficult to describe constructs in the prescribed

	<p>his/her opinions/experiences with sufficient clarity;</p> <p>Quicker explication of information when interviews are time bound.</p>	<p>manner;</p> <p>The process can be very time consuming to administer, as several iterative sessions can be required between interviewer and interviewee;</p> <p>It can be difficult to aggregate individual grid matrices to obtain data averaged across a number of interviewees.</p>
Semi-structured Interviews	<p>Interviews are an important source of information in case study research. Additional interviews may be conducted to supplement repertory grid interviews in specific situations where further information is required from key actors. The interview reference frame should be limited to:</p> <p>(i) the relationship between the project lead and role-set; (ii) cooperation behaviour between project leaders; (iii) the day-to-day process of project management interaction; and (iv) the setting of objectives for long-term project success.</p>	

Table C3.3.1: Summary of benefits and dis-benefits compiled from Denscombe (1998) and Hussey and Hussey (1997: chapters 6-8)

C3.3.2 Alternative methods to obtaining a respondent's values orientation

It is acknowledged that a respondent's personal values may be assessed using a range of methods that include the SVS instrument (Schwartz and Bilsky, 1987; Schwartz, 1992) and a repertory grid interview laddering procedure (Jankowicz, 2004). As noted in section C3.1 above, values orientation for this research is defined in terms of a range of motivational values that act as guiding principles in a person's life (e.g. Schwartz, 1992), and not specifically in terms of an individual's core and personal values as obtained from, say, a repertory grid laddering procedure. While it is acknowledged that laddering will obtain personal values, issues of intimacy between individuals (Jankowicz, 2004: 193) become important; this type of additional personal

information was not required within this research study as the relative relationships of values orientations were compared with the respondents' use and hierarchy of cooperative behavioural mechanisms.

Further, laddering results in specific sets of individuals' personal and superordinate values, as distinct from SVS, which identifies ten motivationally distinct values domains that can be further summated at a two-dimensional level, such that respondent comparative analysis can be readily achieved. Accordingly, SVS was considered suitable in terms of the requirements.

C3.4 Basic Repertory Grid Interview

Interviews were conducted face-to-face or by telephone, and mode variation was acknowledged (Converse and Schuman, 1974; Dilman, 1978, 2000; Frey, 1989; de Leeuw and van der Zouwween, 1988; Groves, 1989; Summerhill and Taylor, 1992; Denzin and Lincoln, 1998b), although all basic grid interviews were conducted face-to-face at the respondents' workplaces. No laddering or resistance to change second stage interviews (Jankowicz, 2004) were undertaken as part of this study. After each basic grid interview was completed, a summary of the output was presented to each respondent.

The repertory grid interviews were conducted in order to elicit respondents' constructs relating to a range of day-to-day PFI project environments (Hussey and Hussey, 1997; Symon and Cassell, 1999; Brewerton and Millward, 2001; Fransella et al. 2004; Jankowicz, 2004): a total of twenty-nine interviews were conducted about the following topic:

“The purpose of this repertory grid interview is ‘to discuss how interaction and mutual behaviour between project leaders influence cooperative behaviour in a PFI project’. The interview relates specifically to how you interact with your opposite project lead and close key project associates.”

C3.4.1 Defining elements

When undertaking a repertory grid interview, it is important to develop elements; these are defined by Kelly as ‘the things or events that are abstracted by a construct’ and that are seen as one of the ‘formal aspects of a construct’ (Fransella et al. 2004).

Grid elements can be elicited from prospective interviewees, or provided by the interviewer, but it is important that they are developed in such a way that there is consistency in the responses. In this study, the elements took the form of typical, day-to-day project situations that were presented as small vignettes. The vignettes, which are described below, were developed and tested during September 2004; to ensure clarity and consistency, each vignette was challenged by an independent expert familiar with PFI projects. After they had been refined, the vignettes were appraised a second time by an independent expert, before being presented to two further PFI project managers for comment.

Project Vignette 1

In the final months prior to (partial/full) hand-over, everyone put a huge amount of extra effort into the final push to complete. Everyone pulled together to make sure the project came in on time. We were all proud of our respective efforts; why can't it always be like this!

Project Vignette 2

The period to financial close was fraught with team and individual brinkmanship. Despite frequent arguments and tense moments, we finally signed the deal and each of us walked away feeling that they had achieved most of their objectives.

Project Vignette 3

The early stages of construction and service delivery were difficult, to say the least. Communication channels just did not work and no one seemed to be able to sort the problem. [Name] came to see me and, after several hours of discussion, we put in place a daily issues process for everyone to review.

Project Vignette 4

Service performance was perceived to be simply appalling and the end user could see no improvement in the short to medium term. A number of review meetings were required to improve the situation. A new broom was required and immediate changes would be required to a number of key positions.

Project Vignette 5

The 'them and us' relationship would in the end undermine the whole project and something needed to be done quickly. Key individuals from each organisation met to

review the problem and decided that a series of team building sessions would be required to break down the barriers to progress.

Project Vignette 6

[Name] simply rubbed others up the wrong way, despite being in a front line service relationship position. Yet again, several people in my team have found it necessary to come and tell me that they have had another run-in and ask what was I going to do.

Project Vignette 7

Hand-over of the floor was due for Monday morning and [Name] should have ensured that the move process was checked before close of play on Friday night. Come Monday morning, only half the necessary equipment was in place and staff were shuttled back and forth all day to ensure that service could be maintained. When questioned, [Name] thought that someone else was dealing with it...

Project Vignette 8

The project leaders and core project support teams finally appeared to be working as an integrated unit, breaking down any organisational boundaries. Individuals worked closely together and openly discussed project aims and goal. They developed integrated planning and communication processes, implementing activities in partnership.

Project Vignette 9

Simply smooth running and all that entails... *the respondent is free to consider this ideal state in any way that you wish.*

C3.4.2 Constructing a repertory grid

Grid constructs are orientated such that the emergent pole is situated at the left-hand side of the grid to aid correlation and cluster analysis. Rating as opposed to ranking was employed, in the form of a five point (1-5) Likert scale, to increase the objectivity of the grid output.

Kelly's construct definition is noted, in Fransella et al. (2004: 7), as 'a way in which two or more things are alike and *thereby* different from a third or more things'. Constructs are bi-polar, as denoted by the dichotomy corollary in which each person has a limited number of dichotomous constructs that form their construct system. As

suggested by Kelly, we never affirm anything without simultaneously denying something; this is a process that establishes the construct poles and allows elements to be rated and located between the emerging and opposing poles. A second corollary that is specifically important to grid analysis is the range corollary, in which ‘a construct is convenient for the anticipation of a finite range of events only’ (Fransella et al. 2004: 84). A construct always operates within a context in which there is a finite number of elements to which the construct can be applied by a given person at a given time.

Elicited constructs, therefore: (i) are bi-polar; (ii) have a range of convenience, i.e. they should be appropriate for the area being investigated, and (iii) co-exist within a construing system (Fransella et al. 2004). Respondents’ constructs were identified using the triad elicitation method, with the ‘opposite method’ being used to identify the emerging and opposing dissimilar construct pole.

Both corollaries can be evaluated by statistical analysis of each construct (Fransella et al. 2004: 83), using a measure of central tendency, in which a person locates their range of convenience somewhere between the construct’s two poles, and the mean or median value indicates where a person locates their range of convenience. The analysis of construct deviation in relation to the mean will indicate whether one or more constructs are lopsided, i.e. if one pole is carrying more influence than the other. The range of convenience can be considered by measuring its dispersion – e.g. the standard deviation that indicates the spread of an element in the context of a particular construct.

Construct relationships for each individual grid were calculated by: (i) establishing correlations among constructs; (ii) determining the average correlation for each construct, and (iii) analysing the principal component factor (with varimax rotation), where a loading greater than 0.5 was considered desirable.

C3.4.3 Piloting the repertory grid interview

In order to validate the process, a repertory grid interview was undertaken, during the first quarter of 2005, with one PFI project lead. The primary objectives of the interview were: (i) to establish whether the vignettes to be used as elements were understood in the interview context; (ii) to see if the range of vignettes ‘tapped’ the range of cooperative behavioural mechanisms under investigation within the project

relationship dynamic, and (iii) to ascertain the time required to carry out the grid interview in a 'live' situation.

In accordance with Wright (2004), the interviewee was provided with a guidance paper that outlined the grid process, one week prior to the interview. This stated how the interview would be conducted and what the respondent's contribution would be. It included: (i) an introduction to repertory grid interviews and how the process would differ from a structured or semi-structured interview; (ii) an outline of the interview topic and the questions to be considered; (iii) an outline of the project vignettes, to aid familiarity, and (iv) a blank grid sheet.

Preparation for the pilot grid interview, including the provision of the guidance notes in advance of the session, proved to be beneficial in terms of aiding construct elicitation. Following a brief introduction to review the interview technique and to clarify any issues relating to differences in the interview format and process, the session proceeded. The interview topic was explained in detail, and the focus on relationship interaction and cooperation mechanisms was explained. The interviewer took approximately 1 hour to elicit the constructs from the interviewee and complete the element ratings on each construct.

Vignette 4 was amended in advance of the formal interview, to include the word 'perceived' and the phrase 'meetings required to improve the situation': all other vignettes remained unchanged from the pre-testing phase.

C3.4.4 Review of pilot interview

The pilot interview data was uploaded to Wed Grid III. After checking that the initial data was correct via the summary output page, and that the construct poles were correctly oriented, cluster and principal components analysis were undertaken to analyse the data set. Cluster analysis provides information in respect of construct and element hierarchy, while principal components analysis looks for patterns based on variability of scores in the summary output table; the pattern with the largest amount of variability is first removed from the data set, a process that is subsequently repeated. Each pattern that is found is defined as a 'component'.

The pilot grid interview identified constructs associated with behavioural cooperation mechanisms, and a summary interview analysis was provided to the respondent for validation.

C3.4.5 Section concluding comment

The interviewee found the process challenging but informative. The structured nature of the interview placed considerably more pressure on the respondent during the session than was envisaged; however the constructs identified from the elements provided, and their subsequent analysis, provided confirmatory data with regards to the cooperation mechanisms.

CHAPTER C4: DATA ANALYSIS METHODS

C4.1 Introduction

This chapter considers the approach to the analysis of data obtained from: (i) the Schwartz Values Survey and (ii) repertory grid interviews, as a precursor to the research findings being discussed in detail in chapter D. The analysis methods in respect of the data obtained from a repertory grid interview is limited to a discussion of a sample single grid only, which serves as an introduction to the analysis procedures; the wider issues associated with multiple grids are dealt with in the responses contained in chapter D.

An overarching data analysis strategy is considered by Yin (1994: 103) to be key to successful case study research: evidence must be treated fairly and alternative conclusions must be ruled out, in order to produce compelling analytic conclusions. The issue of external validity was considered to be important in this research: it was acknowledged that there are constraints, in terms of generalising beyond the case to a wider population, when case study methodology is used. Figure C4.1 below presents the relationship between case studies that generalise at an analytic level, and statistical studies, in which inferences about a population are made on the basis of empirical data collected about a sample.

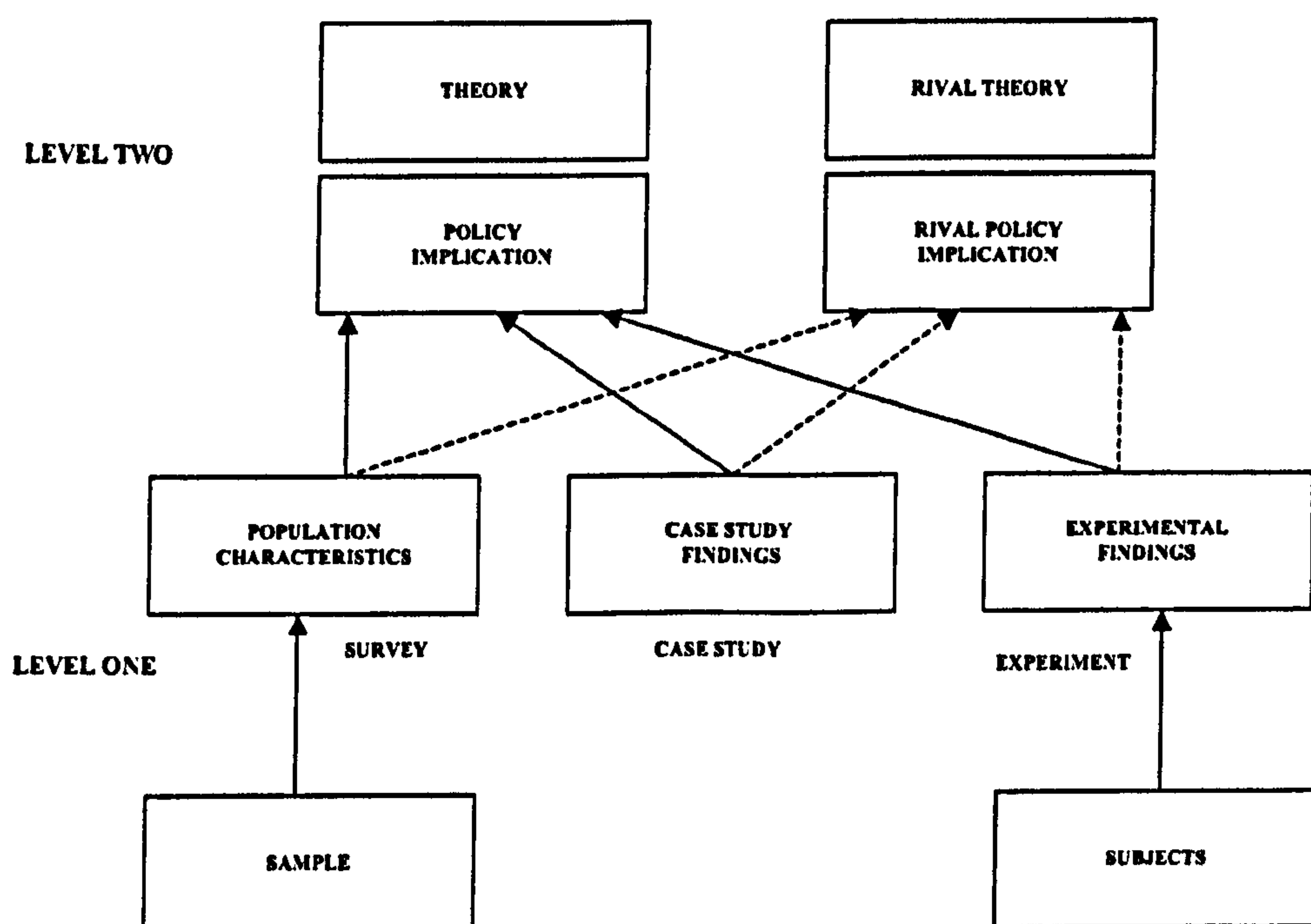


Figure C4.1: Case and survey methodology levels of inference (Yin, 1994: 31)

In considering the matter of generalising from results, two generally available strategies were considered: (i) to rely on the theoretical hypothesis that led to the case study in the first place, and (ii) to develop a case description that relies on the development of a descriptive framework for organising the case study. As this study was developed from underlying theories, a general analytic strategy of relying on the theoretical hypothesis was considered to be more appropriate to the research agenda. Having chosen a general analytical approach, further consideration was given to different modes of analysis, including: (i) pattern-matching; (ii) explanation building; (iii) time-series analysis, and (iv) programme logic models. These modes of analysis are now considered in further detail.

Pattern-matching logic: includes (i) non-equivalent but dependent variables as a pattern; (ii) rival explanations as patterns, and (iii) simpler patterns that compare an empirically based pattern with a predicted one;

Explanation-building: is a form of pattern matching, in which the objective is to analyse the data by building an explanation about the case;

Time-series analysis: is where a series of events is analysed in terms of time patterning; and

Programme logic models: these combine pattern-matching and time series analysis where the pattern being matched is the key cause-effect pattern between the independent and dependent variables.

When appraising the most appropriate mode of analysis for the case studies, the issue of internal validity was considered. A pattern-matching logic model was selected, as this enabled the findings from one project (or case) to be considered in the context of the underlying theories. The findings could be compared with predicted patterns, and where patterns coincided, the internal validity of a case was considered to be strengthened.

C4.2 Approach to Analysis of Data

The approach to the analysis of the data requirements for each research question as stated in section C1.4 is now discussed. The underpinning of the response to each research question is based on individuals' values orientations and the relative importance of behavioural cooperation mechanisms: the former are obtained from the

Schwartz Values Survey and the latter from repertory grid interviews. The requirements of each research question require the relative importance of some but not all cooperation mechanisms to be identified: this is discussed in further detail below.

Research question 1: (i) determines the values orientation of respondents, and (ii) compares the values orientations of the public and private sectors.

The response required the Schwartz Values Survey questionnaires to be analysed in order to establish, for each individual, the orientation of each values domain and values orientation; these were summated at the two-dimensional level of self-enhancement versus self-transcendence, and openness-to-change versus conservation. The output was radar plotted using a Microsoft Excel chart format: data for the respondents is given at an individual level for each of the ten values domains, and at a two-dimensional level. Each respondent is indicated by a different colour. A comparative plot analysis was undertaken at the two-dimensional level for the self-enhancement versus self-transcendence axis, in order to identify the tendency towards self-enhancement or self-transcendence values domains, of: (i) each individual and (ii) the public versus the private sector. Collectivist orientation is indicated: (i) at the individual values domain level by lower power and achievement values coupled with higher benevolence, universalism and conformity values, and (ii) at the summated two-dimensional level by higher self-transcendence as opposed to self-enhancement.

Research question 2: (i) elicits constructs from respondents and allocates them to the *a priori* cooperation mechanism categories (trust, accountability, group identity, super-ordinate goals, communication channels and rewards); (ii) determines the relative importance of the cooperation mechanisms for respondents, and (iii) examines the relationship between the achievement values domain and super-ordinate goals.

Repertory grid interviews were conducted with each public and private sector individual to elicit personal constructs. Constructs were allocated to each *a priori* cooperation mechanism category, and a reliability procedure was undertaken by an independent third party. The relationship between the constructs allocated to the super-ordinate goal cooperation mechanism, individuals' self-enhancement values orientation and the achievement values domain, was examined.

Research question 3: focuses specifically on public and private sector project leaders to examine the relationship between their values orientation and: (i) their preference for short and long-term goals, and (ii) their personal or collective oriented goals.

Individuals' two-dimensional values orientations were established using the Schwartz Value Survey. The response to part (i) of the research question, regarding project leaders' preferences for short or long-term goals, was examined; the two-dimensional values orientation was related to the elicited constructs obtained from the repertory grid interview and allocated to the *a priori* super-ordinate goal and communication categories.

The response to part (ii) of the research question was related to the individuals' two-dimensional values orientations that were elicited from the constructs obtained from the repertory grid interviews. A Honey content analysis and principal components analysis was undertaken to enable multiple repertory grid analysis to be completed. Constructs allocated to the *a priori* group identity cooperation mechanism category were related to the two-dimension values orientation.

Research question 4: examines the relative importance of cooperation mechanisms in guarding against short-termist behaviour, in relation to the values orientations of the public and private sector project leaders.

The individuals' elicited constructs, obtained from the repertory grid interviews, for trust, group identity and communication channel cooperation mechanism categories, was related to the two-dimensional values orientations obtained from the Schwartz Values Survey. A Honey content analysis was carried out on the constructs elicited from the repertory grid interviews, to enable multiple grid analysis to be completed. Cluster and principal components analyses were undertaken to identify the relative importance of the constructs that the individuals allocated to the high and intermediate categories for each cooperation mechanism.

Research question 5: (i) examines the relationship between the values orientations of the public and private sector individuals and the constructs that were elicited to the *a priori* group identity cooperation mechanism category, and (ii) examines the extent of public and private sector role-set formation within each project.

The individuals' two-dimensional values orientations and the relative importance of these with regards to the self-direction values domain were established. The

relationship between the self-transcendence values orientation and the self-direction values domain was examined; values profile similarity was analysed for each project.

C4.3 Analysis of Values Orientation

To aid the reader, in advance of discussing the research findings in chapter D, this section discusses the approach that was taken to the analysis of data from the Schwartz Values Survey, using a sample project.

The SVS values orientation data was presented in a standard Microsoft Excel 2004 radar chart that enabled respondents' values orientation profiles to be examined within and between projects. A radar chart format was used, as it enabled each respondent's values domains to be compared with other respondent's values domains within the same project. To aid visual presentation and assist the reader, respondents' values profiles were presented using different coloured lines.

The first radar chart, which presents the respondents' values orientation profiles, and the third radar chart, which is two-dimensional, are accompanied by tables that summarise the data values: project leaders are denoted by a bold font in the first respondent column; private sector members are denoted by 'pr', and public sector members are denoted by 'pu'. Each table was formatted to show the relative importance of each value and dimension for each respondent, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondents rated values in the SVS instrument using a 0 to 7 scale, as follows: (i) 0 to 2 = values of low importance; (ii) 2.1 to 4.5 = values of medium importance, and (iii) 4.6 to 7 = values of high importance. This section now continues with an outline of three sample radar charts, in order to introduce the presentation format and the approach taken to data analysis. The sample project featured four respondents, and the labelling and legend for each radar chart is explained before each radar chart is presented. Figure C4.3(a) presents respondent values orientation profiles for each of the ten values domains obtained from the SVS instrument. The radar plot was labelled with each of the values domains as follows: (i) C = conformity; (ii) T = tradition; (iii) S = security; (iv) SD = self-direction; (v) ST = stimulation; (vi) H = hedonism; (vii) A

= achievement; (viii) P = power; (ix) B = benevolence, and (x) U = universalism. In the legend located to the right of the radar chart, the respondents are identified by different colours, and the format E-R34 is used, in which E relates to the project and R34 relates to the respondent.

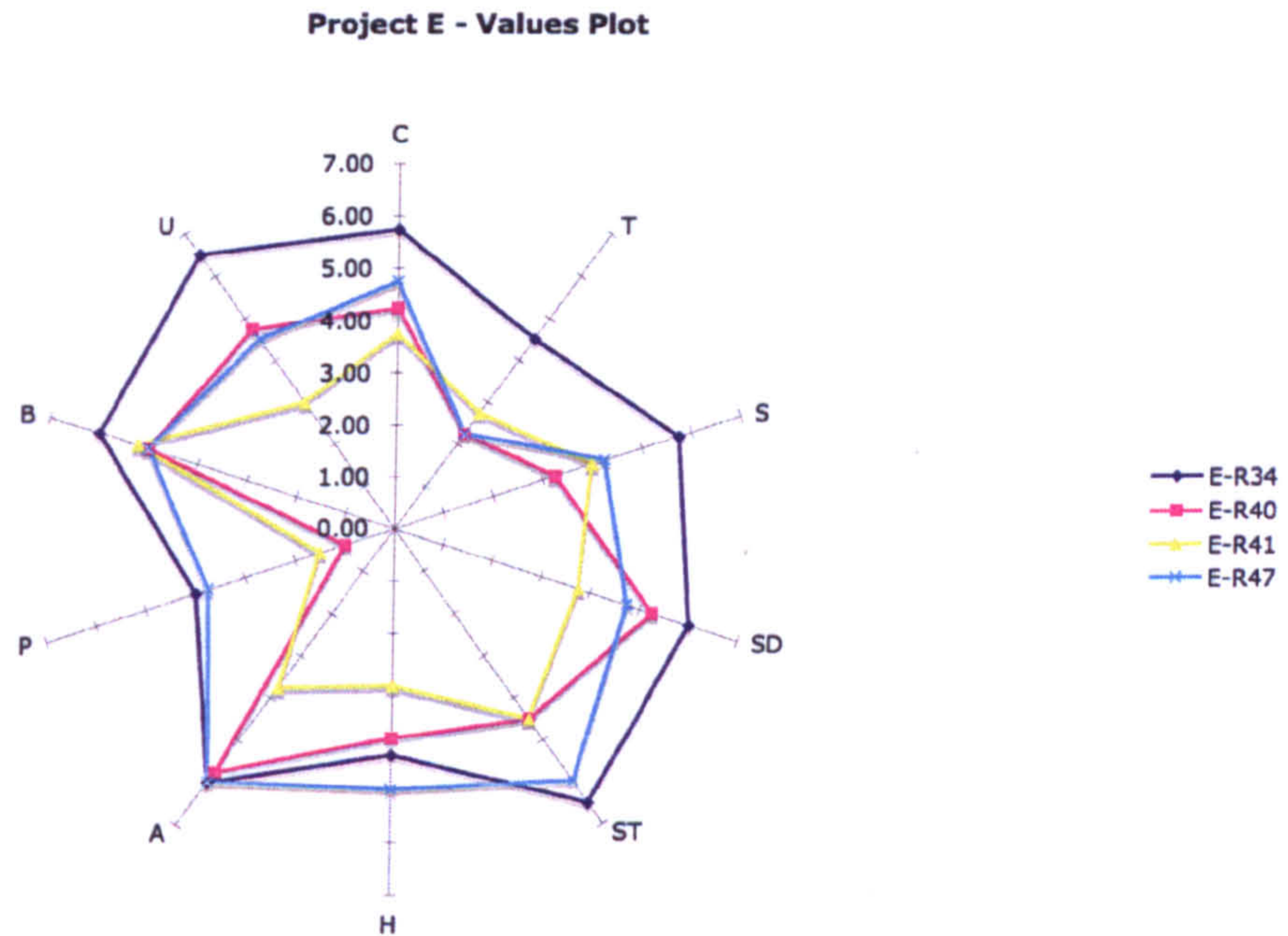


Figure C4.3(a): Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed above, using the following key:

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
34pu	5.8	4.5	5.8	6.0	6.5	4.3	6.0	4.0	6.0	6.5
40pu	4.3	2.3	3.3	5.3	4.5	4.0	5.8	1.0	5.0	4.8
41pr	3.8	2.8	4.0	3.8	4.5	3.0	3.8	1.5	5.2	3.0
47pr	4.8	2.3	4.3	4.8	6.0	5.0	6.0	3.8	5.0	4.5

Table C4.3(a): Respondent data values for all SVS domains

The radar chart in figure C4.3(a) presents each respondent's 10 values domain profile using a different coloured line, such that the magnitude and variance of each domain for each respondent can be contrasted; profile similarity would be indicative of a similar importance being placed on the values domains by respondents. It was noted that the magnitude of R34's profile is generally greater than that of the three other respondents, with the exception of his or her power and achievement domains, which align with R40 and R41. The profiles for R40, R41 and R47 are similar for a number of the domains, and the following observations can be made: (i) lower conservatism values (conformity, tradition and security) contrast with greater openness-to-change values (self-direction, stimulation); (ii) higher ranking benevolence and welfare domains among close work associates reduce the importance of the self-enhancement dimension (power, hedonism), and (iii) the achievement domain, which is generally higher for all respondents, is associated with greater openness-to-change values.

Table C4.3(a) above includes the actual data values for the values domains that are shown in figure C4.3(a). As discussed earlier in this section, the table was formatted to present the relationships between individuals from each sector. The highly rated values domains have been indicated by the green highlight, the lesser rated ones by the amber highlight, and the low rated ones by the red highlight.

Figure C4.3(b) below presents the values orientation profiles of each respondent in terms of a hierarchy; this is shown on a separate axis of the radar chart. This radar chart enables the relative importance of each value domain for each respondent to be considered within a ranked hierarchy, as distinct from the chart presented in C4.3(a),

in which each value domain can be considered separately for each respondent. The axis labels indicate the project and respondent, and the legend to the right of the radar plot allocates a colour to each value domain.

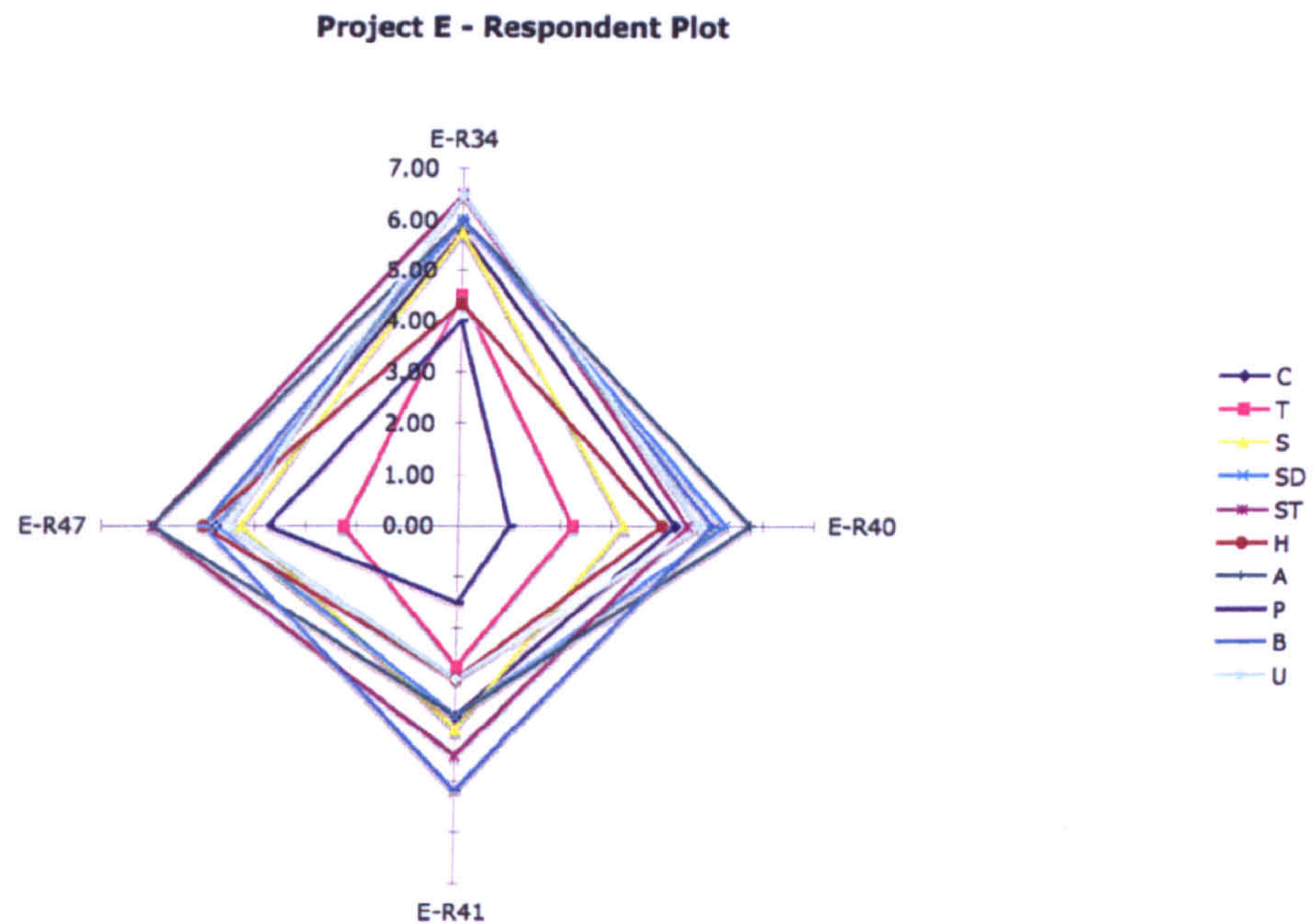


Figure C4.3(b): Individual values domain hierarchy for all respondents

The figure above enables the relative importance of values domains to be ascertained for each respondent. Whereas figure C4.3(a) presented an overall values profile for each respondent, in order to show the relationship between them, figure C4.3(b) enables each individual's ranking of each value profile to be considered on a separate chart axis.

It can be noted from the chart that, with the exception of the power domain that is more influential to R34 and R47 and the tradition domain that is most influential to R34, the other domains have a generally regular profile that varies in magnitude – i.e. importance – depending on the respondent. Achievement oriented values were noted as the most important domain for R40 and R47, with the addition of stimulation for R47, while benevolence values dominated for R41, and universalism and stimulation values were marginally the most important for R34. The profile of R34 was clustered into two groups, and conservation dimension values were ranked lower than other dimensions. R40 rated consideration and welfare for others – with regards to both

close day-to-day relationships and non-group members – as important goals, and these relate to benevolence and universalism values. R41 ranked out-group benevolence high, and placed personal stimulation, i.e. variety in working, next in terms of importance; relationship stability and personal success through competence demonstration were ranked as least important. R47's behaviour was influenced by achievement and stimulation values – both of which are associated with work variability and the ability to demonstrate competence. The remainder of their values domains were closely grouped.

The final figure C4.3(c) presents a summated radar chart for each respondent's values profile, using two dimensions. The axis labels are Con = conservation, which opposes OTC = openness-to-change, and SE = self-enhancement, which opposes ST = self-transcendence. Each coloured line represents the two-dimensional values orientation profile of each respondent; the legend to the right of the radar chart uses the same format as C4.3(a) above.

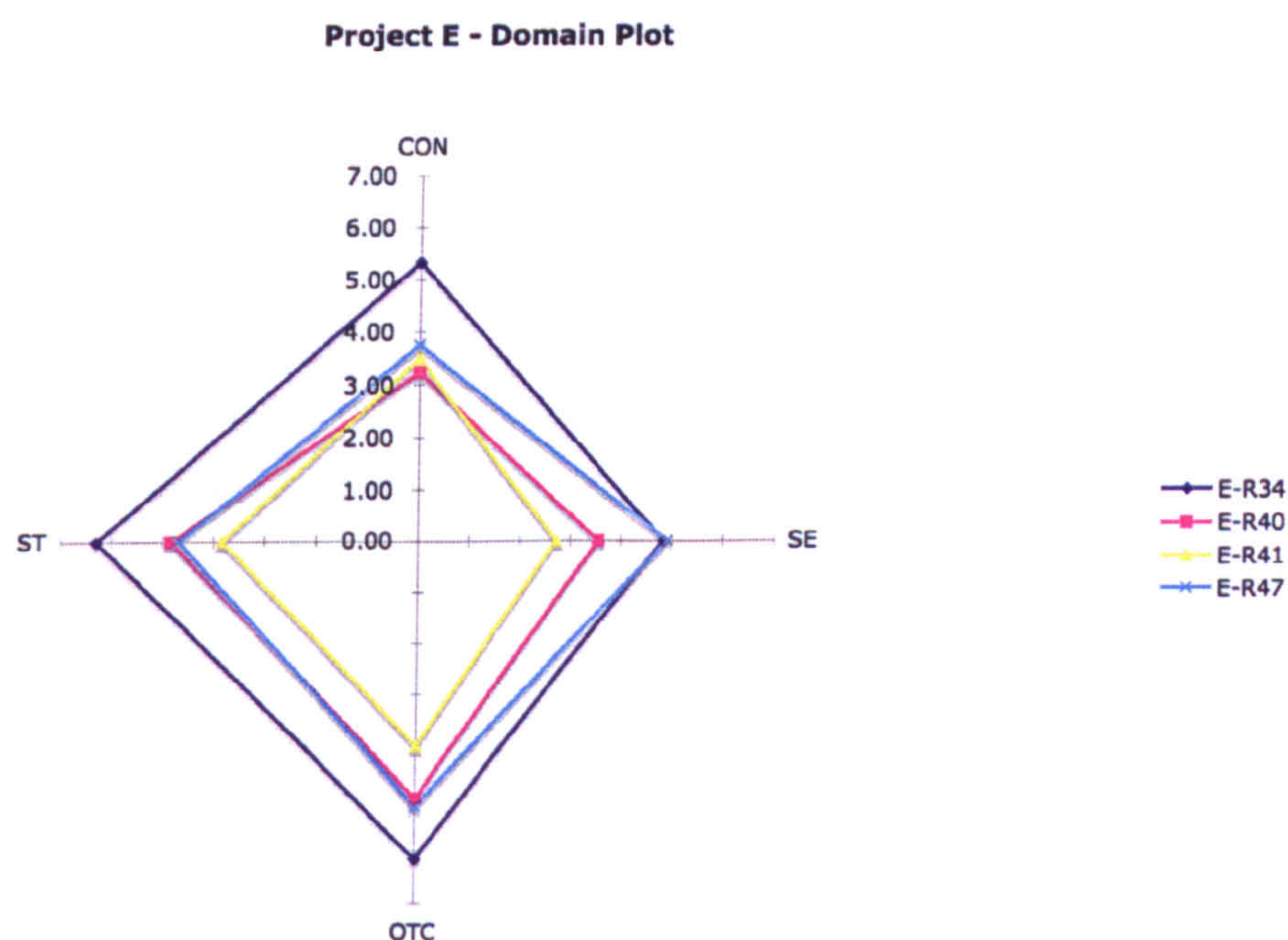


Figure C4.3(c): Two-dimensional values orientations for each respondent

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table

have been subjected to the formatting procedure detailed above, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change	Self-enhancement	vs	Self-transcendence
34pu	5.3		6.2	4.8		6.3
40pu	3.3		4.9	3.6		4.9
41pr	3.5		4.3	2.8		4.1
47pr	3.8		5.2	4.9		4.7

Table C4.3(b): Summated two-dimensional data values for each respondent

The final chart at figure C4.3(c) above summates the 10 values domains for each respondent in terms of a two-dimensional model, as presented in figure C1.5.1; it is at this level of analysis that research findings are discussed in chapter D. In summing the individual values domains using a two-dimensional model, the similarities between individuals are clarified. In the sample project, the relationship between respondents R40, R41 and R47 can be seen to be regular, related and balanced, with the exception of the higher ranking of self-transcendence for R40; there is an overall openness-to-change tendency among all respondents. R34's profile differs, in that it is oriented towards the self-transcendence and openness-to-change dimensions. The relative importance of self-enhancement values is shared by R40 and R41, and R34 and R47 rate self-enhancement values as more important than R40 and R41.

To conclude, project E can be summarised as being an environment in which respondents tended towards the openness-to-change dimension. R47 balances self-enhancement with the self-transcendence dimension, while R40 and R41 marginally orientate towards self-transcendence, and this is more evident for the public sector project leader R34; this is discussed in more detail below.

The analysis of data methods now continues with a discussion of the approach to repertory grid interview single and multiple grid data analysis.

C4.4 Analysis of Repertory Grid Interview Data

To assist the reader, a brief reminder as to why repertory grid interviews are being used is provided.

The literature review identified a number of cooperative mechanisms that may be used in behavioural cooperation relationship exchange; these are also represented by the model in figure C1.3.2(b) on p. 87. Repertory grid interviewing enables respondents' views regarding day-to-day project situations to be elicited in the form of constructs. Using a multi-grid approach, constructs from each respondent can be pooled and allocated to *a priori* behavioural mechanism categories; this is initially done by the writer, and subsequently reliability tested by a third party. Following Jankowicz (2004; 2005), this section – which is supported by a sample project – now considers: (i) an analysis of single and multiple grid content, using Honey content analysis; (ii) the procedure that is used to assess reliability, and (iii) the differential analysis that is undertaken using the elicited and supplied constructs - in association with *a priori* behavioural cooperation mechanisms established from the literature review in chapter B - to establish cooperation mechanism variation between respondents.

C4.4.1 Single repertory grid analysis

To assist the reader, a detailed analysis of a sample single repertory grid interview is given below. The study required the analysis of twenty-nine single grids that were presented using the template included in appendix I1; the summary findings for each interview are contained in appendix I2.

The sample grid was subjected to a single grid analysis (Jankowicz, 2004), using the following: (i) a high level review, or 'eyeball analysis' (Jankowicz, 2004: 72), to identify simple relationships between elements and constructs; (ii) cluster analysis, to identify relationships within the grid, and (iii) principal components analysis, to identify patterns of variability. For completeness, the multiple grid analysis associated with the twenty-nine grids, including differential analysis and reliability testing, is included in the response to the findings in chapter D.

Figure C4.4.1(a) below, presents data associated with the analysis of a sample repertory grid.

The discussion that follows only considers the most important columns (from left to right); the remainder are associated with research administration purposes. The column labelled 'Construct Number' references each of the constructs elicited from, or supplied to, the respondent; the column labelled 'Emergent Pole' gives the

construct label supplied by the respondent in the triad elicitation procedure; the column labelled 'Vignette Reference' refers to the two elements that the respondent identified with during the triad elicitation procedure, and this determined how the construct emergent pole was labelled; the integers between the vignette reference and implicit pole are the values between 1 and 5, as given to each of the elements when they were rated in terms of each construct; the column labelled 'Implicit Pole' refers to the construct label provided by the respondent during the triad construct elicitation procedure that fixed the opposing ends of the construct; the column labelled 'Vignette Reference' refers to the third of the three elements associated with the implicit pole, following the triad construct elicitation procedure. Together, these columns present the data obtained from a respondent during a repertory grid interview.

Line Reference Project	Respondent Construct Number	Emergent Pole	Vignette Ref.		Implicit Pole	Vignette Ref.	Sum of Difference (unreversed)	% Similarity Score (unreversed)	Sum of Difference (reversed)	% Similarity Score (reversed)
160 D	4 4.01	Miscommunication	2,3	5 3 2 2 2 3 1 4 5	Pulling together Individual	1	16	11.11	6	66.67
161 D	4 4.02	Team performance	4,5	1 3 4 2 3 5 4 1 1	performance Communications	6	7	61.11	15	16.67
162 D	4 4.03	Maturity & openness	8,9	2 3 4 3 3 4 5 2 1	blackout	7	4	77.78	14	22.22
163 D	4 4.04	Organisational issues	1,4	1 2 3 1 3 4 5 2 5	Individual problems	7	8	55.56	15	16.67
164 D	4 4.05	Negotiation	2,5	4 1 2 2 2 3 2 5 5	Peace & harmony Lack of team	8	17	5.56	7	61.11
165 D	4 4.06	Teamwork	1,9	2 4 4 5 4 4 5 2 1	interaction	5	6	66.67	18	0.00
166 D	4 4.07	Joint working for success	3,5	2 4 2 4 3 3 5 2 1	Organisation solves own problems	7	5	72.22	15	16.67
167 D	4 4.08	Unilateral led negotiation	6,7	5 5 3 3 3 2 1 5 5	Bi-lateral negotiation process	2	17	5.56	7	61.11
168 D	4 4.09	Boundary demolition	1,8	1 3 4 4 3 5 4 2 1	Boundary construction	6	4	77.78	16	11.11
169 D	4 4.10	Process establishment	3,4	4 3 2 1 2 2 2 5 5	Process integration	8	17	5.56	5	72.22
170 D	4 4.11	Problem specification	3,6	3 2 2 1 4 3 2 4 5	Problem solved	9	15	16.67	7	61.11
171 D	4 4.12	Supplied Construct More conducive		2 3 3 4 3 4 4 2 2	Less conducive					

Figure C4.4.1(a): Summary repertory grid interview grid data for a sample respondent

The final four columns to the right of the figure present information associated with the Honey content analysis procedure, which enables multi-grid analysis to be undertaken; this is discussed in further detail in section C4.6. The 'Sum of Difference'

and related 'Percentage Similarity Score' columns are presented in both reversed and unreversed terms. This is in order to show the relationship between the most similar elicited construct and the overall construct that the interviewee gave the interviewer. The smallest difference indicates the two most similar constructs and the largest difference shows the two most dissimilar constructs. This procedure requires the differences between each element to be rated in terms of each construct, and the overall construct to be calculated twice and then summated by each row, with the construct reversed for the second calculation. With regards to the reversed–unreversed calculated sum of differences: if the smallest sum of differences came from the unreversed column, the construct needs to be reversed to ensure all construct poles can be related. The calculation from sum of differences to percentage similarity scores followed Jankowicz (2004: 141).

The stages that were required to undertake a simple repertory grid analysis are now discussed.

Stage 1 required a simple inspection of the grid data presented in figure C4.4.1(a) to be undertaken. The example interview elicited 11 constructs in addition to the supplied overall construct; all elements were rated in terms of each construct using a 5-point scale. An initial eyeball analysis (Jankowicz, 2004) of the data from the figure above noted that the constructs focused particularly on team and individual relationships, and on ways of working together for mutual benefit; these included: (i) openness (construct 4.4.03); (ii) teamwork (4.4.06); (iii) joint working (4.4.07); (iv) boundary removal (4.4.09); (v) good communication (4.4.01), and (vi) process integration (4.4.10).

The next stage considered a discussion of rated elements and their relationship with each construct.

The elements were comprised of a range of everyday project situations that were presented as small vignettes that could be found in a PFI project environment. (The reader is advised that the terms element and vignette are interchangeable, and that the writer's use of the terms is dependent on the context of the narrative). The respondent rated each element in terms of each construct; this in turn enabled analysis to be undertaken with regards to how the respondent related each project vignette to each of the constructs. In the sample interview, the ratings for each vignette with regards to

the constructs were considered to be wide, as the respondents used the full rating range; all constructs were, however, rated in terms of all elements. A short summary is now presented for each vignette in relation to the construct ratings.

Vignette 1: focuses on collective working being regarded as a positive environment during the final stages of financially closing the project. The organisation and the teams are working together for common success with well-aligned processes.

Vignette 2: deals with tensions created during the final stages of negotiation. The private and public sector organisations have adopted strong negotiating positions, and as a result, teamwork is less of a priority. Individual performance suffers and there are elements of miscommunication.

Vignette 3: reflects the general problems of project start-up when new relationships are forming. The legacy of previous negotiations is still evident and the individual is still very much in focus. Teams have not yet formed and processes are being established. Communication channels are still in their infancy.

Vignette 4: deals with the non-performance of a service, and the issues associated with trying to communicate this and seek improvement. Communication is poor, team working is not evident and the organisation is not specifying what the problem is or working to remove barriers to improvement.

Vignette 5: follows from a joint recognition that a major problem exists, and that without action it will impact on overall project success. Miscommunication is seen as a key issue in the early stages of developing a team environment and integrating processes.

Vignette 6: identifies the issue of a disruptive individual within the project environment. The cause of the problem is possibly due to poor communication and lack of established processes. Boundaries need to be removed in order to develop a team environment.

Vignette 7: relates to poor communication and processes. Miscommunication and blackout are evident, and this is a problem that is resulting from the underperformance of an individual. The organisation is identified as being the cause of the problem, due to its poor integration of processes. There is a lack of team working due to boundaries being in place.

Vignette 8: the benefits of closer working are paying off, and an integrated environment is coming into play. Individuals are working in teams and pulling together for joint success. Boundaries are being removed, work processes are integrated and problems are jointly solved. The environment is one of working towards harmony.

Vignette 9: is an ideal environment in which close working is bringing maximum benefits to both organisations. Success is recognised as attainable when individuals and teams work together. Relationships are open and maturing, leading to a harmonious working environment. Boundaries are removed and work processes integrated, resulting in problems being solved.

In proceeding with the analysis of a single grid, the next stage involved a cluster analysis procedure, which was carried out so that relationships and patterns within the grid could be seen more easily. When cluster analysis was carried out on the interview data set, the most similar ratings for the columns and rows were clustered side by side.

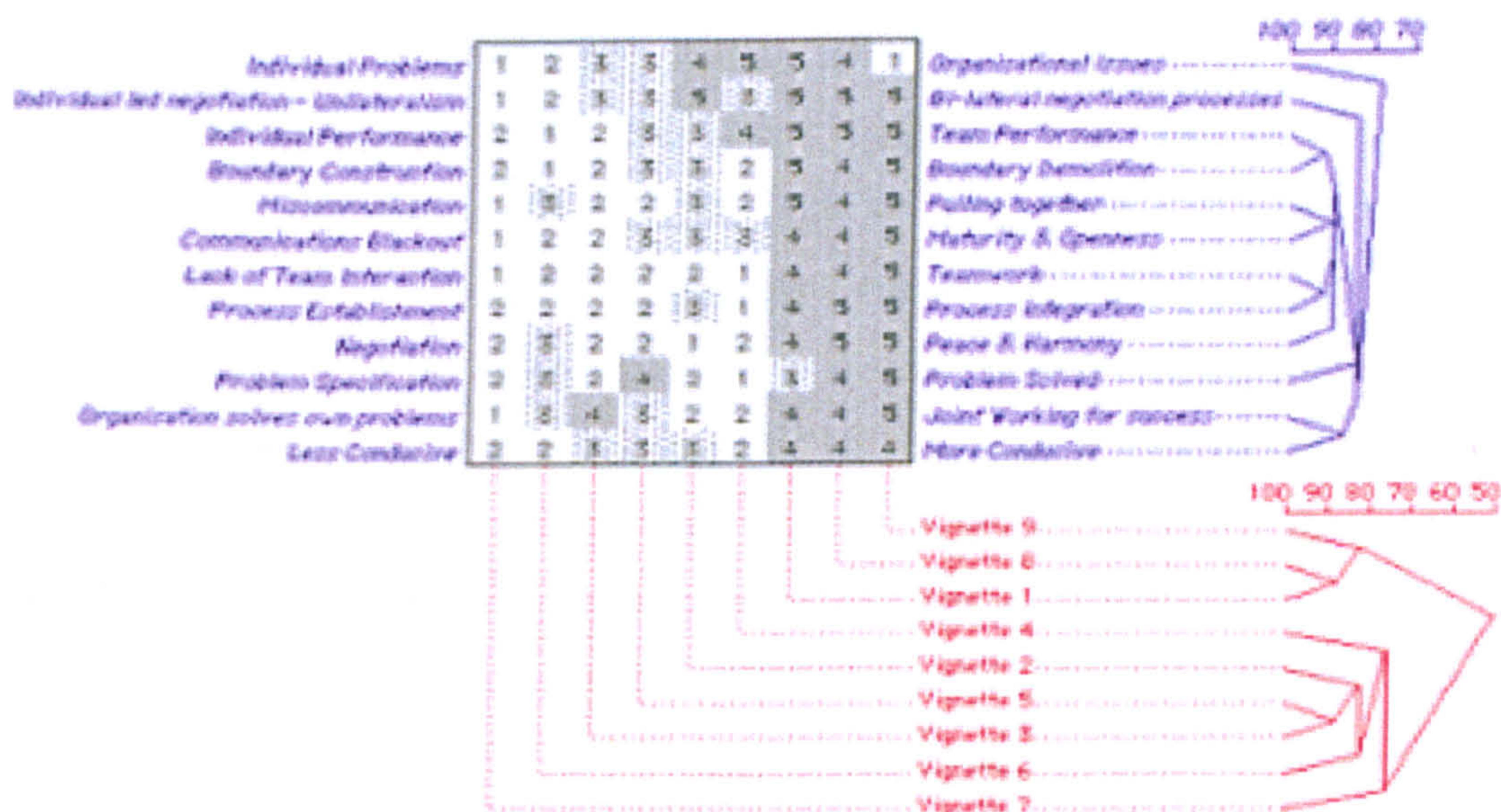


Figure C4.4.1 (b): Interview data cluster analysis for a sample respondent

The associations between the elements and constructs are now discussed by referring to the output image from the Web Grid III software, in figure C4.4.1(b) above. The percentage similarity scores for constructs and elements – labelled as vignettes 1 to 9

– are presented as dendrograms, the elements having been reordered by the Web Grid III software to reflect the associations between the constructs and elements, i.e. their ratings similarity. The technical discussion that follows presents a profile of each person, which involves: (i) discussing the associations they make between the elements – i.e. what they are saying about the day-to-day project situations, and (ii) discussing the associations they make between the constructs – i.e. how the person talks about the day-to-day project situations.

Vignettes 1 and 8 form a distinct cluster grouping, with an 87.5% similarity score; a second grouping is comprised of the remaining vignettes. Within this second grouping, vignettes 3 and 5 form a cluster with an 87.5% match that can be extended to include vignettes 2 and 6, which have 87.1% matching scores. The respondent rated the constructs in vignettes 1 and 8 similarly; two of the constructs have a 1-point difference that demonstrates a tendency towards more positive aspects of relationships and a conducive working environment, including factors such as team working, maturity, openness, boundary removal and integrated processes. Vignettes 3 and 5 present a similar relationship but tend, overall, towards less effective aspects of relationships and environments, which relate to project start-up, individuals establishing relationships and new teams forming. With the exception of one construct, the vignette match is tight, with no more than a 1-point differential. Vignette 2 is part of this cluster, displaying a similarly close matching profile that is balanced in terms of the environment being deemed conducive; i.e. while teams are forming, individuals begin to work together, and boundaries are removed as a project reaches its financial close. This is countered by factors including the continuing development of communication channels and the lack of process integration. The cluster formed by vignettes 3 and 5 can be widened to include vignette 6, which acknowledges that there may be problems with individuals at the root of some of the difficulties within the project; they may not interact well within a team environment when processes and communication channels are still at early stages of development. The element review indicates that the person was concerned with communications processes and the exchange of information. Collective working was seen as an ideal environment in which to conduct day-to-day work.

The discussion will now consider the relationships between the constructs.

In the same way that closely associated elements were discussed in terms of constructs, we can now discuss how similar constructs relate to an element. In the sample, four construct clusters are noted in figure C4.4.1(b), including constructs 2 + 9 (92% matching), 1 + 3 (89%); 6 + 10 (92%); 1 + 3 + 5 (86%), and 7 + 12 (86%). In constructs 2 and 9, there is interplay between the removal of boundaries and enhanced team performance. This is reinforced by construct cluster 6 + 10, which reflects the benefits of process integration and enhanced team working. Both of these factors identify that team working requires a pulling together (construct 1), which arises from openness and maturity (construct 3). Overall, joint working in teams (construct 7), leads to harmony in the working environment (construct 12) and successful outcomes (construct 11).

The last stage of analysis involved a principal components procedure that identified distinct patterns of variability in the interview data. The Web Grid III software completed this iterative procedure by: (i) working out the extent to which the ratings in each row correlate (i.e. are similar) to each other, to identify each distinct pattern, and (ii) attributing as much as possible of the total variability (variance) to each distinct pattern. The principal components output for the sample is presented below in figure C4.4.1(c).

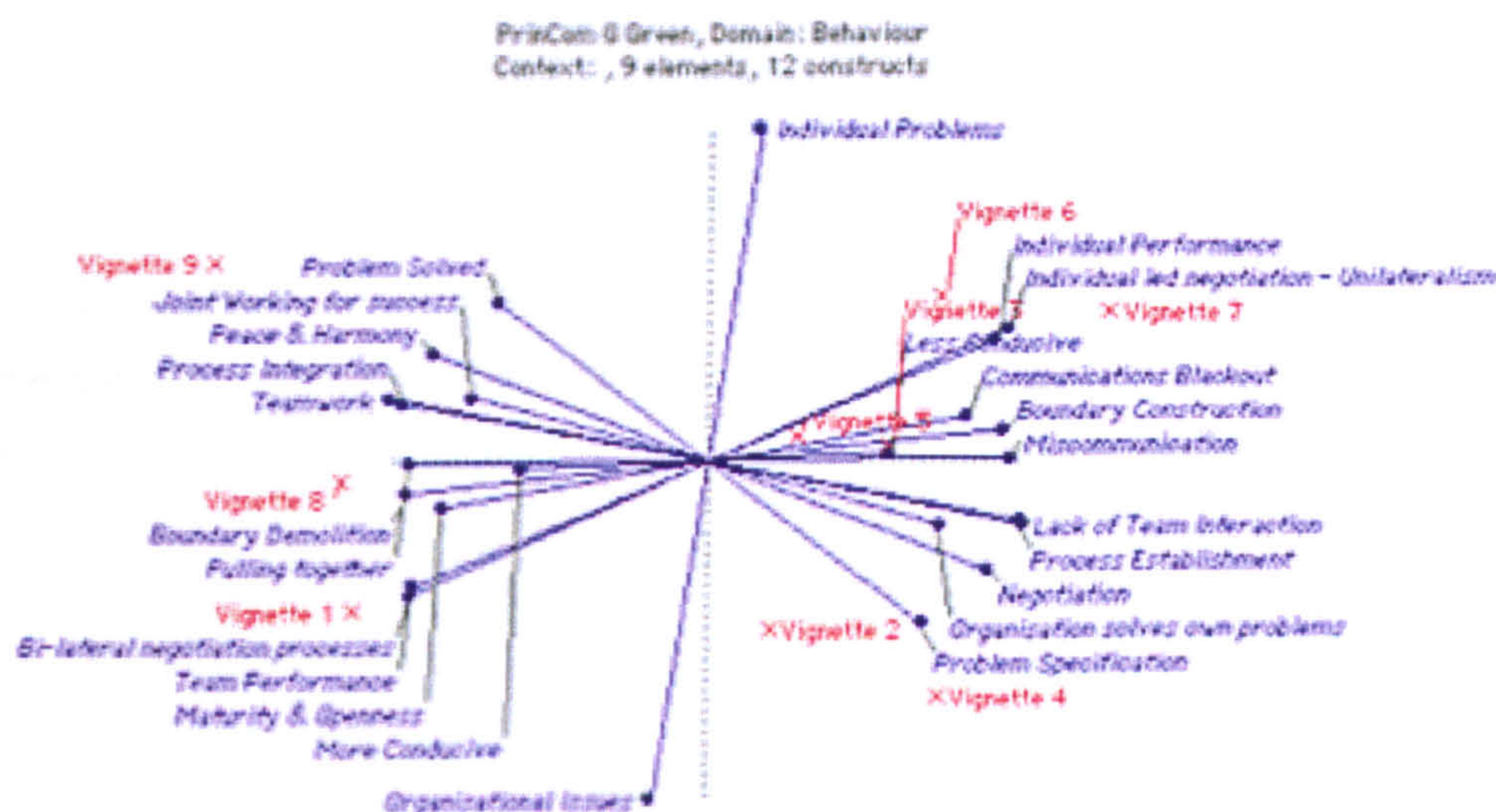


Figure C4.4.1(c): Interview data principal components analysis for a sample respondent

Two principal components are noted that accounts for 86.75% of the total variance in elements on construct ratings (component 1 = 70.31%; component 2 = 16.44%). This is in excess of the 80% variance threshold suggested by Jankowicz (2004: 131), and accounts for the majority of the patterns of variability (using a minimum of components) found in the ratings contained in the grid data table. The main clustering of constructs is on the horizontal plane; only construct 4, which deals with problems at either an organisation or individual level, is principally associated with the vertical plane of component 2. The constructs that are most closely associated with component 1 may be labelled ‘factors important to team building and performance’, while the component 2 constructs could be labelled ‘the separation of the organisation from the individual’. The overall construct that is supplied indicates that there is a close association between the removal of boundaries within teams, working together and enhancing communications. This is highly associated with vignette 8, which summarises an ideal environment in which working together in partnership leads to solving problems and mutual goal satisfaction.

The discussion of a sample single grid interview has concluded.

C4.5 Concluding Comments to Data Analysis Methods

This chapter has served to provide the reader with an overview of the methods of analysis that are associated with the use of the Schwartz Value Survey and repertory grid interviews. The data obtained from all twenty-nine respondents will now be used to: (i) identify respondents’ values orientations, and (ii) allocate elicited respondent constructs to *a priori* behavioural mechanism categories, and thereby establish the hierarchy of behavioural cooperation mechanisms. A discussion in respect of procedures associated with multiple grid analysis was excluded from this overview chapter as this is comprehensively described in the research findings, in response to research question two contained in chapter D2.

C4.6 Introduction to the Research Findings

To assist the reader, an introduction to the research findings contained in chapters D1, D2 and D3 now follows.

Chapter D1 discusses the assessment of individuals’ values orientations; chapter D2 discusses the elicitation of individuals’ constructs, their allocation to *a priori* cooperation mechanism categories, and their relative importance for individuals.

Chapter D3 considers particular issues associated with the relationship between individuals' values orientations and their use of specific cooperation mechanisms.

Chapter D1 starts by re-stating the study aims and research questions that were introduced in section A1.2, so that they can be related to the findings that follow; the chapter then moves on to discuss the findings with regards to question one in more detail. The approach that was adopted gives rise to a commentary that synthesises related issues; the objective was to create a stand-alone summary that would present the findings in a format that balances the needs of the academic community and business practitioner. Yin's (1994) suggestion – that there should be an overarching strategy for the analysis and presentation of case study findings – has been followed; the research process therefore involves drawing comparisons and contrasts from the findings.

C4.6.1 Aim and research questions

The research aim and questions were previously discussed in section C1.3 and C1.4 and are simply restated here to assist the reader.

A review of the literature concludes that public and private sector relationship reforms are influenced by boundary redefinition and collaborative relationship development. The interface between the public and private sectors occurs when they are required to interact and jointly manage different demands created by organisations and individuals that are embedded in the different sectors. Project leaders experience relationship tension due to the different types of ethos that are found within the public and private sectors: the ethos of the public sector is embedded in values of probity and accountability, while the ethos of the private sector is more concerned with shorter term profit maximisation. By combining the skills and competencies of the public and private sectors within collaborative working arrangements and practices, there is potential for well-managed public services to be delivered.

Relationships between public and private sector individuals – how they behave and interact – are important, as they shape and modify the inter organisational relationships that are created in PFI projects. An individual's values orientation influences the use of behavioural cooperation mechanisms, which in turn affects relationship behaviour.

By applying the values and cooperation mechanism literature to this research setting, this study aims to examine how behavioural cooperation mechanisms are influenced by individuals' values orientations within joint public–private sector relationships.

This study is not concerned with subjective accounts and it assumes that differences in values orientation can be objectively measured through recognised instruments.

The research questions are now restated below.

Research question 1: to (i) determine the values orientation of respondents and (ii) compare the values orientations of the public and private sectors.

Research question 2: to (i) elicit constructs from respondents and allocate these to the *a priori* cooperation mechanism categories (trust, accountability, group identity, super-ordinate goals, communication channels and rewards); (ii) determine the relative importance of the cooperation mechanisms for respondents, and (iii) examine the relationship between the achievement values domain and super-ordinate goals.

Research question 3: to focus specifically on public and private sector project leaders, in order to examine the relationship between their values orientation and (i) their preference for short and long-term goals, and (ii) their personal or collective oriented goals.

Research question 4: to examine the relative importance of cooperation mechanisms in guarding against short-termist behaviour in relation to the values orientation of the public and private sector project leaders.

Research question 5: to (i) examine the relationship between the values orientation of the public and private sector individuals and the elicited constructs of the *a priori* group identity cooperation mechanism category and (ii) examine the extent of public and private sector role-set formation within each project.

The discussion now progresses in chapter D1 to consider the research findings in detail.

CHAPTER D1: PRESENTATION OF RESEARCH FINDINGS

ASSESSMENT OF INDIVIDUALS' VALUES ORIENTATIONS

D1.1 Introduction

The findings contained in chapter D1 are concerned with research question one that is restated below.

Research question 1: (i) determine the values orientation of respondents and (ii) compare the values orientation between public and private sectors. It is hypothesised that (i) the private sector will accentuate power and achievement values, while the public sector will accentuate higher benevolence, conformity and universalism values, and (ii) the private sector will express greater individualism by self-enhancement values and the public sector will express greater collectivism through self-transcendence values.

D1.2 A Comparison of Individuals' Values Orientation

Research question 1: to (i) determine the values orientation of respondents and (ii) compare the values orientations of the public and private sectors.

To assist the reader, the discussion below considers each of the projects in succession, in order to present the values orientations of the respondents. This is in answer to question 1(i) above, and uses the approach outlined in the data analysis methods contained in section C4.3.

D1.2.1 Analysis of project A

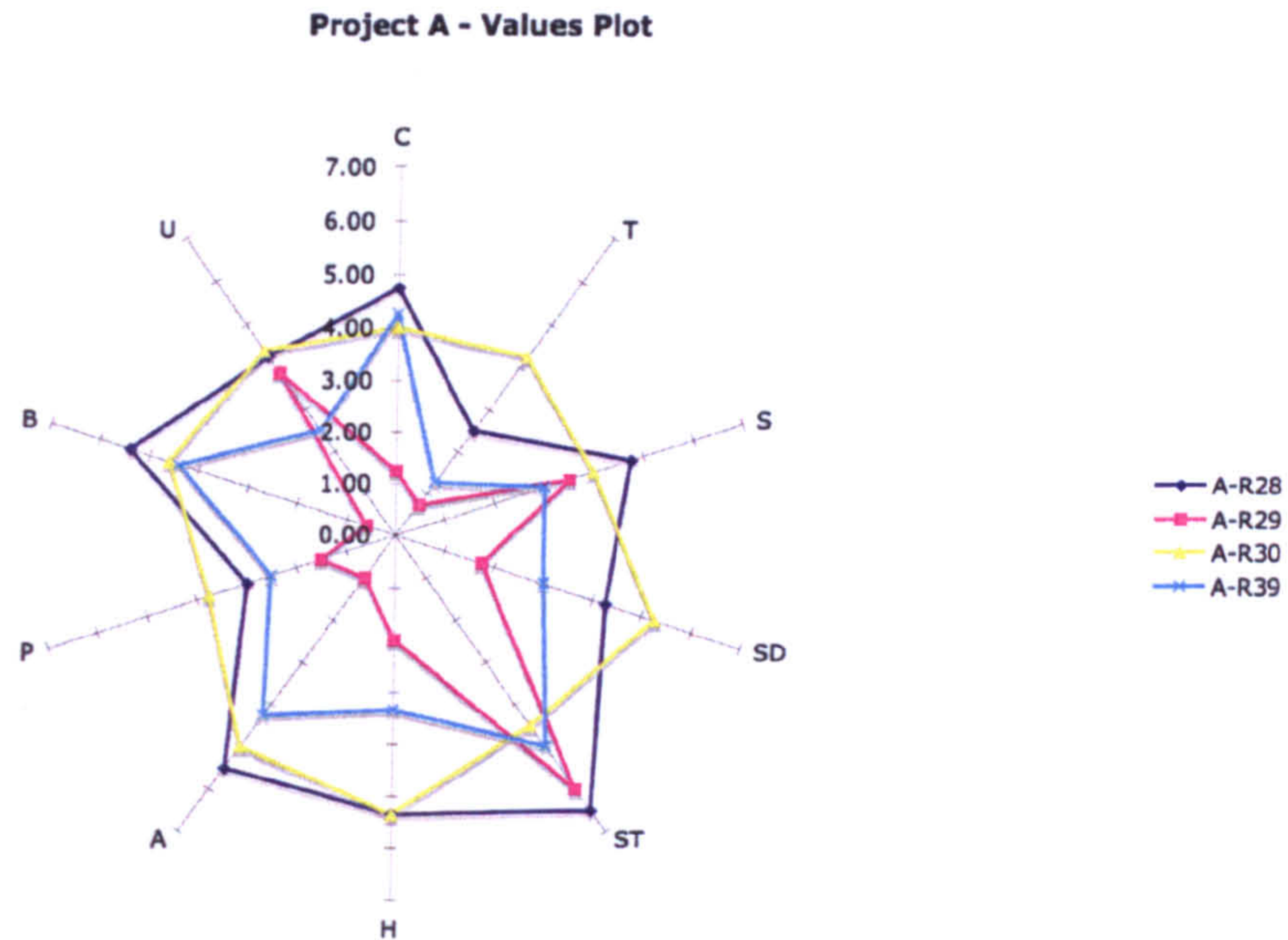


Figure D1.2.1(a): Project A – Respondent values orientation profiles for all SVS domains

The table below presents the SVS data values for each respondent’s individual values domains. The data values have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
28pu	4.8	2.5	4.8	4.3	6.5	5.3	5.5	3.0	5.4	4.3
30pr	4.0	4.3	4.0	5.3	4.5	5.3	5.0	3.8	4.6	4.4
29pr	1.3	0.8	3.5	1.8	6.0	2.0	1.0	1.5	0.6	3.9
39pr	4.3	1.3	3.0	3.0	5.0	3.3	4.3	2.5	4.4	2.5

Table D1.2.1(a): Project A – Respondent data values for all SVS domains

Project leaders R28 and R30 both present similar profiles for all 10 values domains. R28 displays a marginally higher tendency towards the stimulation value (indicating a

desire for an exciting and varied life); however, respect for tradition is rated lower for R28 in relation to R30. Generally, the profile of R39 is found to be similar to R28 and R30, but lower values are reported for each domain. In terms of the group in general, the power domain is subservient to achievement and benevolence, and this is associated with higher conformity domain importance; this indicates a desire for smooth social relations and consideration for the welfare of others in everyday interaction.

The profile of R29 is considerably different to that of the three other respondents. Two principal values domains are accentuated within R28, R30 and R39's profiles, namely universalism and stimulation; this is reflective of a wide concern for others and a desire for change. With the exception of the security domain, all other values are less important for R29 than for other respondents.

The universalism values domain is also important to respondents R28, R29 and R30, representing the need for relationship equality and understanding during engagement with others. Variability in terms of the tradition domain is noted; however, both project leads rate this value domain as of medium importance, and this is indicative of cultural or religious influences and a commitment to, and acceptance of, the customs and the ideas of others.

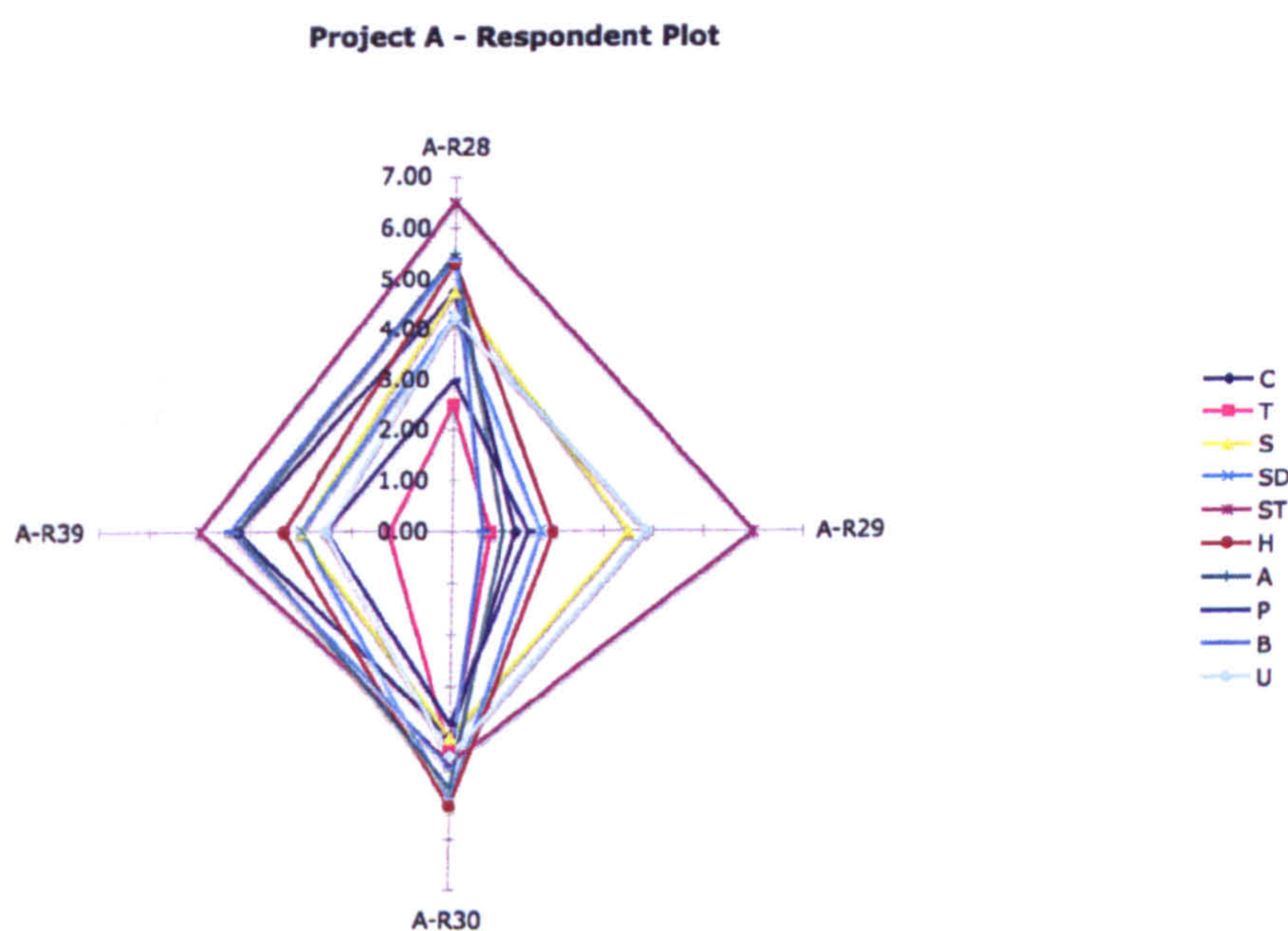


Figure D1.2.1(b): Project A – Individual values domain hierarchy for all respondents

In figure D1.2.1(b), the relative importance of the stimulation domain for R29 is noted; however this value is also ranked as high by respondents R28 and R39, and as medium by R30; R28, R30 and R39 present similar profiles for all values domains.

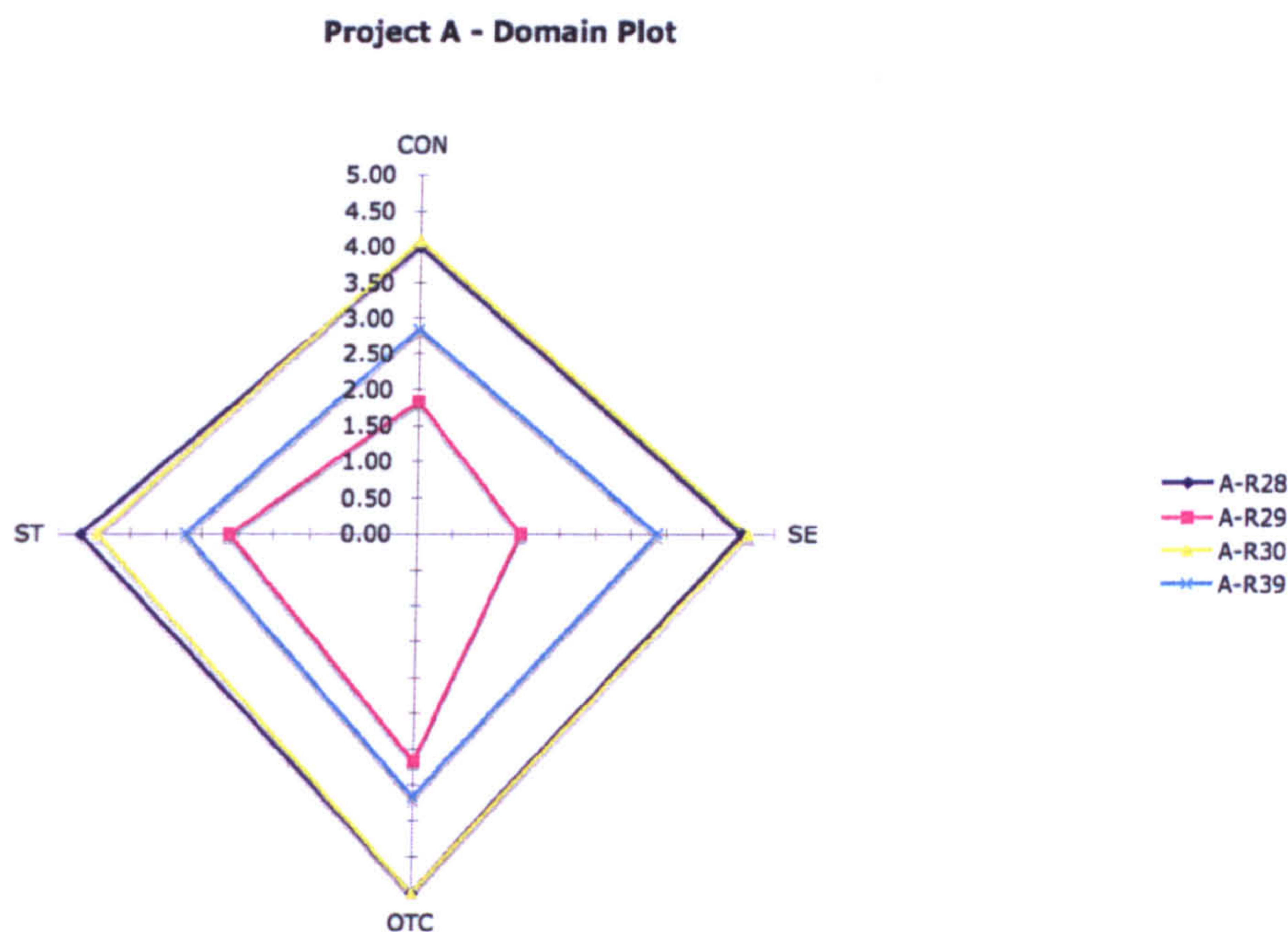


Figure D1.2.1(c): Project A – Respondent two-dimensional values domains

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change	Self-enhancement	vs	Self-transcendence
28pu	4.0		5.4	4.6		4.9
30pr	4.1		4.9	4.7		4.5
29pr	1.8		3.9	1.5		2.6
39pr	2.8		4.0	3.4		3.5

Table D1.2.1(b): Summated two-dimensional data values for each respondent

Figure D1.2.1(c) presents a summation of the values relationships at a two-dimensional level; these are shown as actual data values in table D1.2.1(b).

Respondents R28 and R30 report an almost symmetrical profile that is balanced on both domain axes; R39 also displays a similarly balanced profile. The need to satisfy any particular value is less pronounced for R29 and R39 than for R28 and R30. The fourth project member, R29, was noted as considerably different; his or her underlying values domains are associated with openness-to-change and the welfare of the wider group, and are more pronounced.

To conclude, project A can be summarised as being an environment in which three respondents (R28, R30 and R39) have close two-dimensional values profiles; those for project leaders R28 and R30 are nearly identical. The fourth respondent, R29, is considerably different to the remaining group members, being oriented towards change and welfare considerations. Overall, underlying values related to change and self-transcendence are highly important to this grouping, as noted in table D1.2.1(b) above.

D1.2.2 Analysis of project B

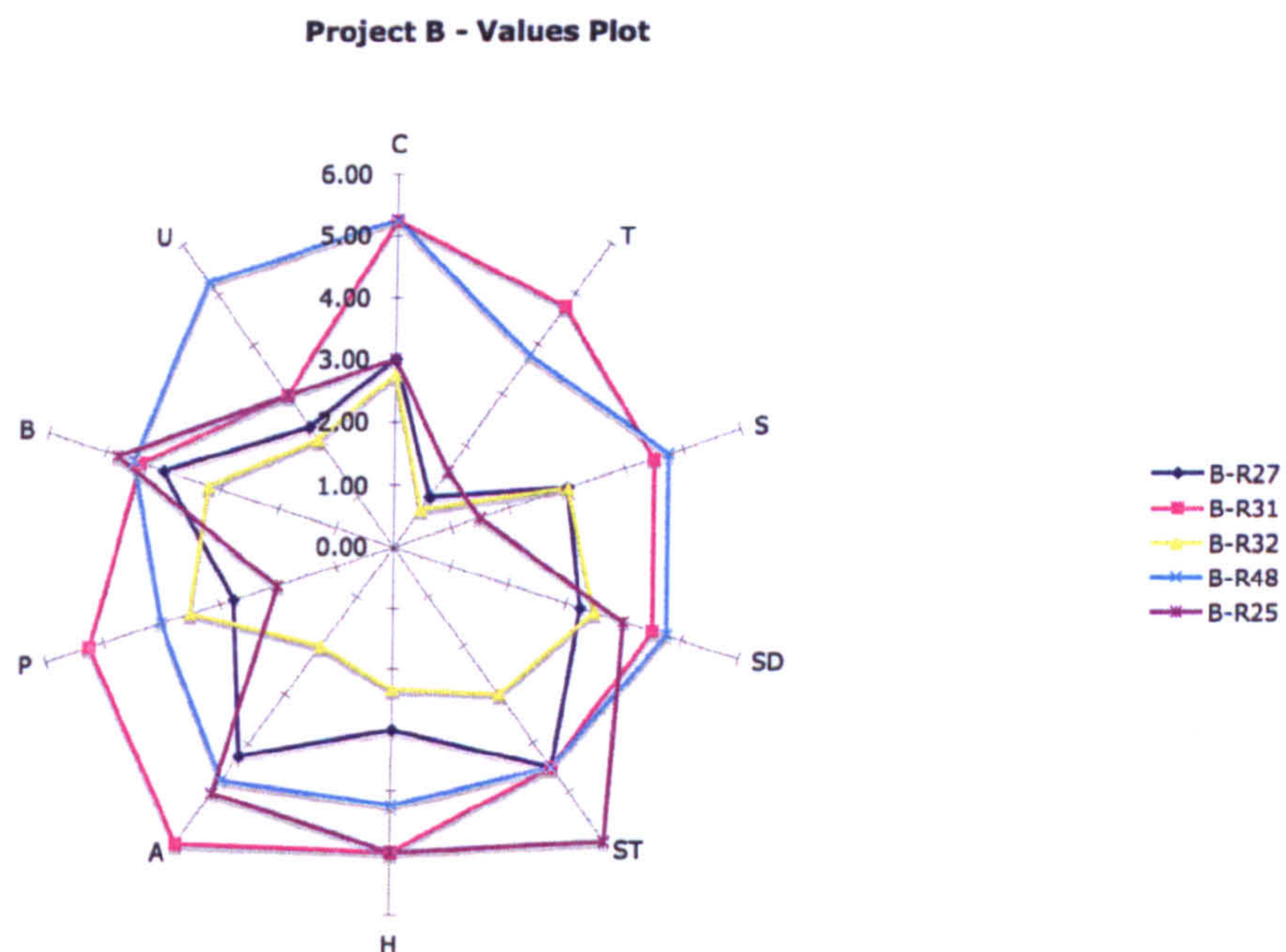


Figure D1.2.2(a): Project B – Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
27pu	3.0	1.0	3.0	3.3	4.5	3.0	4.3	2.8	4.0	2.4
31pu	5.3	4.8	4.5	4.5	4.5	5.0	6.0	5.3	4.4	3.0
25pr	3.0	1.5	1.5	4.0	6.0	5.0	5.0	2.0	4.8	3.0
32pr	2.8	0.8	3.0	3.5	3.0	2.3	2.0	3.5	3.2	2.1
48pr	5.3	3.3	4.8	5.0	5.0	5.0	5.8	4.8	5.4	4.3

Table D1.2.2(a): Project B – Respondent data values for all SVS domains

Although the respondent profiles show that there is similarity between individuals within the project, there is considerable difference in the magnitude of values. Respondent profiles R31 and R48 are reported as being substantially similar, with the exception of the universalism values domain, in which R48 may be considered to display more consideration for non-group members due to the higher value noted in table D1.2.2(a) above. The profiles of both respondents are evenly distributed throughout the ten values domains, except that the behaviour of respondent R31 is influenced more by power and achievement goals. There is a close similarity between respondents R25, R27 and R32 in terms of conformity, tradition and security values domains (the conservation dimension), together with high benevolence. This is indicative of a desire to achieve relationship stability, respect for others and a tendency to refrain from actions that have a negative influence on the overall relationship. Some variability is reported in the opposing domain that is concerned with self-enhancement; this is where power, achievement and stimulation goals are also located. R25 displays a similar profile peak to R31 and R48 in the stimulation and hedonism values domains, indicating a goal desire that relates to enjoyment for one's own sake. This profile weakens in the power domain, and tends, overall, towards the conservation and self-enhancement domains. R32's profile is balanced in terms of not favouring one particular values domain over another, while the importance of tradition and achievement domains is reduced; overall, there is domain

stability. The profile for R27 tends towards the self-enhancement domain; R25's profile also does this, although to a lesser extent.

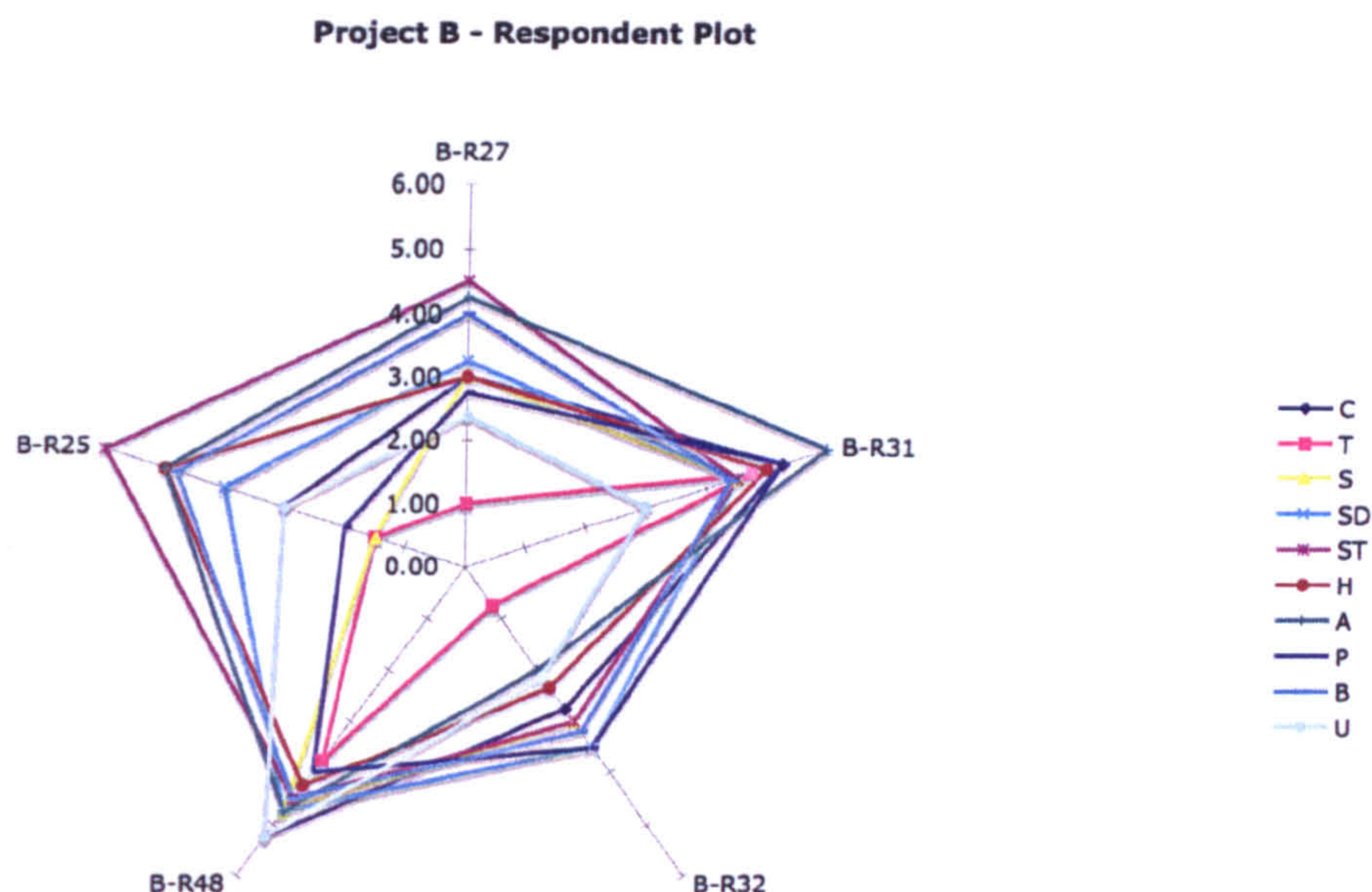


Figure D1.2.2(b): Project B – Individual values domain hierarchy for all respondents

In the radar chart presented in figure D1.2.2(b) above, the values profiles of respondents R32 and R48 are tightly clustered; the other respondents' profiles are characterised by values domains with widely differing hierarchies. In the profile of R27, the particularly close association of stimulation, achievement and self-direction domains indicates that he or she is individualist in orientation. R25 displays a similar profile to R27; personal enjoyment is noted as being an important goal, however, and this would indicate that R25 is even more of an individualist than R27. Other values domains are less important in the R27 profile, and this indicates that there is less concern for tradition and non-group members. R27's remaining values domains are balanced, except that he or she ascribes the least importance to goals that support tradition and conservation, which is also the case for R25. All of R48's values domains are tightly clustered; however goals that satisfy values associated with understanding of others and actions that support harmonious relationships, are noted as important. Closely associated but subservient are the values domains that cluster around openness-to-change and personal enhancement: the ranking of the stimulation

and achievement domains suggests that there is a balance between a desire for change and a desire for stability and traditional practices. The final respondent, R31, is reported as being highly achievement oriented, seeking goals that satisfy achievement values. Power and stimulation values domains are also highly rated, and this is indicative of an individualist values orientation; goals that satisfy personal enhancement and change are noted as important to this individual. This is balanced with a desire for consideration of others with whom he or she is in daily contact, but this does not extend towards distant others, i.e. non-group members, as reflected by the relegation of the universalism values domain.

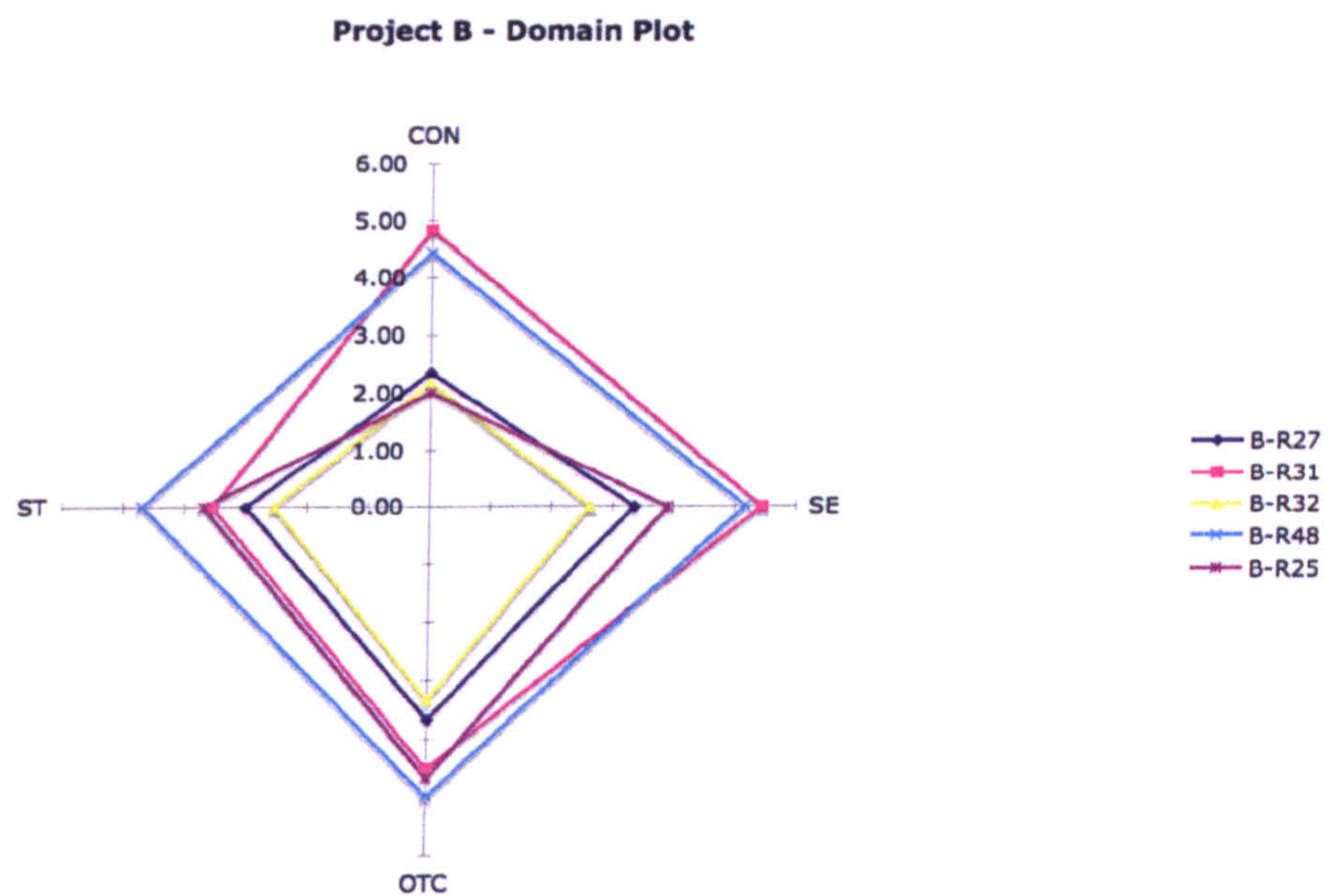


Figure D1.2.2(c): Project B – Respondent two-dimensional values domains

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change	Self-enhancement	vs	Self-transcendence
27pu	2.3		3.9	3.3		3.2
31pu	4.8		4.5	5.4		3.7
25pr	2.0		4.7	3.9		3.7
32pr	2.2		3.3	2.6		2.7
48pr	4.4		5.0	5.2		4.8

Table D1.2.2(b): Summated two-dimension data values for each respondent

In figure D1.2.2(c), R31 and R48 are broadly balanced in each of the two dimensions, although R31 displays a marginally greater tendency towards self-enhancement. R27, R25 and R32 have similar two-dimensional profiles; each respondent balances goals that satisfy values associated with personal enhancement with those that satisfy respect for others. However, all respondents seek goals that satisfy openness-to-change values as opposed to maintaining tradition and existing practices.

To conclude, all respondents in project B have strong stimulation, self-direction, benevolence and universalism values domains, and R48 rates these values domains higher than the other respondents did. Overall, the project respondents tend towards openness-to-change, although, in the case of both R31 and R48 this is balanced with the opposing conservation dimension.

D1.2.3 Analysis of project C

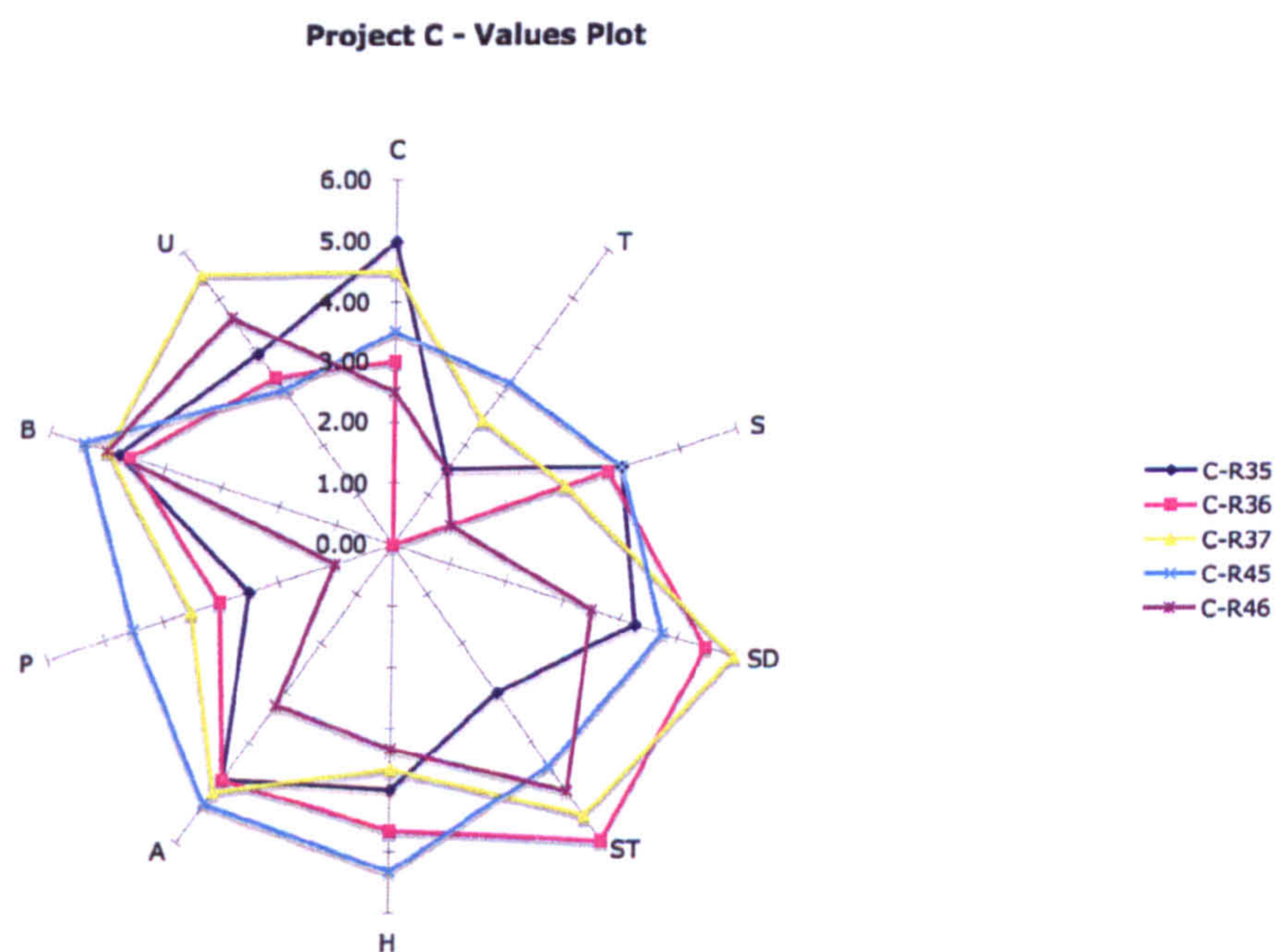


Figure D1.2.3(a): Project C – Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
46pu	2.5	1.5	1.0	3.5	5.0	3.3	3.3	1.0	5.0	4.6
35pu	5.0	1.5	4.0	4.3	3.0	4.0	4.8	2.5	4.8	3.9
36pu	3.0	0.0	3.8	5.5	6.0	4.7	4.8	3.0	4.6	3.4
45pr	3.5	3.3	4.0	4.8	4.5	5.3	5.3	4.5	5.4	3.1
37pr	4.5	2.5	3.0	6.0	5.5	3.7	5.0	3.5	5.0	5.5

Table D1.2.3(a): Project C – Respondent data values for all SVS domains

In general, all respondents give lesser importance to conservation values, and higher importance to the values domains associated with the openness-to-change dimension; the self-enhancement and self-transcendence domains are rated by all respondents as having either high or medium importance, and are therefore of broadly similar significance; however, the public sector project leader, R46, is considerably more oriented towards self-transcendence values. Conformity and security within the conservation domain, and all self-enhancement domain values, are reported as more important to R35, R36, R37 and R45. R35 and R36 – who seek value satisfiers that are associated with stimulation and self-direction, i.e. variety of work and freedom to act independently – are closely related within the openness-to-change domain. R46's profile – in which benevolence is a highly influential values domain, indicating that he or she will recognise the importance of goals associated with the advancement of close colleagues and associates – suggests that he or she will be sympathetic to this tendency. The whole group, including R37, scores highly in terms of universalism –

and so the qualities described can be further extended to include respect for those outside the immediate group.

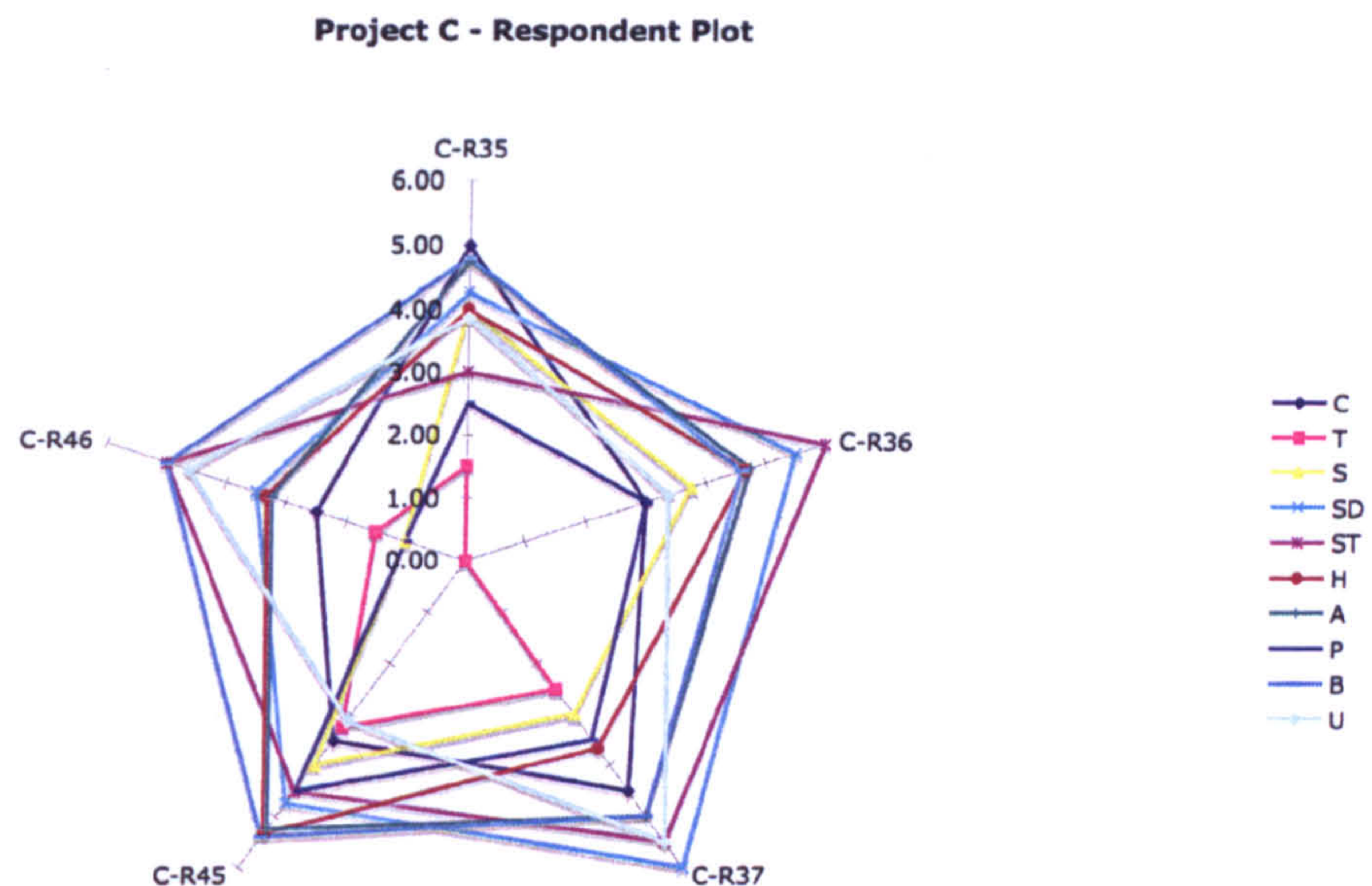


Figure D1.2.3(b): Project C – Individual values domain hierarchy for all respondents

In figure D1.2.3(b), all respondents except R35 report high stimulation and achievement values, and this indicates that respect for those in close working relationships is important; this extends to non-group relationships through benevolence values that indicate that the enhancement of the welfare of close others is significant. Respondent R35 seeks goals that will not result in actions that would upset others. Achievement and the satisfaction of self-esteem goals are particularly important to R35 and R45. For all other project members, these values are of either strong or uniform importance. Tradition and power values (i.e. status and control over others) vary considerably between respondents, with R45 rating the importance of this value domain highly. All other respondents demote this value. The importance of security (relationship stability) is recognised as important, but is placed mid to low in terms of importance for all respondents.

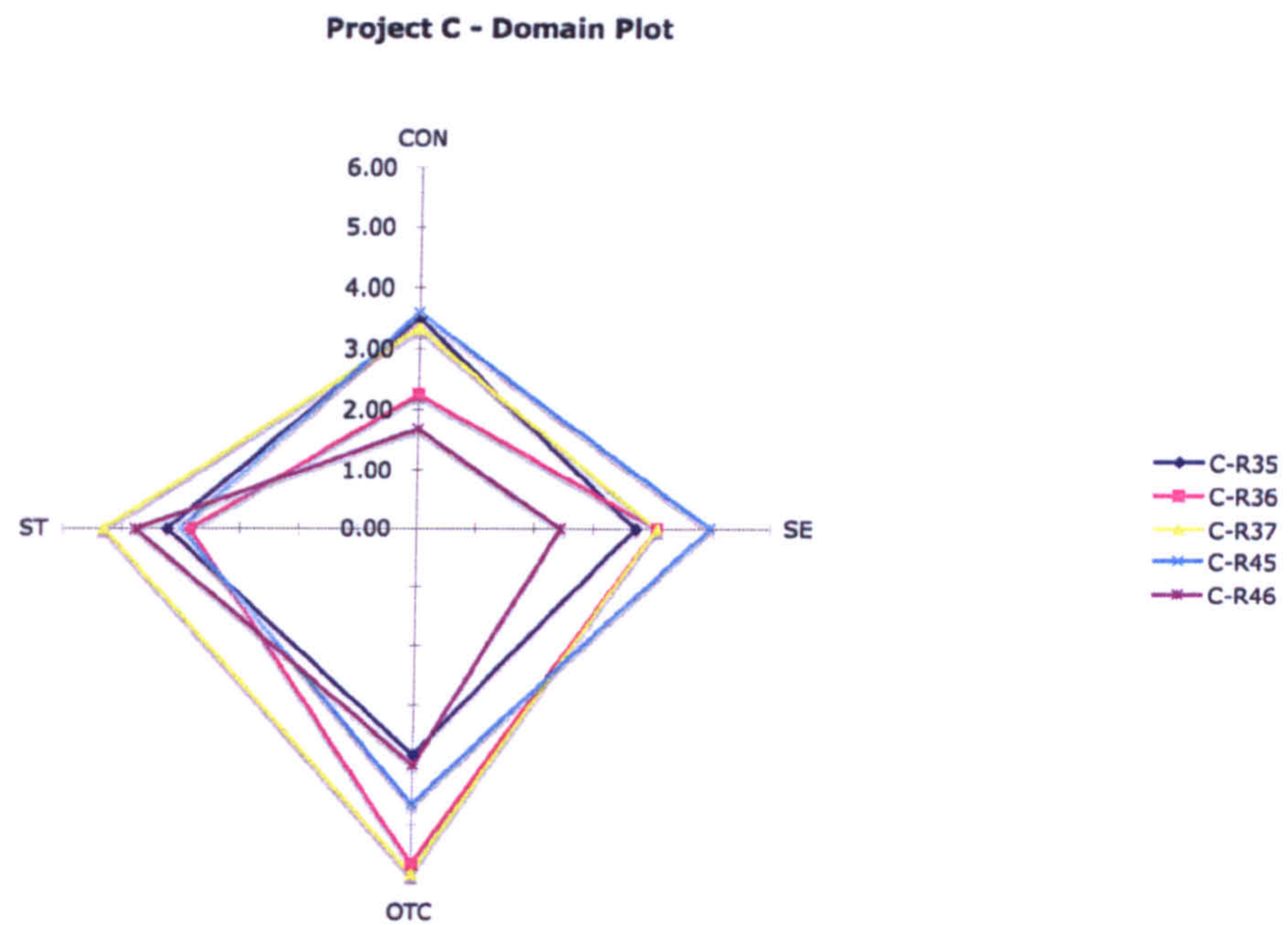


Figure D1.2.3(c): Project C – Respondent two-dimensional values domains

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change		Self-enhancement	vs	Self-transcendence
46pu	1.7		4.3		2.5		4.8
35pu	3.5		3.6		3.8		4.3
36pu	2.3		5.8		4.1		4.0
45pr	3.6		4.6		5.0		4.3
37pr	3.3		5.8		4.1		5.3

Table D1.2.3(b): Summated two-dimensional data values for each respondent

The respondents' profiles show a similarity at the two-dimensional values level, and tend towards the openness-to-change dimension; this was particularly true of R36, R37 and R45. Project leaders R45 and R46 report similar profiles, with R45 affording marginally more importance to openness-to-change and R46 giving marginally more

importance to self-transcendence; this may be reflective of their private and public sector status.

To conclude, project C is characterised by the generally balanced self-enhancement to self-transcendence dimension that clusters tightly in the self-transcendence dimension. Overall, respondents relegate conservation – the retention of tradition and conformance – and favour the change dimension. In terms of the higher ranked values dimensions, both project leaders present similar profiles.

D1.2.4 Analysis of project D

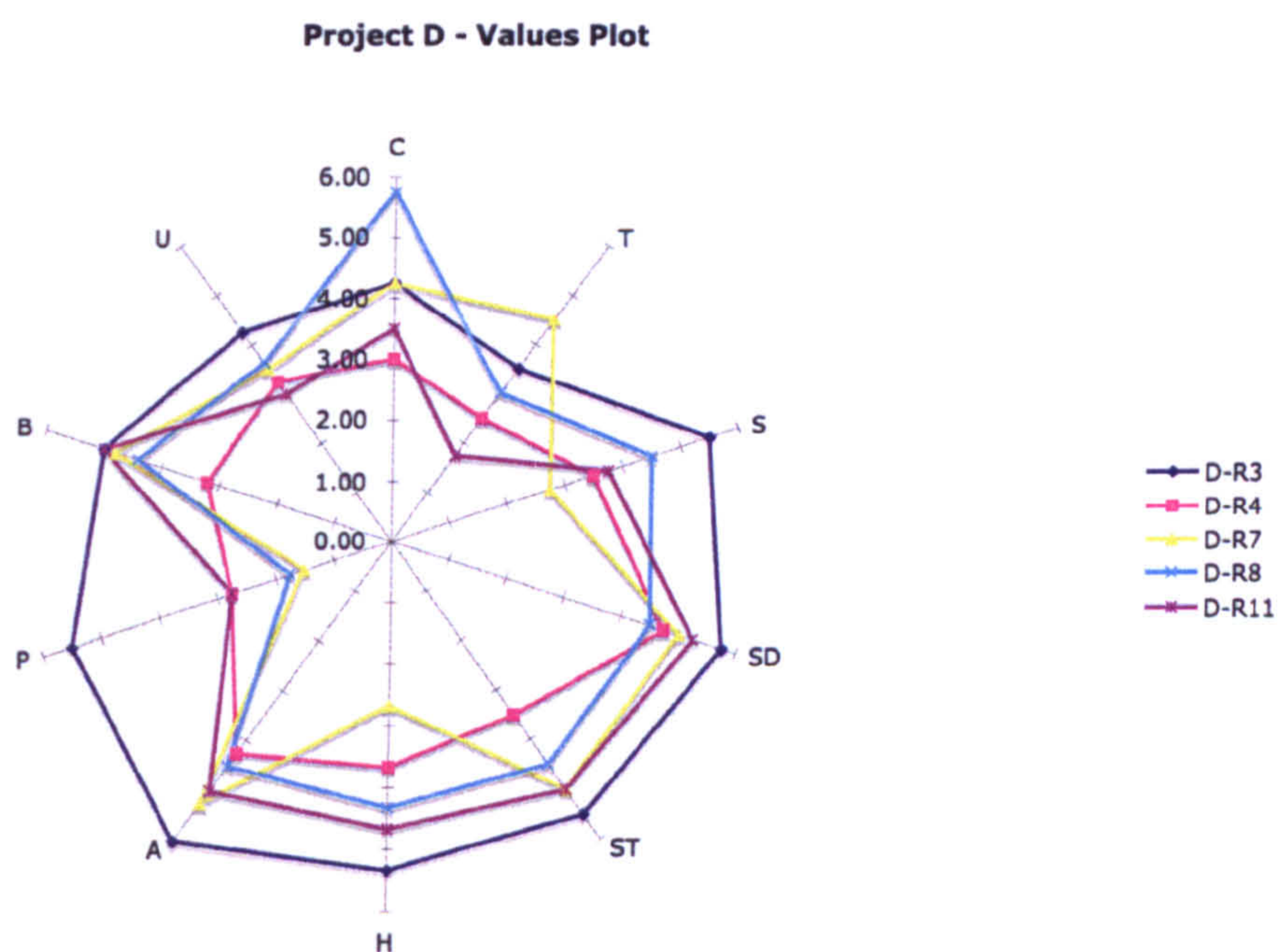


Figure D1.2.4(a): Project D – Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
3pu	4.3	3.5	5.5	5.8	5.5	5.3	6.0	5.5	5.0	4.3
11pu	3.5	1.8	3.8	5.3	5.0	4.7	5.0	2.8	5.0	3.0
4pr	3.0	2.5	3.5	4.8	3.5	3.7	4.3	2.8	3.2	3.3
7pr	4.3	4.5	2.8	5.0	5.0	2.7	5.3	1.5	4.8	3.5
8pr	5.8	3.0	4.5	4.5	4.5	4.3	4.5	1.8	4.4	3.6

Table D1.2.4(a): Project D – Respondent data values for all SVS domains

High uniformity and magnitude variability of profiles are deduced from figure D1.2.4(a) above. R3 displays a highly balanced profile for all values domains, with the exception of a marginal reduction in importance of the tradition domain; this is mirrored by R4, who displays a lower rating for each of the values domains. The profiles of R7, R8 and R11 are generally considered to be similar to the project leaders': the high importance to R8 of the conservation domain, and the high importance to R7 of the tradition domain, are exceptions to this. High respondent variability is most evident in the power domain; all respondents, excluding R3, rank this value domain lowest.

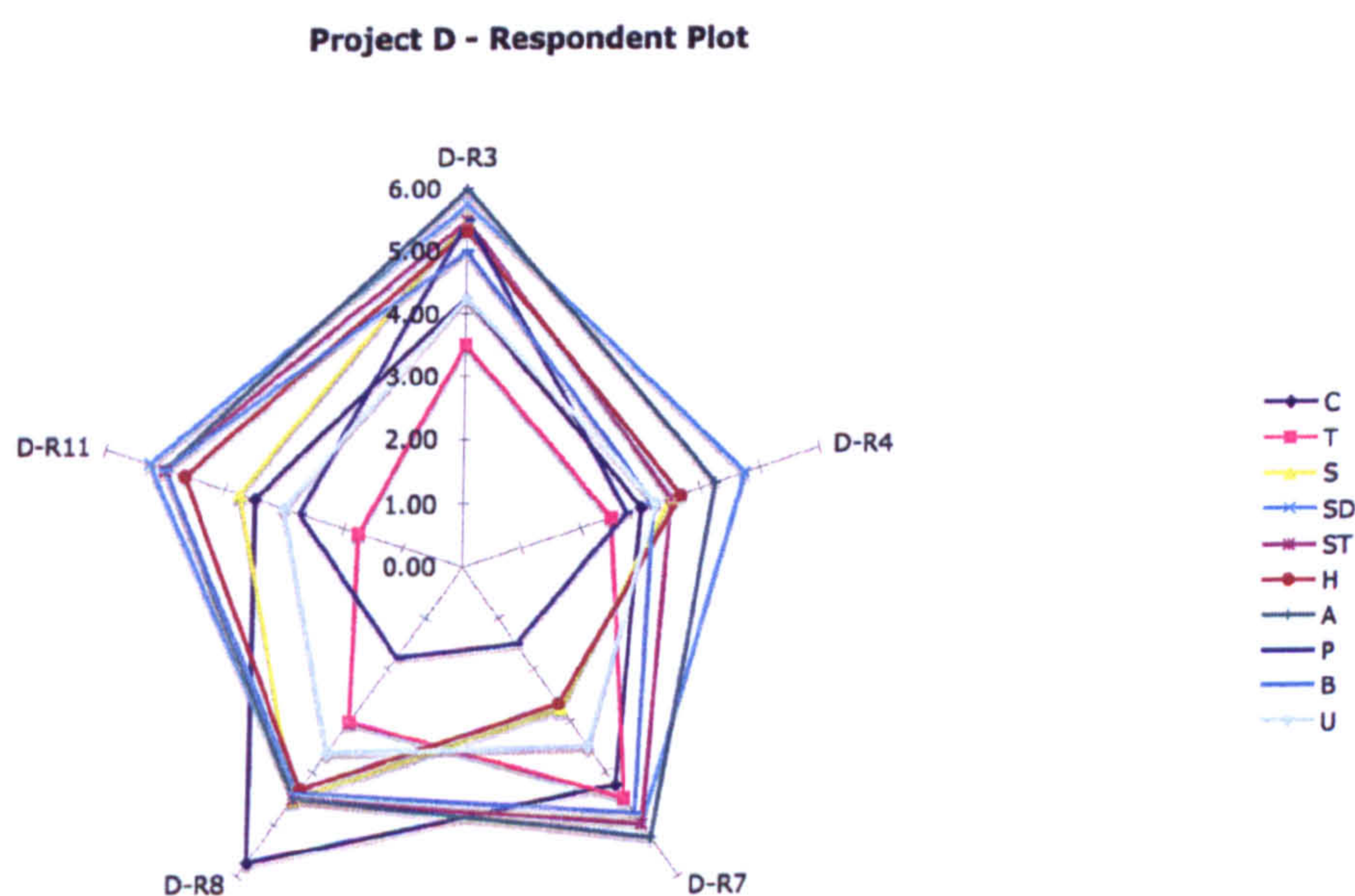


Figure D1.2.4(b): Project D – Individual values domain hierarchy for all respondents

With the exception of power, conformity and tradition values, profile regularity is evident for respondents in figure D1.2.4(b); self-direction, achievement and benevolence are highly ranked. R3 and R4 report tightly clustered profiles that rank achievement and benevolence values highly, while consideration for the welfare of those in close association is retained. All other values are closely associated, and those relating to openness-to-change and self-transcendence are strong influencers of behaviour. R11's profile is associated with the profiles of R3 and R4 in terms of self-enhancement and openness-to-change, R11's remaining values domains are reported as being similar to R4's, although they are not as tightly clustered: security and conformance values influence behaviour more than universalism and power values. The profile of R8 differs from the other respondents': conformance is noted as the dominant values domain, and self-enhancement is given a lower ranking (as is the case for other project members); the overall value domain relationship is less tightly clustered.

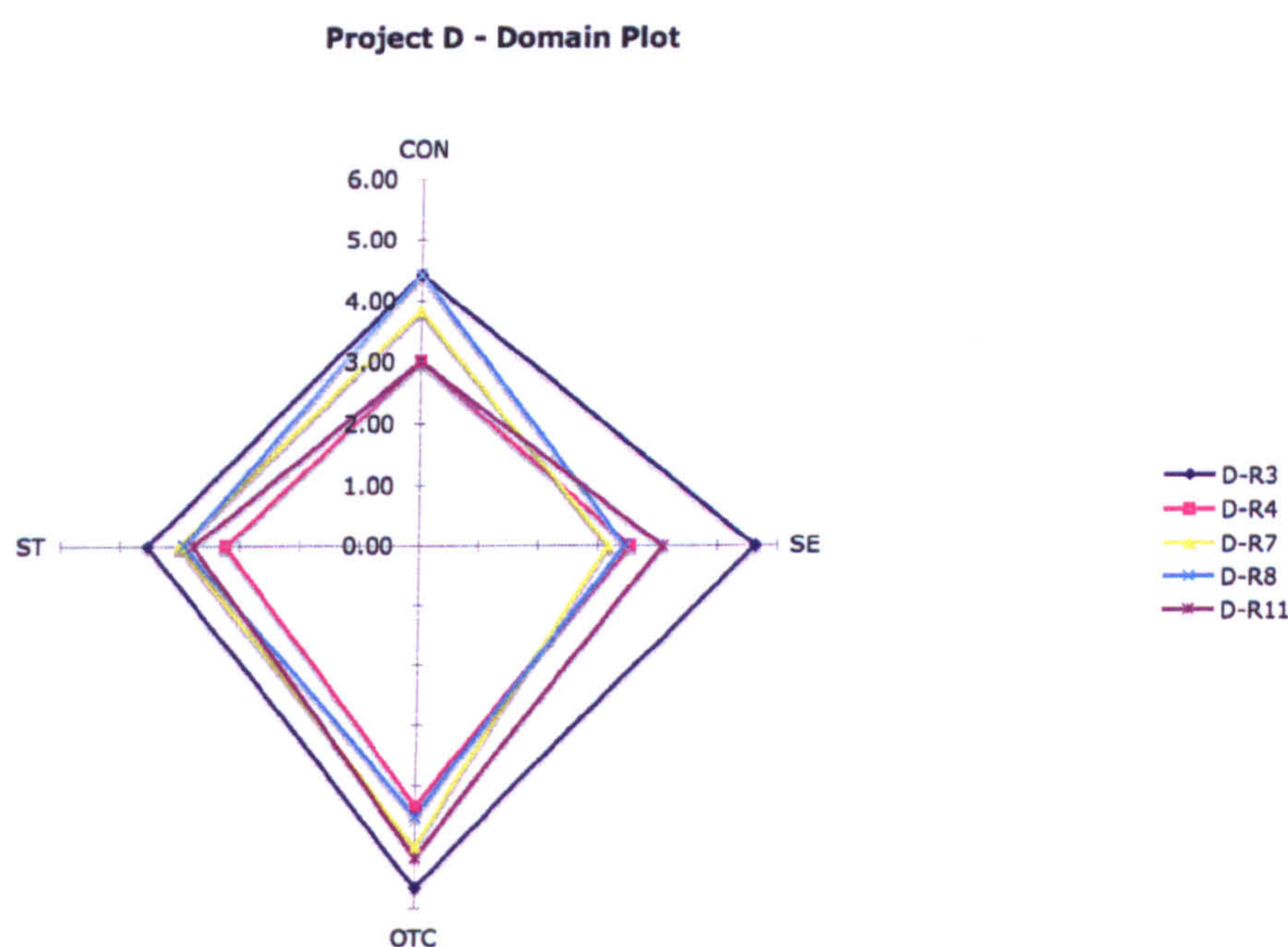


Figure D1.2.4(c): Project D – Respondent two-dimensional values domains

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table

have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change		Self-enhancement	vs	Self-transcendence
3pu	4.4		5.7		5.6		4.6
11pu	3.0		5.1		4.1		4.0
4pr	3.0		4.1		3.6		3.2
7pr	3.8		5.0		3.1		4.2
8pr	4.4		4.5		3.5		4.0

Table D1.2.4(b): Summated two-dimensional data values for each respondent

All respondents report a similar two-dimensional profile, but with domain magnitude variability. R3 displays the most acute tendency (see figure D1.2.4(c)) towards the self-enhancement and openness-to-change dimensions, but ranks the self-transcendence dimension marginally higher, reflecting welfare for others. R4's profile marginally accentuates the openness-to-change and self-enhancement dimensions. R7 and R8 report similar two-dimensional profiles, balancing self-enhancement and self-transcendence, i.e. they regard personal enhancement as important but not if it is at the expense of others. In addition, R7 and R8 broadly balance conservation and openness-to-change domains, and R8 matches R3 in terms of the conservation domain. Respondent R11 is similar in profile to R4, being marginally more influenced by goals associated with openness-to-change, i.e. variety in one's work and the ability to self-direct one's own actions.

In conclusion, project D respondents are noted to be similar; they all tend towards the openness-to-change dimension, while reporting a balanced self-enhancement to self-transcendence dimension axis.

D1.2.5 Analysis of project E

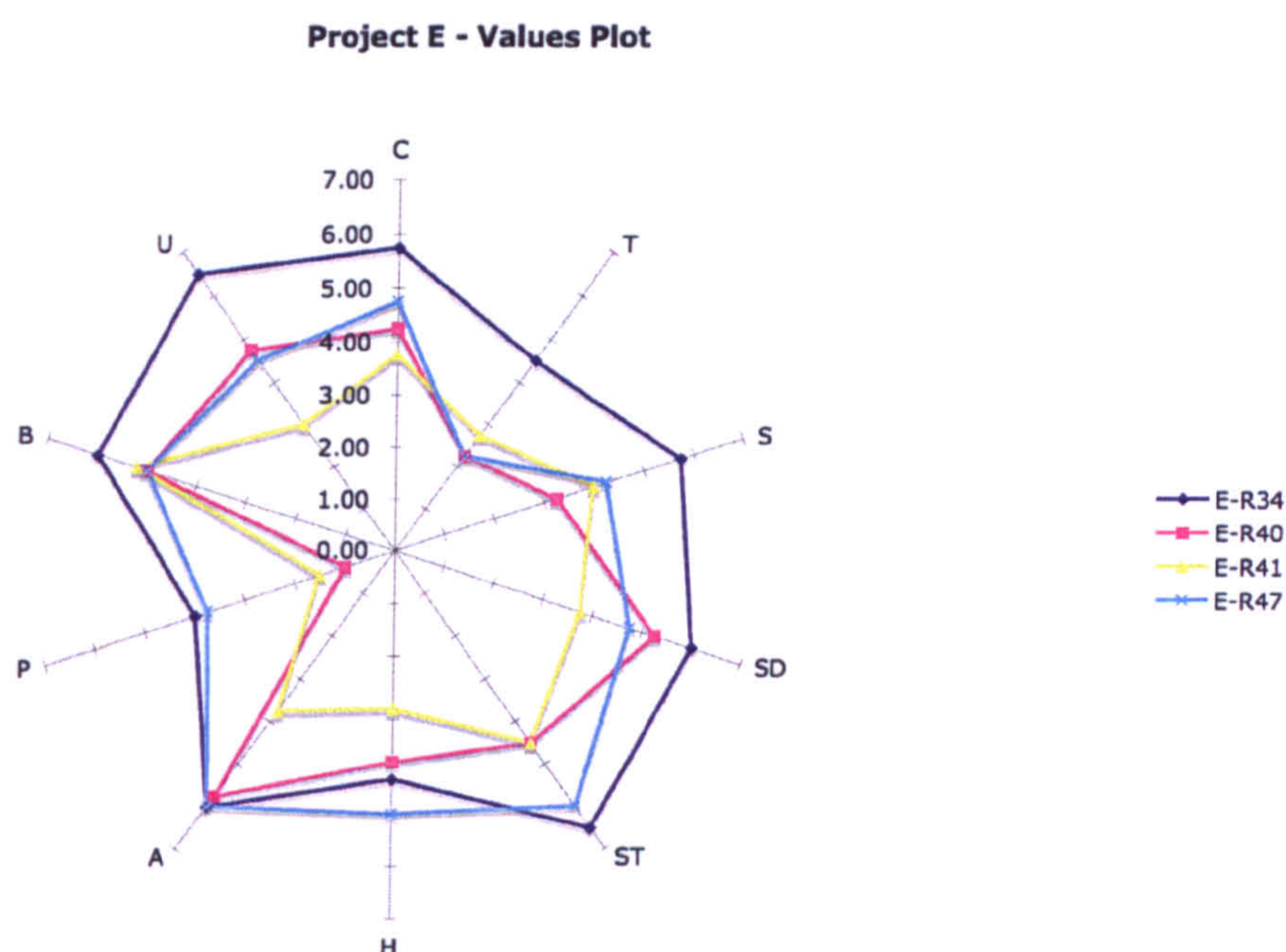


Figure D1.2.5(a): Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
34pu	5.8	4.5	5.8	6.0	6.5	4.3	6.0	4.0	6.0	6.5
40pu	4.3	2.3	3.3	5.3	4.5	4.0	5.8	1.0	5.0	4.8
41pr	3.8	2.8	4.0	3.8	4.5	3.0	3.8	1.5	5.2	3.0
47pr	4.8	2.3	4.3	4.8	6.0	5.0	6.0	3.8	5.0	4.5

Table D1.2.5(a): Respondent data values for all SVS domains

The radar chart in figure D1.2.5(a) indicates that the magnitude of R34's profile is generally greater than that of the three other respondents, with the exception of the power and achievement domains, which align with those of R40 and R41. The profiles for R40, R41 and R47 are similar in a number of domains in several respects: (i) lower conservatism values (conformity, tradition and security) contrast with greater openness-to-change values (self-direction, stimulation); (ii) a higher benevolence domain and welfare for close work associates reduces the importance of the self-enhancement dimension (power, hedonism), and (iii) the achievement domain, which is associated with greater openness-to-change values, is generally higher for all respondents..

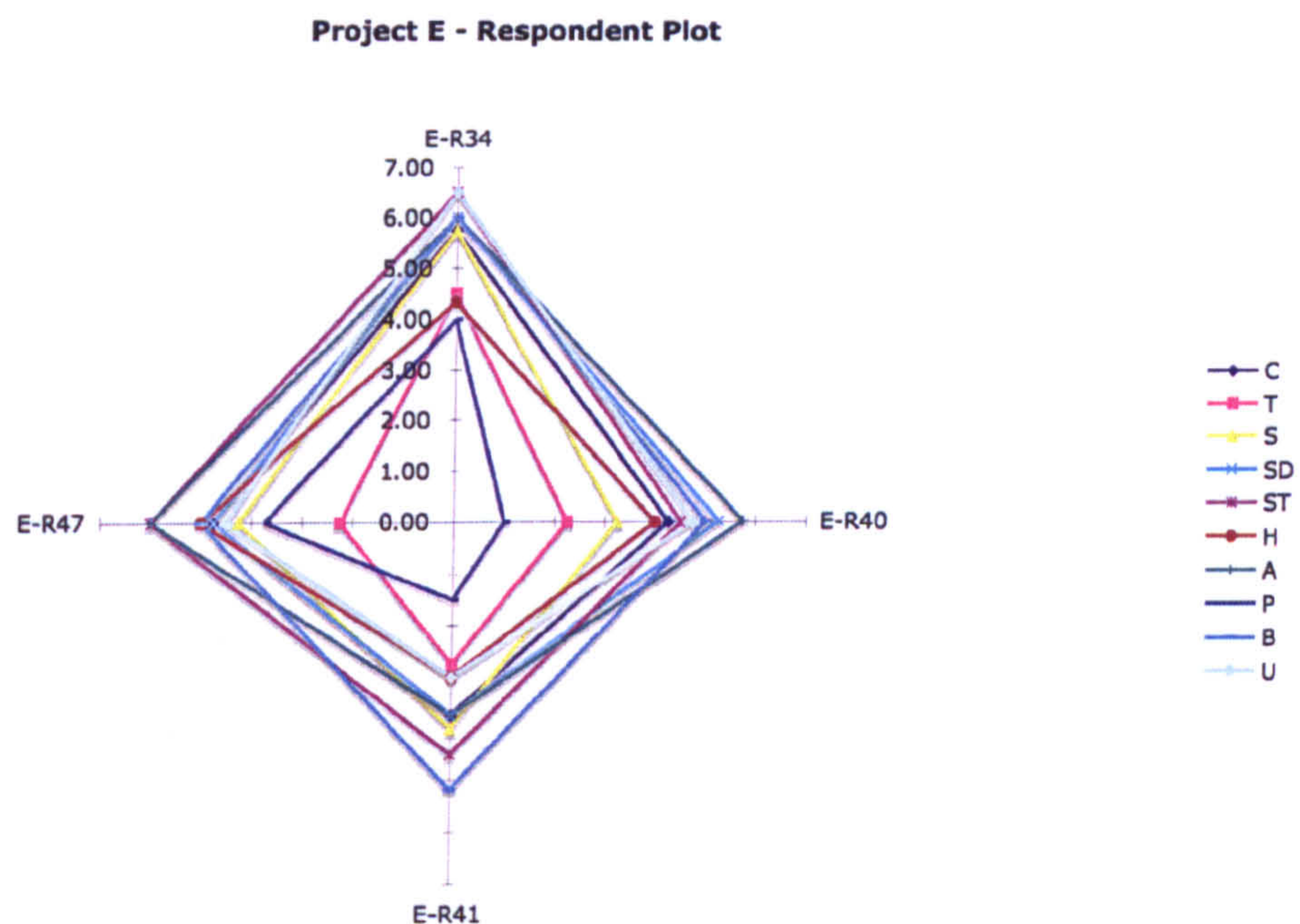


Figure D1.2.5(b): Individual values domain hierarchy for all respondents

It can be seen from the chart above that – with the exception of the power domain that is more influential to R34 and R47 and the tradition domain that is most influential to R34 – the other domains present a generally regular profile that varies in magnitude, and therefore importance, depending on the respondent. Achievement oriented values are noted as the most important domain for R40 and R47, with the addition of stimulation for R47, while benevolence values dominate for R41 and universalism and stimulation values marginally lead for R34. The profile of R34 is clustered into two groups, and conservation dimension values are ranked lower than other

dimension values. R40 rates consideration and welfare for others – including not only people in close day-to-day relationships but also non-group members – as important goals, in terms of satisfying benevolence and universalism values. R41 ranks out-group benevolence high, placing personal stimulation, i.e. variety in working, next in terms of importance; he or she ranks relationship stability and personal success through competence demonstration as least important. R47 leads with achievement and stimulation values, which influence behaviour associated with both work variability and the ability to demonstrate competence; the remainder of R47's values domains are closely grouped.

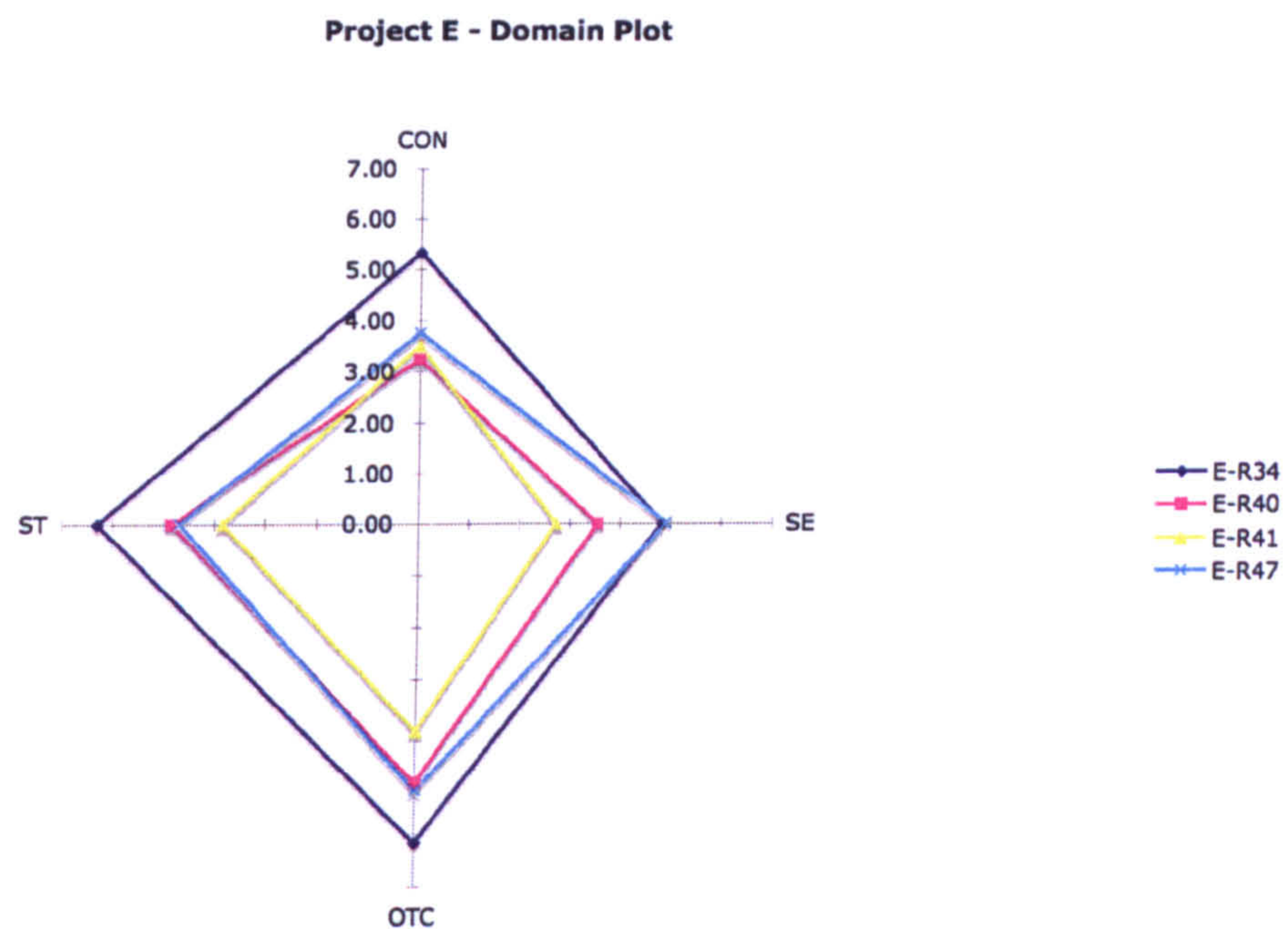


Figure D1.2.5(c): Two-dimensional values orientations for each respondent

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change	Self-enhancement	vs	Self-transcendence
34pu	5.3		6.3	4.8		6.3
40pu	3.3		4.9	3.6		4.9
41pr	3.5		4.1	2.8		4.1
47pr	3.8		5.4	4.9		4.8

Table D1.2.5(b): Summated two-dimensional data values for each respondent

R40, R41 and R47 present a regular, related and balanced profile, with the exception of R40's higher ranking of self-transcendence; there is an overall tendency among all the respondents towards openness-to-change. Differences in R34's profile can be seen; it is oriented towards self-transcendence and openness-to-change dimensions. R40 and R41, and R34 and R47, are paired in terms of self-enhancement values, and the latter pair report self-enhancement values as more important than R40 and R41.

In conclusion, project E can be summarised as an environment in which respondents tended towards the openness-to-change dimension. R47 balances self-enhancement with self-transcendence dimensions, while R40 and R41 marginally orientate towards self-transcendence, and this tendency is more marked for the public sector project leader R34.

D1.2.6 Analysis of project F

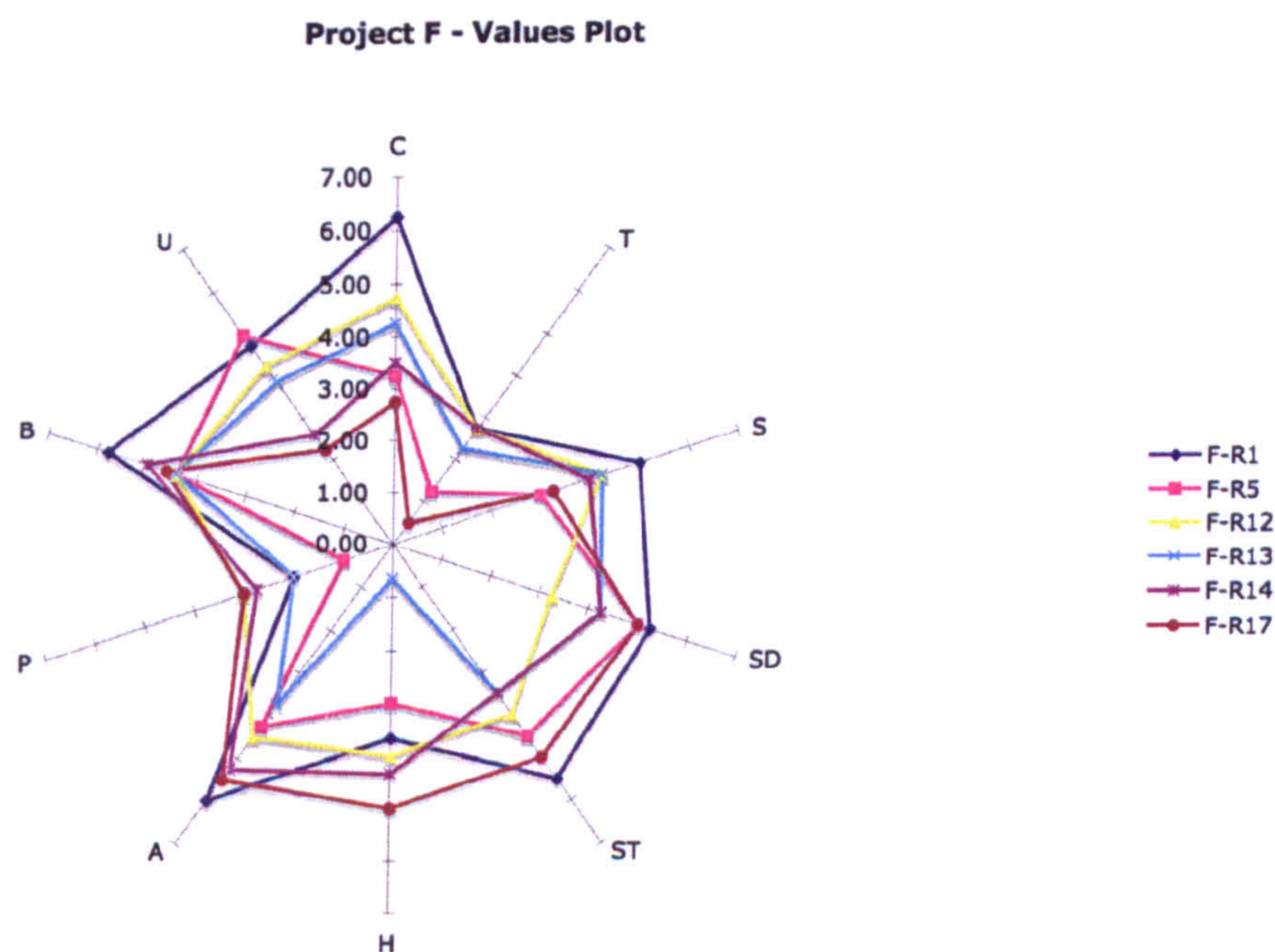


Figure D1.2.6(a): Project F – Respondent values orientation profiles for all SVS domains

The table below presents the data values obtained from SVS for each of the individual values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
5pu	3.3	1.3	3.0	5.0	4.5	3.0	4.3	1.0	4.4	5.0
13pu	4.3	2.3	4.3	4.3	3.5	0.7	3.8	2.0	4.4	3.9
14pu	3.5	2.8	4.0	4.3	3.5	4.3	5.3	2.8	5.0	2.6
1pr	6.3	2.8	5.0	5.3	5.5	3.7	6.0	2.0	5.8	4.8
12pr	4.8	2.8	4.3	3.3	4.0	4.0	4.5	3.0	4.4	4.3
17pr	2.8	0.5	3.3	5.0	5.0	5.0	5.5	3.0	4.6	2.3

Table D1.2.6(a): Respondent data values for all SVS domains

Project F reports tightly grouped regular profiles with variability in the magnitude of values domains. Values associated with the openness-to-change and self-transcendence dimensions are highly ranked. All respondents' benevolence and achievement values are highly ranked and tightly clustered. Security, tradition and conformance values are generally ranked lower, with the exception of R1, who balances conformance and tradition with change related values (reflecting a desire to refrain from actions likely to harm or upset others). The universalism values domain reports considerable variability: project leaders R1 and R5 ranks this domain high, while R12 and R13 regard the domain to be of medium importance, and R14 and R17 demote it to almost low importance.

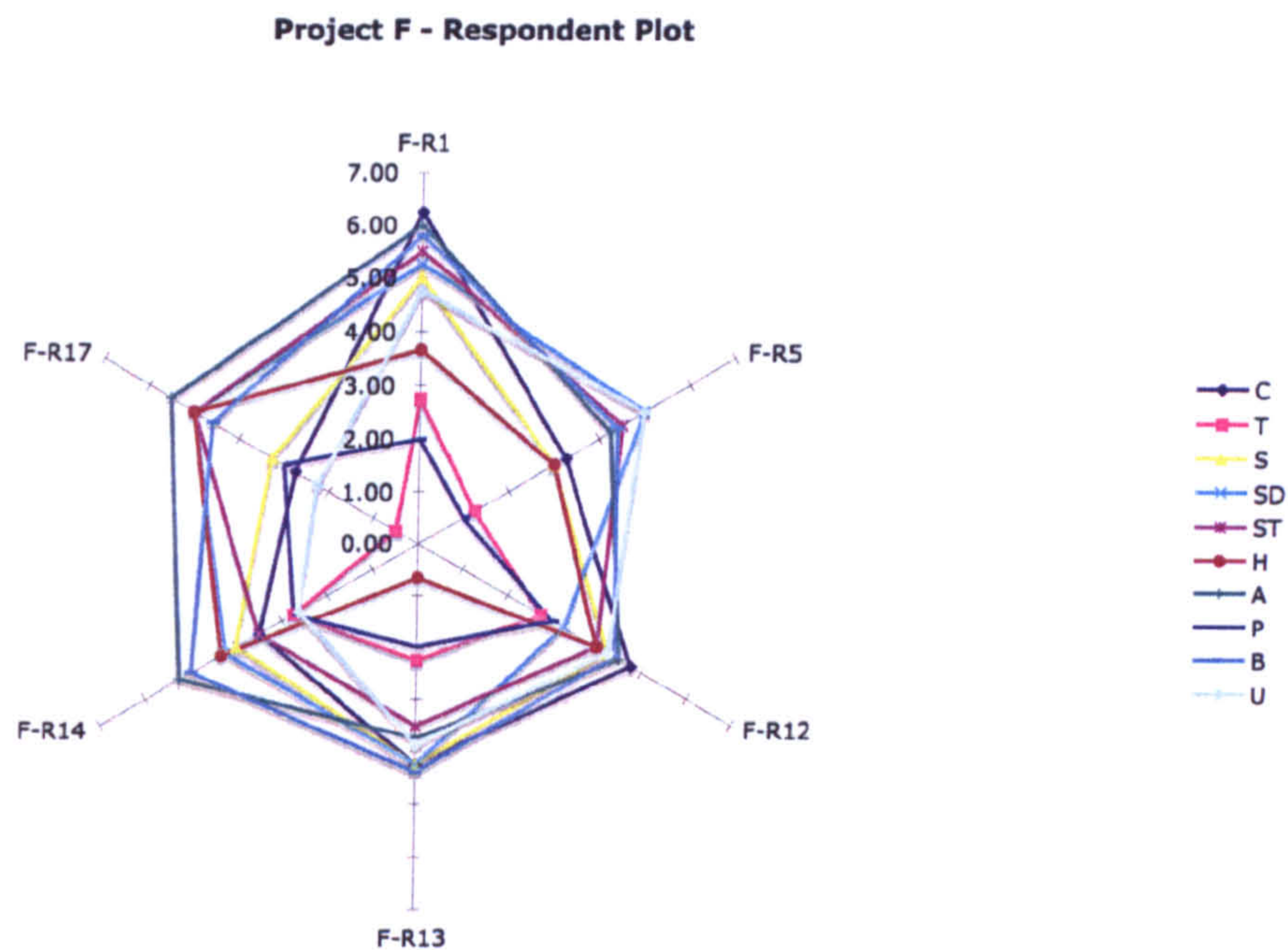


Figure D1.2.6(b): Project F – Individual values domain hierarchy for all respondents

Achievement values that reflect a demonstration of competence, capability, ambition and influence, together with benevolence values, are noted as important for all respondents, as seen in figure D1.2.6(b) above; power and tradition values are ranked as least important.

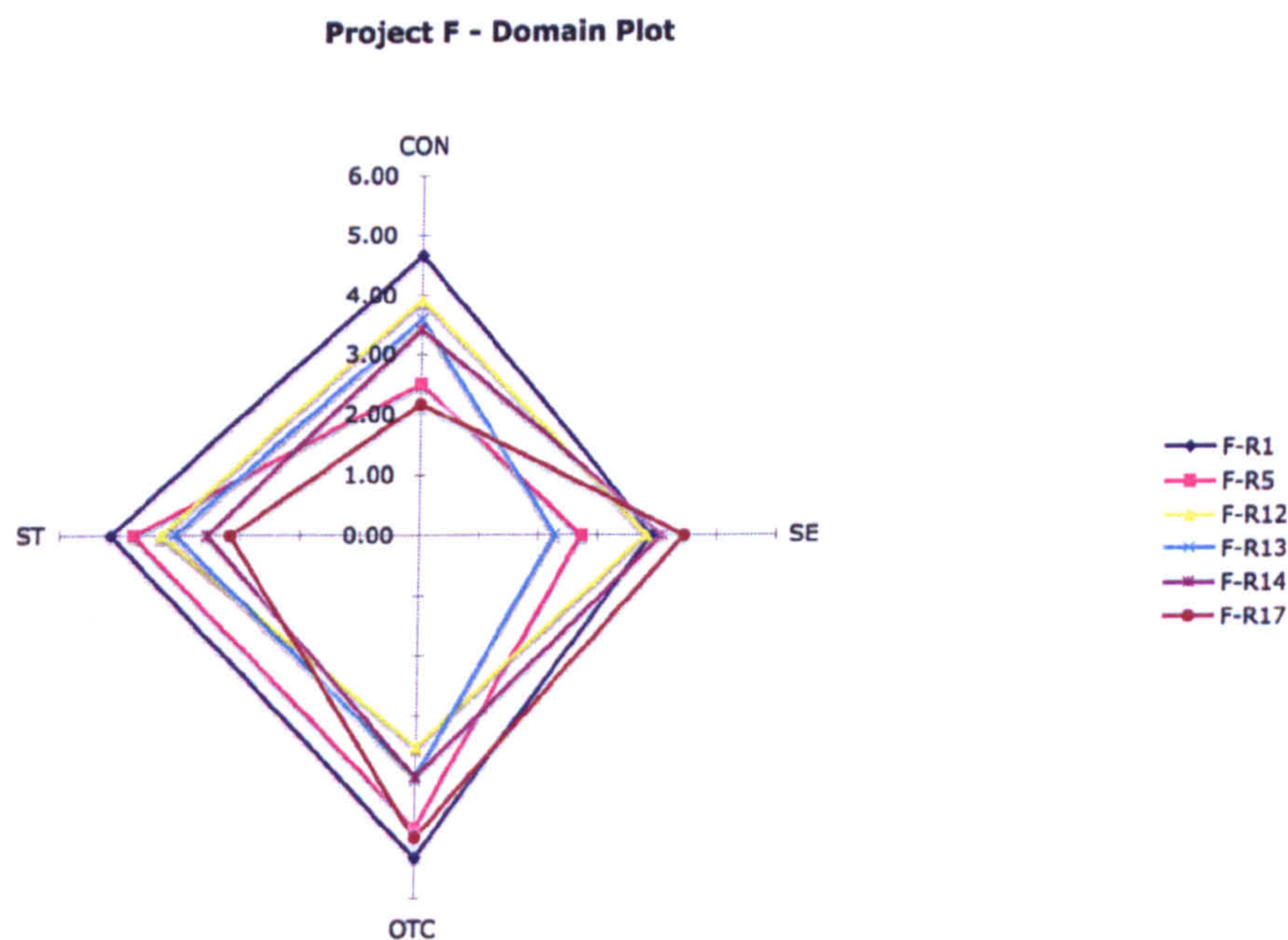


Figure D1.2.6(c): Project F – Respondent two-dimensional values domains

The table below presents the data values obtained from SVS for each of the two-dimensional values domains for each respondent. The data values within the table have been subjected to the formatting procedure detailed in section 4.3, using the following key.

0-2	2.1-4.5	4.6-7
Low	Medium	High

Respondent	Conservation	vs	Openness-to-change	Self-enhancement	vs	Self-transcendence
5pu	2.5		4.8	2.8		4.7
13pu	3.6		3.9	2.1		4.1
14pu	3.4		3.9	4.1		3.8
1pr	4.7		5.4	3.8		5.3
12pr	3.9		3.6	3.8		4.3
17pr	2.2		5.0	4.5		3.4

Table D1.2.6(b): Summated two-dimensional data values for each respondent

All respondent behaviour is highly influenced by openness-to-change values; R1, R5, R12 and R13 are also closely associated in terms of self-transcendence values. R14 and R17 tend towards self-enhancement rather than self-transcendent values, but recognise that there are tensions between pursuing one's own success and accepting others as equals and having concern for their welfare. There is limited variability between respondents in terms of conservation values; they are more influential for respondents R1, R12, R13 and R14, and less important to respondents R5 and R17.

In conclusion, the personnel in project F can be summarised as having a marginal tendency towards the openness-to-change and self-transcendence dimensions, particularly with regards to the project leaders R1 and R5. In table D1.2.6(b), the respondent profiles can be seen to cluster more tightly on the self-transcendence dimension, and this reflects the similarity of that values dimension within the group.

Individuals' values orientations have been established for public and private sector individuals at the values domain and summated two-dimensional level. The discussion now continues in section D1.3 with the findings associated with research question 1(ii) that is associated with the differences in values orientation between the public and private sectors.

D1.3 Differences in Public and Private Sector Values Orientations

The discussion that follows considers differences in values orientation between the public and private sectors. Table D1.3(a) below presents the mean, median and mode values for each values domain for the public and private sector respondents, obtained using the Schwartz Values Survey. The figures in parenthesis are the differential values of the private and public sectors presented in terms of the percentage variance between the two.

Sector	Conservation			Openness-to-change		Self-enhancement			Self-transcendence	
	Conformity	Tradition	Security	Self-direction	Stimulation	Hedonism	Achievement	Power	Benevolence	Universalism
Private										
Mean	4.0	2.4	3.6	4.3	4.8	4.0	4.6	2.8	4.4	3.6
Median	4.1	2.6	3.8	4.8	5.0	3.8	5.0	2.9	4.7	3.6
Mode	4.3	2.8	4.0	5.0	4.5	5.0	5.0	1.5	4.4	3.0
Public										
Mean	4.0 (0%)	2.3 (-4%)	3.9 (8%)	4.7 (9%)	4.8 (0%)	4.0 (0%)	5.0 (9%)	2.8 (0%)	4.8 (9%)	4.0 (11%)
Median	4.3 (5%)	2.3 (-10%)	4.0 (5%)	4.5 (-6%)	4.5 (-10%)	4.3 (13%)	5.0 (0%)	2.8 (-3.5%)	5.0 (6.5%)	3.9 (8%)
Mode	4.3 (0%)	1.5 (-46%)	3.0 (-25%)	4.3 (-14%)	4.5 (0%)	3.0 (-40%)	6.0 (20%)	2.8 (86%)	5.0 (13.5%)	3.0 (0%)

Table D1.3(a): Data values for all domains summarised for all public and private sector respondents

The implications of using the mean, median or mode were considered before concluding that it was appropriate to use the mode value, as it represented the highest frequency rating of the respondents. It would also have been possible to present the chart below using the mean or median values; however, after consideration, these were discounted, because: (i) the mean would significantly remove differences between the sectors, and (ii) the median would be too strongly influenced by high and low respondent data values.

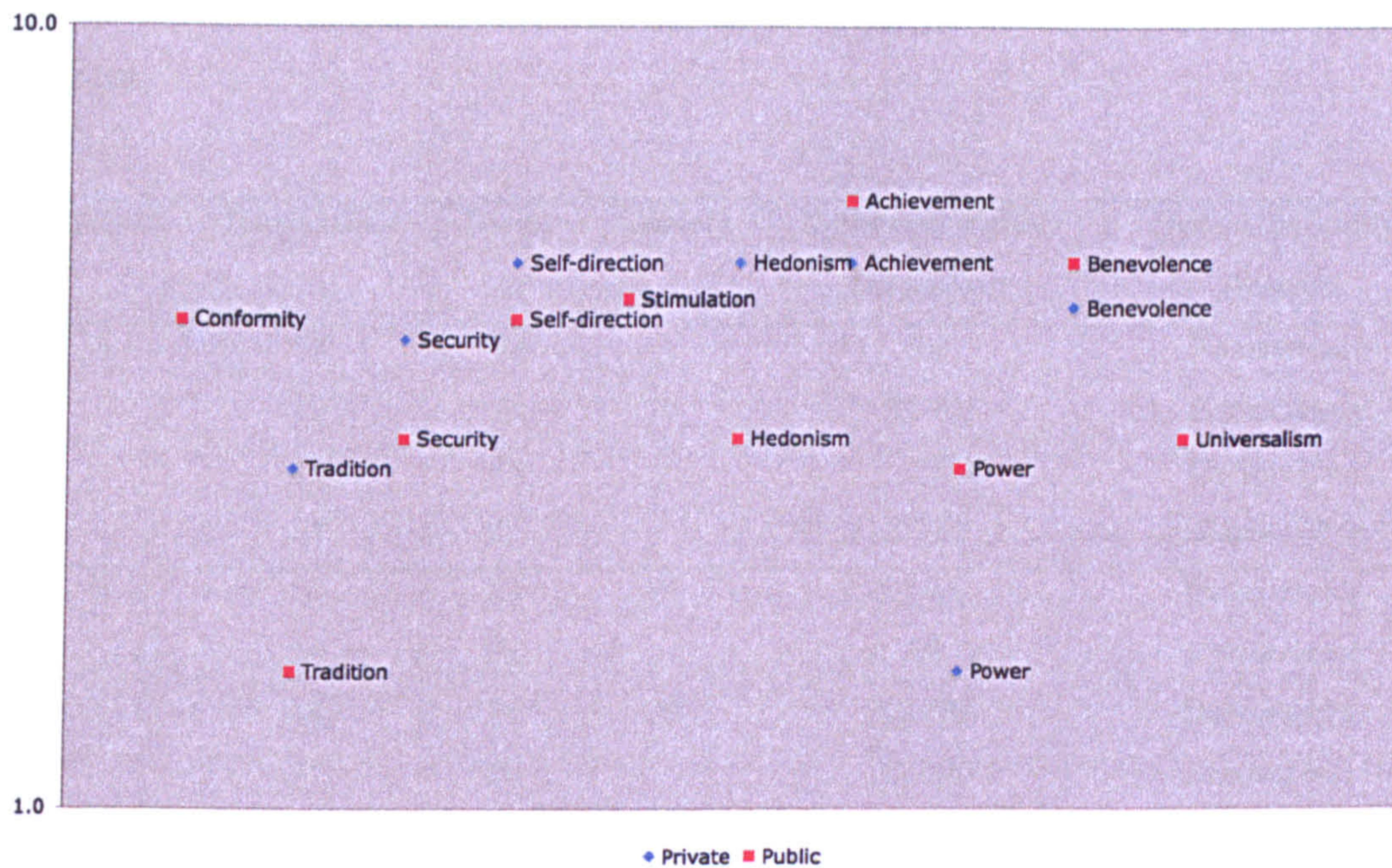


Figure D1.3(a): Domain values summarised for all respondents by sector

A brief discussion of the differences between the ratings of the values domains for the sectors now follows.

The public and private sector respondents give the same ratings to conformity and universalism values: these values can support both individualist and collectivist values orientations and reflect a similar approach in both sectors to restraint of action so as not to harm others or violate expected social norms. Tradition values are rated lowest for the public sector respondents, and this is associated with acceptance of existing customs and ideas. Security values are rated higher for both sectors; however, the public sector respondents rate these lower than the private sector, possibly reflecting the loss of security associated with project and environment change. Independent thought and action associated with self-direction values are rated higher for the private sector respondents, which may be reflective of the expectation of greater work freedoms. Stimulation values are of equal importance to both sectors. The private sector respondents rate hedonism values considerably higher, while the public sector respondents give a higher rating to achievement values, which are associated with personal success through demonstration of competence. Both sectors rank power values low in terms of overall influence, while the welfare of those whom one is in frequent contact with was seen to be important to both sectors, and ranked higher for the public sector. Both sectors considered welfare for others in general to

have the same influence; this was expressed in terms of their rating of universalism values.

Project	Respondent	Sector	Leaders	Dominant Values	Dominant Values
				Dimension	Domain
A	28	Pu	Y	ST	Benevolence
	30	Pr	Y	ST-SE	Benevolence
	29	<i>Pr</i>		<i>ST</i>	<i>Universalism</i>
	39	<i>Pr</i>		<i>ST-SE</i>	<i>Benevolence</i>
B	27	Pu	Y	ST-SE	Benevolence
	31	<i>Pu</i>		<i>SE</i>	<i>Benevolence</i>
	48	Pr	Y	ST-SE	Universalism
	25	<i>Pr</i>		<i>ST-SE</i>	<i>Benevolence</i>
	32	<i>Pr</i>		<i>ST-SE</i>	<i>Benevolence</i>
C	46	Pu	Y	ST	Benevolence
	35	<i>Pu</i>		<i>ST</i>	<i>Benevolence</i>
	36	<i>Pu</i>		<i>SE</i>	<i>Benevolence</i>
	45	Pr	Y	SE/ST	Benevolence
	37	<i>Pr</i>		<i>ST</i>	<i>Benevolence</i>
D	3	Pu	Y	SE	Benevolence
	11	<i>Pu</i>		<i>SE</i>	<i>Benevolence</i>
	4	Pr	Y	SE	Universalism
	7	<i>Pr</i>		<i>ST</i>	<i>Benevolence</i>
	8	<i>Pr</i>		<i>ST</i>	<i>Benevolence</i>
E	34	Pu	Y	ST	Benevolence
	40	<i>Pu</i>		<i>ST</i>	<i>Benevolence</i>
	41	Pr	Y	ST	Benevolence
	47	<i>Pr</i>		<i>ST-SE</i>	<i>Benevolence</i>
F	5	Pu	Y	ST	Universalism
	13	<i>Pu</i>		<i>ST</i>	<i>Benevolence</i>
	14	<i>Pu</i>		<i>ST</i>	<i>Benevolence</i>
	1	Pr	Y	ST	Benevolence
	12	<i>Pr</i>		<i>ST-SE</i>	<i>Universalism</i>
	17	<i>Pr</i>		<i>SE</i>	<i>Benevolence</i>
Notes					
ST = self-transcendence; SE = self-enhancement; OTC = openness-to-change; Con = conservation;					
Pu = public sector; Pr = private sector					
Project leaders are shown in normal font; project sub-ordinates are shown in italics					

Table D1.3(b): Two-dimensional values domains for all respondents

Table D1.3(b) above shows a high incidence of self-transcendence values in combination with benevolence values orientation among the project leaders from both public and private sectors. This suggests that the welfare of others is an important relationship factor for the leaders from both sectors. Of the twenty-nine respondents, twenty-three tend towards self-transcendence, or balance self-transcendence (collectivist) and self-enhancement (individualist) tendencies. Only six respondents – three of whom are from project D, and have had extensive involvement with the private sector – tend marginally towards self-enhancement and individualist preferences; however, the highest rated values domains and behavioural cooperation influencers are benevolence or universalism.

Both sectors rate benevolence values higher than power values; the public sector's rating of this value is 13% higher than the private sector's. Schwartz (1996) has suggested that the relationship between these values is indicative of positive cooperative behaviour between individuals. While power values might be expected to be closely allied with achievement values, this is not found. Both sectors rate power values as low, and while the relationship between power and achievement values is maintained between the public and private sectors, achievement values are rated higher for public sector individuals. The substantial growth of the reporting culture and performance measurement within the NHS may be partially responsible for the higher rating of achievement values by the public sector group – although a detailed investigation and discussion of this possibility is beyond the scope of this study.

Higher self-direction, stimulation and hedonism values orientations create a negative influence on cooperative behaviour. These values were found to be either lower or the same in the public sector group, and this is considered to be reflective of the greater collectivist orientation of the public sector.

Hypothesis 1(i) stated that the private sector would accentuate greater power and achievement values, while the public sector will accentuate greater benevolence, conformity and universalism values.

The findings suggest greater public and private sector homogeneity than anticipated. The public sector rates benevolence values higher than the private sector, as expected, but rates conformity and universalism values the same. Power values are rated lowest in both sectors, and achievement values are rated highest in both sectors; the

differential between power and achievement values are found to be similar for both sectors. It is noted from table D1.3(a) that the public sector mode value for achievement values is 20% greater for the public sector; however, this is negated when the median value is considered. It is noted from a subsequent review of the data set that this position is highly sensitive to switching when the outlier values are removed suggests that the variation between the public and private sectors is less pronounced. Hypothesis (i) found partial support.

The discussion now progresses to consider hypothesis (ii) that the public sector respondents would be oriented towards self-transcendence values that are reflective of a collective tendency, and that private sector respondents would be orientated towards self-enhancement values and an individualist tendency.

Table D1.3(c) below presents the mean, median and mode values for all public and private sector respondents obtained using the Schwartz Values Survey. The figures in parenthesis are the differential values between the private and public sectors; the variance from the private sector value is shown as a percentage.

	Conservation	Openness-to-change	Self-enhancement	Self-transcendence
Private				
Mean	3.3	4.6	3.8	4.0
Median	3.3	4.8	3.8	4.4
Mode	3.0	5.0	5.0	4.4
Public				
Mean	3.4 (3%)	4.8 (4.3%)	3.9 (2.6%)	4.4 (10%)
Median	3.5 (-6%)	4.5 (-6%)	4.3 (13%)	4.5 (2.3%)
Mode	3.0 (0%)	4.5 (-10%)	3.0 (-40%)	5.0 (14%)

Table D1.3(c): Data values for two-dimensions for all public and private sector respondents

It is noted that the conservation dimension is rated lowest for both sectors: this may reflect an increasing homogeneity between the public and private sectors as a consequence of changing health policy. The openness-to-change dimension is rated marginally lower for the public sector; the self-enhancement dimension is rated highest for the private sector, and the self-transcendence dimension is rated highest for the public sector. Using the mode values for each dimension from the table above, figure D1.3(b) below has been produced to show the values relationships between the public and private sectors.

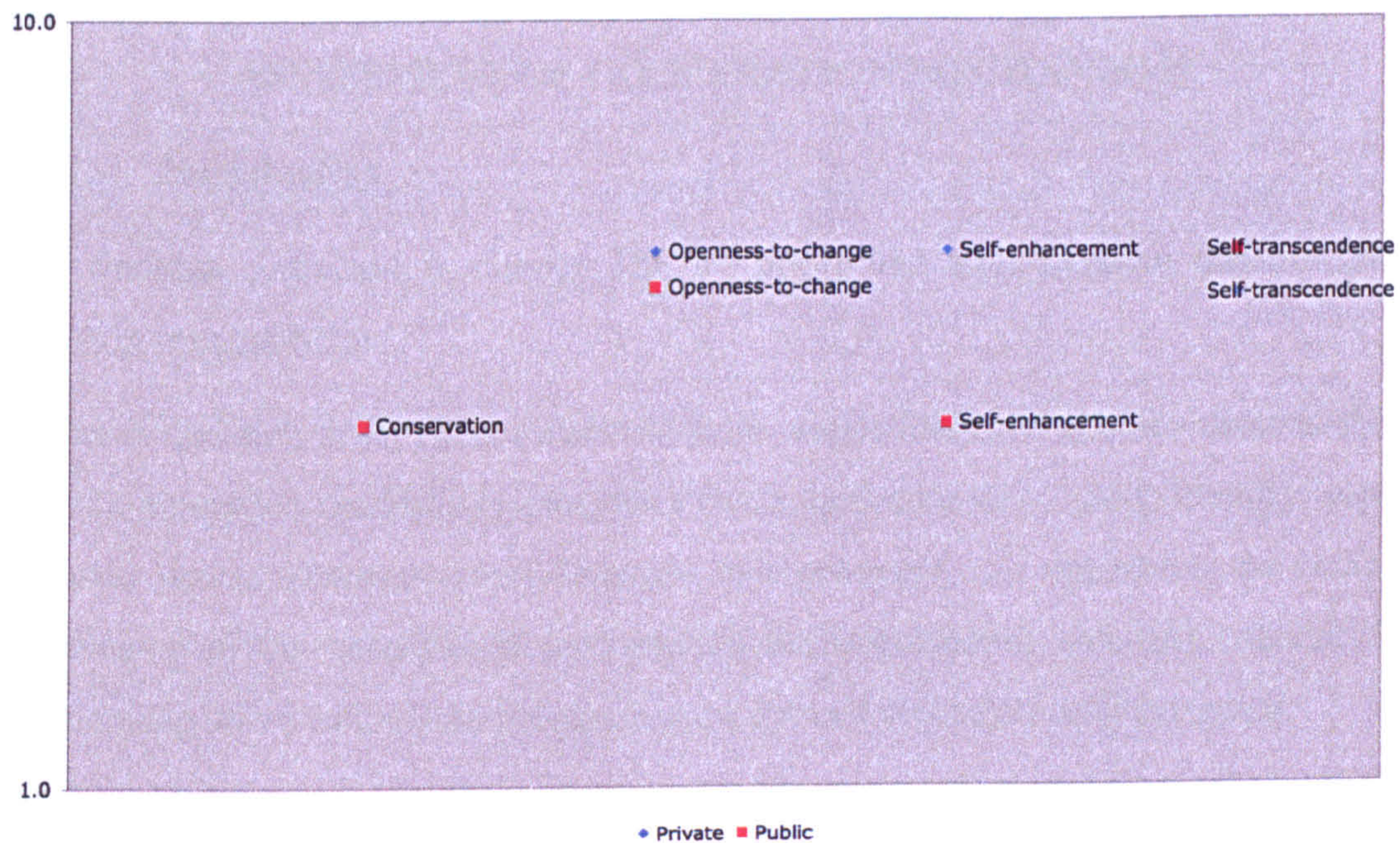


Figure D1.3(b): Two-dimensional values orientation for public and private sector respondents

It is found that when respondents are considered by sector, the public sector shows a greater propensity towards self-transcendence values (14%), while the private sector displays a greater propensity towards self-enhancement (40%), and this validates hypothesis (ii).

The discussion of the findings now proceeds to consider research question two in chapter D2.

CHAPTER D2: PRESENTATION OF RESEARCH FINDINGS

ASSESSMENT OF COOPERATION MECHANISMS

D2.1 Introduction

The findings contained in chapter D2 are concerned with research question two, which is restated below.

Research question 2: (i) elicit constructs from respondents and allocate these to the *a priori* cooperation mechanism categories (trust, accountability, group identity, super-ordinate goals, communication channels and rewards); (ii) determine the relative importance of the cooperation mechanisms for respondents, and (iii) examine the relationship between the achievement values domain and super-ordinate goals.

In respect of part (iii), it is proposed that individuals oriented towards self-enhancement and particularly achievement values will be more concerned with self-promotional goals, and individuals with self-transcendence oriented values will be more oriented towards collective goals.

The discussion below is structured to respond to each part of the research question.

D2.2 Construct Allocation to Cooperation Mechanism Categories

The following discussion relates to research question 2 (i). Multiple grid analysis enables similarities between the grid interviews with different respondents to be considered. In order to undertake this task, a content analysis procedure is carried out. The constructs from the twenty-nine repertory grids provide the data to undertake a Honey content analysis, following the procedure outlined by Jankowicz (2004: 170-177); this is an important step in the overall process, as it is necessary to consider how each respondent applies their elicited constructs, in their own words, to the day-to-day project situations that are presented as vignettes. After the completion of the Honey content analysis, it is possible to associate the elicited and supplied constructs to *a priori* behavioural mechanism categories.

Each construct is labelled with two indices that reflect the extent that the ratings of any one particular construct match the ratings of the overall construct. The procedure requires an overall summarising construct to be supplied to the respondent at the end of the construct elicitation process; the supplied construct is: 'is this situation or environment more or less conducive to cooperative behaviour'.

The two indices are labelled with the following information: (i) the similarity score, as a percentage, and (ii) a ranking of high, intermediate or low (H-I-L), to reflect the fact that people have different ranges of percentage similarity scores on any topic (i.e. they have different personal metrics). This procedure deals with the relativity of each person's percentage similarity scores, such that each construct can be classified as high, intermediate or low; this is what Honey (Jankowicz, 2004: 171) calls the top-and-tail data for a particular individual. To undertake the procedure, it is necessary to: (i) allocate core categories, as described in more detail below; (ii) obtain ratings with regards to the supplied overall construct; (iii) compute sums of differences for each construct against the overall construct, checking for reversals; (iv) convert the sums of differences into percentage similarity scores; (v) allocate the percentage similarity scores to either the high, intermediate or low categories for each individual; (vi) identify and allocate constructs to the *a priori* behavioural mechanism categories; and (vii) establish the reliability of the category system, as discussed below in section D2.2.1.

The construct core categorisation process was completed in discrete stages. First of all, the constructs were allocated to the behavioural cooperation mechanism by the interviewer; then an independent third party undertook the same allocation process; finally, a reconciliation procedure was conducted, in which the constructs were allocated to the *a priori* categories. This resulted in excess of 91% (100% being a total match) of all constructs being allocated to the *a priori* behavioural mechanism categories identified within the literature review. A summary was completed of the constructs allocated to each behavioural mechanism category after reliability testing, and this is shown below in table D2.2(a). The table states the association between: (i) the *a priori* behavioural mechanism category label; (ii) a category summary that gives an overall description of the constructs allocated to the category, and (iii) the total number of constructs and the percentage allocated to each category. The constructs allocated to each category are contained in appendix F.

Summary of category system

Category Label	Category Summary – Bipolar constructs		Sum	Sum %
Trust	An environment of cooperation evidenced by teams with shared purpose and common goals. Relationships have progressed to partnership, such that openness, honesty and transparency serve to reduce disharmony, <i>versus</i> barriers, brinkmanship and conflict. Relationships still operate on a 'them and us' basis with limited integration or understanding resulting in competition at an individual and team level.	For further details see Appendix G	85	27.68%
Accountability	An environment where there is vision and shared purpose. Problems are owned and tackled collectively in order to get the job done. There is clear direction and there are processes in place to support issue resolution, <i>versus</i> an environment where working together is not seen as an important step to recognising and resolving problems. Issues are not tackled at an individual or team level as limited or no structure exists to facilitate resolution. All too often avoidance and blame are evident strategies.		75	24.42%
In/Out Group Identity	An environment typified by working together in teams. Boundaries are not evident and differences between each other are recognized. A collaborative approach without conflict has resulted in a partnership, <i>versus</i> dysfunction and silo working, with individuals being excluded or excluding themselves to create an environment of isolation and separation with defined boundaries in place.		49	15.96%
Communication	An environment where open and active communication in teams supports the progress and delivery of objectives, <i>versus</i> miscommunication that sets out to hinder progress, and facilitate communication voids and misunderstanding at individual and team levels.		44	14.33%

Superordinate Goals	An environment where goals and targets are clearly defined, issues are recognised and processes are put in place to resolve problems within a relevant timeline, <i>versus</i> an environment where there is a conflict between the individual and the organization and no clear direction over any time horizon. There is no sense of urgency in dealing with issues and a lack of process to bring about a successful resolution.		43	14%
Reward/Incentive	A commercial environment <i>versus</i> a focus on wider goal delivery.		2	0.65%
Miscellaneous			9	2.93%
			307	100%

Table D2.2(a): Summary of constructs allocated to the behavioural mechanism categories

Appendix G2 contains the highly ranked constructs by respondent; a summary of the indicators noted as important factors by respondents in relation to the *a priori* behavioural mechanism categories is provided in table D2.2 (b) below.

Category	Indicator
Trust	Maturity of relationship Common goals Working together Joint problem solving Partnership working
Accountability	Tackling issues Integrated working Performance of individual and team
In/out Group	Partnership in preference to 'them and us' Boundary removal Focused teams Clarity and responsibility
Communications	Openness Active communications channels
Goals	Objective setting Common objectives Issue recognition End results Timeline Outcome focus
Rewards	Commercial issues

Table D2.2(b): Summary of indicators considered as important factors by respondents

D2.2.1 Assessment of reliability

A reliability of 93% was noted in the section above; the procedure used to calculate this reliability, following Fransella et al. (2004) and Jankowicz (2004: 150-154), using the percentage of similarity of results given by the interviewer and an independent third party, is now discussed. The interviewer and a third party completed the allocation of constructs independently, using the *a priori* behavioural mechanism categories from the literature. As the *a priori* categories were given to both the interviewer and the independent third party, the steps requiring the categories to be identified, constructs to be allocated, and their meaning to be negotiated were not required. A summary of constructs is given in the table below; the reported percentage agreement increased from 67% to 91%, following discussion and reallocation. It was not necessary to undertake a statistical assessment of reliability using Cohen's Kappa (Cohen, 1968), as the categories for the elicited constructs were the same for both the interviewer and the independent third party.

		Third Party	1.Trust	2.Accountability	3.Communication	4.In/out Group	5.Goals	6.Rewards	7.Misc.	Total
Independent	Interviewer									
	1.Trust		62	7	1	3	6	2	4	85
	2.Accountability		9	46	3	7	3	3	4	75
	3.Communication		3	7	32				2	44
	4.In/out Group		2	4		42			1	49
	5.Goals		1	6		2	16	10	8	43
	6.Rewards							2		2
	7.Misc.		1			2	1	1	4	9
	Total		78	70	36	56	26	18	23	307
Collaboration	Third Party									
	Interviewer									
	1.Trust		78		2	3	2			85
	2.Accountability		3	58	8	5	1			75
	3.Communication				44					44
	4.In/out Group				1	48				49
	5.Goals						43			43
	6.Rewards							2		2
	Total		81	62	55	56	47	2	4	307

Table D2.2.1: Construct allocation percentage agreement between interviewer and third party

D2.3 Relative Importance of Cooperation Mechanisms

The following discussion relates to research question 2 (ii). The relative importance of individuals' cooperation mechanisms was assessed, using differential construct allocation analysis for each *a priori* behavioural cooperation mechanism category; a summary is contained in table D2.3 below. This was undertaken to enable the construct allocation profiles for each respondent to be considered for similarities and

differences. In cases where the allocation percentage did not align with the overall construct allocation, the higher percentage values are highlighted in green and the lower percentage values are highlighted in red. The respondents are denoted 'pu' for the public sector and 'pr' for the private sector.

To assist the reader a description of the information contained in the table below is now provided.

The table summarises the percentage construct allocation per *a priori* category for all respondents in projects A to F. The *a priori* categories for each project are listed to the left hand side of the table in descending order, starting with trust, which accounted for 27.7% of all constructs allocated by all respondents. This is followed by accountability, groups, communications, goals, rewards and a final category, which accounts for less than 3% of all constructs allocated and is labelled miscellaneous. The first column of the table lists the construct allocation percentage for each category; this is followed (from left to right) by the constructs allocated by each public and private sector respondent to each category. The total construct allocation percentage for each respondent adds up to 100%, and round numbers are used where required.

Project Reference A						
	<i>All (%)</i>	Respondent				
		28pu	29pr	30pr	39pr	
Trust	27.7	46.2	27.3	27.3	23.1	
Accountability	24.4	0.0	0.0	9.1	23.1	
In/out Group	16.0	31.0	9.1	36.4	15.4	
Communications	14.3	7.7	36.4	27.3	23.1	
Goals	14.0	7.7	27.3	0	15.4	
Rewards	0.65	7.7	0	0	0	
Misc.	2.93	0	0	0	0	
Project Reference B						
	<i>All (%)</i>	Respondent				
		27pu	48pr	31pu	25pr	
Trust	27.7	36.5	10.0	33.3	23.0	18.2
Accountability	24.4	18.2	20.0	16.7	38.5	36.4
In/out Group	16.0	9.1	20.0	0	15.4	27.3
Communications	14.3	9.1	30.0	0	7.7	9.1
Goals	14.0	18.2	10.0	50.0	15.4	9.1
Rewards	0.65	0	0	0	0	0
Misc.	2.93	9.1	10	0	0	0

Project Reference C							
	<i>All (%)</i>	Respondent					
		46pu	45pr	35pu	36pu	37pr	
Trust	27.7	37.5	30.0	36.4	50.0	33.3	
Accountability	24.4	25.0	20.0	0	0	11.1	
In/out Group	16.0	12.5	30.0	9.1	8.3	22.2	
Communications	14.3	12.5	0	45.5	16.7	22.2	
Goals	14.0	12.5	20	9.1	16.7	0	
Rewards	0.65	0	0	0	0	0	
Misc.	2.93	0	0	0	8.3	11.1	
Project Reference D							
	<i>All (%)</i>	Respondent					
		3pu	4pr	11pu	7pr	8pr	
Trust	27.7	30.0	16.7	20.0	15.4	7.7	
Accountability	24.4	10	8.3	30.0	23.1	46.0	
In/out Group	16.0	10.0	25.0	10.0	23.1	23.1	
Communications	14.3	30.0	41.7	20.0	23.1	7.7	
Goals	14.0	20.0	8.3	20.0	15.4	15.4	
Rewards	0.65	0	0	0	0	0	
Misc.	2.93	0	0	0	0	7.7	
Project Reference E							
	<i>All (%)</i>	Respondent					
		34pu	41pr	40pu	47pr		
Trust	27.7	27.3	27.3	16.7	20.0		
Accountability	24.4	18.2	36.4	0.0	40.0		
In/out Group	16.0	36.4	9.1	25.0	10.0		
Communications	14.3	9.1	9.1	41.7	10.0		
Goals	14.0	9.1	18.2	16.7	20.0		
Rewards	0.65	0	0	0	0.0		
Misc.	2.93	0	0	0	0.0		
Project Reference F							
	<i>All (%)</i>	Respondent					
		5pu	1pr	13pu	14pu	12pr	17pr
Trust	27.7	27.3	20.0	33.0	27.3	14.3	37.5
Accountability	24.4	27.3	30.0	33.0	9.00	43.0	37.5
In/out Group	16.0	18.2	10.0	11.0	27.3	14.3	0
Communications	14.3	9.0	0.0	11.0	18.2	28.5	0
Goals	14.0	18.2	30.0	11.0	18.2	0	25.0
Rewards	0.65	0	10.0	0	0	0	0
Misc.	2.93	0	0	0	0	0	0

Tabulated figures are: (i) the percentage of constructs allocated by each respondent to each category; (ii) pu = public sector leader, pr = private sector leader, and (iii) the interviewer's construct allocation

Table D2.3: Summary of differential analysis presented by project and respondent

D2.3.1 Differential analysis discussion

The differential analysis has been completed at an individual level on a project-by-project basis, and the similarities and differences between respondents from the public and private sectors have been discussed.

The differential analysis is concerned with the similarities and differences in the construct allocation profiles associated with the *a priori* behavioural mechanism categories. It considers the extremes of construct percentage allocations and does not report allocation percentages that are in alignment with the overall construct allocations presented in table D2.3. A schedule of constructs allocated to each category is contained in appendix F. A construct allocation profile for each respondent is undertaken as part of the analysis of each project; this is presented in a chart that displays the percentage of constructs allocated to each *a priori* behavioural mechanism category. In the case of each chart, a different coloured line is used for each respondent, and a table follows that shows the respondents' category allocation percentages. The legend located to the right of each chart provides the respondent reference that corresponds with the allocation table. The discussion now moves to consider each project.

D2.3.1.1 Analysis of project A

As trust and accountability accounted for more than 50% of all constructs allocated, project A was characterised – as shown in figure D2.3.1.1 – as a high trust, low accountability environment. Trust is recognised as a key antecedent to cooperation, and is related to issues such as an individual's role performance, competence, reliability and track record.

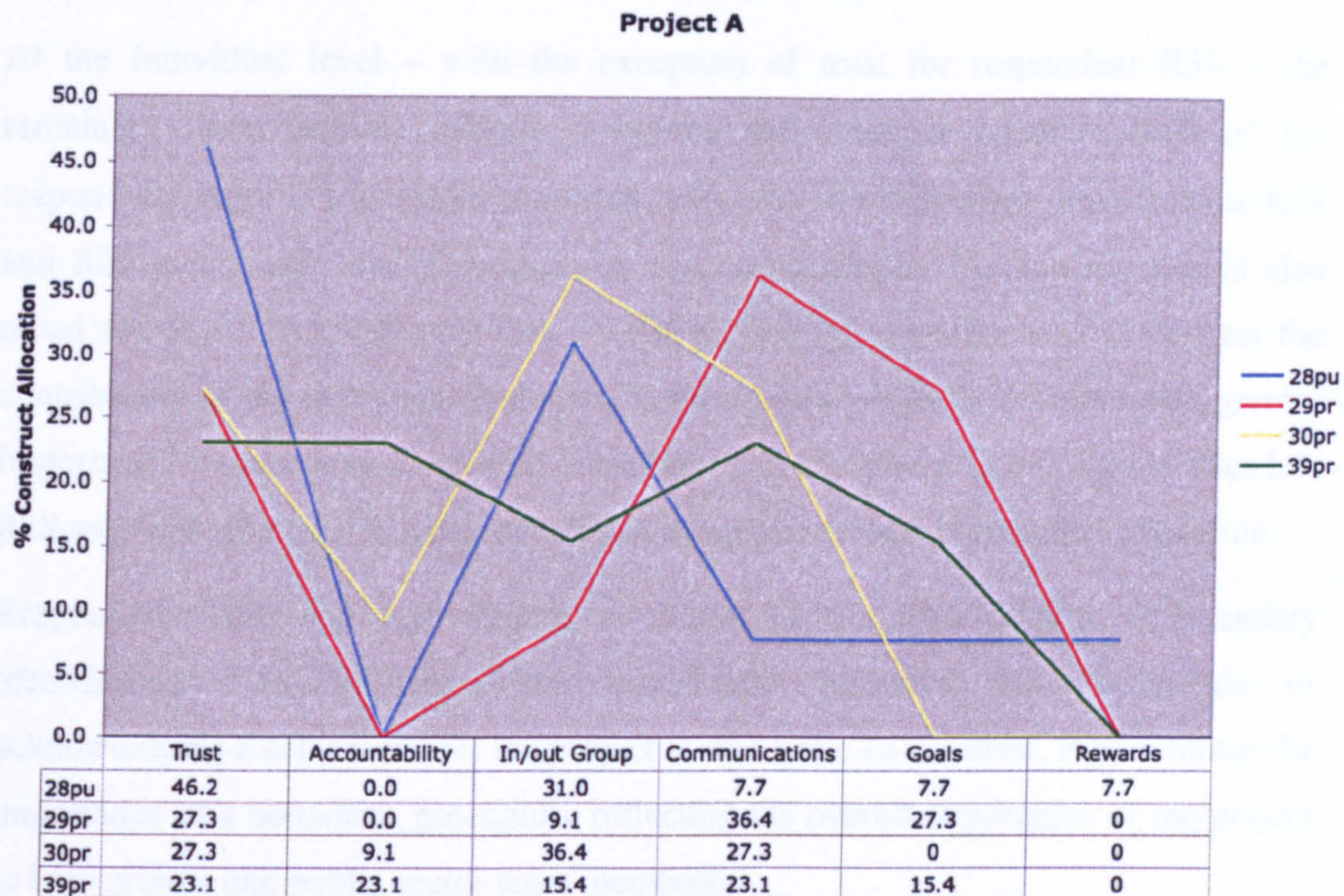


Figure D2.3.1.1: Project A respondent construct allocation by category

These attributes indicate professionalism and the likelihood that the group will abide by their contractual commitments and treat others fairly (Chen et al. 1998). The development of a relationship – where emotional and social bonds are evident – extends goodwill and reciprocal action by demonstrating care and concern for others rather than simple self-interest.

Respondents R28 and R30 appear to be highly oriented towards group membership as a key behavioural influencer; R29, by contrast, appears to be more focused on collective membership at a project level.

The establishment of a superordinate goal – whether alignment or interdependence – is not evident, and this is something that is noted as being an important factor in inducing cooperative behaviour between individuals with potentially conflicting interests. This may indicate that this project is at an early stage of development: a clear and mutual understanding of each other's goals is not yet in evidence, and inter-relationships are not yet fully understood. Equally, equity or equality based reward

structures are not evident as a core cooperation mechanism for anyone in the group. Again, this may be reflective of a project at an early stage.

At the individual level – with the exception of trust for respondent R39 – the remaining three profiles indicate a number of common features; each of the respondents regards trust as an important cooperation mechanism. Respondents R28 and R29 place very low importance on the accountability mechanism; this is also noted for R30. This indicates that a relative lack of importance is placed on the contribution of the individual at this early point in the project's development; greater importance is placed on the overall contribution of the group, and the project leaders R28 and R30 are noted to have twice the average score for this construct allocation.

Respondents R28 and R30 display a similar profile with regards to boundary identification and influence; this potentially indicates the importance of acknowledging a schism within the project at that time. By contrast, R29 demotes the importance of a boundary, potentially reflecting the overall importance of the project to both private and public sector team members.

The profile of the project changes with regards to communications and goals. Closer communication channel association is evident for respondents R29 and R39, who are members of the private sector group, and for the project leaders R28 and R30. Respondent R29 places high importance on the establishment of a super-ordinate goal; other respondents do not value this to the same extent, and this is especially true of R28 and R30, who demote this mechanism to less than 50% of the overall construct allocation for all respondents.

Overall, project A is characterised by high trust and low accountability for all respondents. Project leaders R28 and R30 allocate more than twice the average construct allocation to group membership; this potentially reflects the importance of close working within the project, as opposed to isolating the contribution of individuals. The overall environment is seen to be highly important to R29, who displays a profile high in trust and group construct allocation. All respondents regard having rewards as a behavioural influencer as low in importance. Communication mechanisms are noted as important to the private sector group, R28, R29 and R39.

D2.3.1.2 Analysis of project B

In figure D2.3.1.2 below, project B respondent profiles are found to closely align, with the exception of respondent R31, whose profile is considerably oriented towards the trust and goal categories. There are two trust behavioural cooperative mechanism clusters: R27 and R31, and R25, R32 and R48. The first cluster places slightly higher importance on trust as a promoter of cooperative behaviour than the second, but this changes marginally when individual accountability is considered. R48, R27 and R31 form a close grouping in which accountability is reduced to less than the respondent total construct allocation percentage. A second cluster, comprising R25 and R32, recognises shared and collective working as more important.

R25, R27 and R32 are similar in terms of group boundary, communications, goal importance and reward structures. R48 has affiliations with this cluster, except that he or she places a higher degree of importance on communication channels than the other respondents.

In common with project A, all respondents in project B place rewards as a cooperation mechanism lowest. In project B, the importance of establishing a super-ordinate goal, or understanding each other's goals, is found to be in line with the overall construct allocation profile, with the exception of R31, who considers this mechanism to be highly important.

The respondents are divided in terms of how they rate the importance of accountability, individual recognition and closer working. The first grouping, which includes R32 and R48, places higher importance on closer working than the overall respondent allocation profile. Whereas the second grouping, which includes R25, R27 and R31, places less importance on this mechanism, and are more accepting of silo working and leaving issues to be resolved by the individual.

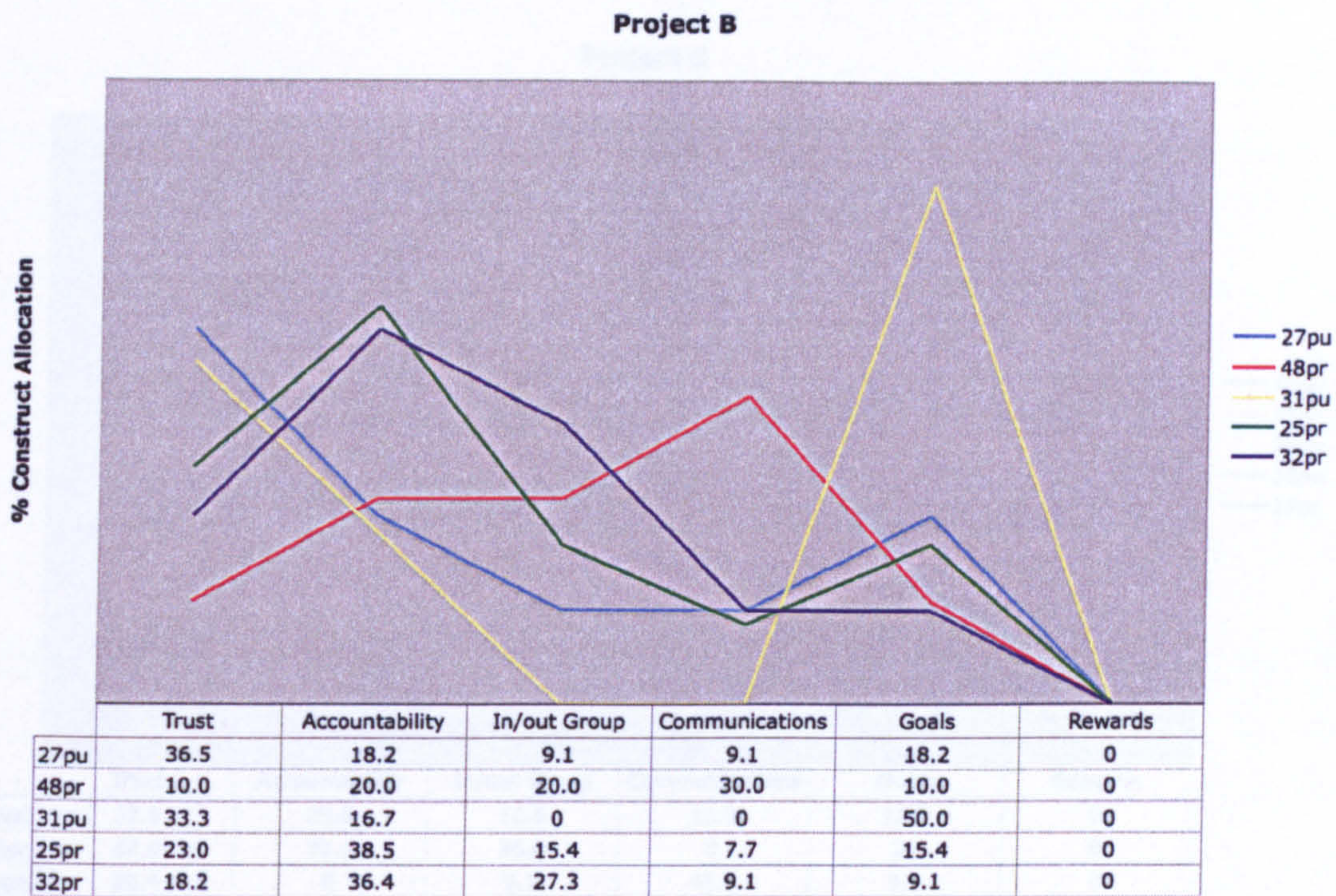


Figure D2.3.1.2: Project B respondent construct allocation by category

Overall, project B is characterised by two accountability clusters: (i) the project leaders R27 and R48, and (ii) a private sector grouping, comprising R25 and R32. R31 accentuates trust and goal categories, while aligning with the project leaders in terms of the influence provided by the accountability category.

D2.3.1.3 Analysis of project C

Project C respondent construct allocation profiles are presented below in figure D2.3.1.3; these characterise the project as a high trust environment that is coupled with a low focus on rewards. All respondents place trust considerably higher than the overall construct allocation percentage; a grouping that includes R36, R35 and R46 place it marginally higher in importance than a second grouping comprising respondents R37 and R45. The respondents vary in terms of the importance they place on accountability, recognition of the group boundary and communications mechanisms.

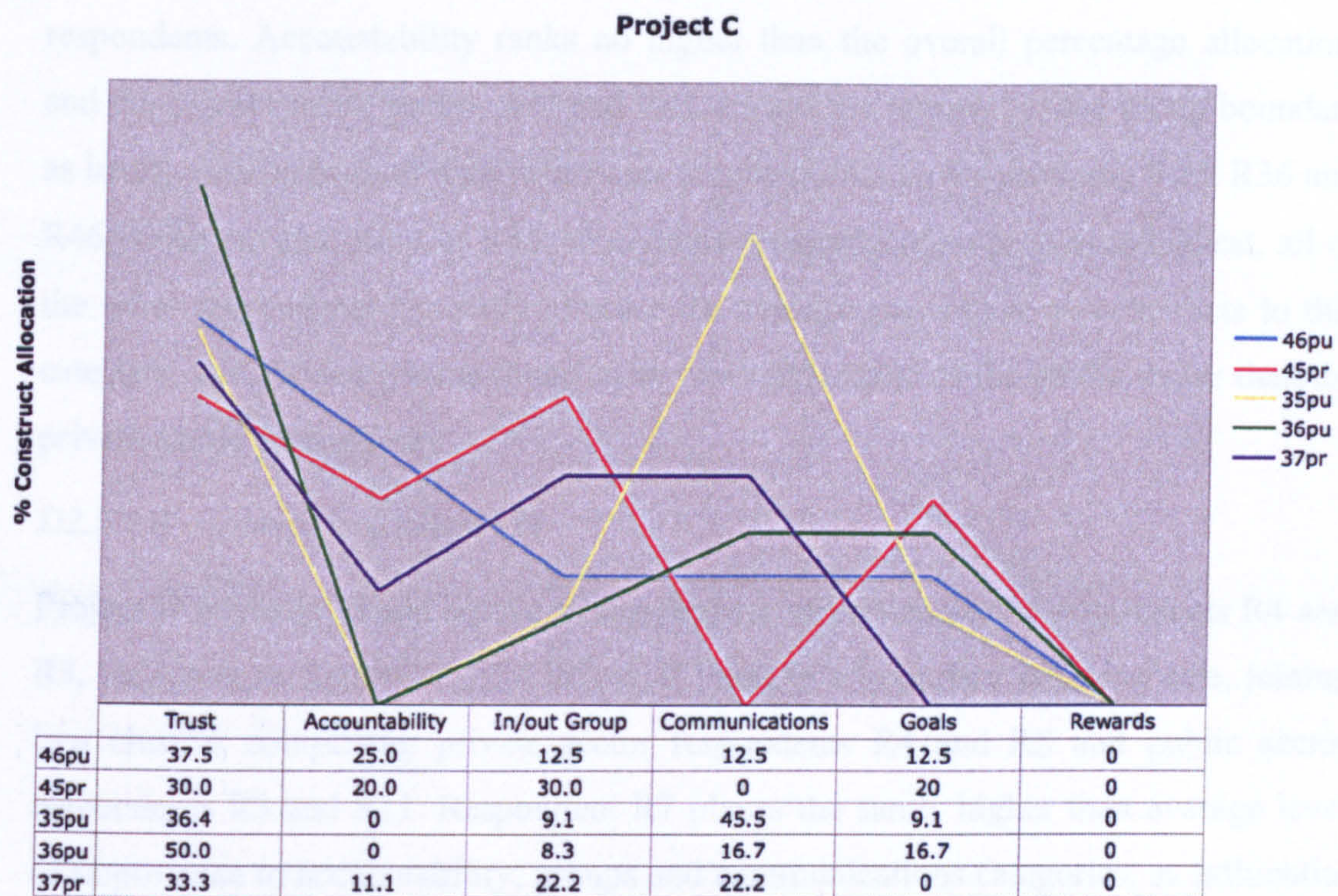


Figure D2.3.1.3: Project C respondent construct allocation by category

Respondents R45 and R46 rate accountability in line with the overall respondent construct allocation; however, R37 rates this category low, and R35 and R36 place no importance on this mechanism as a cooperative behavioural mechanism influencer.

A cluster of private sector members, comprising R37 and R45, place a higher importance on the group boundary mechanism, whereas a second cluster, comprising respondents R35, R36 and R46, demote the mechanism to below the percentage allocation by all respondents.

Communications processes and ways of interacting are found to be highly important to R35, whereas R45 places no importance on this behavioural mechanism. A cross sector group comprising R36 and R37 place a higher level of importance on communications processes than is found overall.

The respondents vary in terms of goal setting and alignment: cross sector clusters R36 and R45, and R35 and R46, note these as factors as being important to the development of a cooperative environment. R37 gives no importance to this category.

Overall, project C represents a high trust, low rewards environment for all respondents. Accountability ranks no higher than the overall percentage allocation, and the private sector group, R37 and R45, regard the removal of the group boundary as being more important than is the case for the public sector grouping R25, R36 and R46. With the exception of R35, who ranks communication processes highest, all of the other respondents generally allocate the average percentage of constructs to this category, and the category is found to be more influential to the public sector than the private sector respondents.

D2.3.1.4 Analysis of project D

Project D is characterised by the strong profiles of private sector respondents R4 and R8, as shown in figure D2.3.1.4 below. R7 acts in a boundary spanning role, joining two clusters comprising private sector respondents R4 and R8 and public sector respondents R3 and R11. Respondent R7 places the same, higher than average level of importance to accountability, groups and communications categories, as influential behavioural mechanisms.

There are two clusters relating to the trust category, and these follow sector lines; R3 and R11 belong to the first, and R4, R7 and R8 belong to the second; R8 place very low importance on this mechanism.

R3 and R4 are closely allied in terms of the importance they give to their sector groups and to the boundaries between the sectors; communication processes are marginally more important for R4 than for R3, and both respondents allocate in excess of twice the average significance to this category.

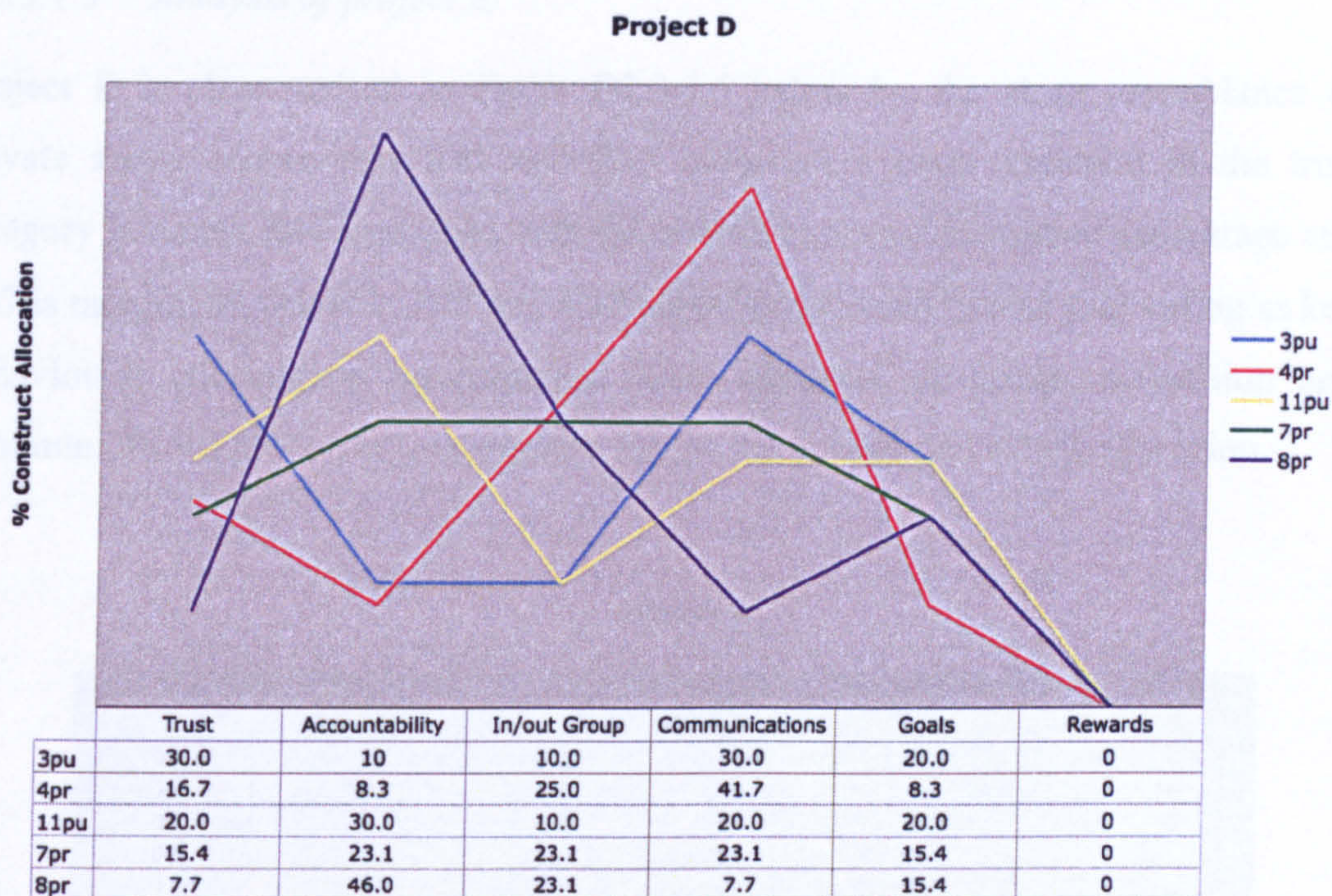


Figure D2.3.1.4: Project D respondent construct allocation by category

The private sector respondents R7 and R8 are aligned in terms of the overall construct allocation percentage for the goal setting category; R3 and R11, the public sector members of the team, place this mechanism considerably higher in importance.

Cross sector colleagues R11 and R8 place similar importance on accountability, although R8's profile is greater than R11's. In terms of communications, R11 resembles the remainder of the project grouping. None of the respondents regard reward structures as important.

Overall, project D is dominated by private sector respondent profiles, and in particular, accountability for R8 and communication processes for R4. Private sector respondent R7 acts in the role of a boundary-spanning individual by connecting private sector respondents R4 and R8 with public sector respondents R3 and R11. R3 and R4, the project leads, rank groups and boundary removal as important. Having defined and aligned goals is more important for the team members in the public sector.

D2.3.1.5 Analysis of project E

Project E is characterised in figure D2.3.1.5 below by the close resemblance of private sector respondents R41 and R47, although a small variation in the trust category is noted; R41 is aligned with the overall construct allocation percentage and R47 is marginally below it. R41 and R47 regard accountability and goal setting as key behavioural cooperative mechanisms. Their appraisal of group recognition and communications processes is marginally below the overall percentage allocation.

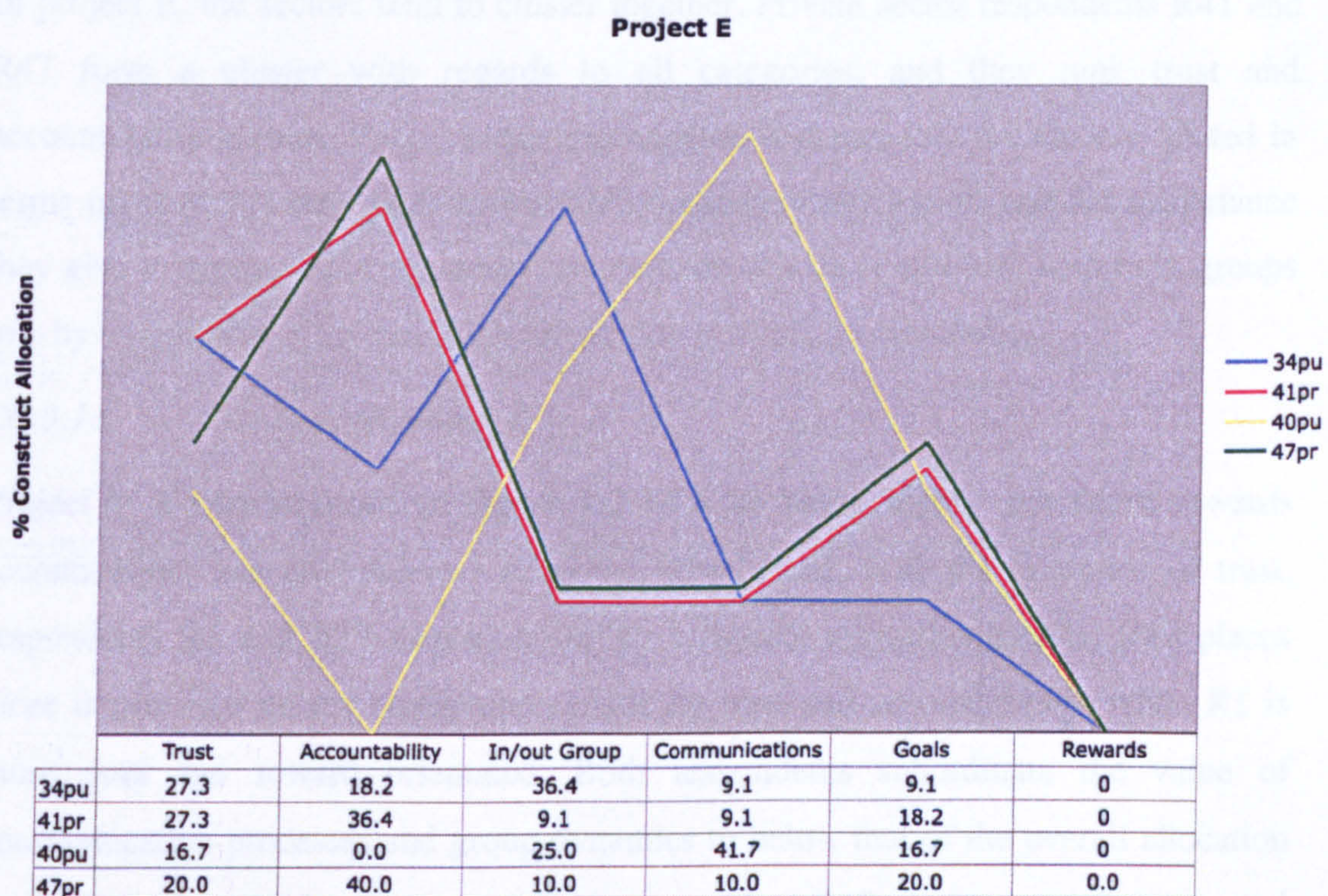


Figure D2.3.1.5: Project E respondent construct allocation by category

There is an association between respondents R34 and R40, and they form a tight cluster with R41 and R47 in relation to a number of categories. Trust construct allocation for R41 and R47 is in line with the overall percentage allocation, while it is below average for R34 and R40; both pairs of respondents cluster together. R34 recognises that individual accountability is a contributing factor to creating a cooperative environment, although their construct allocation is marginally below the overall percentage allocation; R40 places no importance on this mechanism. This is countered considerably by R41 and R47, who place high importance on this category, while ranking groups and group boundary removal relatively low. R34 and R40 place

high importance on groups and relationships between individuals within the grouping, such that this mechanism ranks highest in their construct allocation, in line with the importance that is placed by R41 and R47 on the accountability mechanism. The importance of the communication category is a principal issue for R40, while a cluster comprising R34, R41 and R47 ranks the communication category lowest in terms of importance and contribution; however, this is only marginally below the average allocation percentage. Reward structures are not recognised as an important factor within the respondent grouping.

In project E, the sectors tend to cluster together. Private sector respondents R41 and R47 form a cluster with regards to all categories, and they rank trust and accountability highest. Public sector respondents R34 and R40 are closely related in terms of trust, but they rank accountability considerably lower, and the importance they give to groups and communications reflects this. R41 and R47 both rank groups low by comparison with their high orientation towards accountability.

D2.3.1.6 Analysis of project F

Project F is characterised in figure D2.3.1.6 as being highly orientated towards accountability and goal delivery at an individual level. With the exception of trust, respondents R1 and R17 display a similar construct allocation profile; R17 places more importance on the contribution made by trust and accountability, while R1 is more goal and reward orientated. Both respondents subordinate the value of communication processes and group dynamics to below that of the overall allocation percentage for these constructs. R13 resembles R17 in terms of trust and accountability construct allocation; however R13 substantially subordinates all other mechanisms in favour of trust and accountability. R12 is similar to R13 in that two mechanisms are highly exaggerated in the allocation profile, i.e. trust and communication process. The remainder of R12's constructs, however, are subordinated below the overall group construct allocation profile. R12 places the communication mechanism highest, ranking this twice as important as the overall allocation and second only to accountability in terms of their construct profile. R5 and R14 present a similar profile when the differential associated with the greater importance placed on accountability by R5 and subordinated by R14 is acknowledged. The importance of the accountability category is in line with the overall allocation percentage; it is respondent R14 who subordinates the category in

favour of the importance of communication mechanisms and relationships between individuals. Variability occurs in relation to the categories associated with individual relationships and communication processes.

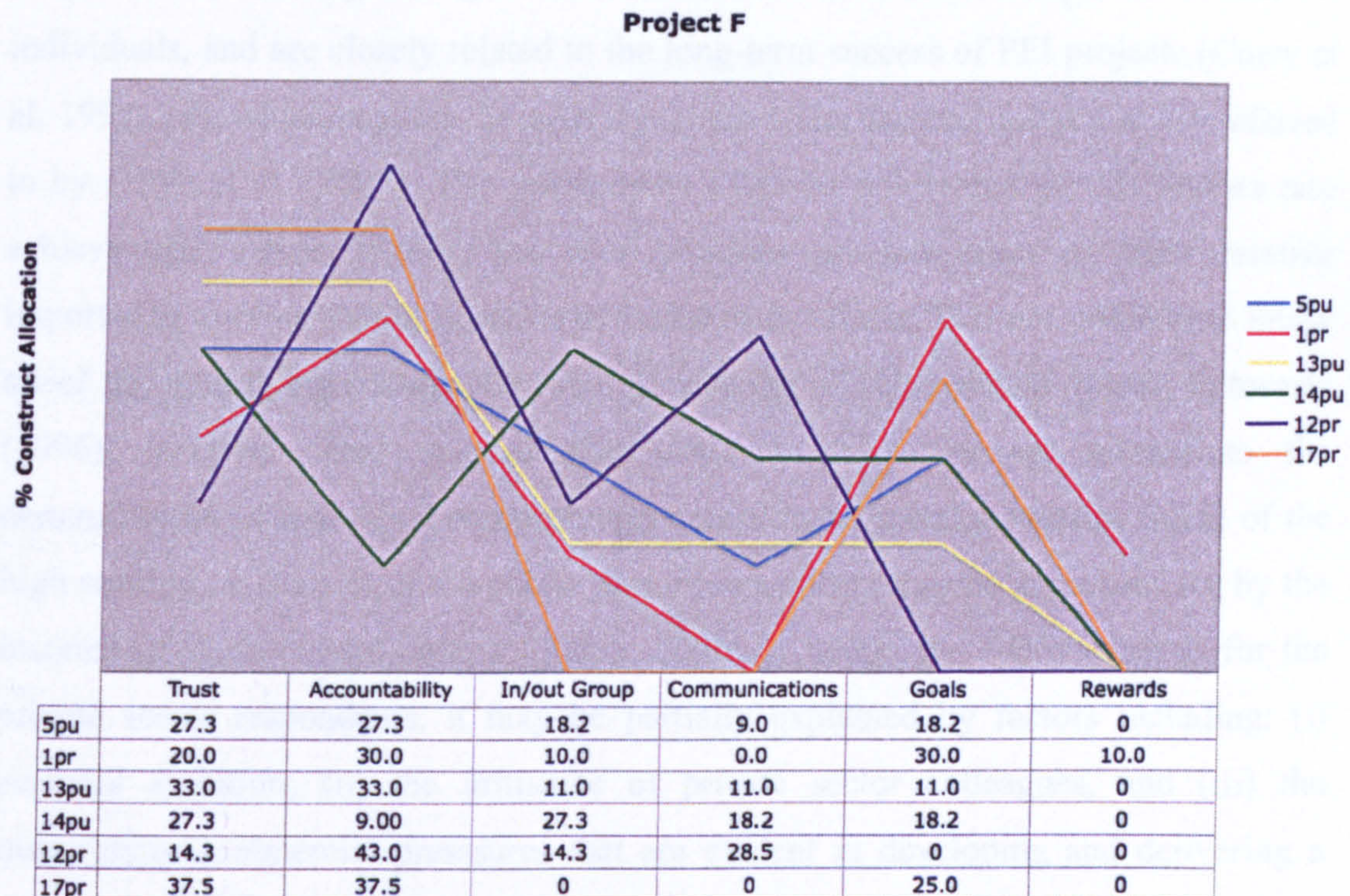


Figure D2.3.1.6: Project F respondent construct allocation by category

Acknowledging that R13 and R14 are close to the overall allocation percentage for the group category, neither preferring nor subordinating the mechanism, two clusters are noted. Respondents R5 and R14 place higher importance on the contribution made by recognising each other and working together, while R1 and R17 place considerably lower importance on this construct. The importance of goals varies between respondents within the sectors, although two public sector respondents, including the project leader, give the same allocation percentage to this category; two private sector respondents, including the project leader, report goals as highly important. All respondents generally rate the rewards category as being of low importance.

D2.4 Relating Values Orientation to Goals

The following discussion relates to research question 2 (iii). As shown in figure D1.3(b) (p. 191), the public and private sectors are found to have values orientation tendencies as hypothesised: the public sector tends towards greater self-transcendence

values and the private sector tends towards self-enhancement values. However, this pattern shows a degree of variability when public and private sector project leader relationships are analysed.

As previously noted, goal alignment and achievement values are important factors for individuals, and are closely related to the long-term success of PFI projects (Corry et al. 1997: 13), which support the delivery of the wider societal goals that are referred to by Ferlie et al. (2007). The respondents from the public and private sectors rate achievement values highly, and this provides an indication of their relative importance to other values in terms of influencing affects. It is not possible to know all of the underlying reasons for the high ranking of achievement values; Schwartz (1996), however, does suggest that achievement values are related to the demonstration of individual competencies according to social standards. Some of the high ranking on the part of the public sector respondents may be accounted for by the increasing 'measurement culture' (Paton, 2006: 7) within the NHS; whereas for the private sector respondents, it may be partially explained by factors including: (i) personal ambition; (ii) the influence of private sector colleagues, and (iii) the overarching commercial pressures that are evident in developing and delivering a PFI project. Further research would be required to explore these themes in greater detail.

In terms of behavioural cooperation mechanisms, goal importance is rated relatively low by comparison with other mechanisms; trust and accountability between individuals is consistently given the highest ranking, and accounts for more than 50% of the constructs elicited from all respondents (see table D2.4(a) below). A second group of cooperation mechanisms comprises: (i) group versus individual identity; (ii) goals, and (iii) communications: each accounts for approximately 14 to 16% of the total constructs that respondents use to describe their day-to-day project situations. Although goal importance is rated fifth, the differential of +/- 1% between these three cooperation mechanism categories is considered sufficiently close to switch the order. Accordingly, all three cooperation mechanisms are considered to have a similar and lower importance in terms of their behaviour influencing affect.

Summary of category system

Category Label	Category Summary – Bipolar constructs		Sum	Sum %
Trust	An environment of cooperation evidenced by teams with shared purpose and common goals. Relationships have progressed to partnership, such that openness, honesty and transparency serve to reduce disharmony, <i>versus</i> barriers, brinkmanship and conflict. Relationships still operate on a 'them and us' basis with limited integration or understanding resulting in competition at an individual and team level.	For further details see Appendix G	85	27.68%
Accountability	An environment where there is vision and shared purpose. Problems are owned and tackled collectively in order to get the job done. There is clear direction and there are processes in place to support issue resolution, <i>versus</i> an environment where working together is not seen as important in terms of recognising and resolving problems. Issues are not tackled at an individual or team level as limited or no structure exists to facilitate resolution. All too often avoidance and blame are evident strategies.		75	24.42%
In/Out Group Identity	An environment typified by working together in teams. Boundaries are not evident and differences between each other are recognized. A collaborative approach without conflict has resulted in a partnership, <i>versus</i> dysfunction and silo working, with individuals being excluded or excluding themselves to create an environment of isolation and separation with defined boundaries in place.		49	15.96%
Communication	An environment where open and active communication in teams supports the progress and delivery of objectives, <i>versus</i> miscommunication that sets out to hinder progress, and facilitate communication voids and misunderstanding at individual and team levels.		44	14.33%
Superordinate Goals	An environment where goals and targets are clearly defined, issues are recognized and processes are put in place to resolve problems within a relevant timeline, <i>versus</i> an environment where there is a conflict between the individual and the organisation and no clear direction over any time horizon. There is no sense of urgency in dealing with issues and a lack of process to bring about a successful resolution.		43	14%

Reward/Incentive	A commercial environment <i>versus</i> a focus on wider goal delivery.	2	0.65%
Miscellaneous		9	2.93%
		307	100%

Table D2.4(a): Summary of constructs allocated to the behavioural mechanism categories

The findings at an individual level are more variable and no distinct patterns are discernable. The public and private sector respondents' construct allocation percentages for all categories are shown in table D2.3 (p. 190); individuals generally rate the goal category lower than other cooperation mechanism categories. No recurring association is found between the incidence of higher achievement values orientation and the rating of the goal category as a more important cooperation mechanism for individuals. In addition, constructs allocated to the goal category are more broadly defined in terms of the summary provided in table D2.4(a) above, where problem identification, process and outcomes are considered more important than an explicit focus on the person or collective.

Accordingly, the hypothesis that individuals oriented towards self-enhancement and particularly achievement values will be more concerned with self-promotional goals, and individuals with self-transcendence oriented values will be more oriented towards collective goals, was not found in this study. The greater incidence of self-transcendence orientation within the sample, as shown in figure D1.3(b) (p. 183), may in part reflect the general matter of goals being more associated with outcome and success than personal gain.

This concludes the discussion of the findings associated with research question two. The discussion now continues in chapter D3, where questions three to five are addressed.

CHAPTER D3: PRESENTATION OF RESEARCH FINDINGS VALUES ORIENTATION AND COOPERATION MECHANISMS RELATED

D3.1 Introduction

The findings contained in chapter D3 are concerned with research questions three to five, which are restated below.

Research question 3: focuses specifically on public and private sector project leaders, in order to examine the relationship between their values orientation and (i) preference for short and long-term goals, and (ii) personal or collective oriented goals. It is hypothesized that: (i) private sector project leaders will focus on short-term goals and public sector project leaders will focus on long-term goals, and (ii) private sector project leaders will focus on personal goal satisfaction and self-maximisation, and public sector project leaders will focus on collective goal satisfaction for mutual benefit.

Research question 4: examine the relative importance of cooperation mechanisms in guarding against short-termist behaviour in relation to the values orientation of the public and private sector project leaders. It is hypothesized that the project leaders summated two-dimensional values orientation will: (i) indicate high self-transcendence and (ii) give high importance to trust, group identity and communication cooperation mechanisms.

Research question 5: (i) examine the relationship between the values orientation of the public and private sector individuals and the elicited constructs of the *a priori* group identity cooperation mechanism category and (ii) examine the extent of public and private sector role-set formation within each project.

It is hypothesized that: (i) higher openness-to-change than conservation values orientation will be found, and (ii) a higher self-direction values domain will exist in combination with higher self-transcendence values orientation.

D3.2 Relating Goals and the Importance of Time Horizon

The following discussion of the findings relate to research question 3(i).

As previously established, goal alignment between project leaders is influenced by values orientation (Chen et al. 1998); self-enhancement oriented individuals tend towards goal satisfaction in the short term and only seek mutual benefits and shared

goal delivery in support of personal goal satisfaction. However, self-transcendence orientated individuals tend to adapt their personal interests and individual goal satisfaction, preferring to align their personal goals with the satisfaction of the interests of the wider group (Chatman et al. 1998).

In the context of the PFI projects that are examined here, two situations in particular reflect the varying demands placed on the project leaders. The first relates to a short-term final period before a new hospital becomes operational (project environment 1), and the second involves the breaking down of barriers and collective working, with the objective of integrating planning and communications and jointly delivering outcomes in a sustainable long-term environment (project environment 8). The project environments expressed as vignettes are detailed on p. 130-131.

Time horizon is found to be an important factor in relationship engagement for both public and private sector project leaders. A small number of project leaders (who are both in project C) regard the shorter term pressures leading up to a hospital becoming operational as more important than longer term matters; however, the majority (ten of the twelve project leaders) balance intense short-term demands with long-term planning, as reflected by project vignettes 1 and 8. It is found that the project leaders within each project adopt a consistent approach to time horizon. In projects A and D, the leaders balance short- and long-term issues in relation to their project situations; in projects B and F, the leaders tend to focus marginally on the shorter term, while in project E, the longer term view is more prevalent. Accordingly, it is noted that there is no specific public or private sector orientation towards time horizon; this may reflect a homogeneous state that has developed within NHS PFI over the past twenty years, as the sectors have become increasingly close.

However, while accepting that the goal cooperation mechanism is considerably less influential, the approaches adopted by project leaders in relation to this mechanism are nevertheless seen to be important. When the constructs elicited from the project leaders are considered, similarities are found to exist that are not consequent on a time horizon; the key findings are discussed below.

With the exception of the shorter term focus of the project C leaders, the findings indicate that the majority of project leaders balance short and longer term demands. The project leaders focus on a number of different issues; the overarching theme that

emerges from the analysis of elicited constructs is the relationship benefit that can be obtained by collaborating in the delivery of a stated goal. The project leaders' principal construct themes include: (i) the importance of teams, team dynamics and collaborative working; (ii) how boundary removal aids organisational blending, team formation and closer working relationships; (iii) the importance of, and contribution made by, integrating planning and communication processes, and (iv) the importance of establishing integrated and open communication processes as early as possible.

However, while the goal mechanism is rated lower in overall importance, the differential analysis enables the relative importance of the constructs elicited from project leaders to be considered (see section D2.3), such that six project leaders rate the goal mechanism as an important behavioural mechanism, while four project leaders rate the mechanism as having low or no importance. While it is not possible to identify specific associations between self-enhancement and self-transcendence values orientations and shorter or longer term goals for either the public or private sector project leaders, there are some differences of approach between the project leaders in terms of reconciling the differing demands of long-term PFI goals and shorter-term business cycles; these are now considered.

Project leaders generally rate goal importance in line with the average category construct allocation; it is fifth and represents 14% of all constructs. When the importance of the goal category is removed, or its influence reduced as a behavioural cooperation influence, the similarity of the project leaders' self-transcendence values orientation is brought into focus. The high rating of benevolence values reflects that the project leaders give higher importance to the welfare of others and the development of relationships with people they are in close and frequent contact with: there is an emphasis on the importance of team working to satisfy objectives and deliver end goals, rather than a fixation on either short- or long-term objectives.

Short-term factors – including process evolution, task satisfaction and evolution of communications – are considered to be of importance in evolving individual relationships into successful teams. As the time horizon extends, the removal of the boundary between the public and private sector groups enables the organisations to blend, and this facilitates collaborative and joint working in relation to an end goal. As relationships mature, integrated planning and communications processes become increasingly important in terms of interdependence, while progressively, peer

relationships become the basis for collaborative working. Hypothesis (i) is not supported.

The discussion of findings now considers public and private sector project leaders' focus on personal or collective goals, in section D3.3 below.

D3.3 Personal versus Collective Goal Satisfaction

The following discussion of the findings relate to research question 3(ii).

Group identity is rated marginally third as a cooperation mechanism influencer and represents 15.96% of the constructs elicited. When group identity is considered in relation to other closely rated goal and communication mechanism categories, a marginal (i.e. plus or minus one percentage point) rating differential is found to exist that could result in their order being susceptible to reversal; accordingly, these three mechanisms are considered to be of similar importance and represent a second level of behavioural influencers.

Table D3.3 below shows project leader construct distribution for the group identity category (the full table, including construct references, can be found in appendix J). Of the forty-nine constructs allocated to the group identity cooperation mechanism, forty constructs are given high or intermediate importance, and twenty-one of these are allocated by project leaders.

Refs:		SVS	Honey Content Analysis	Principal Components Analysis	
Respondent	Project	Values orientation	Summary of constructs allocated to group identity category	Major Component	Major Component Label
R28	A	ST; marginal OTC	People and personal relationships	50%	Long standing openness and maturity in relationships enables goal attainment Teams create learning environments
R30	A	ST-SE; marginal OTC	Team working resolves problems	65%	
R27	B	ST-SE; Strong OTC	Team working	71%	Teams that work together pull together, communicate well and work to a defined goal Good communications aid better planning
R48	B	ST-SE	Partnership and team working	45%	
R46	C	Strong ST; strong OTC	Team working and team effort	82%	Teams that work together achieve positive outcomes Joint working aids project delivery
R45	C	ST-SE (marginal SE); marginal OTC	Team cooperation	49%	
R3	D	SE; strong OTC	Partnership	60%	Benefits of partnership working Team building and performance
R4	D	ST-SE (marginal SE); marginal OTC	Boundary removal for team working success	70%	
R34	E	ST; marginal OTC	Boundary removal leads to team working and good performance	56%	Team working in preference to outlying individual Strong interdependent relationships achieve end results
R41	E	ST; marginal OTC	Strong relationships	85%	
R5	F	ST; OTC	Integrated team approach	56%	Productive team attributes Successful relationship attributes
R1	F	Marginal ST; marginal OTC	Cohesive team	75%	

Notes to accompany table
SVS: (from the Schwartz Value Survey Instrument) individuals' values orientation is denoted by: ST = self-transcendence; SE = self-enhancement; OTC = openness-to-change; Con = conservation
Honey Content Analysis: references to high, intermediate and low categories follow allocation by 1/3rds to each group after a Honey Content analysis is carried out. The numeric references relate the respondent to the construct. The summary provides a summated label for constructs allocated to the category.
Principal Components Analysis: the principal component label is provided together with the variance percentage accounted for by the component; the higher the percentage, the greater the

Table D3.3: Honey content analysis construct allocation to group category

Following construct allocation and reliability testing, each category is summarised in table D2.4(a) in terms of two opposing situations. The first is typified by team working, boundary removal and individuals' differences being recognised, and the outcome of collaboration without conflict, resulting in a partnership. The second, opposing situation, is typified by dysfunction and silo working: individuals are excluded, or excluded themselves, creating an environment of isolation and separation with clearly defined boundaries. The constructs allocated to the group identity category are reviewed in association with the principal components analysis, to enable differences of approach that may exist between project leaders to be considered.

As shown in the table above, the predominant values orientation for both the public and private sector project leaders is self-transcendence; the presumption that the private sector leaders, being more individualist, will be at variance with their public sector counterparts is not borne out. At a macro level, the importance of interaction, collaboration and teams is generally found to be a consistent theme. Accordingly, hypothesis (ii) that proposes that private sector project leaders will be more orientated towards self-enhancement and public sector project leaders will be more orientated towards self-transcendence, seeking personal versus collective goals, is not supported. All project leaders' values are oriented towards self-transcendence and aligned with the importance of team and collaborative working.

This concludes the discussion of research question three.

D3.4 Protection Against Short Termism

The following discussion of the findings relate to research question 4.

The alignment of organisational influence and project leader behaviour may contribute to a positive cooperative disposition and successful outcomes (Chatman and Barsade, 1995). However, as noted by Axelrod (1984), an individual's values orientation influences their approach to maximisation of short-term benefits or relationship investment for longer term collective gain. When project leaders' attitudes to trust, group identity and patterns of communication are considered, their tendency towards short and longer term relationship positioning may be assessed (Chen et al. 1998). The hypothesis that the private sector would, as a group, adopt a short-term, self-maximising position, while the public sector, as a group, would be more concerned with the long-term, is not substantiated. Drawn from the differential

analysis that was previously reported (see section D2.3), the table below presents the trust, group identity and communication cooperation mechanisms in terms of their influencing effect for each project leader.

			Cooperation Mechanisms						Legend					
Project	Respondent	Sector	Trust		Group Identity		Communica-tions		Level of Importance					
A	28	Pu	High		High		Low		High					
A	30	Pr	Intermediate		High		Low		Intermediate					
B	27	Pu	High		High		Low		Intermediate					
B	48	Pr	Low		Intermediate		High		Low					
C	46	Pu	High		High		Low		Low					
C	45	Pr	Intermediate		High		Low							
D	3	Pu	Intermediate		High		High							
D	4	Pr	Low		High		High							
E	34	Pu	Intermediate		High		Low							
E	41	Pr	Intermediate		High		Low							
F	5	Pu	Intermediate		Intermediate		Low							
F	1	Pr	Intermediate		High		Low							
<i>By category importance</i>			3	7	2	4	2	6	3	0	9			
<i>Overall high/intermediate vs low</i>			10		2		6		6		3		9	
Pu = Public sector; Pr = Private sector														

Table D3.4(a): Project leader key cooperation mechanism influencers

By considering each individual's two dimensional values orientation and their allocation of constructs to the trust, group identity and communications categories, the project leaders' relationships with short and long-termism may be inferred. Table D3.4(b) below summarises the relationship between each project leader's behavioural cooperation mechanisms, as noted in table D3.4(a), and their two-dimensional values orientation (the full table, with construct cross references, is included in appendix I).

Respondent	Project	Sector	Values Orientation	Summary of Construct Labels for High and Intermediate Categories	Major Component	Major Component Label
28	A	Pu	ST	Maturity in relationships enhances communications	50%	Long standing openness and maturity in relationships enables goal attainment
30	A	Pr	ST/SE	Boundary removal and team working resolves problems	65%	Teams create learning environments
27	B	Pu	ST/SE	Boundary removal and team working	71%	Teams that work together pull together, communicate well and work to a defined goal
48	B	Pr	ST/SE	Team working and partnership peer relationships	45%	Good communications aids better planning
46	C	Pu	ST	Team working and team effort	82%	Teams that work together achieve positive outcomes
45	C	Pr	ST/SE	People interaction enables objectives to be met	49%	Joint working aids project delivery
3	D	Pu	SE	Partnership working supports mutual goals being satisfied	60%	Benefits of partnership working
4	D	Pr	SE	Boundary removal and joint working for mutual team success	70%	Team building and performance
34	E	Pu	ST	Team working and open communications channels aid process integration	56%	Team working in preference to outlying individual
41	E	Pr	ST	Collaboration, dependency and excellent communications assist with meeting mutual objectives	85%	Strong interdependent relationships achieve end results
5	F	Pu	ST	Integrated team approach delivers	56%	Productive team attributes

				objectives		
1	F	Pr	ST	Team cohesion assists mutual objective satisfaction	75%	Successful relationship attributes

Table D3.4(b): Individual relationship construct category labels

Trust between project leaders is found to be the most influential behavioural mechanism, and this accords with the overall findings from the differential analysis. This is in line with the finding that the predominant values orientation for project leaders is self-transcendence (denoted by ST in column four of the table above), and can be set in the context of the important contribution made by groups to successful outcomes. Hypothesis (i) is therefore supported.

As previously reported, the constructs allocated to group identity and communication mechanisms are considered sufficiently close to switch in order of influence. However, the labels given to the constructs elicited from the project leaders provide further information in terms of understanding how the project leaders relate to short- and long-term time horizons; this is now considered.

While no consistent themes are discerned for public or private sector project leaders, trust, group identity and communications mechanisms are found to be important factors in relationship behavioural outcomes for project leaders. For ten project leaders, trust plays an instrumental part in the structuring and development of the project managers' relationships, and tends to be closely linked to factors associated with enabling the formation of stronger relationships. Trust is essential to boundary removal between the organisational structures, facilitates collaborative working and partnership formation, and enables joint teams to deliver required outcomes. Where trust is not explicitly found to be of most importance, either group identity (for six project leaders), or communications channels (for three project leaders), become greater influencers of behaviour for project managers.

However, the group identity category remains supportive of boundary removal and team development, while becoming more focused on relationship dynamics, including process integration, peer-to-peer working, problem solving, mutual objective-setting and the mechanics of discussion and reviewing. The precise working of relationships brings communications into context: while they are of lower importance, open

channels and good communication between project leaders are important in supporting better outcomes. By integrating different types of communications, problems are better resolved and planning is improved, and discussion supports the breaking down of the them-and-us relationship that may have existed within a project environment.

The importance and influence of trust, group identity and communications mechanisms are consistent with the overall ranking of constructs for all respondents. The predominant values orientation for the project leaders is self-transcendence, and welfare for others that they were in frequent close contact with is consistently highly important. Trust enables stronger relationships to be built in the first instance, and in the longer term these enable mutually important objectives to be delivered. In the case of the project leaders for whom trust is not the predominant behavioural influencer, either identification with a group or communications processes exert a greater influence: both mechanisms underpin relationship dynamics that bring individuals together in support of achieving a stated objective. Accordingly, hypothesis (ii) is supported.

This concludes the discussion of research question four.

The discussion now continues by considering the findings in relation to the last research question, which is concerned with the extent of boundary removal between the public and private sectors. Katz and Kahn's (1966) notion of role-sets provides a frame of reference within which to consider the development of cross boundary integration, as the removal of boundaries at a project level is found to be important to longer-term relationship development.

D3.5 Potential for Boundary Spanning Role-sets to Emerge

The following discussion of the findings relates to research question 5.

As the person responsible for the day-to-day relationship between the public and private sectors, the emergence of boundary spanning role-sets may be considered in terms of the project leaders and their tendencies towards self-transcendence and openness-to-change values orientation, and in particular in terms of their propensity for higher self-direction values.

As a reminder for the reader, figure D3.5(a) below has been reproduced, to show the summated two-dimensional values orientations for the public and private sector respondents; the discussion below the figure considers the values orientations of the respondents as individuals.

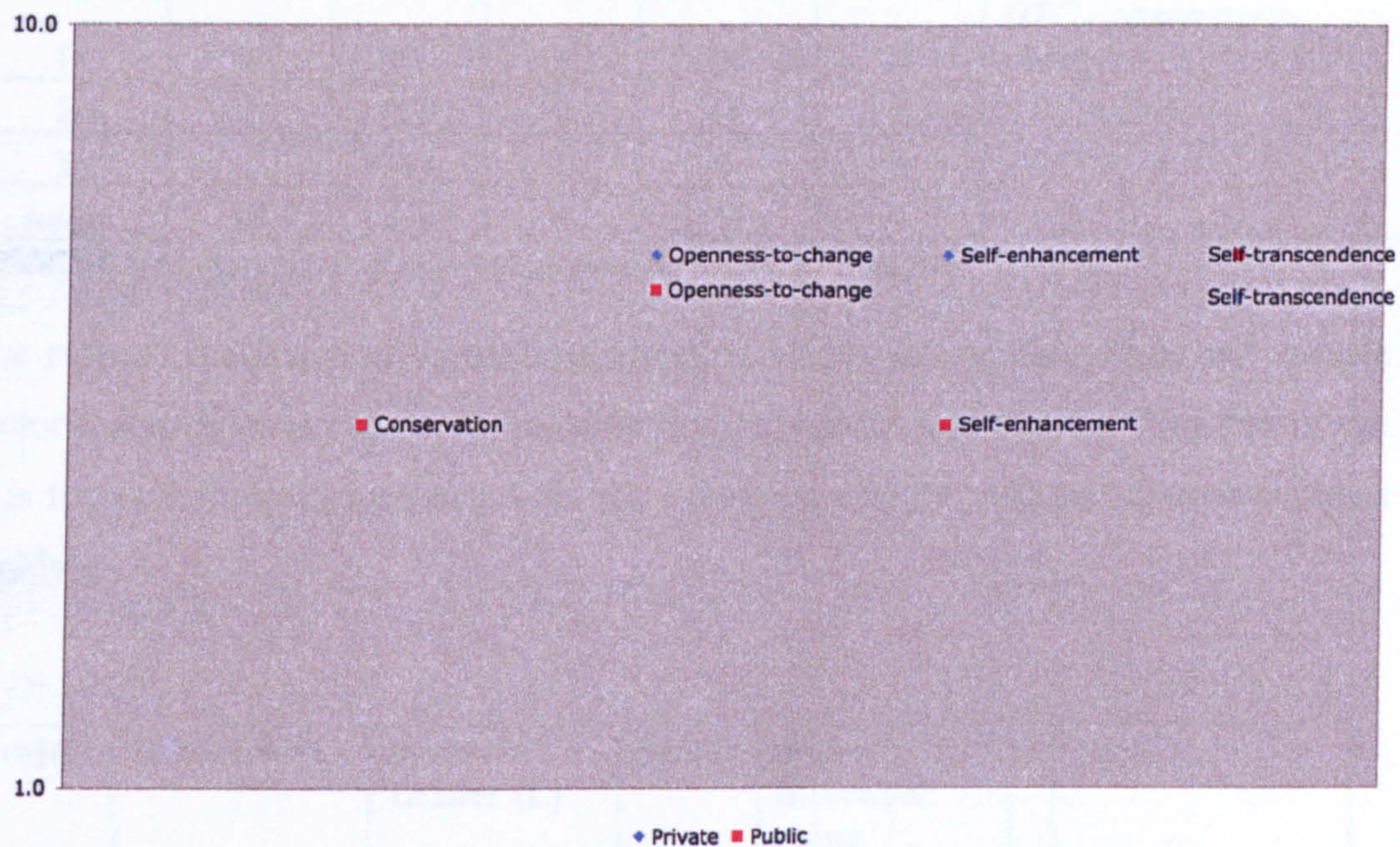


Figure D3.5(a): Two-dimensional values orientation for public and private sector respondents

The findings reported in chapter D1 show that the project leaders' predominant values orientations either: (i) suggests a propensity for collectivism through greater self-transcendence values, or (ii) indicates a balance between self-transcendence and self-enhancement dimensions, in combination with higher openness-to-change values. Twenty-five of the respondents are found to either: (i) balance self-transcendence and self-enhancement, or (ii) tend towards self-transcendence. This is in addition to twenty-nine occurrences in which the openness-to-change dimension is stronger than conservation, which supports hypothesis (i). The two-dimensional values orientations for all respondents are shown in table D3.5(a) below.

Project	ST-SE	ST	SE	OTC	Con	Legend
A	3	1	0	4	0	<i>ST-SE – self transcendence vs self- enhancement</i> <i>ST – self transcendence</i> <i>SE – self enhancement</i> <i>OTC – openness-to- change</i>
B	4	0	1	5	0	
C	2	2	1	5	0	
D	4	0	1	5	0	
E	1	3	0	4	0	
F	1	4	1	6	0	
<i>totals</i>	15	10	4	29	0	

Table D3.5(a): Summary of respondent two-dimensional domains

The relative incidence of higher self-direction values among the public and private sector respondents is considered in table D3.5(b) below, and supports hypothesis (ii). It is found that all respondents, with the exception of R29, rate self-direction values highly.

Project	Respondent	Project Leader (L)	Sector	Self-direction value importance	Legend
A	30	L	Pr	High	<i>Level of Importance</i> High Intermediate Low
A	28	L	Pu	High	
A	39		Pr	Intermediate	
A	29		Pr	Low	
B	48	L	Pr	High	
B	31		Pu	High	
B	25		Pr	High	
B	32		Pr	Intermediate	
B	27	L	Pu	Intermediate	
C	36		Pr	High	
C	37		Pu	High	
C	45	L	Pr	High	
C	35		Pu	High	
C	46	L	Pu	Intermediate	
D	3	L	Pu	High	
D	11		Pu	High	
D	7		Pr	High	
D	4	L	Pr	High	
D	8		Pr	High	
E	34	L	Pu	High	

E	40		Pu	
E	47		Pr	
E	41	L	Pr	
F	1	L	Pr	
F	17		Pr	
F	5	L	Pu	
F	13		Pu	
F	14		Pu	
F	12		Pr	

Table D3.5(b): Respondent self-direction values importance

The tendency towards self-transcendence and openness-to-change dimension orientations, in combination with greater self-direction values for public and private sector respondents, is considered an indicator of a potential for role-set formation. Figure D3.5(b) below pictorially presents the project respondents in terms of their potential role-set relationships, using the self-transcendence data values obtained from the analysis contained in chapter D1. A number of close relationships – deemed to be potential indicators of role-sets – are found to exist within the same sector and across the sectors.

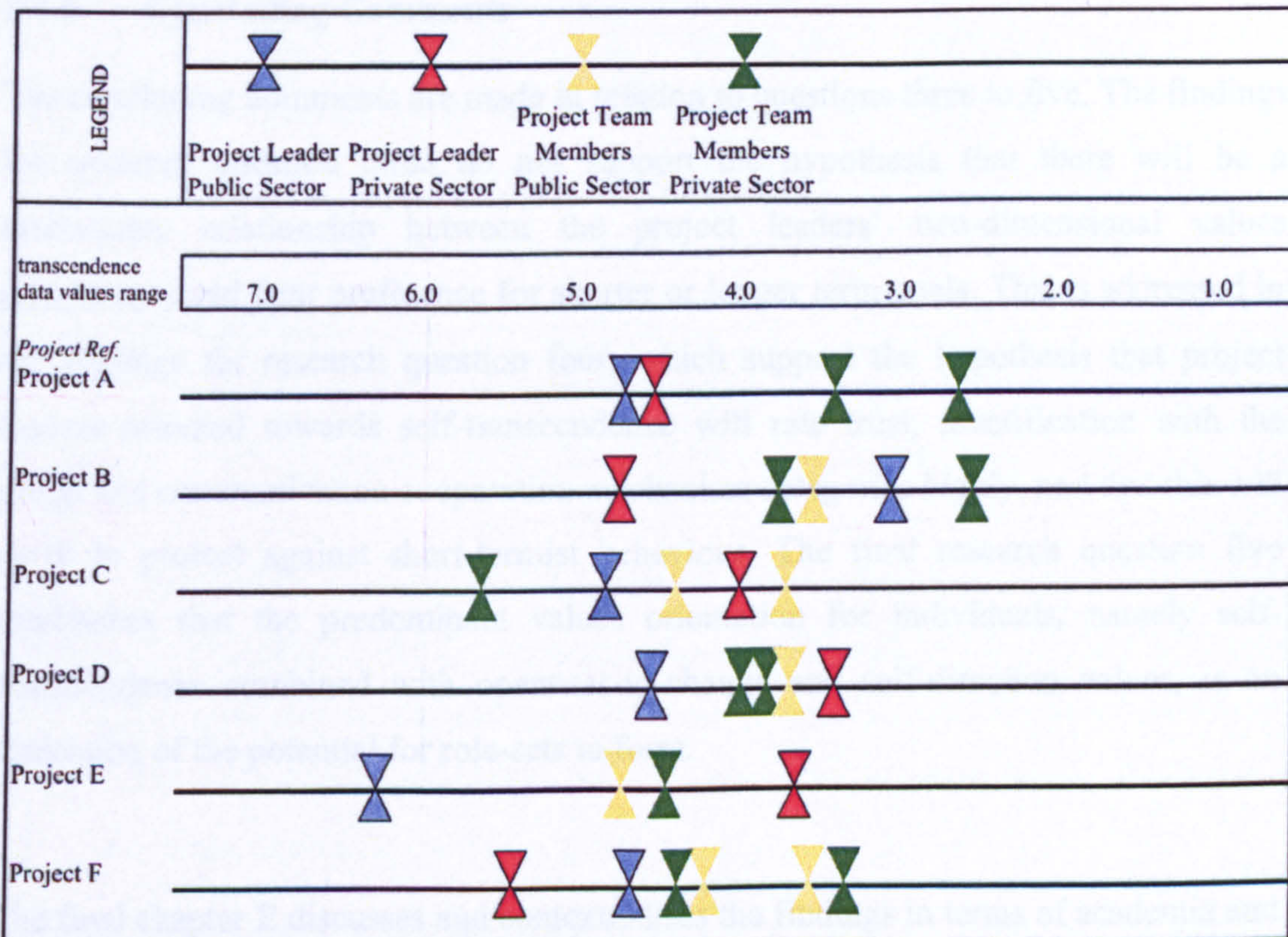


Figure D3.5(b): Representation of project role-set relationships

The relationship between the project leaders is found to be direct or through subordinates from either the public or private sectors. In project A, a close association is found to exist between the private sector project respondents, and a very close association is found to exist between the public and private sector project leaders; no public sector associations are possible due to the lack of public sector respondents. In project B, the public and private sector subordinates form a close association, as do the project leaders with their subordinates, and the project leaders are linked through the association between their subordinates. Project C public sector subordinates are found to cluster with the private and public sector project leaders. In projects D and E, the public and private sector subordinates are closely related, creating a connection between the project leaders. However the associations in project D are tighter than they are in project E, which may be partially explained by project E relationships being less well formed than in project D. In the final project F, the project leaders are associated, and two discrete cross sector subordinate relationships are found to exist.

This concludes the discussion of the findings for research question five.

D3.6 Concluding Comments

The concluding comments are made in relation to questions three to five. The findings for research question three do not support the hypothesis that there will be a discernable relationship between the project leaders' two-dimensional values orientations and their preference for shorter or longer term goals. This is addressed in the findings for research question four, which support the hypothesis that project leaders oriented towards self-transcendence will rate trust, identification with the group and communication cooperation mechanism categories highly, and that this will serve to protect against short-termist behaviour. The final research question five establishes that the predominant values orientation for individuals, namely self-transcendence combined with openness-to-change and self-direction values, is an indication of the potential for role-sets to form.

The final chapter E discusses and contextualises the findings in terms of academia and the public and private sector business relationship environment, and considers the research implications and further research opportunities.

CHAPTER E: CONCLUDING DISCUSSION, RESEARCH IMPLICATIONS AND FURTHER RESEARCH OPPORTUNITIES

The final chapter contextualises the research findings in terms of the literature reviewed and draws a number of conclusions regarding the relationships formed between the public and private sectors. It further comments on the issue of PFI performance that may not be attributable to individuals' values orientation. The chapter concludes with a discussion of the limitations of the study before identifying areas for further research.

This study involves a number of research and business aims. In academic terms, the research seeks to contribute to understanding how an individual's values orientation influences the selection and operation of behavioural cooperation mechanisms. The business aims are multi-layered. They are, firstly, to gain a greater understanding of PFI project leader relationships, and, more generally, to widen the discourse about PPP, which continues to blur the boundary between the public and private sectors. Secondly, at a business sector level, it is hoped that the research outcomes will contribute to a widening knowledge of PFI. Thirdly, at an organisational level, the research is intended to support the work of the many private sector companies that continue to rely on the advancement of the PPP market place.

E1.1 Introduction

There has been successive governmental intervention in the health sector since its creation in 1948 (Webster, 2002; Klein, 2006). During the past twenty years in particular, there have been considerable changes to the long-standing relationships between the public, private and voluntary sectors (Timmins, 1995; DH, 2000; Grimshaw and Hebson, 2005). Government policy has resulted in a more business-like environment for health delivery, and, as a consequence, ongoing structural change within the NHS continues to blur the boundary between the public, private and increasingly important voluntary services sectors.

Changes in the nature of the state can be viewed as either constraining or enabling, and Weiss (2003) suggests that the redefinition of the state's role is encouraging new forms of governed interdependence under the auspices of state goal setting. As a consequence, contracting has increasingly become the preferred government

procurement instrument to advance public service reform (Marchington et al. 2005b). The implication is that the public sector should provide only core functions, with the expectation that the private sector will deliver supporting services more efficiently and cost effectively through an open market.

Contracting blurs the interface between the public and private sectors. Ruane (1997) suggests that this has been an active goal of New Labour, which has created alternative forms of PPPs, reflecting a move towards networked and hybrid organisational forms and away from state controlled monopolies (Marchington, 2005b). As the boundary between the sectors blurs, Domberger (1998) suggests that outcomes that are important to both sectors will only be delivered successfully where there is relationship cooperation, such that project leaders act as points of information transfer (Aldrich and Herker, 1977), building relationships that enhance cooperation (McAllister, 1995).

Tensions are, to some extent, inevitable; however, relationship interaction and associated behaviour have not received the same degree of analysis as the econometric aspects of PFI. It was hypothesised that individuals in the public and private sectors would display considerable differences in terms of their values orientation. The expectation was that individuals would reflect public sector collectivism in clear contrast to private sector individualism; this was not found as hypothesised. However, at a more general level, when sector relationships were considered it was possible to discern differences in values orientation between the public and private sectors, where greater collectivism within the public sector contrasted with the private sector's individualism, but as a marginal differential.

However, operational and relationship problems can be experienced in public and private sector relationships and within PFI projects. Although beyond the scope of this study, other issues have been identified from the literature that may account for and contribute to relationship tensions. Rather than representing confirmed or closed positions, the following comments are therefore posited as open questions that seek to broaden the relationship discourse.

The nature of contracting between the public and private sectors, which results from open competition, requires a private sector partner to be selected in preference to other bidders prior to contracting, developing and delivering a new service. This

inevitably introduces a range of pre contracting and post operational factors that may further influence the relationship between the parties. These include: (i) contracting structures, the bidding partner relationship dynamic, and related public-private sector governance issues; (ii) commercial decisions made pre contract by the public and private sectors that cannot be sustained in the post contract construction and operational phases, and whether there is the ability to correct this through benchmarking and market testing; (iii) the user satisfaction experience and post contracting organisational desire to make a project succeed; (iv) the operational reality as opposed to the *a priori* anticipated environment as specified by the public sector and subsequently experienced by the private sector, and (v) commercial problems that manifest from the operation of the performance and payment mechanism.

More recently, the financial climate in the health service has become increasingly constrained in terms of wider public service delivery. Inevitably, annualised performance improvement targeting brings the committed PFI expenditure into closer focus, such that limited opportunities for private sector income growth, or conversely public sector expenditure constraint, lead to commercial problems or increased opportunism that negatively influence the relationship dynamic. While the above list cannot be considered exhaustive, it presents a number of the issues that are likely to be contributing factors to project tensions and under-performance that have given rise to lower than anticipated value for money assessed by the National Audit Office.

The discussion now continues with a summary of the research findings, in section E1.2, followed by a consideration of the contribution this research makes to academic and business communities, in section E1.3.

E1.2 Summary of Key Findings

The increasing interdependence and interconnectedness of the public and private sectors has been promulgated, in part, by the use of PFI in facilitating public service change (Timmins, 2001). By blurring the boundary between the sectors, different patterns of behaviour have been merged (Blunden, 1984), bringing about relationship interdependence, and at the same time creating an environment in which resources can be shared and knowledge transferred (Söllner, 1999).

At a fundamental level, the relationship between the public and private sectors formed by PFI projects relies on the successful delivery of mutually dependent goals that can act as a cooperation enhancer. Public and private sector relationships involve working in partnership: the resources of government are combined with those of the private sector to deliver a public service in order to meet what Ferlie et al. (2007) refer to as societal goals. As hybrid organisational forms develop, and in order to move beyond purely contractual relationships, greater cross sector alignment is required to enhance collaboration (Paton, 2006).

The current, performance driven, NHS was brought about, in part, by New Public Management Reform (IPPR, 2001), which sought to create an environment in which goals between the nation state and the NHS are aligned. In response to the increasingly restricted economic climate, Klein (2006) suggests that closer working relationships between the sectors are required in order to bring about a model of welfare provision that is focused on final outcome and value contribution to society.

However, in transferring risk from the public to the private sector, long-term contractual relationships raise the issue of private sector profit maximisation (Corry et al. 1997; Sachdev, 2001; Unison, 2004), which can lead to some of the tensions at the heart of PFI relationships. It has been suggested (Nicholson, 2000; National Audit Office, 2004) that public and private sector relationships need to develop in a spirit of partnership: collaborative working should be encouraged, such that available skills and competencies are combined to deliver high quality, good value and well-managed public services. To break down traditional sector boundaries and demarcation lines, attributes need to be developed by the public and private sectors, including: (i) a high degree of trust; (ii) the sharing of risk; (iii) the setting of common objectives and the alignment of goals, and (iv) the adoption of a long-term outlook.

In order for relationships to advance, greater effort is required on each side to understand each other's nuances (Ghobadian et al. 2004); Ruane (2000) suggests that the public and private sectors both need to be better educated and informed with regards to new aspects of relationship management: interaction requires voice equality, collective planning, the alignment of goals and an inclusive communications process. In order to accommodate the ethos of partnership, however, the public sector needs to develop a greater awareness of risk and a better understanding of the roles, responsibilities and benefits of collaborative working. The profit driven private sector,

on the other hand, needs to be more cognisant of probity and accountability when it enters into partnership with the public sector; it needs to shift its ethical compass (Kelly, 2000) in order to understand public sector values better.

As supported by this study's findings, the behaviour of individuals is influenced, in part, by their values orientation (Kluckhohn, 1957; Rokeach, 1979; Triandis, 1996), such that a particular values orientation will be a strong determinant of behaviour towards others – providing guidance with regards to the situations individuals should enter and what kinds of behaviour they should adopt during relationship engagement (Homer and Kahle, 1988; Deal and Kennedy, 2000). An individual's values orientation, therefore, influences both the degree to which a person will cooperate with others and how they will use various cooperation mechanisms associated with relationship engagement (Chen et al. 1998).

Values orientations that were established for all individuals were successfully related within a hierarchical structure to *a priori* cooperation mechanisms. Differential analysis identified the variability between respondents, and the results strongly aligned the respondent's cooperation mechanisms with their two-dimensional values profiles. When all individuals were considered, the elicited constructs were allocated to two discernable clusters: trust and accountability accounted for in excess of fifty percent of all constructs; group identity, communication channels and goals accounted for marginally less than fifty percent of constructs; reward structures accounted for less than one percent, and under three percent were miscellaneously allocated.

The majority of project leaders' values orientations tended towards self-transcendence, such that differences in goal focus and time horizon in relation to self-enhancement and self-transcendence orientations were not observable at this level of analysis. When the individuals' construct allocations to the *a priori* cooperation mechanism categories were reviewed, it was found that they generally rated group identity low, again reflective of the higher incidence of individuals' self-transcendence values orientation and group associations being less of a relationship engagement differentiator. The team theme however made a consistent contribution to successful outcomes and protection against short-termist behaviour: this was found to be the case in relation to the shorter-term focus of project environment one (vignette 1), which dealt with the final months before a hospital was handed over, and in the

longer-termed environment eight (vignette 8), in which teams worked in close association to break down barriers and create more integrated processes.

The project leaders' subordinates and boundary crossing role-set structures were identified, and the projects were assessed in terms of the respondents' self-transcendence and openness-to-change values orientations and the self-direction values domain. The findings support intra and inter-project role-set development as an indication of the potential for the creation of a cooperative relationship between the public and private sectors. The greater emphasis by individuals on values orientation that tended towards self-transcendence, openness-to-change and self-direction values were considered indicators of cooperative behaviour.

Differences in the values orientations of individuals were found and were clearly distinguishable at a public and private sector level, although closer values orientation similarity was found to exist than expected in the case of some individuals. Both public and private sector individuals showed a propensity towards concern for the welfare of those with whom they were in frequent and close working contact. This may, in part, be due to the ever-increasing integration of the public and private sectors and the marketisation and commercialisation of public services.

Now that the research findings have been summarised, the contribution they make to research and business communities is discussed below.

E1.3 Research Contribution

A doctoral study is required to make an original, independent contribution to knowledge. As distinct from a PhD, a DBA is required to make a contribution to both academic and business communities; this is now discussed below.

E1.3.1 Academic context

The contribution made to the academic community can be measured in several ways. First, values orientation for public and private sector individuals has been successfully assessed at the individual values domain and summated two-dimensional levels, by using the Schwartz Value Survey (Schwartz and Bilsky, 1987; Schwartz, 1992, 1996). Second, the relative importance of *a priori* cooperation mechanisms (Chen at al. 1998) was established for public and private sector individuals, by conducting repertory grid interviews in which project vignettes were provided as elements that enabled constructs to be elicited. Third, a mixed methodology was used to synthesise

data obtained from the Schwartz Value Survey and repertory grid interviews, in order to examine the relationship between individuals' values orientations and various behavioural cooperation mechanisms. Finally, the role of public and private sector boundary spanning persons has been considered in the context of role-set theory (Katz and Kahn, 1966), in order to establish the interplay between the project leaders and other key public and private sector team members.

E1.3.2 Business context

The study has contributed to public and private sector relationship discourse in a number of ways. First, the literature associated with public and private sector relationships and specifically the private finance initiative has been considered in the context of individuals' relationships within NHS projects. Second, the relationship between public and private sector individuals' values orientations and their use of different cooperation mechanisms that influence behaviour in relationship engagement has been established. Third, project leader preferences for shorter or longer-term goals, together with their personal or collective oriented goals, have been considered. Fourth, the relationship between individuals' values orientations and their use of cooperation mechanisms that help to guard against short-termist behaviour has been explored. Finally, the similarity of individuals' values orientations has been examined and the extent of the similarity considered in the context of the potential for establishing collaboration and cross sector relationship working.

It is also suggested that the knowledge obtained from this study may be of some benefit to wider public, private and voluntary sector contracting, in which close long-term relationship interaction is important to mutual long-term success; however, this does not form part of this study and would require further research.

To provide a context for the research findings, their implications for both academic and business communities are considered below.

E1.4 Implications of Findings

The climate of continuous change that has existed over the past 60 years looks set to continue in the NHS, as indicated by current initiatives and policies, which include: patient choice, service devolution, the creation of foundation trusts, and the movement towards creating an increasingly local and patient-led health service. In bringing the public and private sectors together, PFI is playing a part in reforming and

modernising public services. However, critics regard PFI as a factor in the destruction of health provision, particularly with respect to how it is locking newly formed foundation trusts into long-term contractual obligations, which will become increasingly significant in terms of the quality and affordability of future health provision.

The relationships that form between public and private sector individuals are seen to be important to long-term project performance, and the behaviour of individuals is conditioned, in part, by their values orientations, which in turn affect their attitudes and their use of a range of cooperation mechanisms. Trust and accountability were found to be key cooperation mechanisms, while lower rated factors – including super-ordinate goals, group identity and good communication processes – also give rise to cooperative relationship behaviour.

The hypothesis that individuals employed in the public or private sectors would display sector related differential values orientations was not, however, supported. This may be accounted for, in part, by the increasingly close public and private sector relationships that have developed over the past 20 years, coupled with the transfer of private sector business practices into the public sector and the associated movement of people.

The public sector as a whole had a marginally greater propensity towards collectivist behaviour, and displayed a greater differential between self and collective interests. The private sector, by contrast, was more balanced in terms of self interest versus collective interest, while having a higher self interest rating than the public sector. To some extent, the distinction between private sector self interest and public sector collective interest, would seem to be obvious. However, this distinction only had such clarity at a sector level. When individuals in the public and private sectors were considered individually, the differential was much less clear; it was found that there was an underlying propensity towards collective interest and welfare for close and distant relationships among all respondents. There seems to be two possible causes; firstly, those individuals whose values orientation tends towards collectivism may seek environments in which associated behaviours are enacted; secondly, the increasingly close association between the public and private sectors over the past generation has conditioned and socialised those working in close proximity.

This study has resulted in the positive finding that similarity rather than acute differences in individuals' values orientations can be viewed as a support mechanism in the management of long-term public and private sector relationships. These relationships look set to continue in the delivery of public services, and this will involve working in closer proximity with higher levels of collaboration, to enable mutually defined and interdependent objectives to be set, in order for successful outcomes to be delivered. The closer ties that form in cross sector work groups will be dependent, in part, on joint planning, process integration and open communications, which were found to be important factors to individuals associated with this study.

It is posited that the greater incidence of self-transcendence values orientation may be either: (i) associated with individuals seeking environments that supports their values orientation, or (ii) an inevitable result of the melding of public and private sectors in the delivery of public services. While this study cannot be certain as to which of these is the principle factor, inter sector working is likely to continue for the foreseeable future, and a better understanding of public and private sector individuals' relationships is therefore considered to be important. It is suggested that assessing values orientation within a project environment and establishing appropriate management processes would make a positive contribution to the relationship dynamic.

The discussion now moves on to consider some of the limitations of the study.

E1.5 Research Limitations

E1.5.1 Project setting

Some factors associated with the projects are considered to be research limitations. There was limited availability of suitable projects at the start of the research in 2000, due to commercial factors; the writer was, at the time, employed by one of the largest providers of services to the health PFI market. Gaining access to projects in the early days of PFI proved immensely difficult, as many projects were in the very early stages of development – and in many cases, the procurement process and the award of a contract had only recently been concluded, or remained pending. The commercial and confidential nature of private finance projects generally prevented the inclusion of potentially relevant data, such as the precise nature of the projects in the study. A

condition of access to all projects from which data was collected was anonymity, and access to the respondents was in relation to agreed data only.

At a crucial, early stage of the research, one project withdrew support; however, a change in the writer's employment status enabled this project to be replaced with three other, larger projects that were at varying stages of development. This broadened the range of projects that were considered, in terms of their size, their stage of development and, importantly, the length of any relationships that had been established.

The one-shot basis of the study is considered a key constraint of the research: the writer was unable to allocate sufficient time to each project and its employees to evaluate the consequences of the changing nature of public and private sector relationships within PFI project environments.

E1.6 Methodology Issues

The methodological issues are considered in terms of the overall approach and its wider limitations.

E1.6.1 Methodology approach

During the pilot stage of values instrument measurement it was established that the INDCOL survey instrument was not dimensionally stable without further scale development – particularly in respect of the horizontal-individualism dimension. At the time, the writer discussed scale development with Professor Triandis, who confirmed that the INDCOL scale had not been used with an exclusively UK sample and that locality-related scale development was not uncommon. When assessed as a summated two-dimensional model, acceptable dimensional Cronbach alpha reliability values were obtained following scale purification, but it was concluded that the scale lacked sufficient analytical granularity for this setting.

E1.6.2 Methodology limitations

At the inception of the study, research in health PFI was relatively embryonic; this factor, combined with commercial and confidentiality pressures that were due to the writer being employed by a large provider of PFI services, meant that the number of potential projects in which data could be collected was considerably reduced. Eight

years later, PFI has evolved considerably in the health sector and there is now reduced support for its use to drive change in public services.

One of the major concerns about the study is the single-shot nature of the data collection, and the fact that it took place during a relatively short period in 2004 and 2005. With hindsight, the data collection process was started too early and suffered from a number of factors, including: (i) commercial access constraints due to the writer's employment status; (ii) time limitations in terms of access to the respondents, and (iii) lack of absolute clarity with regards to the final data analysis processes. The larger number of active projects and the greater number of respondents that exist now, would enable a questionnaire-based study to be undertaken with relative ease.

The individuals' values orientations were established using the Schwartz Value Survey. It would have been possible to extend the use of the repertory grid technique to assess core personal values, using a laddering procedure; this was considered but discounted, as a hierarchy of individuals' values was not required to establish the hierarchy of the *a priori* categories. However, if a repertory grid analysis of core personal values was undertaken in combination with the Schwartz Values Survey at the ten values domain level, a more detailed, granular understanding of each individual's values would have resulted. This could have been compared with the constructs that were obtained from respondents to analyse their cooperative behavioural mechanism categorisation.

E1.7 Further Research Opportunities

This study has analysed twenty-nine respondents' values orientations and use of cooperative behavioural mechanisms in the context of six health projects; the respondents' values orientation variability was assessed and a hierarchy of the importance of cooperation mechanisms was established. The short time period that was spent with each project – principally due to the one-shot basis of the study – means that there is potential for further research to be undertaken.

The relationship between the public and private sectors continues to change in response to new forms of contracting; accordingly, a study of the influence of cooperation mechanisms could sensibly be extended to other settings that require long-term contracting relationships.

A number of issues associated with the design of this study are now discussed below.

E1.7.1 Research design

The small number of projects and the restricted time spent with individuals created study limitations. Day-to-day changes that occurred within projects were only discovered at the time of the writer's engagement, and the impact of employees joining and leaving could not be assessed. A longitudinal study would, by its nature, enable longer-term engagement with projects in which the impact of changes in personnel could be assessed. The individuals' values orientations could be analysed at different times during a project's development to assess the impact of role-set structure formation on cooperation mechanism utilisation. It would be both possible and practical to extend the study to a wider UK or international base, in order to compare the findings of this research with a larger sample: the current research strategy could be adopted or a questionnaire-based approach could be pursued

Game theory, which has a long and established history, could be used to consider cooperation and competition, and enable relationship cooperation to be analysed as a relationship game, thus leading to an alternate perspective on player interaction. The payoffs for the respondents within the different organisations and role-set structures could be explored, in order to enhance the understanding of how payoff utility varies over different time horizons.

Finally, a Q sort methodological analysis could now be undertaken, using the constructs elicited from the project respondents. This, by contrast, is a normal factor analysis that looks for correlations between variables across a sample of subjects. Q sort factor analysis looks for correlations between the subjects – in this case it would be the project leaders – across a sample of variables. The constructs elicited from a repertory grid analysis would provide a pool of statements that would allow respondents to undertake a Q sort ranking procedure in relation to two separate categories, e.g. agree/disagree or most like/least like. The factor matrix output that followed from factor analysis would allow similarities and differences between the respondents to be established, and would indicate how representative each factor is of the input statements.

E1.8 **Closing Comment**

It is accepted that limitations exist in terms of the design of the research and its findings and that alternate approaches could be adopted to enhance one's

understanding of the complexity of the public and private sector project leaders' behaviour, relationships and interactions. However, this study suggests that the values orientations and relationship behavioural mechanisms of project leaders from both the public and private sectors are more similar than different. One view is that this has resulted from the repeated engagements between resourceful and receptive individuals within these specific PFI projects; another view is that this was an inevitable consequence of PFI as part of a 'grand plan' and results from more than 20 years of constructive reform of the public and private sector interface.

The findings suggest that collectivist values, combined with trust and accountability, remain central to building cooperative behavioural relationships between individuals within and across the public and private sector boundary. PFI and the wider application of PPP in the health sector would appear – from these projects – to be led by project leaders with similar values; a potential source of commercial tension that may have hindered the performance of contracts is therefore removed. However, it cannot be said that trust and accountability expectations are met at all times and accordingly, commercial and service delivery expectations may not be achieved under all conditions.

LIST OF APPENDICES

			Page Number
Appendix	A:	Scale Cronbach Alpha coefficient results	241
	A1:	Pre-tested scales	242
	A2:	Purified SVS scale	246
Appendix	B:	Summary chronology of values measurement development	248
Appendix	C:	Pre-test instruments	259
	C1:	SVS pre-test instrument	260
	C2:	[S]INDCOL and INDCOL pre-test instruments	269
Appendix	D:	Revised Schwartz Value Survey (SVS) instrument	279
Appendix	E:	Schwartz Value Survey (SVS) responses to purified scale	284
Appendix	F:	Allocation of constructs by category	285
Appendix	G:	Allocation of constructs by high-intermediate-low (H-I-L) classification	286
Appendix	G1:	Construct allocation to high, intermediate and low categories	287
	G2:	Highly ranked constructs following Honey Content Analysis	295
Appendix	H:	Guidance notes for repertory grid interviewees	298
Appendix	I:	Descriptive analysis of repertory grid interviews	306
	I1:	Sample grid summary template for respondent analysis reporting	307
	I2:	Summary grid responses for all project respondents	308
Appendix	J	D1.5.3 full table including construct allocation for group identity category	338
Appendix	K	D1.6(b) full table including construct labels for high and intermediate categories	340

Appendix A

Scale Cronbach Alpha Coefficient Results

Appendix A contains two parts. A1 contains Cronbach alpha coefficient results for pre-tested scales, including the Schwartz Value Survey, and the two-dimensional INDCOL and four-dimensional INDCOL scales. Part A2 contains Cronbach alpha coefficient results for the SVS scale after purification.

APPENDIX A1

Cronbach alpha coefficient results for pre-tested scales.

SVS Instrument Cronbach's coefficient Alpha Tests					
Cronbach's Coefficient Alpha Tests					
Dimension	Item	Initial		Final	
		Corrected Item- Total Correlation	Alpha if item deleted	Corrected Item- Total Correlation	Alpha if item deleted
Conformity					
	Q11	0.732	0.840	0.732	0.840
	Q20	0.700	0.846	0.700	0.846
	Q40	0.675	0.856	0.675	0.856
	Q47	0.830	0.794	0.830	0.794
<i>Dimension Alpha</i>			0.872	0.830	0.872
Tradition					
	Q18	0.365	0.732	0.365	0.732
	Q32	0.736	0.586	0.736	0.586
	Q36	0.504	0.689	0.504	0.689
	Q44	0.660	0.615	0.660	0.615
	Q51	0.265	0.773	0.265	0.773
<i>Dimension Alpha</i>			0.735	0.660	0.735
Benevolence					
	Q33	0.881	0.736	0.881	0.736
	Q45	0.379	0.865	0.379	0.865
	Q48	0.585	0.818	0.585	0.818
	Q52	0.652	0.799	0.652	0.799
	Q54	0.745	0.775	0.745	0.775
<i>Dimension Alpha</i>			0.836	0.745	0.836
Universalism					
	Q1	0.463	0.788	0.463	0.788
	Q17	0.553	0.773	0.553	0.773
	Q24	0.599	0.767	0.599	0.767
	Q26	0.688	0.573	0.688	0.573
	Q29	0.325	0.816	0.325	0.816
	Q30	0.392	0.795	0.392	0.795
	Q35	0.634	0.760	0.634	0.760
	Q38	0.536	0.777	0.536	0.777
<i>Dimension Alpha</i>			0.801	0.536	0.801
Self-direction					
	Q5	0.386	0.944	0.386	0.944
	Q16	0.915	0.851	0.915	0.851
	Q31	0.822	0.869	0.822	0.869
	Q41	0.902	0.847	0.902	0.847
	Q53	0.801	0.872	0.801	0.872
<i>Dimension Alpha</i>			0.903	0.801	0.903
Stimulation					
	Q9	0.666	0.666	0.666	0.666
	Q25	0.756	0.595	0.756	0.595
	Q37	0.502	0.878	0.502	0.878
<i>Dimension Alpha</i>			0.785	0.502	0.785
Hedonism					
	Q4	0.796	0.780	0.796	0.780
	Q50	0.753	0.811	0.753	0.811
	Q57	0.707	0.855	0.707	0.855
<i>Dimension Alpha</i>			0.868	0.707	0.868
Achievement					
	Q34	0.792	0.755	0.792	0.755
	Q39	0.609	0.840	0.609	0.840
	Q43	0.778	0.762	0.778	0.762
	Q55	0.570	0.849	0.570	0.849
<i>Dimension Alpha</i>			0.846	0.570	0.846
Power					
	Q3	0.686	0.862	0.686	0.862
	Q12	0.678	0.864	0.678	0.864
	Q27	0.756	0.833	0.756	0.833
	Q46	0.832	0.801	0.832	0.801
<i>Dimension Alpha</i>			0.877	0.832	0.877
Security					
	Q8	0.622	0.801	0.622	0.801
	Q13	0.724	0.768	0.724	0.768
	Q15	0.594	0.809	0.594	0.809
	Q22	0.314	0.865	0.314	0.865
	Q56	0.929	0.693	0.929	0.693
<i>Dimension Alpha</i>			0.831	0.929	0.831

Individualism-Collectivism Cronbach's coefficient Alpha Tests

Dimension	Item	Initial		Final	
		Corrected Item- Total Correlation	Alpha if item deleted	Corrected Item- Total Correlation	Alpha if item deleted
Individualism					
	Q4	0.61	0.72	0.60	0.85
	Q8	0.78	0.71	0.76	0.84
	Q10	0.61	0.72	0.72	0.85
	Q12	0.76	0.71	0.77	0.84
	Q19	0.71	0.71	0.70	0.85
	Q23	0.54	0.74	0.56	0.86
	Q26	0.38	0.75	0.56	0.86
	Q30	0.49	0.74	0.52	0.86
	Q1	-0.27	0.78		<i>deleted</i>
	Q5	0.39	0.75	0.41	0.87
	Q6	0.07	0.77		<i>deleted</i>
	Q15	0.34	0.75	0.26	0.87
	Q18	0.07	0.77		<i>deleted</i>
	Q21	-0.52	0.79		<i>deleted</i>
	Q25	-0.13	0.78		<i>deleted</i>
	Q32	0.23	0.76	0.42	0.87
<i>Dimension Alpha</i>			0.76		0.87
Collectivism					
	Q3	0.65	0.79	0.65	0.87
	Q7	0.53	0.80	0.57	0.88
	Q13	0.00	0.83		<i>deleted</i>
	Q17	0.79	0.78	0.80	0.86
	Q24	0.58	0.79	0.60	0.88
	Q27	0.77	0.79	0.81	0.87
	Q29	0.18	0.82	0.25	0.90
	Q31	0.58	0.79	0.57	0.88
	Q28	0.73	0.78	0.73	0.87
	Q22	0.07	0.82		<i>deleted</i>
	Q20	0.32	0.81	0.28	0.89
	Q16	0.02	0.83		<i>deleted</i>
	Q14	0.75	0.78	0.78	0.86
	Q11	0.40	0.81	0.41	0.88
	Q9	0.71	0.78	0.71	0.87
	Q2	-0.24	0.85		<i>deleted</i>
<i>Dimension Alpha</i>			0.81		0.88

Individualism-Collectivism Cronbach's coefficient Alpha Tests

Dimension	Item	Initial		Final	
		Corrected Item- Total Correlation	Alpha if item deleted	Corrected Item- Total Correlation	Alpha if item deleted
Vertical-Individualism					
	Q4	0.66	0.87	0.66	0.87
	Q8	0.77	0.86	0.77	0.86
	Q10	0.58	0.87	0.58	0.87
	Q12	0.83	0.85	0.83	0.85
	Q19	0.72	0.86	0.72	0.86
	Q23	0.59	0.87	0.59	0.87
	Q26	0.54	0.88	0.54	0.88
	Q30	0.54	0.88	0.54	0.88
<i>Dimension Alpha</i>			0.88		0.88
Horizontal- Individualism					
	Q1	0.06	-0.06	0.58	0.52
	Q5	-0.06	0.06		<i>deleted</i>
	Q6	0.43	-0.49	0.37	0.61
	Q15	0.21	-0.20	0.36	0.60
	Q18	-0.10	0.06	0.36	0.61
	Q21	-0.02	-0.01	0.36	0.60
	Q25	0.22	-0.21		<i>deleted</i>
	Q32	-0.42	0.38		<i>deleted</i>
<i>Dimension Alpha</i>			-0.02		0.64
Vertical-Collectivism					
	Q3	0.55	0.84	0.60	0.88
	Q7	0.67	0.83	0.62	0.88
	Q13	0.08	0.89		<i>deleted</i>
	Q17	0.80	0.81	0.83	0.85
	Q24	0.74	0.81	0.77	0.86
	Q27	0.86	0.81	0.87	0.86
	Q28	0.67	0.82	0.66	0.87
	Q31	0.56	0.84	0.56	0.89
<i>Dimension Alpha</i>			0.85		0.89
Horizontal-Collectivism					
	Q2	-0.08	0.71		<i>deleted</i>
	Q9	0.70	0.46	0.85	0.64
	Q11	0.27	0.60	0.32	0.78
	Q14	0.61	0.49	0.70	0.68
	Q16	-0.06	0.68		<i>deleted</i>
	Q20	0.37	0.58	0.35	0.77
	Q22	0.37	0.58	0.21	0.80
	Q28	0.54	0.52	0.66	0.69
<i>Dimension Alpha</i>			0.62		0.77

Appendix A2

Cronbach alpha coefficient results for the purified SVS scale.

SVS Instrument Cronbach's coefficient Alpha Tests				
Cronbach's Coefficient Alpha Tests				
Dimension	Item	Initial		Final
		Corrected Item- Total Correlation	Alpha if Item deleted	Corrected Item- Total Correlation
Conformity				
	Q11	0.490	0.668	
	Q20	0.337	0.747	
	Q40	0.620	0.579	
	Q47	0.606	0.593	
<i>Dimension Alpha</i>			0.717	0.717
Tradition				
	Q18	0.523	0.486	
	Q32	0.354	0.575	
	Q36	0.571	0.490	
	Q44	0.147	0.676	<i>deleted</i>
	Q51	0.370	0.577	
<i>Dimension Alpha</i>			0.619	0.676
Benevolence				
	Q33	0.711	0.855	
	Q45	0.729	0.851	
	Q49	0.723	0.852	
	Q52	0.728	0.851	
	Q54	0.678	0.863	
<i>Dimension Alpha</i>			0.880	0.880
Universalism				
	Q1	0.497	0.781	
	Q17	0.550	0.774	
	Q24	0.575	0.769	
	Q26	0.466	0.786	
	Q29	0.495	0.782	
	Q30	0.432	0.791	
	Q35	0.494	0.782	
	Q38	0.585	0.768	
<i>Dimension Alpha</i>			0.802	0.802
Self-direction				
	Q5	0.358	0.573	
	Q16	0.148	0.684	<i>deleted</i>
	Q31	0.317	0.589	
	Q41	0.450	0.516	
	Q53	0.667	0.389	
<i>Dimension Alpha</i>			0.614	0.684
Stimulation				
	Q9	0.4100	0.2500	
	Q25	0.4310	0.1390	
	Q37	0.1310	0.7310	<i>deleted</i>
<i>Dimension Alpha</i>			0.4780	0.7310
Hedonism				
	Q4	0.3520	0.5830	
	Q50	0.3160	0.6260	
	Q57	0.5970	0.1730	
<i>Dimension Alpha</i>			0.6020	0.6020
Achievement				
	Q34	0.7830	0.8600	
	Q39	0.7140	0.8980	
	Q43	0.7330	0.8760	
	Q55	0.8860	0.8230	
<i>Dimension Alpha</i>			0.8940	0.8940
Power				
	Q3	0.7000	0.5580	
	Q12	0.3940	0.7400	
	Q27	0.6050	0.6280	
	Q46	0.4340	0.7330	
<i>Dimension Alpha</i>			0.7340	0.7340
Security				
	Q8	0.5180	0.5170	
	Q13	0.5820	0.4600	
	Q15	0.4060	0.5610	
	Q22	0.1590	0.6540	<i>deleted</i>
	Q56	0.2900	0.6360	
<i>Dimension Alpha</i>			0.6270	0.6540

Appendix B
Summary Chronology of Values Measurement Development

Source	Focus	Description	Comments
Allport, Vernon and Linzey (1931)	Individuals	AVL Scale Provides an indication of the relative priorities people give to 6 value types	Inspired by Spranger's 6 types of classification of man Instrument became one of the most popular at the time
Morris (1956)	Individuals	Identifies 13 ways to live by 5 value types by asking respondents to rate 'like' or 'do not like' to ways to live in paragraph descriptions	See Rohan (2000) See Reallo (2000)
Braithwaite and Scott, in <i>Measures of Personality and Social Psychological Attitudes</i> , 1991	Evolution of values measurement instruments from 1950's to late 1980's	Various	
Osgood et al. (1957)	Individuals	Personal Values Questionnaire (PVQ) Targets measurement of meaning, which provides a description of a person's value system These are measured using sets of 66 bi-polar adjectives grouped into 5 classes, including: goals of business; personal goals of individuals; groups of people; ideas associated with people, and ideas about general topics	See England (2001)
England (1967)	Business focused	Developed list of 66 values	In McDonald and Gandz (1992)

Rokeach (1973)	Individual	Comprises 2 lists of 18 values. One relates to end-states (or goals), labelled terminal values. The second relates to ways of behaving (or modes of conduct), labelled instrumental values	See Rokeach 1973, 1979. Also, Rohan (2000)
		Has become one of the most popular and enduring methods of measuring value priorities	States no underpinning theory
Tanaka (1978)	Pacific Rim focused	Goal study	Can be used as an instrument to measure Triandis's (1995) four cultural patterns: (i) definition of self; (ii) goal
Hofstede (1978, 1980)	Culture level, purports to extract individual level I-C	IBM multi country study detailing 4 cultural dimensions: power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity	Hofstede (1980) widely criticised approach (e.g. see Hui, (1988)
Hofstede and Bond (1984)			I-C similar to findings in Triandis (1972)
Chinese Cultural Connection (CCC) (1987)			CCC (1987) emic (as opposed to etic) approach to the derivation of values
			See also Allik and Reallo (2004)
cf Sixtl (1982)		Use of a pairwise comparison procedure	From Thurstone's Law of Comparative Judgements
Hsu (1983)	Cultural level USA China	Detailed aspects of collectivism and individualism in each culture. Validated link between competition and individualism	See Oishi et al. (1998)

Elizur (1984)	Values as objects, 2 basic factors: modality of outcome (importance of the outcome to the individual), and system performance contingencies (importance of rewards to the individual)	Smallest Space Analysis as for SVS instrument	
Hui (1984, 1988)	Individual level measurement of target specific construct of I-C Social ingroup: deals with interpersonal concerns and the belief in the group as distinct from the individual as the basic unit of survival China, America Use of attitude items	First to measure at individual level Development of 63-item INDCOL attitude scale, with separate I-C sub scales for different situations (target specific), responding to Triandis' statement that I-C is situation specific Treats I-C as cultural syndrome	Built from models that predict behaviour from attitudes, norms and other variables: Fishbein and Ajzen (1975), and Triandis (1972, 1977, 1980) Triandis (1990) notes 6 values types from Spranger (1928)
Bellah et al. (1985, 1988)	Cultural level USA	Discerns aspects of American life, stating that the standard is no longer 'what is good' but 'does it feel good?' Recognises several types of individualism: religious, utilitarian and expressive Factor analysis of attitude items	
Triandis et al. (1985)	USA I-C at an individual level	Distinguishes between I-C at cultural and individual levels	Supports Hsu (1983) findings Extends Hui's (1984) INDCOL attitude scale, also broadens the measurement through use of scenarios to include the influence of people

Wagner and Moch (1986)	Relationship of the individual to the group in terms of individual sacrifice for the group	Multi method approach to the measurement of I-C. 34-item scale (11 measuring beliefs, 5 measuring values and 18 assessing norms) resulting in 11-factor instrument distinguishing between I-C	Extended from Breer and Locke (1965)
Triandis, et al. (1986)	Study focused on craft workers Cross country study USA, Pacific Rim, Europe	Pan cultural factor analysis (using four factor clusters) and discriminant factor analysis Moves from cultural to individual level using idiocentric/allocentric dimensions	Used in Moorman and Blakely (1995) Uses items from 9 diverse cultures, positive attitude items from Hui (1984; Triandis et al. 1985; Bellah et al. 1985)
cf Eamonns (1986)	Individual	Personal Strivings Values Scale	See Oishi et al. (1998)
Schwartz and Bilsky (1987; 1990)	Goals, content and structure of human values Country level analysis	Comparison of value scores based on individual's types of personal strivings Use of 56 value items (and 10 motivational domains) to provide a general theory of value structure beyond that of Rokeach's (1973) 36-item value scale Values viewed as criteria and not qualities inherent to objects	Defines values as 'people's conceptions of the goals that serve as guiding principles in their lives' Schwartz and Bilsky (1987) generated a conceptual definition of values that incorporates 5 formal features, which: (i) relate to concepts or beliefs; (ii) pertain to desirable end states or behaviours; (iii) transcend specific situations; (iv) guide the selection or evaluation of events, and (v) are ordered by their relative importance
Triandis, Bontempo Villareal et al. (1988)	USA Pacific Rim Europe USA I-C at an individual level	Uses 158 items (including 93 from INDCOL) to examine the structure of idiocentrism and allocentrism	

Semin and Rubini (1990)	Content analysis Italy orientated		Analysis of insults
Triandis et al. (1990)	Cross-culture level measurement Value focus	Multi method relating to: (i) meaning of the self; (ii) homogeneity of in/out groups; (iii) responses to attitude items; (iv) responses to value items (use of Schwartz 56-item SVS instrument); (v) perceptions of social behaviour (See Triandis 1995: 193 for further information)	Extracts the value aspects and combines this with the multi method approach from Triandis, Chan, Bhawuk, Iwao and Sinha (1995) Supports a consideration of individualism and collectivism as cultural syndromes (a syndrome being 'a pattern characterized by shared beliefs, attitudes, norms, roles and values, organized around a theme and that can be found in certain geographic regions during a particular historic period'
Lortie-Lussier and Fellers (1991) McDonald and Gandz (1991; 1992)	Canada HR management, Canada Organisation focused Uses England's (1968) Personal Values Questionnaire (PVS)	% of subjects' responses that were linked to a social entity (%S score) Intra cultural study to assess degree of I-C in sub communities Reduced 24-item value scale derived empirically to test congruence between organisational and individual values Output as values orientation as moralist or pragmatist 4 values domains: task orientated, relationship orientated, change related, and related to the status quo	Builds on work and maps across Rokeach (1973), England (1967) and Allport et al. (1990)

Bhawuk and Brislin (1992)	Direct and indirect communication	16-item scale to measure individualism and collectivism, together with measurement of open mindedness and flexibility	
Schwartz (1992, 1994, 1996)	Cross country cultural assessment in 49 countries of I-C	56 types of goal-related values, in 10 motivationally distinct categories Developed from Rokeach's (RVS) 36-item value survey (1973)	Contains the Schwartz Value Survey (SVS) instrument. Links back to Markus and Kitayama (1991), and underpins Kapoor et al. (2003) See appendix C1 for further information
Weissman et al. (1993)	Focused on kin	The 'Californian Cultural Assessment Inventory' CCAI. Uses 25 value statements	
Singelis (1992, 1994)	Direct/indirect communication processes	Independent and interdependent self-construals measured	Development of Self-Construal Scale (SCS)
Brierbrauer, Meyer and Wolfradt (1994)	Distinguishes between normative and evaluative components of social behaviour German versus collectivist populations	Scale that measures normative/evaluative behaviour components	
Chan (1994)	Hong Kong and Illinois	Uses the %S attitude value measures to distinguish the degree of collectivism Called the COLINDEX score	
Gudykunst, Matsumoto et al. (1994)	Self	Measures self-construal by using a mixture of other scales and additional items	
Bilsky and Schwartz (1994)	Personality	Use of Rokeach's (1973) Value Survey (RVS) and the Freiburg Personality Inventory (FPI)	Draws on Maslow (1955) on motivational needs
Moorman and Blakely (1995)	I-C as predictor of OCB	Uses a range of instruments containing I-C items. Use of Wagner and Moch's (1986) 11-item scale	W and M scale looks at the focus on self vs group in group context.

Singelis et al. (1995)	Individual	Multi method assessment of measurement of I-C at an individual level (32-item INDCOL scale)	Triandis suggests that this is combined with a multi method I-C measurement approach (Triandis et al. 1995), encompassing: (i) aspects of Sinha (1987); (ii) Triandis et al. (1995), and (iii) the Self-Construal Scale [SCS] from Schwartz (1992) See pp. 203-217, Triandis (1995) for approach See Reallo (2002)
(Triandis et al. 1995)	Multi method approach to I-C at an individual level across cultures. Measurement of idio/allo dimensions.	Combines: (i) aspects of Sinha (1987); (ii) Triandis et al. (1995), and (iii) the Self Construal Scale from Schwartz (1992), to provide measurement at horizontal and vertical dimensions The original 56 SVS items are reduced to 44, due to their lack of cultural universality	Uses additional items from Triandis, Leung et al. (1985), Hui (1988), Triandis et al. (1988), and Triandis et al. (1990) See also Triandis (1995, 1998) Relates to Schwartz (1992)
Schwartz and Sagiv (1995)	Individual level analysis		Schwartz defines values as 'desirable transitional goals, varying in importance that serve as guiding principals in peoples' lives' A value is distinguishable by the type of motivational goal it expresses
Triandis (1995, 1996)	Cultural level I-C as cultural syndrome of attitudes, self-concepts and behaviours	Uses 2 methods to distinguish degree of vertical and horizontal I-C: a questionnaire and triad response time groups The SINDCOL convergent validity is tested against Self Construal Scale and Singelis' (1995) 32-item INDCOL attitude scale	Subjective cultural syndromes consist of shared attitudes, beliefs, norms, role- and self-definitions, and the values of members of a culture are organised around a theme Use of Schwartz (1992) SVS scale [S]INDCOL (subjective self- measurement of individualism vs collectivism through 24 questions that provide direct measurement), instrument 2 p. 213 Included in Probst, Carnevale and Triandis (1999)

cf McCrea (1996)	Individuals	Big Five Personality Test, considered to be similar to Schwartz SVS	See Rohan (2000)
Rhee et al. (1996)	Groups	Assesses approaches to the world that affect internal experience and interpersonal interactions in social behaviour Measures individualism and collectivism across groups using a 4 factor model of kin collectivism, non-kin collectivism, kin individualism and non-kin individualism	See Reallo (2002)
Matsumoto et al. (1996)	Groups	Individualism Collectivism Assessment Inventory (ICIA) Examines individualism and collectivism within 4 reference groups, including family, friends, colleagues and strangers	See Reallo (2002)
Schwartz et al. (1997)	Israel and Finland	Uses 2 scales: the Marlow-Crowne Socially Desirable responding (MDS), and the Schwartz (1992) Schwartz Value Survey (SVS) to ascertain the influence of socially desirable behaviour on response	The MDS scale is a 33-item scale from Crowne and Marlow (1960) Uses a reduced item list (utilising 44 of the original 56 items in SVS) from Schwartz and
Dose (1997)	Values distinguished and rated on 2 orthogonal continua	Moral considerations vs preferences, and the degree to which the members of a culture	Extends Borg (1990) and counters Elizur (1984)
Reallo et al. (1997)	Estonia	Variation of INDCOL for specific study Scale labelled ESTCOL using a 24 point scale	See Reallo (2002)

Gouveia (1998)	Societal	Basic values survey using 66 items grouped in 22 basic values categories. Measures social identity as defined by relationship with in-group	See Gouveia et al. (2002), also Triandis (1995) for relationship with vertical collectivism
Triandis et al. (1998)	Measurement of I-C vertical and horizontal dimensions across cultures USA, Pacific Rim	Scenario response testing as for Triandis (1996)	
Triandis and Gelfand (1998)	USA Measurement of I-C horizontal and vertical dimensions	4 study assessment as follows: (i) reduced (27-item) Singelis et al. (1995); (ii) additional 36 scenarios and 27 modified items from INDCOL; (iii) additional 48 non-overlapping	Uses modified Singelis (1995) SINDCOL scale
		Test of cultural values and their influence on cooperation Experimental approach using Prisoner's Dilemma Use of Subjective [S]INDCOL scale (Singelis, Triandis, Bhawuk and Gelfand, 1995) to establish I-C at horizontal and vertical levels	Tests Bornstein and Ben-Yossef's (1994) experiment
Finegan (2000)	Work related values measurement and the relationship between this and a person's 'fit' within an organisation	Builds from McDonald and Gandz (1991, 1992) and Rokeach (1973), to establish 4-value poles of an individual	Use of 24-item scale, moves from the rank order notion of Rokeach (1973) to the rating order of Munson and McIntyre (1979) Considers a number of approaches to measurement, including Amabile (1994) and Rawlin and Meglione (1987) Considers integrating (SVS) Schwartz, (1994), Schwartz and Bilsky (1987), and McDonald and Gandz, into new individual values measurement instrument
England (2001)	Focuses on value systems of USA managers	Uses PVQ to build on Whiteley and England (1980), to assess pragmatist / moralist	Acknowledges that values influence behaviour

Schwartz et al. (2001)	Development and application of Personal Values Questionnaire (PVQ) for use at cultural/individual level analysis	Tests PVQ in non western application (SA) where SVS has been found to be out of range Respondents presented with 224 descriptions of imaginary individuals and asked 'how much the individual is like you'	Finds PVQ to be more concrete and contextualized in comparison to SVS. Response requirement deals with people descriptions rather than self-conscious reports of values
Oyserman et al. (2002a)	American study focusing on IndCol	Critique of IndCol worldview and ways of measuring	Provides extensive summary of IndCol measurement instruments
Schwartz et al. (2008)	European Social Survey model	Embeds SVS into European Social Survey process	Only 7 values domains discerned as opposed to 10 in SVS

Appendix C

Pre-tested Instruments

Appendix C consists of two parts. Appendix C1 contains the Schwartz Values Survey Instrument. Appendix C2 contains the [S]INDCOL and INDCOL instruments.

APPENDIX C1:
THE SCHWARTZ STRUCTURED VALUE SURVEY (SVS)

In this questionnaire you are to ask yourself: "What values are important to ME as guiding principals in MY life, and what values are less important to me?" There are two lists of values on the following pages. These values come from different cultures. In the parentheses following each value is an explanation that may help you to understand its meaning.

Your task is to rate how important each value is for you as a guiding principal in your life. Use the rating scale below:

0--means the value is not at all important, it is not relevant as a guiding principal for you.

3--means the value is important.

6--means the value is very important.

The higher the number (0, 1, 2, 3, 4, 5, 6), the more important the value is as a guiding principal in YOUR life.

-1 is for rating any values opposed to the principals that guide you.

7 is for rating a value of supreme importance as a guiding principal in your life; *ordinarily there are no more than two such values.*

In the space before each value, write the number (-1,0,1,2,3,4,5,6,7) that indicates the importance of that value for you, personally. Try to distinguish as much as possible between the values by using all the numbers. You will, of course, need to use numbers more than once.

AS A GUIDING PRINCIPAL IN MY LIFE, this value is:

Opposed to my values	Not important to me			Important to me			Very important to me	Of supreme importance to me
-1	0	1	2	3	4	5	6	7

Before you begin, read the values in List I, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values and rate it -1. If there is no such value, choose the value least important to you and rate it 0 or 1, according to its importance. Then rate the rest of the values in List I.

VALUES LIST I

- 1 EQUALITY (equal opportunity for all)
- 2 INNER HARMONY (at peace with myself)
- 3 SOCIAL POWER (control over others, dominance)
- 4 PLEASURE (gratification of desires)
- 5 FREEDOM (freedom of action and thought)
- 6 A SPIRITUAL LIFE (emphasis on spiritual not material matters)
- 7 SENSE OF BELONGING (feeling that others care about me)
- 8 SOCIAL ORDER (stability of society)
- 9 AN EXCITING LIFE (stimulating experiences)
- 10 MEANING IN LIFE (a purpose in life)

AS A GUIDING PRINCIPAL IN MY LIFE, this value is:

Opposed to my values	Not important to me			Important to me			Very important to me	Of supreme importance to me
-1	0	1	2	3	4	5	6	7

- 11 POLITENESS (courtesy, good manners)
- 12 WEALTH (material possessions, money)
- 13 NATIONAL SECURITY (protection of my nation from enemies)
- 14 SELF RESPECT (belief in one's own worth)
- 15 RECIPROCATION OF FAVORS (avoidance of indebtedness)

-
- 16 CREATIVITY (uniqueness, imagination)
 - 17 A WORLD AT PEACE (free of war and conflict)
 - 18 RESPECT FOR TRADITION (preservation of time-honored customs)
 - 19 MATURE LOVE (deep emotional and spiritual intimacy)
 - 20 SELF-DISCIPLINE (self-restraint, resistance to temptation)
 - 21 PRIVACY (the right to have a private sphere)
 - 22 FAMILY SECURITY (safety for loved ones)
 - 23 SOCIAL RECOGNITION (respect, approval by others)
 - 24 UNITY WITH NATURE (fitting into nature)
 - 25 A VARIED LIFE (filled with challenge, novelty and change)
 - 26 WISDOM (a mature understanding of life)
 - 27 AUTHORITY (the right to lead or command)
 - 28 TRUE FRIENDSHIP (close, supportive friends)
 - 29 A WORLD OF BEAUTY (beauty of nature and the arts)
 - 30 SOCIAL JUSTICE (correcting injustice, care for the weak)

VALUES LIST II

Now rate how important each of the following values is for you as a guiding principal in YOUR life. These values are phrased as ways of acting that may be more or less important for you. Once again, try to distinguish as much as possible between the values by using all the numbers.

Before you begin, read the values in List II, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values, or -- if there is no such value -- choose the value least important to you, and rate it -1, 0, or 1, according to its importance. Then rate the rest of the values.

AS A GUIDING PRINCIPAL IN MY LIFE, this value is:

Opposed to my values	Not important to me			Important to me		Very important to me	Of supreme importance to me	
-1	0	1	2	3	4	5	6	7

- 31 INDEPENDENT (self-reliant, self-sufficient)
- 32 MODERATE (avoiding extremes of feeling and action)
- 33 LOYAL (faithful to my friends, group)
- 34 AMBITIOUS (hard-working, aspiring)
- 35 BROADMINDED (tolerant of different ideas and beliefs)
- 36 HUMBLE (modest, self-effacing)
- 37 DARING (seeking adventure, risk)
- 38 PROTECTING THE ENVIRONMENT (preserving nature)
- 39 INFLUENTIAL (having an impact on people and events)
- 40 HONORING OF PARENTS AND ELDERS (showing respect)
- 41 CHOOSING OWN GOALS (selecting own purposes)
- 42 HEALTHY (not being sick physically or mentally)
- 43 CAPABLE (competent, effective, efficient)
- 44 ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)
- 45 HONEST (genuine, sincere)
- 46 PRESERVING MY PUBLIC IMAGE (protecting my "face")
- 47 OBEDIENT (dutiful, meeting obligations)
- 48 INTELLIGENT (logical, thinking)
- 49 HELPFUL (working for the welfare of others)
- 50 ENJOYING LIFE (enjoying food, sex, leisure, etc.)

-
- 51 DEVOUT (holding to religious faith and belief)
- 52 RESPONSIBLE (dependable, reliable)
- 53 CURIOUS (interested in everything, exploring)
- 54 FORGIVING (willing to pardon others)
- 55 SUCCESSFUL (achieving goals)
- 56 CLEAN (neat, tidy)
- 57 SELF-INDULGENT (doing pleasant things)

Note: background information was not collected in this study. However, the questions that form part of the standard instrument have been included for completeness.

Your Sex (circle): 1. Male 2. Female

Your age: ____ Years

While you were growing up (birth to age 15), who were the people who lived in your home for at least two years? Write the number of people in each category. Write zero if none in category.

____ Parents

____ Other Relatives

____ Sisters and Brothers

____ Persons who are not relatives

How many years of education has each person completed (since 1st grade)? (estimate if not certain)

____ Yourself

____ Your Father

____ Your Mother

Your Marital status (circle): 1. Single 2. Married or 3. Widowed 4. Divorced
5. Cohabiting

What is your current occupation or your occupation when last employed?

1. Teacher grades k-2

9. Other blue collar

2. Teacher grades 3-8

10. Farm owner or farm worker

3. Teacher grades 9-12

11. Secondary school student

- | | |
|--|---|
| 4. School principal
and education | 12. University student: social sciences |
| 5. Other professional
and law | 13. University student: humanities, arts, |
| 6. Manager or business owner
and medicine | 14. University student: natural sciences |
| 7. Clerical or sales worker | 15. Homemaker |
| 8. Skilled worker | 16. Other not codable into 1-15 |

With regard to religion, with which religious group do you identify? (circle)

[List major religious groups, "Other_____“ and "None"]

- | | |
|--------------------------|-------------------------|
| 1. XXXXXXXXXXXX | 4. XXXXXXXXXXXXXXXXXXXX |
| 2. XXXXXXXXXXXXXXXX | 5. Other_____ |
| 3. XXXX XXXXXXXXXXXXXXXX | 6. None |

How religious are you, if at all? (circle)

Not at							Very
all							religious
0	1	2	3	4	5	6	7

Of which of the following groups are you a member? (circle)

[List main ethnic groups in your society and "Other_____"]

- | | |
|------------------------------|---------------------|
| 1. XXXXXXXX | 4. XXXXXXXXXXXX |
| 2. XXXXXXXXXXXXXXXX XXXXXXXX | 5. XXXXXXXXXXXXXXXX |
| 3. XXXXX XXX | 6. Other_____ |

Which of the following political parties comes closest to representing your views?
(circle)

[List main political parties and "Other_____"]

- | | |
|-------------|-----------------|
| 1. XXXXXXXX | 4. XXXXXXXXXXXX |
|-------------|-----------------|

2. XXXXXXXXXXXXXXXX XXXXXXXX 5. XXXXXXXXXXXXXXXX
 3. XXXXX XXX 6. Other _____

In what kind of a place did you grow up? (circle):

1. large city (500,000+) 2. small city 3. rural area 4. farm

Instrument Scoring,

Keying of SVS Ten Value Scales

Note: as the focus of research is at the individual values orientation level only, the 10 items listed below individual level analysis have been included only.

Individual Level Analysis

Value Domain	SVS items
Conformity	11, 20, 40, 47
Tradition	18, 32, 36, 44, 51
Benevolence	33, 45, 49, 52, 54
Universalism	1, 17, 24, 26, 29, 30, 35, 38
Self-Direction	5, 16, 31, 41, 53
Stimulation	9, 25, 37
Hedonism	4, 50, 57
Achievement	34, 39, 43, 55
Power	3, 12, 27, 46
Security	8, 13, 15, 22, 56

Cultural level Analysis

Embeddedness	8, 11, 13, 15, 18, 20, 26, 32, 40, 46, 47, 51, 54, 56
Hierarchy	3, 12, 27, 36, 39
Mastery	34, 37, 43, 55,
Affective Autonomy	4, 9, 25, 31, 41, 50, 57
Intellectual Autonomy	5, 16, 35, 53
Egalitarianism	1, 30, 33, 45, 49, 52
Harmony	17, 24, 29, 38

Scale Use Correction: Because individuals and cultural groups use the value scale differently, it is necessary to correct for scale use in all analyses.

Note: this is not a requirement for this study as the sample has been drawn from the same country. If required the following steps would be required to obtain standardised scores for each respondent.

Individual Level: 1. Compute each individual's total score on all values; 2. Use the total score as a covariate in analyses of variance, or a variable to partial in correlations and 3. For regression, first center scores of all items for an individual around that individual's mean rating of all items

Culture Level: Compute mean sample score on all values. Subtract sample mean from 4.00. Add the result to the score for each value dimension. (e.g., Mean = 4.5; Dimensions = 4.0; Adj. = 3.5)

For example: Say you want to calculate a score for mastery in Chile.

1. You calculate the mean for all respondents from Chile on all 57 items in the survey. Say it is 4.375.
2. Comparing the overall mean in Chile to the international mean of 4.00, I find that Chileans tend to use the upper part of the scale. They have a mean that is .375 higher than the average (4.375-4.00).
3. Therefore, I will subtract .375 from whatever score I get for a cultural dimension in Chile.
4. If the observed score on mastery in Chile, before adjusting for scale use, is 5.375 (the mean of all mastery items across all respondents in the sample), then the adjusted score for mastery will be 5.00 (5.375-.375). That is the score to use for the mastery dimension in cross-national comparisons.
5. Let's say the Chilean average for harmony was 2.875. Then the score on this dimension would be corrected to 2.500 (2.875-.375) for cross-national comparisons.

FAILURE TO CORRECT FOR SCALE USE YIELDS INCORRECT RESULTS!!!

Scale Use Correction:

Because individuals from different cultural groups use the value scale differently, it is sometimes necessary to correct it for scale use in all analyses.

Note: this is not a requirement for this study, as the sample has been drawn from the same country. If it was necessary, the following steps would be required to obtain standardised scores for each respondent.

Individual Level: 1. Compute each individual's total score on all values; 2. Use the total score as a covariate in analyses of variance, or a variable to partial on correlations and 3. For regression, first center scores of all items for an individual around that individual's mean rating of all items

Culture Level: Compute mean sample score on all values. Subtract sample mean from 4.00. Add the result to the score for each value dimension. (e.g., Mean = 4.5; Dimensions = 4.0; Adj. = 3.5)

For example: Say you want to calculate a score for mastery in Chile.

1. You calculate the mean for all respondents from Chile on all 57 items in the survey. Say it is 4.375.
2. Comparing the overall mean in Chile to the international mean of 4.00, I find that Chileans tend to use the upper part of the scale. They have a mean that is .375 higher than the average (4.375-4.00).
3. Therefore, I will subtract .375 from whatever score I get for a cultural dimension in Chile.
4. If the observed score on mastery in Chile, before adjusting for scale use, is 5.375 (the mean of all mastery items across all respondents in the sample), then the adjusted score for mastery will be 5.00 (5.375-.375). That is the score to use for the mastery dimension in cross-national comparisons.
5. Let's say the Chilean average for harmony was 2.875. Then the score on this dimension would be corrected to 2.500 (2.875-.375) for cross-national comparisons.

FAILURE TO CORRECT FOR SCALE USE YIELDS INCORRECT RESULTS!!!

Appendix C2:

[S]INDCOL and INDCOL Instruments

This questionnaire provides information required to undertake the data collection and analysis phase of the Business Administration doctoral research programme being undertaken by Keith McNally, at Kingston University.

Respondents are thanked in advance for their continuing support and the time taken to complete the questions.

INSTRUCTIONS FOR RESPONDENTS ON COMPLETION OF THE INDIVIDUALISM-COLLECTIVISM QUESTIONNAIRE

Completion of these questionnaires provides important information on the respondent's orientation in respect of behaviour, values and norms towards close friends and work colleagues. The subjective Individualism-Collectivism and expanded Individualism-Collectivism questionnaires will be combined with values orientation data obtained through self-completion of the Schwartz Values Survey (SVS) questionnaire (issued separately).

The INDCOL and SVS questionnaires originated in the USA. Part of the pre test process is to consider the internal validity of the questionnaire, which may be influenced by anglicizing some of the question content. Where the question text has been changed for an English respondent, the original USA question text is shown below in *italics*.

2.2.1 Are you an individualist or collectivist – quick check

Individuals may differ in their relationship between themselves and a collective, i.e. family or work group. Collectivists will place greater importance on the group and may subvert their goals for the betterment of the whole group. Individualists have a different emphasis, placing more importance on their own success, which may be in conflict with the needs of a group to which they belong or relate.

In this questionnaire we wish to help you find out for yourself if you are a collectivist or an individualist by asking you to answer questions about your own circumstances and lifestyle.

We will help you find out where you stand on these tendencies by summing “points” to give a questionnaire score.

Under C (Collectivism) and I (Individualism) you should enter a rating on a 0 to 10 scale, following the instructions associated with each question.

E.g. suppose we ask you: Do you feel a part of any group, such that if that group expelled you, you would feel that your life has ended? If the answer is “yes, very definitely, absolutely true”, you would enter 10 under C. On the other hand, if it is not true, you might enter 0.

We will ask you questions that either reflect individualism, in which case you should enter a number between 0 and 10 in the “I” column or collectivism; in which case you should enter a number in the “C” column. After you answer all the questions, you can sum the points you have given to Individualism and, separately, all the points you have given to Collectivism. You will then have an idea of how high you are in each of these tendencies. We can review the outcomes when we meet.

2.2.2 Please Note – enter your score in the column relating to the indicator letter

No	Question	Guidance	Indicator	Score I - C
1	Individualists tend to be concerned with their personal success, even if that does not help their family. Collectivists often chose family over personal goals. On the whole how close do you feel to your family?	Enter numbers from 0 to 10. 0=no trace 5=quite a bit 10=the maximum possible	C	
2	There are probably other groups to which you feel very close. These might be colleagues [co-workers], neighbours, people who share personal rights views, environmental views, social standing, or people with similar aesthetic standards, etc. Now select the three of four groups that you feel closest to and enter an average collectivism rating, indicating how close you feel to these groups.	Insert an average rating from 0 to 10. 0=not close 10=very close	C	

3	<p>The younger people are, the more they like to explore new ideas and do things that do not necessarily fit what groups want them to do. But that is not constant with age. Young children often want to do what their parents want them to do; in some cultures teenagers want to do what their friends want them to do; old people often want to do what their own children and grandchildren want them to do.</p>	<p>Now think how free you are from group influences.</p> <p>If you feel totally free enter a 10. Otherwise use a lower number.</p>	I		
4	<p>Individuals who travel a lot or change residences frequently do not feel that they must do what their neighbours want them to do. How free do you feel from the influences of your neighbours?</p>	<p>If you feel totally free enter a 10. If you feel totally constrained enter a 0.</p>	I		
5	<p>The smaller the community in which you live, the more people (fellow villagers, neighbours) know what you are doing, and the more you feel that you must pay attention to their ideas about your lifestyle.</p>	<p>If you feel that you are paying maximum attention to the ideas that people in your community have about your lifestyle, enter 10, otherwise enter a value from 0 – 10.</p>	C		
6	<p>You have probably picked up a lot of ideas about how you should live from your parents, and they from their parents. So it is likely that traditions that were in the families of your grandparents are still very influential in your own life.</p>	<p>If these traditions are maximally influential in your life use a 10.</p>	C		
7	<p>Think of your grandparents and parents in terms of how much they have been influenced by individualistic cultures such as those of the United States, England, Canada, Australia and New Zealand, or collectivist cultures such as those of Africa, East Asia and Latin America.</p> <p>One clue is the kind of child rearing a</p>	<p>Try to estimate how individualistic you are, taking into account who your parents and other important influences (e.g. relatives, teachers) were and also how influential each of them was while you were growing up. If you feel you were influenced so as to become an extreme</p>	I		

	<p>person has had. When the child rearing you have experienced was warm-controlling, in other words, your parents adored you as long as you did what they told you to do, you are most likely to be a collectivist; on the other hand, if the child rearing was warm-independent, that is, your parents adored you and encouraged you to be independent, self reliant, exploratory, it was ok to get into trouble, and they would help you get out of trouble, you are likely to have become an individualist.</p> <p>If your rearing as a child was cold and neglected, you would also be an individualist; if it was cold and controlling, you would be a collectivist, but these relationships are weaker, so do not give too many points in this rating.</p>	<p>individualist, enter a 10; if on the other hand, you were influenced not to be individualistic, enter a 0.</p>		
8	<p>Think of the people you socialized with (e.g. close friends) when you were growing up. In the previous question the influences from the different cultures were present, but they did not necessarily influence you directly.</p> <p><u>Now we are talking about direct influence.</u></p> <p>Did the people you socialized with come from different cultures and traditions? The more diverse they were, the more likely is that you are an individualist.</p>	<p>Rate yourself by giving a 10 if most of your friends and influential adults (e.g. teachers) when you were growing up were from different ethnic groups.</p>	I	
9	<p>How independent are you in your finances? Some people cannot make any decisions about how to spend their money without consulting others, either because they have too little money or because they have important financial obligations.</p>	<p>If you cannot spend even a small amount of money without considering what that will do to other people, give yourself a 10.</p>	C	

10	How much education do you have? The more education you have, the more you can consider different points of view from different parts of the world, and you can decide for yourself what is right and wrong, and so you become more of an individualist.	Rate the maximum 10, otherwise use the range 0 – 10.	I	
11	How much formal traditional education did you have? This is education about your ethnic group (e.g. Sunday school, language school) covering the language, religion, history, rituals and traditions of your ethnic group.	The more traditional education you had, the higher you should rate yourself.	C	
12	How much have you travelled alone abroad? If you have travelled that way a lot, enter the maximum 10 because you have seen many countries and met people from all over the world, and you will had to decide for yourself what lifestyle is best for you, and so you must have become an individualist. If you travelled with your own group, you maintained your home culture while you were abroad, so you did not have to face the question of lifestyles. In that case give yourself fewer points or a 0.	Enter a maximum 10 for wide independent travel or a lower number (or 0) for group travel.	I	
13	Did you live abroad for more than 6 months? The chances are that if you did, you had to decide for yourself whether the way of life of the host people was the kind of life you wanted for yourself, and so you would have become more individualistic.	If you have not lived abroad enter a 0; if you lived in different countries every few years, enter a 10. Enter between 0 and 10 representing your living abroad experience.	I	
14	Are you married? Generally married people have to live in a way that pays attention to	If you are not married enter a 0.	C	

	the needs of their spouse and that makes them collectivist. How collectivist do you feel because of your marital status?				
15	Did you grow up in a large family, with many siblings and other relatives, in which you had to pay attention to the needs of others? In that case you may have become collectivist.	Rate yourself accordingly between 0 and 10.	C		
16	Television, movies and magazines often expound an individualistic viewpoint (e.g. boy meets girl, they fall in love, get married, though sometimes this upsets their family and friends). How much exposure to such media did you experience?	The more exposure, the greater the number from 0 to 10.	I		
17	Do you approve of the stories in the media mentioned in the previous section? The more you disapprove the more collectivist you may be.	If you strongly condemn these stories, enter a 10.	C		
18	Are your jobs or most of your activities allowing you to do your own thing (e.g. you are writing novels as you see fit) or do you have to act so as to take into account the needs and views of others? The more you have to take into account other people the more collectivist you are likely to be.	Enter 0 where jobs and activities allow you to do your own thing and 10 where you are required to take others into account.	C		
19	What percentage of your time do you work alone? If you work alone almost all the time, you do not have to pay attention to the needs of others, thus enter 10.	Maximum working alone enter 10, minimum working alone enter 0.	I		
20	Do you enjoy doing fun things alone (e.g. taking a walk alone), or must you do things with others? The more you must have others with you in order to have fun, the more collectivist you are.	Rate yourself on the basis of 0 for tending toward individual activity and 10 activities involving others.	C		
21	Would you say that most of the time you do "your own thing", paying no attention to	If you do your own thing all the time enter 10.	I		

	whether it fits customs and "proper" behaviour?				
22	How much do you value your privacy?	If you value your privacy very much enter 10, if you think that privacy is unimportant enter 0.	I		
23	Is your occupation or job such that you <u>can</u> make decisions while ignoring the needs of others?	The more you can do that, the larger should be the number between 0 and 10.	I		
24	Finally, in your occupation or job do you generally pay a lot of attention to the views and needs of others?	The more you pay such attention, the higher the number between 0 to 10.	C		
		Self Score			

Now that you have an idea of your tendency towards both individualist and collectivist traits, please proceed to answer the 32 questions in the INDCOL questionnaire below.

There are no right or wrong answers.

In completing the questionnaire there are no right or wrong answers. The purpose is to establish how strongly the respondent agrees or disagrees with a number of statements.

Please use the following rules to complete the questionnaire,

- **If you strongly agree with a statement enter a 9 in the blank space to the right of the question**
- **If you strongly disagree, enter a 1 in the blank space**
- **If you are unsure of the question please enter a 5 in the space**
- **If for any reason you feel that the statement does not apply to you enter a 5 and underline**

In short, use this key:

Strongly	Strongly
Disagree	Agree
1 2 3 4 5 6 7 8 9	

INDCOL QUESTIONNAIRE

To avoid losing information as the questionnaire is completed, please save the file to your computer before starting. When finished please attach and send the completed questionnaire back to keith.mcnally@btinternet.com.

Ref.	Question	Score in the range of 1 (strongly disagree) to 9 (strongly agree)
1	I prefer to be direct and forthright when I talk to people	
2	My happiness depends very much on the people around me	
3	I would do what would please my family, even if I detested that activity	
4	Winning is everything	
5	One should live one's life independently of others	
6	What happens to me is of my own doing	
7	I usually sacrifice my self-interest for the benefits of my group	
8	It annoys me when other people perform better than I do	
9	It is important for me to maintain harmony within my group	
10	It is important to me that I do my job better than others	
11	I like sharing little things with my neighbours	
12	I enjoy working in situations involving competition with others	
13	We should keep our aging parents with us at home	
14	The well being of my work colleagues is important to me <i>The well being of my co-workers is important to me</i>	
15	I enjoy being unique and different from others in many ways	
16	If a relative were in financial difficulty, I would help	

	within my means	
17	Children should feel proud if their parents receive an honour or award <i>Children should feel honoured if their parents receive a distinguished award</i>	
18	I often "do my own thing"	
19	Competition is the law of nature	
20	If a work colleague received a prize I would feel proud <i>If a co-worker gets a prize I would feel proud</i>	
21	I am a unique individual	
22	To me, pleasure is spending time with others	
23	When another person does better than I do, I become tense and upset <i>When another person does better than I do, I get tense and aroused</i>	
24	I would sacrifice an activity that I enjoy very much if my family did not approve of it	
25	I like my privacy	
26	Without competition it is not possible to have a good society	
27	Children should be taught to place duty over pleasure	
28	I feel good when I cooperate with others	
29	I hate to disagree with others in my work group <i>I hate to disagree with others in my group</i>	
30	Some people emphasize winning; I am not one of them	
31	Before I take a major trip, I consult with most members of my family and many friends	
32	When I succeed, it is usually because of my abilities	

Please enter your name:

Email:

Contact Number:

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

Appendix D

Revised Schwartz Values Survey (SVS) Instrument

This questionnaire provides information required to undertake the data collection and analysis phase of the Business Administration doctoral research programme being undertaken by Keith McNally, at Kingston University.

Respondents are thanked in advance for their continuing support and the time taken to complete the questions.

INSTRUCTIONS FOR RESPONDENTS ON COMPLETION OF SVS

Please note the comments above each part in advance of completing the questionnaire.

In this questionnaire you are to ask yourself: "What values are important to me as guiding principles in my life, and what values are less important to me?"

The two lists of values on the following pages are derived from different cultures. In the parentheses following each value is an explanation that may help you to understand its meaning.

Your task is to rate how important each value is for you as a guiding principle in your life.

Use the rating scale below:								
AS A GUIDING PRINCIPLE IN MY LIFE, this value is:								
Opposed to my values	Not important to me		Important to me			Very important to me	Of supreme importance to me	
-1	0	1	2	3	4	5	6	7
<p>0 - means the value is not at all important, it is not relevant as a guiding principle for you. 3 - means the value is important. 6 - means the value is very important.</p> <p>-1 is for rating any values opposed to the principles that guide you. 7 is for rating a value of supreme importance as a guiding principle in your life; <i>ordinarily there are no more than two such values.</i></p> <p>The higher the number (0, 1, 2, 3, 4, 5, 6), the more important the value is as a guiding principle in <u>your</u> life.</p>								

Before you begin, read the values in List 1, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values and rate it -1. If there is no such value, choose the value least important to you and rate it 0 or 1, according to its importance. Then rate the rest of the values in List 1.

In the score space after each value statement, write the number (-1,0,1,2,3,4,5,6,7) that indicates the importance of that value for you, personally. Try to distinguish as much as possible between the values by using all the numbers. You will, of course need to use numbers more than once.

VALUES LIST 1

Ref.	Value	Supporting Comment	Score
1	EQUALITY	equal opportunity for all	
2	INNER HARMONY	at peace with myself	
3	SOCIAL POWER	control over others, dominance	
4	PLEASURE	gratification of desires	
5	FREEDOM	freedom of action and thought	
6	A SPIRITUAL LIFE	emphasis on spiritual not material matters	
7	SENSE OF BELONGING	feeling that others care about me	
8	SOCIAL ORDER	stability of society	
9	AN EXCITING LIFE	stimulating experiences	
10	MEANING IN LIFE	a purpose in life	
11	POLITENESS	courtesy, good manners	
12	WEALTH	material possessions, money	
13	NATIONAL SECURITY	protection of my country from enemies	
14	SELF RESPECT	belief in one's own worth	
15	RECIPROCATION OF FAVORS	avoidance of indebtedness	
16	CREATIVITY	uniqueness, imagination	
17	A WORLD AT PEACE	free of war and conflict	
18	RESPECT FOR	preservation of time-honoured customs	

	TRADITION		
19	MATURE LOVE	deep emotional and spiritual intimacy	
20	SELF-DISCIPLINE	self-restraint, resistance to temptation	
21	PRIVACY	the right to have a private sphere	
22	FAMILY SECURITY	safety for loved ones	
23	SOCIAL RECOGNITION	respect, approval by others	
24	UNITY WITH NATURE	fitting into nature	
25	A VARIED LIFE	filled with challenge, novelty and change	
26	WISDOM	a mature understanding of life	
27	AUTHORITY	the right to lead or command	
28	TRUE FRIENDSHIP	close, supportive friends	
29	A WORLD OF BEAUTY	beauty of nature and the arts	
30	SOCIAL JUSTICE	correcting injustice, care for the weak	

VALUES LIST 2

Now rate how important each of the following values is for you **as a guiding principle in your life**. These values are phrased as ways of acting that may be more or less important for you. Once again, try to distinguish as much as possible between the values by using all the numbers.

Before you begin, read the values in List 2, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values, or -- if there is no such value--choose the value least important to you, and rate it -1, 0, or 1, according to its importance. Then rate the rest of the values.

Ref.	Value	Supporting Comment	Score
31	INDEPENDENT	self-reliant, self-sufficient	
32	MODERATE	avoiding extremes of feeling and action	
33	LOYAL	faithful to my friends, group	
34	AMBITIOUS	hard-working aspiring	
35	BROADMINDED	tolerant of different ideas and beliefs	
36	HUMBLE	modest, self-effacing	

37	DARING	seeking adventure, risk	
38	PROTECTING THE ENVIRONMENT	preserving nature	
39	INFLUENTIAL	having an impact on people and events	
40	HONORING OF PARENTS AND ELDERS	showing respect	
41	CHOOSING OWN GOALS	selecting own purposes	
42	HEALTHY	not being sick physically or mentally, feeling well	
43	CAPABLE	competent, effective, efficient	
44	ACCEPTING MY PORTION IN LIFE	submitting to life's circumstances	
45	HONEST	genuine, sincere	
46	PRESERVING MY PUBLIC IMAGE	protecting my "face", reputation with others?	
47	OBEDIENT	dutiful, meeting obligations, carrying out instructions	
48	INTELLIGENT	logical, thinking	
49	HELPFUL	working for the welfare of others	
50	ENJOYING LIFE	enjoying food, sex, leisure, etc.	
51	DEVOUT	holding to religious faith and belief	
52	RESPONSIBLE	dependable, reliable	
53	CURIOUS	interested in everything, exploring	
54	FORGIVING	willing to pardon others	
55	SUCCESSFUL	achieving goals	
56	CLEAN	neat, tidy	
57	SELF-INDULGENT	doing pleasant things, meeting own desires for pleasure	

Please enter your name:

Email:

Contact Number:

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

Appendix F

Allocation of Constructs by Category

Category Label	Category Summary - Bipolar constructs	Construct	Sum	Sum %
Trust	An environment of cooperation evidenced by teams with shared purpose and common goals. Relationships have progressed to partnerships, such that openness, honesty and transparency serve to reduce disharmony, <i>versus</i> barriers, brinkmanship and conflict. Relationships still operate on a 'them and us' basis, with limited integration or understanding resulting in competition at individual and team levels.	4.5,4.10,4.12,30.1,30.6,30.7,30.8,30.11,39.5,39.6,39.7,39.8,39.13,28.2,28.7,28.10,28.11,28.12,28.13,29.11,35.1,35.2,35.7,35.9,35.11,46.5,46.8,36.2,36.4,36.6,36.9,36.11,36.12,37.2,37.5,37.9,45.10,5.5,5.7,5.11,1.2,1.10,12.7,14.7,14.9,14.11,3.4,3.9,3.10,7.2,7.7,13.8,13.11,8.11,10.13,5.13.6,13.7,13.8,13.9,17.3,17.7,17.8,47.9,47.10,41.8,41.11,40.1,40.5,40.6,40.12,34.1,34.7,34.11,27.4,27.11,31.5,31.6,48.10,32.3,32.7,32.11,25.1,25.12,25.13	85	27.68%
Accountability	An environment in which there is vision and shared purpose. Problems are owned and tackled collectively, in order to get the job done. There is clear direction and processes in place to aid issue resolution, <i>versus</i> an environment in which working together is not seen as an important step to recognising and resolving problems. Issues are not tackled at an individual or team level, as limited or no structure exists to facilitate resolution. All too often, avoidance and blame are evident strategies.	4.2,4.4,30.2,30.4,30.5,39.2,39.9,39.10,28.4,28.8,29.4,29.9,29.10,35.10,46.1,46.2,46.3,46.4,36.3,37.1,37.4,37.6,37.7,45.1,45.3,45.4,45.5,5.2,5.4,5.6,5.8,1.3,1.5,1.6,12.2,12.4,12.5,12.6,14.2,7.3,7.8,7.11,8.8,8.9,8.10,11.3,11.5,13.2,17.2,17.4,17.5,47.2,47.4,47.6,41.1,41.4,41.9,41.10,40.10,34.3,34.8,27.9,27.10,31.4,48.8,32.1,32.2,32.6,32.9,25.4,25.7,25.8,25.9,25.10,25.11	75	24.42%
In/Out Group Identity	An environment typified by working together in teams. Boundaries are not evident and differences between each other are recognised. A collaborative approach without conflict has resulted in a partnership, <i>versus</i> dysfunction and silo working, in which individuals are excluded or exclude themselves, creating an environment of isolation and separation with defined boundaries in place.	4.6,4.7,4.9,30.3,30.9,30.10,39.3,28.6,28.9,29.3,29.5,29.7,35.5,46.7,36.1,36.8,37.8,45.9,5.9,1.9,12.3,14.5,14.8,14.10,3.1,7.1,7.12,8.2,8.3,8.6,8.12,11.1,13.4,47.3,41.6,40.2,40.3,40.9,34.2,34.4,34.5,34.9,27.5,48.5,48.7,32.4,32.10,25.2,25.5	49	15.96%
Communication	An environment in which open and active communication in teams supports the progress and delivery of objectives, <i>versus</i> miscommunication that sets out to hinder progress, facilitate communication voids and misunderstanding at individual and team levels.	4.1,4.3,4.8,4.11,39.11,39.12,28.3,29.1,29.8,35.3,35.4,35.6,35.8,46.6,36.5,37.3,45.8,5.3,1.8,12.1,14.1,3.3,3.8,7.6,7.10,8.11,11.7,11.9,13.1,47.1,47.7,47.8,41.7,40.8,40.11,34.6,27.2,48.2,48.4,48.6,32.5,25.6	44	14.33%
Superordinate Goals	An environment in which goals and targets are clearly defined, issues are recognised and processes put in place to resolve problems over a relevant timeline, <i>versus</i> an environment in which there is a conflict between the individual and the organization and no clear direction over any time horizon. There is no sense of urgency in dealing with issues and a lack of process to bring about a successful resolution.	39.1,39.4,28.5,29.6,36.10,5.1,5.10,1.4,1.7,14.3,14.6,3.2,3.5,3.6,3.7,7.4,7.5,7.9,8.4,8.5,8.7,11.4,11.6,13.3,17.1,17.6,47.5,41.2,41.5,40.4,40.7,34.10,27.1,27.6,27.7,31.1,31.2,31.3,48.1,48.3,48.9,32.8,25.3	43	14%
Reward/Incentive	A commercial environment, <i>versus</i> focus on wider goal delivery	28.1,1.1	2	0.65%
Miscellaneous		29.2,36.7,45.2,45.6,45.7,8.1,11.2,41.3,27.8	9	2.93%
			307	100%

Appendix G
Allocation of Constructs by High-Intermediate-Low (H-I-L)
Classification

Appendix G contains two parts. The first part, G1, contains the allocation of constructs by respondents to the high, intermediate and low categories, following a generic content analysis. The second part, G2, contains the highly ranked constructs, following a Honey content analysis.

Appendix G1
H-I-L Ranked Constructs' Generic Content Analysis

Project	Respondent	Construct Number	Content Analysis Category	Content Analysis Category Ref.	Emergent Pole	Implicit Pole	Vignette Ref.	Sum of Difference (unreversed)	% Similarity Score (unreversed)	Sum of Difference (reversed)	% Similarity Score (reversed)	Ranking (Highest to Lowest in Category)	H-I-L Range
C	36	36.09	Trust	1	Integration	1	1,8	6	1	94.44	21	-16.67	94.44 H
E	41	41.08	Trust	1	Collaboration & dependency	1	1,9	5	1	94.44	29	-61.11	94.44 H
D	7	7.02	Trust	1	Blame	1	4,6	5	20	-11.11	2	88.89	88.89 H
C	35	35.02	Trust	1	Situation undermined project	1	4,5	2	2	88.89	18	0	88.89 H
B	32	32.03	Trust	1	Smooth running	1	8,9	7	3	83.33	23	-27.78	83.33 H
A	39	39.06	Trust	1	Teamwork to achieve common goal	1	3,9	6	3	83.33	23	-27.78	83.33 H
C	46	46.05	Trust	1	Competition	1	2,5	8	27	-50	3	83.33	83.33 H
F	13	13.06	Trust	1	Positive outcome	1	3,9	6	4	77.78	22	-22.22	77.78 H
F	13	13.08	Trust	1	Planning	1	1,8	6	4	77.78	22	-22.22	77.78 H
F	14	14.07	Trust	1	Achieved partnership working	1	1,9	6	4	77.78	22	-22.22	77.78 H
A	28	28.11	Trust	1	Mature relationships	1	4,8	5	4	77.78	26	-44.44	77.78 H
C	36	36.04	Trust	1	Leadership setting direction	1	2,8	3	4	77.78	17	5.56	77.78 H
D	3	3.04	Trust	1	Problem solving demonstrated	1	4,7	5	26	-44.44	4	77.78	77.78 H
D	4	4.1	Trust	1	Process establishment	1	3,4	1	5	72.22	15	16.67	72.22 H
A	30	30.07	Trust	1	Norm	1	1,5	8	17	5.56	5	72.22	72.22 H
A	39	39.07	Trust	1	Pulling together	1	1,9	9	22	-22.22	6	66.67	66.67 H
D	7	7.07	Trust	1	One team	1	5,9	5	6	66.67	18	0	66.67 H
B	25	25.12	Trust	1	Positive supporting environment	1	2,9	8	3	83.33	17	5.56	83.33 I
C	35	35.07	Trust	1	Goal alignment	1	1,5	4	4	77.78	26	-44.44	77.78 I
C	35	35.09	Trust	1	Brinkmanship (non-specific individual)	1	6,7	9	5	72.22	19	-5.56	72.22 I
E	47	47.09	Trust	1	Integrated working	1	1,8	2	5	72.22	21	-16.67	72.22 I
F	5	5.07	Trust	1	Working together to deliver objective	1	1,9	6	5	72.22	17	5.56	72.22 I
F	17	17.03	Trust	1	Harmony	1	8,9	5	6	66.67	16	11.11	66.67 I
F	17	17.07	Trust	1	Harmony	1	1,9	7	6	66.67	22	-22.22	66.67 I
B	27	27.04	Trust	1	Disconnected management	1	4,7	5	6	66.67	24	-33.33	66.67 I
C	36	36.02	Trust	1	Working together to resolve issue	1	4,5	1	24	-33.33	6	66.67	66.67 I
E	40	40.05	Trust	1	People working together	1	5,8	6	18	0	6	66.67	66.67 I
D	4	4.05	Trust	1	Negotiation	1	2,5	2	6	66.67	22	-22.22	66.67 I
F	5	5.05	Trust	1	Them & us relationship	1	2,5	8	17	5.56	7	61.11	61.11 I
A	30	30.08	Trust	1	Learning	1	3,5	8	18	0	8	55.56	55.56 I
E	34	34.01	Trust	1	Good team relationships	1	1,2	7	26	-44.44	28	-55.56	55.56 I
A	39	39.08	Trust	1	Willingness to work together	1	3,5	3	8	55.56	22	-22.22	55.56 I
E	40	40.01	Trust	1	Working together	1	1,2	7	23	-27.78	8	55.56	55.56 I
A	28	28.12	Trust	1	Potential for failure	1	2,4	3	8	55.56	22	-22.22	55.56 I
A	28	28.02	Trust	1	Relationships	1	5,6	9	19	-5.54	8	55.55	55.55 I
C	37	37.05	Trust	1	Openness and acceptance	1	2,8	4	9	50	16	11.12	50 I
B	31	31.05	Trust	1	Positive teamworking	1	1,9	5	10	44.44	26	-44.44	44.44 I
B	25	25.01	Trust	1	Team creation	1	2,3	5	14	22.22	22	-22.22	22.22 I
C	35	35.01	Trust	1	Brinkmanship	1	2,3	1	22	-22.22	6	66.67	66.67 L
D	3	3.09	Trust	1	Transparency	1	6,7	1	15	16.67	7	61.11	61.11 L
C	36	36.06	Trust	1	Making an effort	1	1,5	2	8	55.56	12	33.33	55.56 L
F	13	13.05	Trust	1	Objectives being achieved	1	2,8	9	20	-11.11	8	55.56	55.56 L
								50	50	21	-16.67	50 L	

A	30	30.05	Accountability	2	Recognising the need to work together	5,8	1	5	3	3	1	5	5	1	1	Individual working	77.78	24	-33.33	77.78	I
C	36	36.03	Accountability	2	Service problems	4,7	1	2	4	3	3	4	5	1	1	Joint working	77.78	22	-22.22	77.78	I
C	46	46.04	Accountability	2	Individual performance	4,7	4	1	2	2	2	1	1	5	5	Cooperation	77.78	4	77.78	77.78	I
F	1	1.05	Accountability	2	Need for corrective action	2,5	5	2	1	1	1	2	5	5	5	No corrective action	16.67	5	72.22	72.22	I
F	13	13.02	Accountability	2	Problem being resolved	4,5	1	3	4	3	2	5	5	1	2	Individual is the problem	72.22	21	-16.67	72.22	I
F	14	14.02	Accountability	2	Project level problem	4,5	1	2	3	3	2	5	5	1	1	Individual level and solved	72.22	9	50	72.22	I
B	25	25.11	Accountability	2	Problem not being addressed	3,4	4	1	2	2	3	1	2	5	5	Problem tackled and solved	72.22	5	72.22	72.22	I
F	5	5.06	Accountability	2	Actions being taken	3,6	5	4	1	1	2	2	2	4	5	No action required	66.67	6	66.67	66.67	I
F	17	17.04	Accountability	2	Problem	4,7	5	5	3	3	1	2	5	5	Solution	66.67	6	66.67	66.67	I	
B	32	32.06	Accountability	2	Coordinated success	1,9	1	4	3	3	5	5	3	3	1	Partial resolution of problem	66.67	20	-11.11	66.67	I
C	45	45.01	Accountability	2	Teamworking	1,2	1	4	3	5	5	3	3	2	1	Early stage team problems	66.67	30	-66.67	66.67	I
A	30	30.02	Accountability	2	Positive problem solving	4,5	1	4	1	1	5	5	1	1	1	No acceptance of problem	61.11	27	-50	61.11	I
F	1	1.06	Accountability	2	Rectification necessary	3,6	1	3	1	1	1	1	2	5	5	Everything running OK	55.56	8	55.56	55.56	I
A	39	39.02	Accountability	2	Teams meeting to aid progress	4,5	2	4	3	1	2	5	5	2	3	No team structure	55.56	22	-22.22	55.56	I
A	28	28.08	Accountability	2	Resolution	3,5	1	1	5	2	2	3	4	1	2	Blame	55.55	21	-16.66	55.55	I
C	37	37.06	Accountability	2	Individuals not empowered	3,6	1	1	4	3	1	5	5	1	1	Individuals can make decisions	50	27	-50	50	I
F	12	12.05	Accountability	2	Collective working	5,8	4	5	3	5	2	3	5	1	1	Lack of working together	44.44	22	-22.22	44.44	I
B	31	31.04	Accountability	2	Lack of leadership	5,6	4	4	1	1	2	1	1	4	5	Good leadership	22.22	14	22.22	22.22	I
D	8	8.08	Accountability	2	Proactive	3,5	1	2	1	3	2	4	5	1	1	Reactive	66.67	24	-33.33	66.67	L
B	25	25.07	Accountability	2	Positive effort	1,9	1	1	3	3	3	5	4	1	1	Lack of effort	66.67	24	-33.33	66.67	L
D	4	4.02	Accountability	2	Team performance	4,5	1	3	4	2	3	5	4	1	1	Individual performance	61.11	15	16.67	61.11	L
B	25	25.04	Accountability	2	Lack of service	4,7	5	2	4	2	1	1	1	4	5	Service oriented	55.56	15	16.67	55.56	L
D	4	4.04	Accountability	2	Organisational issues	1,4	1	2	3	1	3	4	5	2	5	Individual problems	55.56	14	22.22	55.56	L
D	11	11.05	Accountability	2	Team working	5,8	1	1	4	3	4	5	3	4	1	Initial team formation	55.56	18	0	55.56	L
E	47	47.02	Accountability	2	Action plan in place	4,5	1	2	3	2	1	5	5	1	2	No action plan	50	17	5.56	50	L
F	5	5.08	Accountability	2	Processes required to resolve issues	3,5	1	3	3	3	4	1	5	1	2	No processes	50	21	-16.67	50	L
F	17	17.02	Accountability	2	Solution identified	4,5	1	1	3	2	5	2	1	1	1	Symptoms identified	50	19	-5.56	50	L
B	32	32.02	Accountability	2	Changing individuals to resolve problem	4,6	5	2	3	1	5	1	2	4	4	Teamworking to resolve problems	50	19	-5.56	50	L
E	34	34.03	Accountability	2	Good process	1,7	1	3	3	3	2	4	1	1	1	Lack of process	50	19	-5.56	50	L
E	34	34.09	Accountability	2	Team working	1,8	1	2	3	1	1	2	1	1	1	Rogue individual	50	23	-27.78	50	L
F	1	1.03	Accountability	2	Effective cooperation	8,9	1	3	5	4	2	4	5	1	1	Lack of management control	44.44	24	-33.33	44.44	L
F	12	12.06	Accountability	2	Individual-led project	3,6	5	3	1	1	1	1	1	5	3	Project-led	44.44	26	-44.44	44.44	L
A	30	30.04	Accountability	2	Recognising and resolving problem	1,4	1	1	1	1	1	5	5	1	1	No recognition of problem existing	44.44	26	-44.44	44.44	L
B	32	32.01	Accountability	2	Focus on individual problems	2,3	5	2	1	2	3	2	1	4	4	Focus on team working	44.44	10	44.44	44.44	L
A	39	39.09	Accountability	2	Failure to grasp task	6,7	4	4	3	3	3	1	1	4	4	Common understanding of objectives	44.44	10	44.44	44.44	L
F	5	5.02	Accountability	2	Team working	4,5	2	4	3	1	3	5	5	4	4	Individual's performance	44.44	10	44.44	44.44	L
D	8	8.09	Accountability	2	Individual failing	6,7	5	5	2	2	2	4	5	5	5	Team success	38.89	11	38.89	38.89	L
B	27	27.09	Accountability	2	Individual problems	6,7	5	5	4	4	4	1	1	4	5	Corporate level people problems	38.89	11	38.89	38.89	L
B	27	27.1	Accountability	2	Team pulling together	1,8	1	2	1	2	1	5	4	2	1	Individual being disruptive	38.89	17	5.56	38.89	L
C	37	37.01	Accountability	2	Successful project environment	1,2	1	1	4	3	3	3	4	1	1	Early stage of project	33.33	22	-22.22	33.33	L
C	46	46.03	Accountability	2	Effective team working	8,9	2	3	2	2	2	1	5	1	1	No team working	33.33	18	0	33.33	L
D	11	11.03	Accountability	2	Planning focused	8,9	2	5	2	4	4	5	4	1	4	Contingency focus	27.78	13	27.78	27.78	L

Appendix G2

Honey Content Analysis – Highly Ranked Constructs

This appendix contains an extract of the higher ranked constructs from appendix H1, following a Honey content analysis.

Project	Respondent	Construct Number	Content Analysis Category	Content Analysis Category Ref.	Emergent Pole	Implicit Pole	Vignette Ref.	4	3	2	2	3	1	2	5	5	Vignette Ref.	Sum of Difference (unreversed)	% Similarity Score (unreversed)	Sum of Difference (reversed)	% Similarity Score (reversed)	Ranking (Highest to Lowest in Category)	H-I-L Range	
D	7	7.06	Comms	3	Lack of communication	5	3,6	4	3	2	2	3	1	2	5	9	3,6	20	-11.11	2	88.89	88.89	H	
F	14	14.01	Comms	3	Partnership working	5	1,2	1	3	4	4	4	5	5	2	3	1,2	30	83.33	23	-27.78	83.33	H	
E	34	34.06	Comms	3	Lack of communication	4	5,7	5	3	3	4	4	4	4	4	4	5,7	19	-5.56	3	83.33	83.33	H	
C	35	35.03	Comms	3	Agreed way forward	4	8,9	1	3	4	4	4	4	4	4	2	8,9	4	77.78	20	-11.11	77.78	H	
E	40	40.08	Comms	3	Solution identified	4	3,5	1	2	1	3	1	5	5	1	7	3,5	4	77.78	24	-33.33	77.78	H	
D	4	4.03	Comms	3	Maturity & openness	4	8,9	2	3	4	3	3	4	5	2	7	8,9	4	77.78	14	22.22	77.78	H	
C	35	35.06	Comms	3	Poor communications impacting on delivery	4	3,6	5	2	2	2	2	2	2	4	9	3,6	20	-11.11	4	77.78	77.78	H	
B	32	32.05	Comms	3	Lack of individual level communications	4	3,6	5	4	1	3	4	1	2	4	9	3,6	19	-5.56	5	72.22	72.22	H	
A	28	28.03	Comms	3	Communications	4	8,9	1	3	1	4	2	2	5	1	7	8,9	7	61.22	22	-22.22	61.22	H	
C	36	36.08	In/Out Grp	4	Acting individually	4	6,7	5	4	3	3	2	1	1	4	2	6,7	22	-22.22	0	100	100	H	
A	30	30.1	In/Out Grp	4	Team working	4	1,8	1	5	3	3	5	5	1	1	6	1,8	2	88.89	22	-22.22	88.89	H	
B	27	27.05	In/Out Grp	4	Teamwork	4	2,8	1	2	4	4	5	4	5	2	5	2,8	2	88.89	24	-33.33	88.89	H	
B	25	25.05	In/Out Grp	4	Team and us	4	2,5	5	2	1	2	1	1	5	5	8	2,5	28	-55.56	2	88.89	88.89	H	
D	8	8.06	In/Out Grp	4	Team working together	4	3,9	1	1	2	4	2	5	4	1	6	3,9	3	83.33	25	-38.89	83.33	H	
E	47	47.03	In/Out Grp	4	Lack of clarity & responsibility	4	7,9	5	3	2	3	2	1	5	3	8	7,9	6	83.33	25	-38.89	83.33	H	
D	4	4.09	In/Out Grp	4	Boundary demolition	4	1,8	1	3	4	4	3	5	4	2	6	1,8	4	77.78	16	11.11	77.78	H	
E	34	34.02	In/Out Grp	4	Team oriented	4	4,5	1	4	3	2	2	4	2	2	6	4,5	4	77.78	18	0	77.78	H	
A	30	30.09	In/Out Grp	4	Internal approach to problem solving at individual level	4	6,7	5	1	3	3	5	1	1	5	2	6,7	24	-33.33	4	77.78	77.78	H	
C	35	35.05	In/Out Grp	4	Team and us	4	2,5	5	1	2	3	2	2	2	4	8	2,5	20	-11.11	4	77.78	77.78	H	
B	48	48.07	In/Out Grp	4	Teamworking	4	1,5	1	4	3	2	5	4	4	1	9	1,5	5	72.22	21	-16.67	72.22	H	
D	4	4.07	In/Out Grp	4	Joint working for success	4	3,5	2	4	2	4	3	3	5	2	7	3,5	5	72.22	15	16.67	72.22	H	
D	11	11.01	In/Out Grp	4	Teamwork focused	4	1,2	1	3	4	3	4	3	2	3	2	1,2	7	61.11	11	38.89	61.11	H	
B	48	48.05	In/Out Grp	4	Partner peer relationship	4	2,8	2	4	2	4	2	5	3	3	1	3	2,8	8	55.56	18	0	55.56	H
E	41	41.02	Goals	5	End result obtained	5	1,2	1	2	4	4	4	5	5	1	5	1,2	0	100	28	-55.56	100	H	
F	1	1.07	Goals	5	Successful achievement	5	1,9	1	2	4	4	5	5	3	1	5	1,9	1	94.44	27	-50	94.44	H	
B	27	27.07	Goals	5	Working together	5	1,9	1	2	4	4	5	4	3	2	5	1,9	2	88.89	22	-22.22	88.89	H	
D	7	7.09	Goals	5	Personality issues	5	6,7	4	3	2	3	1	2	5	5	6,7	5	-11.11	2	88.89	88.89	H		
B	27	27.06	Goals	5	Blockers to goal success	5	3,6	5	4	1	2	1	2	2	4	2	3,6	20	-33.33	2	88.89	88.89	H	
F	17	17.06	Goals	5	Short-term	5	3,6	5	5	2	2	2	1	3	5	9	3,6	22	-22.22	4	77.78	77.78	H	
F	17	17.01	Goals	5	Outcome focused	5	1,2	1	1	5	4	3	4	3	1	3	1,2	5	72.22	21	-16.67	72.22	H	
D	3	3.05	Goals	5	Framged solution	5	2,5	4	3	2	3	1	3	4	1	8	2,5	5	72.22	17	5.56	72.22	H	
F	1	1.04	Goals	5	Failure	5	4,7	5	3	2	1	1	2	1	5	1	4,7	27	-50	5	72.22	72.22	H	
B	32	32.08	Goals	5	Objective setting	5	6,7	5	5	4	3	3	2	1	4	2	1	21	-16.67	5	72.22	72.22	H	
D	11	11.06	Goals	5	Wide issues	5	3,9	2	2	4	2	4	5	3	3	1	3,9	6	66.67	14	22.22	66.67	H	
B	48	48.01	Goals	5	Completion	5	1,2	2	1	5	3	4	3	1	2	1	3	8	55.56	20	-11.11	55.56	H	
B	31	31.02	Goals	5	Desired objectives	5	8,9	1	1	4	4	2	2	4	2	2	7	13	27.78	23	-27.78	27.78	H	

Appendix H

Guidance Notes for Repertory Grid Interviewees

The following notes provide background information to the Repertory Grid procedure, with regards to how the interview is conducted and the role of the interviewee.

What is Repertory Grid (RG)?

RG is a structured interview process in which the interviewer minimally influences the data collected from the interviewee. The process is very structured and to some extent mechanical in how it is performed. This is important and does not in anyway detract from the experience of the interviewee.

It can be considered as a discussion between two individuals within a strong reference frame. The frame provides the necessary information for cross sample analysis post interview.

RG seeks to understand how a participant relates to a particular circumstance and importantly recounts the nature of their experiences in their own words, rather than the interviewer generating a commentary. RG helps to provide information about how a respondent sees the world, using their own terms. The resultant 'grid' is in effect a rating scale, which can be analysed both in a contextual format and quantitatively, the latter being important to this research.

What constitutes the RG process?

The basic elements of the RG process are,

The interviewer and the interviewee. *All interviews in my research programme will be conducted on an individual basis and the results un-attributed.*

The subject matter or *topic* for discussion,

Elements,
Constructs, and
Ratings.

The key issue is obtaining the respondent constructs in relation to the topic area.

Examples of constructs could be,

Pleasant – Rude

Warm and sunny – Cold and windy

A good teacher – An ineffective teacher

Ensures I've understood his point – Doesn't check if he's made sense

Reliable – Unreliable

Usually comes in late for work – Always comes to work on time

The important point to note is that the constructs are yours, not mine!

Perhaps another way to review the construct examples above is to substitute 'as opposed to' in place of the dash, so *Reliable – Unreliable* would become *Reliable as opposed to Unreliable*.

A construct always represents a contrast and should not be seen as a simple opposite. Several respondents may separately say that someone is reliable. While the opposite would simply be unreliable and perfectly acceptable as a construct system, another respondent may see rude or exciting as the opposite end of the construct. It is therefore very important in responding to the RG process to think hard about the opposing end of the construct and not simply turn a positive into a negative, or vice versa.

How does the process work?

Some of the work has already been done in advance of the RG interview. My research is concerned with relationship behaviour and mechanisms of behaviour in a PFI setting. The RG process requires 'elements' to be developed in advance of the

interview, as it's the elements which are compared by the interviewee to gain access to the constructs.

Nine simple project vignettes have been prepared, these are shown over the page. During the interview, you will be asked to compare triads of elements in turn, identifying why two are similar and why the third is different. This comparative process elicits the construct system.

Occasionally, it may be difficult to make a comparison, in this case we will simply move on to another group of three. Most people can generate about 10 constructs, some fewer and others more.

Each element (remember the nine listed over the page) is then compared to the construct on a scale of 1-5.

The procedure continues, each element in turn being compared to the next construct developed until no more constructs can be distinguished. The result is a populated grid sheet. An unpopulated sample is attached.

The whole process should take about an hour. Eliciting the constructs should take about 30 minutes and the rating procedure about the same. For ease of completion we will rate each construct as it is elicited rather than leave them all to end. This maintains both interest and focus.

Ground rules for the Interview

The simplicity of the approach belies the depth at which a respondent needs to think about the issues (elements) being posed. Accordingly, some ground rules,

- A quiet room,
- Freedom from disturbance for about an hour,
- No phones etc!
- Somewhere suitable to sit in as relaxed a manner as possible.

The Topic

The topic area for the interview is outlined below and, as mentioned, the vignettes (elements) are noted over the page. I will run through these again when we meet but if you have a chance some pre familiarity would be beneficial.

The purpose of this repertory grid interview is to “**discuss how the interaction and mutual behaviour between Project Leaders influences cooperation in a PFI project**”.

Specifically in relation to how you interact with your opposite Project Lead and close key project associates.

Conducting the Interview

RG is a structured interview – for structure please don’t read constraint. It will be relaxed and informal.

I am trying to understand, in your own words and on your terms, how you view a range of circumstances. There are no right answers.

You control the situation; I simply collect information. The depth at which the interview takes place always remains in your control. And above all remains confidential.

I will be asking you to make a series of systematic comparisons (triads) along the line of,

What is ‘similar’ about two of the following people you know well as opposed to being ‘different’ about the third?

Mike

Janet

John

At a superficial level the response may simply be that Mike and John are male and Janet is female. While this is a construct, it's very limited in what it tells me about three people you know. I may therefore challenge you to think again and review your response!

A second consideration could be,

Janet and John are similar because they are caring and considerate (always putting others before their own interests), while Mike, *still a close friend*, always puts himself first. You may choose to state this end of the construct as individualist or self-centred.

Annexure A – Project vignettes as elements

Project Vignette 1

In the final months prior to (partial/full) hand - over, everyone put a huge amount of extra effort into the final push to complete. Everyone pulled together to make sure the project came in on time. We were all proud of our respective efforts; why can't it always be like this!

Project Vignette 2

The period to financial close was fraught with team and individual brinkmanship. Despite frequent arguments and tense moments, we finally signed the deal and each of us walked away feeling that they had achieved most of their objectives.

Project Vignette 3

The early stages of construction and service delivery were difficult, to say the least. Communication channels just did not work and no one seemed to be able to sort the problem. [Name] came to see me and, after several hours of discussion, we put in place a daily issues process for everyone to review.

Project Vignette 4

Service performance was perceived to be simply appalling and the end user could see no improvement in the short to medium term. A number of review meetings were required to improve the situation. A new broom was required and immediate changes would be required to a number of key positions.

Project Vignette 5

The 'them and us' relationship would in the end undermine the whole project and something needed to be done quickly. Key individuals from each organisation met to review the problem and decided that a series of team building sessions would be required to break down the barriers to progress.

Project Vignette 6

[Name] simply rubbed others up the wrong way, despite being in a front line service relationship position. Yet again, several people in my team have found it necessary to come and tell me that they have had another run-in and ask what was I going to do.

Project Vignette 7

Hand-over of the floor was due for Monday morning and [Name] should have ensured that the move process was checked before close of play on Friday night. Come Monday morning, only half the necessary equipment was in place and staff were shuttled back and forth all day to ensure that service could be maintained. When questioned, [Name] thought that someone else was dealing with it...

Project Vignette 8

The project leaders and core project support teams finally appeared to be working as an integrated unit, breaking down any organisational boundaries. Individuals worked closely together and openly discussed project aims and goal. They developed integrated planning and communication processes, implementing activities in partnership.

Project Vignette 9

Simply smooth running and all that entails... *the respondent is free to consider this ideal state in any way that you wish.*

Annexure B – Basic Grid Sheet

Topic:

Respondent:

1

5

(Shaded with diagonal lines)									

Appendix I

Descriptive Analysis of Repertory Grid Interviews

Appendix I contains two parts. This first part, I1, contains the framework used to summarise individual repertory grid interview outputs. The second part, I2, contains summarised grid analyses for all interviews.

Appendix II

This part, II, contains the template used in I2 to summarise each individual repertory grid interview.

Summary of Repertory Grid Analysis for each Respondent		
Interview Theme: "The purpose of this repertory grid interview is to "discuss how the interaction and mutual behaviour between Project Leads influences cooperation in a PFI project, specifically in relation to how you interact with your opposite Project Lead and close key project associates".		
Resp.	Project	Stage 3 - Principal Components Analysis
	Stage 1 - Simple Inspection Number of constructs elicited, rated on a 5-point scale; Summary and focus of constructs; Key themes obtained from construct poles; Spread of vignette ratings (narrow, wide, skewed); Key relationships between vignettes and construct ratings.	Stage 2 - Cluster Analysis Key element clustering and groups formed; Matching scores relationships; Construct relationships; Matching score relationships; Key themes between constructs.
		Stage 3 - Principal Components Analysis Identification of components accounting for greater than 80% of variance; How constructs group around the horizontal and vertical components; Key relationships between constructs and components; Key relationships between component, construct and elements.

Appendix I2

This part, I2, contains the summary grid interview analysis sheets for all 29 interviews.

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	28
Project	A
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>13</p> <p>Focuses on relationship engagement, interface and dynamics. Key themes include openness and conflict in personal relationships, communication and planning processes, problem resolution and blame apportionment.</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>A conducive environment is reflected in vignettes 1 and 8, where successful outcomes are associated with maturity and openness. People communicate, build relationships, engage in teams and resolve issues together.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Vignettes 1 and 8 (which have an 88% similarity) are closely associated with a conducive environment (83%). In vignette 8, construct ratings reflect the organisation, as distinct from the individual, and the maturity of the relationship, due to the 3-point delta on the honesty task oriented construct. Vignette 7 and 4 have an 81% match, and indicate a failure of the individual in 7 and failure of team engagement in 4. A 1-point delta is typical, however the blame-resolution construct does reflect responsibility issues in vignette 7. Vignettes 3 and 6 (73%) reflect the response required for an issue/problem.</p> <p>Three major cluster groups with a number of sub groups are noted. Constructs 1 and 6 (89%) associate close personal relationships (as distinct from organisational relationships (vignette 9, 86%) with goal attainment. When coupled with maturity (vignette 11, 89%), a conducive environment is created. Teamworking is enabled through good communications (vignettes 3 and 4, 83%) as distinct from issues and problems (vignettes 4 and 7), requiring the organisation to take a planning approach to ensure resolution.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>50%</p> <p>17% + 11%</p> <p>Long-standing openness and maturity in relationships enables goal attainment (vignettes 1, 8 and 9)</p> <p>Focus on the relationship or simply getting the task done</p> <p>People and organisation are separate</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	29
Project	A
Stage 1 - Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11</p> <p>Focuses on teams and working together to provide solutions that ensure appropriate outcomes are attained. Themes include solutions oriented teamwork, a focus on product and end results, an orientation towards results and process, and getting the job done. Wide, all vignettes are rated on all constructs.</p> <p>Vignette 8 represents a highly conducive environment in which boundaries are removed, teams are integrated, planning and communication processes are well advanced, and there is clear goal focus.</p>
Stage 2 - Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Vignettes 6 and 7 mirror match (97%), reflecting the highly disruptive and dysfunctional situation, in which there is ineptitude at individual and team level, and communication processes are simply functional rather than enabling. A second grouping includes vignettes 2 and 3 (87%), which closely mirror except 2 construct ratings in which there is a 2-point delta, reflecting the team pulling together to obtain the end goal. Vignette 4 (which has a 85% match) is supportive, but reflects the need to replace individuals on occasion, when a step change is required.</p> <p>One major branched structure is noted, which has a similarity approaching 90%. The core relationships are concerned with focused teams getting the job done, reflected in the 95% similarity score for constructs 3, 4 and 6, which deal with solutions, outcomes and results, and creating the most conducive environment. The construct ratings for each vignette reveal no more than 1 or 2 instances in which there is a maximum 1-point delta in the ratings.</p>
Stage 3 - Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>74%</p> <p>14% + 5%</p> <p>Successful team attributes (reflected in vignettes 1 and 8) Working together Openness of communications channels</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	30
Project	A
Stage 1 – Inspection	
<p>Number of Constructs elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette commentary</p>	<p>11 The pragmatic working environment is in focus. Key themes include problem identification and rectification, team as distinct from individual working and the cooperative benefits that flow from team working. Polarised with some mid point rating. The ideal environment is highly team oriented (vignettes 1+8 = most conducive), however, the ideal of smooth running is simply an ideal. Teams create learning which aids problem solving.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p>	<p>Three element clusters are noted. Vignettes 6 and 7 (98% match) involve isolating the influence of an under-performing individual. Vignettes 8 and 9 (96%), together with vignette 1 (96%), recognise the team interaction on key stages of the project. The close association of vignette 8 with 9 reflects the integration of teams, planning together, common goals etc. These three constructs reflect that total team integration is unlikely, and show a 1-point delta; the remainder are mirror rated. Vignettes 3 and 4 (84%) diverge in terms of team interaction and lack of cooperation as a result of poor communications channels and problem insolvency.</p>
<p>Construct Relationships</p>	<p>Three construct groups are noted. The main grouping is concerned with the benefits of teamworking to learning (constructs 8 and 9, 90%) and problem solving (constructs 2 and 4, 90%). Constructs 5, 9 and 10, which have a 95% match, are seen as creating a conducive environment, with the exception of 2 ratings on 4 constructs, which have a 1-point delta; these are mirror rated. Constructs 2 and 4 are highly matched, with 2 ratings showing a 1-point differential, principally reflecting the issue that for a problem to be solved there must first be acceptance that one exists, as demonstrated in vignette 4.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %)</p>	<p>2 65% 19%</p>
<p>First Component Label Second Component Label Third Component Label</p>	<p>Teams create learning environments (vignettes 8 and 9) Teams create a positive problem resolution environment (vignette 1) Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	39
Project	A
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>13 Team structure to achieve positive outcomes. Key themes include ensuring that common objectives are known and understood by the team, that there is focus on the task and time scale to deliver the outcome, and there is willingness to engage and pull together. Wide, all constructs are rated to all vignettes. Vignette 9 is seen as an attainable conducive working environment that is reflective of vignettes 1 and 8, where teams interact with common purpose, and are focused on common objectives in order to delivery/achieve a goal within a time constrained context.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships Construct Relationships</p>	<p>Four clusters are noted, all matching with 90% similarity or above. Vignettes 1 and 8 reflect the conducive environment outlined in vignette 9, and are mirror rated, with the exception of 3 occurrences in which there is a 1-point delta, indicating a small expectations gap between teams in closing the deal. Vignettes 6 and 7 are closely matched (94%), and relate to the negative influences of an individual in a team environment, showing no greater than a 1-point delta on four rated constructs. Vignettes 2, 3, 4 and 5 match at 86%, indicating the slight lack of process and team cohesiveness, together with some lack of expectation management. Two main clusters are formed, one reflecting teams and team working and the second dealing with task and process. Task and process associated constructs 2, 5, 6, 8, 9 and 10 have a 92% similarity, with ratings in most cases mirroring each other. Teams perform on time when there is clear understanding and a common purpose. The second cluster deals with the team and team-working, and relates to the benefits of pulling together and close working (constructs 3 and 7, 92%), a focus on common objectives, and meeting a common goal (vignettes 6 and 10, 92%). This is a conducive environment in which teams have a common focus on goals.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %) First Component Label Second Component Label Third Component Label</p>	<p>2 72% 14% Team focus on common objectives and end goals (vignettes 1, 8 and 9) Teams that work closely and pull together succeed Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	25
Project	B
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>13 Team structure and working together in partnership. Creating a positive; supportive environment with open communications resulting in achievement, satisfaction and a sense of pride. Wide with all vignettes rated on all constructs.</p> <p>Working together in close contact as in vignettes 1 and 8 is reflective of highly conducive environments for all to succeed. Vignette 9 allows for integration of communications and planning, removal of organisational boundaries and common goal focus.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two vignette clusters are formed. The first, which has a 94% match, indicates how vignettes 1 and 8 are reflective of, and representative of, the highly conducive environment described by vignette 9. The second vignette cluster, which comprises the remaining vignettes, form three sub clusters. Vignette 6 & 7 (90%) reflect the dis-benefits of poor individual performance, including lack of pride, no goals, and poor communications. The second sub group of vignettes, 3 and 4 (81%), reflects the start-up issues within the project and the final cluster of 2 and 5 (71%) indicates fragmented working relationship.</p> <p>Two clusters are noted. The first, which has a 95% match, brings together constructs indicative of conducive environments, including sense of pride, satisfaction and achievement. Vignettes 1, 8 and 9 are highly representative of the situation: ratings, in the main, mirror with no more than a 1-point delta. The second cluster is reflective of communications and working together, and shows a maximum 1-point delta on construct ratings; it brings together constructs 1,4, 6 and 11, in which open communications in team environments enables problems to be tackled and solved.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>1 84%</p> <p>Good team dynamics lead to problem resolution, sense of achievement and pride (reflective of vignettes 1, 8 and 9) Not defined Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	27
Project	B
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11 Grid considers the interplay of the individual and the team in terms of goal setting and blockers to success. It reflects how the team interacts and the consequences of individuals pulling away as a disruptive force.</p> <p>Mainly polar with some use of mid-points.</p> <p>Vignette 1 is acknowledged as a highly conducive environment in which there is a high level of team-working towards well-defined goals. Communication channels are active and integrated, with everyone pulling towards an ultimate, defined goal.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>One major and two sub cluster groups are formed. The first reflects vignette 1 as being highly conducive (95%) , in which everyone works closely towards a clearly defined common goal. Closely associated are vignettes 2 and 8 (93%), in which elements of brinkmanship are considered, but which acknowledges that positive a team structure did finally come through and boundaries were removed. The two sub clusters reflect the negative impact on the team of an individual failing to take responsibility for their actions (vignettes 6 and 7; 80%), and the final grouping (also 80%) reflects early relationship building in which communications and processes are forming.</p> <p>A core construct grouping comprises 3, 5, 6, 7 and 11, in which, with the exception of 2 ratings with a 1-point delta, there are mirror ratings. This indicates teamworking, open and integrated communications, and well-defined goals that lead to highly conducive working environments. Where this is not achieved, as in vignettes 3, 4 and 5, this is because of the failure of an individual, or their disruptive influence detracting from the team pulling together.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>71%</p> <p>18%</p> <p>Teams that work together pull together, communicating well, working towards a defined goal (vignette 1)</p> <p>Individual people problems detract from the team pulling together</p> <p>Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	31
Project	B
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>6 Good leadership and positive teamworking leads to objectives being met.</p> <p>Wide.</p> <p>Close working, focused on well-defined objectives, as in vignettes 1,2 and 8, represents a highly conducive working environment. Processes and communications (vignette 8) are integrated, the team is focused and pulls together (vignette 1) and objectives are achieved (vignette 2).</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>The main vignette cluster brings together 1, 2 and 8 as being reflective of a highly conducive environment, which is described in vignette 9 (which has a 96% match and no more than a 1-point delta). Vignettes 3 and 4 (also 96%) acknowledged that start-up difficulties are encountered where processes are being developed and, on occasion, individuals need to be replaced. The disruptive influence of an individual described in vignettes 6 and 7 is acknowledged and highly matched (87%): it is noted that vignette 7 failed to achieve the objective, whereas in vignette 6 no objective is evident.</p> <p>All constructs relating to an ideal environment match at 80%. Teamworking and positive outcomes (constructs 1,3 and 5 match at 89%) are highly mirrored but reflect that there is no specific outcome; in vignette 9 a 2-point delta exists in relation to successful outcomes. This initial grouping widens to include the benefits of good leadership (80%), in terms of contributing to successful outcomes and how positive objectives contribute to teamworking (80%).</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>73%</p> <p>16%</p> <p>Well-led teams with defined objectives will succeed (reflected particularly in vignette 1 and closely aligned with vignette 9)</p> <p>Good team working is preferable to the negative affects of disruptive individuals</p> <p>Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	32
Project	B
Stage 1 – Inspection	
<p>11 Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>The dynamic of the team in relation to the individual. Key themes include whether the individual is the root cause of the problem and whether the team is working to resolve the problem. Is there a common goal? What is the status of objectives? Is the team pulling together and running smoothly, or is there an environment of blame?</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>Vignette 9 (highly conducive) is most closely associated with a common focus and the interaction of the team, and is associated with a distinct phase of the project. A positive outcome is achieved and everyone is proud of their efforts. Key aspects include coordination, team cohesion, common objectives, common focus and integrated problem solving.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two vignette clusters are noted. The first includes 1, 9 (86%), 8 (82%) and 2 (80%). The second cluster includes vignettes 6 and 7. The remainder only match with a 56% similarity score. Cluster 1 reflects that the common focus and team interaction of vignette 1 is representative of a highly conducive environment. Ratings mirror well, with a 1-point delta maximum evident. Coordination, common goals, focus and teamworking are considered to be indicators of a highly conducive environment. The second cluster, including vignettes 6 and 7 (82%), reflects individual failings, including blame, having no strategy, poor communications and a lack of objective setting. The ratings closely</p> <p>Three construct clusters are noted. The first, including constructs 4, 8 (92%), 9 and 10 (89%), indicates that team cohesion is supported by common objectives, common focus and joint working on problems. The second (including constructs 3, 5 and 6) indicates that conducive environments involve integrated communications, and that shared success leads to smooth running (the match is greater than 86%). The ratings either mirror or, with the exception of 2 items, show no more than a 1-point delta. The two 2-point ratings reflect a lack of team integration and poorly developed communications early on in the project.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>67%</p> <p>13% + 8%</p> <p>Good team dynamics lead to smooth running and success (vignette 9) Strategy is needed to break down the 'them and us' Team working, in contrast to individuals, is causing problems</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	48
Project	B
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>10</p> <p>Grid focuses on operational level issues, including problem resolution, communication processes, people and process management, and relationship parity.</p> <p>Wide – all vignettes are rated on all constructs.</p> <p>Vignette 1 is closely reflective of the conducive environment outlined in vignette 8. Teams work together at a partnership level to solve problems, and communications are well developed.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two main clusters are noted. Cluster 1 brings together vignettes 1 and 8 (77%), which extends to associate with vignette 9 (75%). There is an equality within the profile, which either mirrors or has no more than a 1-point delta. There is a separation resulting from the focus on the project or the people and partnership parity. The second, smaller cluster, including vignettes 6 and 7 (matching at 83%), reflects the dis-benefits of problems caused directly by an individual or consequent on an activity not being completed.</p> <p>Three groupings cluster above 81% similarity. Grouping 1 simply reflects that the team-working of construct 7 is considered to be highly conducive and closely mirrors construct 10. 3 of the 9 vignettes have mirror ratings; the remainder have no more than a 1-point delta. Grouping 1 extends to grouping 2 (constructs 2 and 5; 81% match) by acknowledging that successful people management and partner peer working are key issues. The final grouping, which has a higher than 80% match, includes constructs 3, 4, 6 and 8, and reflects the benefits of being proactive, planning and having good communications.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>45%</p> <p>27% + 14%</p> <p>Good communications enable better planning (vignette 8) Issues associated with start-up, i.e. people and process management (vignette 3) Proactive teams solve problems (vignettes 1 and 9)</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	35
Project	C
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11</p> <p>Team relationship and interplay. Key themes noted are team relationships and dynamics, process and agreeing way forward, brinkmanship versus agreement.</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>The ideal, represented by vignette 9, brings together team engagement, pulling together, close relationships, and goal alignment leading to smooth running. With the exception of the extent of communications processes in play, vignette 1, dealing with the engagement required to deliver the project on time, mirrors vignette 9 as most conducive.</p>
Stage 2 - Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Vignettes 1 and 9 (which have a 97% match) reflect the ideal environment. A second sub cluster is noted, building initially from vignettes 3 and 4 (93%), and extending to include vignettes 7 and 6 (89%). To varying degrees, these clusters represent difficulties within the project relationships. All vignettes are highly mirrored, however they acknowledge the greater breakdown of communications within vignettes 6 and 7.</p> <p>A major cluster brings together constructs 2, 5, 6, 7 and 11 (the matching is >95%), which are representative of a conducive environment being one in which goals are aligned and problems are tackled collectively. The ratings are predominantly mirrored, with no more than a 1-point delta. A second cluster, which incorporates constructs 4 and 8 (86%), have no more than a 1-point delta on 4 ratings and a 2-point delta on one further rating. This acknowledges communications issues at an individual level, and also the benefits that can accrue from close relationships in moving problems forward.</p>
Stage 3 - Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %)</p> <p>First Component Label Second Component Label Third Component Label</p>	<p>1 81%</p> <p>Close working teams solve problems and deliver (vignette 1 mirrors vignette 9 as being highly conducive) Not defined Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	36
Project	C
Stage 1 – Inspection	
<p>12 Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>Team engagement and Interplay. Themes include the extent of teamworking, the level of communication, and integration and planning.</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>A highly conducive environment is considered in principle unattainable, although aspects of vignettes 1,2 and 8 are seen as important. Vignettes 1 and 8 reflect a high level of integration, close working and cooperation, and that team building and enhancing communication channels are always required.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Three clusters are noted. The negative effect of individuals' underperformance in vignettes 6 and 7 (85%) is evident, particularly the separation of the individual from the team in vignette 6. The ratings closely align, and, where a differential is evident in 3 other ratings, this is limited to a 1-point delta. The two other clusters bring together vignettes 4, 5 and 3 and 1, 2 and 9, which have an 85% similarity. The ratings show no more than a 1-point delta. A 'them and us' and lack of partnership is evident in vignettes 4 and 5, while vignette 3 reflects that the project is at an early stage, and requires closer working and leadership. Vignettes 1 and 2 (83%) are closely mirrored and represent the most likely circumstances to create a conducive environment.</p> <p>The first cluster reflects how integration and cooperation create conducive environments (>97%). The ratings are highly mirrored, with only 4 ratings on 4 constructs showing a maximum 1-point delta. The second cluster of constructs 5 and 6 (90%) reflect that continual effort will always be required and that communications are a process and not an end state. The third cluster, comprising constructs 1 and 4 (90%), reflects that initial team building happens at an individual engagement level and that with leadership, team formation is enhanced. Ratings on both sets of constructs show a 1-point delta on 4 ratings, the remainder match.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>69%</p> <p>14%</p> <p>Build teams, cooperate and tackle problems (vignette 1 closely aligns to vignette 9)</p> <p>Work in progress, versus smooth running</p> <p>Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	37
Project	C
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>9 Team dynamics and aspects of building teams. Themes include project phase development, positive and negative aspects of working together, the process of building a team, barriers in contrast to openness and acceptance. Mainly polarised with use of mid point rating. The environments represented in vignettes 1 and 8, in which close working towards delivering a mutually beneficial goal aligns with the highly conducive environment outlined by vignette 9. Relationships are open and accepting, the team is working and a successful project environment has been created.</p>
Stage 2 – Cluster Analysis	
Element Relationships	<p>Vignettes 1, 8 and 9 align with a 100% similarity, and this cluster can be extended to include vignette 2, with the exception of 2 ratings with a 2-point delta that acknowledges the negative influence of brinkmanship. Two further clusters are noted, one matching at 86% and incorporating vignettes 3 and 4, in which ratings match in all but 3 areas, where there is a 1-point delta. This reflects start-up problems and that, at times, replacing an individual can bring positive benefits, where there is a relationship issue. The third cluster, with a 75% matching, acknowledges the negative influences of an under-performing individual (vignette 6) and the impact of poor communications on a team (vignette 7).</p>
Construct Relationships	<p>The major grouping, which has a >90% matching, sub divides into 3 minor clusters, involving 6 constructs. The first grouping (97%) reflects that when issues are localised, this impacts on the performance of the team. Construct ratings are mirrored with the exception of one rating with a 1-point variation. The second sub cluster of vignettes 5 and 6 (92%) deals with the impact an individual can have in breaking down barriers, leading to openness and greater acceptance. The ratings mirror, except for one with a 1-point variation and a second with a 2-point variation, acknowledging the impact an individual can have on barrier removal.</p>
Stage 3 – Principal Components Analysis	
Number of Components	2
Major (Variance %)	68%
Minor (Variance %)	20%
First Component Label	Individuals do make a difference in positive and negative terms (vignette 7)
Second Component Label	Negative relationships detract
Third Component Label	Not defined

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	45
Project	C
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>10</p> <p>Themes focused on delivering successful project outcomes. Themes include partnership working, the individual's personality and influence on team level cooperation, positive outcomes and completion of a project.</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>A conducive environment is one in which people interact in a team setting that is focused on delivery and completion of tasks. Vignette 1 is most representative of situation 9, in which, with a specific goal in sight, everyone pulled together and were proud of the positive outcome.</p>
Stage 2 - Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two small clusters are formed with two pairs of vignettes. The first brings together vignettes 5 and 6 (93%), reflecting the negative influence of an individual and how this can create a 'them and us' relationship. The difficulty of the situation in vignette 6, caused by a problem individual, is acknowledged by the 2-point variance in rating. The second clustering, of vignettes 1 and 9 (85%), has mirror ratings, except for two items in which there is a 1 and 2-point delta. This reflects the higher levels of personal interaction envisaged by vignette 9, as distinct from the meeting of explicit objectives in vignette 1.</p> <p>Two clusters are noted. The first, with a 92% match, brings together constructs 6 and 7, in which the focus is considered to be the delivery and completion of a project. The ratings, except one, mirror. A second group closely associated with the first (89%) considers task delivery to be more important than creating an integrated working environment. The construct ratings mirror, except for one with a 3-point delta in which the need to replace a number of individuals is not considered a good situation to be placed in.</p>
Stage 3 - Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>49%</p> <p>26% + 12%</p> <p>Joint working aids project delivery (vignette 1)</p> <p>Team and partnering relationships</p> <p>Delivering objectives and positive outcomes</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	46
Project	C
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>8</p> <p>Teams that work together and perform together, leading to positive outcomes. Themes include team versus individual performance, cooperation in contrast to competition, communications benefits.</p> <p>Wide, all vignettes are rated on all constructs.</p> <p>The integrated nature of the team environment in vignette 8 is closely aligned with the highly conducive environment outlined in vignette 9, except for the ongoing requirement for ongoing team building in everyday operations. The environment described in vignette 8 acknowledges that performing teams cooperate, work closely and achieve positive outcomes.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Three cluster groupings relate to the majority of the vignettes. The first reflects the start-up difficulties of a project environment, bringing together vignettes 3 and 4, which have a 94% similarity. Two ratings have a 1-point variance, reflecting the slightly less preferred situation in vignette 4, in which individuals would need to be replaced. The second cluster acknowledges the negative affect that an individual can have on a situation, as noted in vignettes 6 and 7 (97%). The third cluster formed by vignettes 1, 9 and 8 (85%) align working situations with a conducive environment. There is one rating with a 1-point variance, reflecting the ongoing team-building requirements of vignette 8.</p> <p>Two small construct clusters are initially formed by two pairs of constructs. One acknowledges that working together aids cooperation (constructs 4 and 5, 97%), the second notes that performing teams (constructs 1 and 2, 95%) lead to positive outcomes. Ratings mirror, except for two ratings associated with vignette 2, in which the slightly greater influence of individual-level brinkmanship is noted. The two small clusters, which when combined have a 90% similarity, can be seen as creating a conducive working environment.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>1</p> <p>82%</p> <p>Teams that work together achieve positive outcomes (vignette 1, which is representative of vignette 9).</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	3
Project	D
Stage 1 – Inspection	
<p>Number of Contracts Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>10 Partnership, problem visibility, setting direction and robust solutions, relationship dynamics, problem identification and resolution are key themes. Wide.</p> <p>Organisation and teams are becoming aligned, following difficulties during the early stages of formation. Problems are being identified, communication channels are active and have visibility; a framework is now in place to resolve issues.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Three cluster groupings are evident. The first, with an 87.5% similarity, deals with the tensions created during the early stages of relationship formation. The second grouping, which has a comparable similarity, identifies issues and problems that can be associated with specific individuals. The third grouping, with an 80% similarity, recognises the effort put in and the benefits that flow from, building a longer-term partnering environment with integrated planning, process and communication channels.</p> <p>Three groupings are noted. The first, with a 92% match, deals with partnership benefits that are leading to robust solutions, the second (89%) deals with the negative affect tension has on a conducive environment, in terms of building cooperation, and the third (89%) provides a framework for problem solving.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2 60% 22%</p> <p>Benefits of partnership working over silo working Problem resolution process Dichotomy between posturing and openness in solving problems</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	4
Project	D
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>12 Relationships are contributing to a positive environment, and there is openness, teamwork, joint working, boundary removal, good communication and process integration.</p> <p>Boundary removal aids team structuring and working. Closer working brought about through good communications and integrated processes enhances the team environment, leading to joint problem resolution, common success and harmonious relationships.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Vignettes 1 and 8 (87.5%) form a distinct cluster grouping. This grouping deals with the more conducive aspects of good relationships and teams, including maturity, openness and integration. All other vignettes fall into a second group. Within this second group, vignettes 3 and 5 cluster (87%), and this extends to include 2 and 6 (81%). The second grouping reflects less conducive elements associated with building close team relationships during start-up, and indicates difficulties with regards to communication channels and individual personalities.</p> <p>Four separate cluster groupings are noted. Constructs 2 and 9 (92%) reflect the benefits of boundary removal with regards to team building. Constructs 6 and 10 (92%) deal with process integration, while 1 and 3 (89%), which are closely associated with vignettes 6 and 10, recognise the positive influence of openness and pulling together. The final cluster grouping of vignettes 7 and 12 (86%) recognises the importance of joint working and harmony to successful outcomes from the teams.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (variance %)</p> <p>Minor (variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>70%</p> <p>17%</p> <p>Factors important to team building and performance</p> <p>Separation of the organisation from the individual</p> <p>Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	7
Project	D
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>13 Focuses on the relationships and responsibilities of individuals and teams, and the processes of vision sharing and goal setting in the short and longer term, with an emphasis on shared purpose, mutual responsibility, communication and cooperation. Wide. The need for ownership, shared purpose and shared goals in developing cooperation and collaboration, is recognised. In the longer term, this requires the removal of boundaries, in order to transform a 'them and us' relationship and create 'one team'. Enhanced communications, joint working and planning are important factors.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships Construct Relationships</p>	<p>Two cluster groupings are evident, the second containing two sub-groups. Vignette 8 and 9 have a 96% similarity and are almost a mirror match. These vignettes deal with team working and shared goals. Within the second grouping, vignettes 3 and 7 (90%) deal with the positive benefits of communications and individual responsibility for outcomes. The second sub-group, comprising vignettes 1 and 5, and 2 (85% and 83%) shows the mutual benefits that are derived from working together, and the negative influence of unilateral brinkmanship. Constructs form into two groups with a combined 80% similarity. The first group, dealing with communications and collaboration, includes constructs 6, 9 and 10, which have a 100% match. This extends to include team benefits and goal achievement, which have a 90% similarity. The second grouping is less tightly clustered and deals with taking ownership and harmonious working relationships.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %) First Component Label Second Component Label Third Component Label</p>	<p>1 90% Team dynamics (ownership, shared purpose and common goals) are the most important aspect of a conducive relationship. Not defined Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	8
Project	D
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>13</p> <p>The emphasis is on team dynamics and relationships, and the contribution they make to meeting objectives. Key factors include the contribution that is made by the individual, the focus on achievements and the time-line for delivery.</p> <p>Wide.</p> <p>Joint working is a key factor. Team cohesiveness, close working and sticking together are all positive contributors to team building and creating a conducive environment. Good communications are essential, and the removal of tension is an important relationship factor.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Three cluster groupings are seen. Cluster 1 includes vignettes 1 and 2 (96%), and 8 (90%), and deals with a close working relationship that creates a conducive environment. The second group deals with issues and problem resolution processes, and comprises vignettes 4 and 5 (73%), and can be extended to include vignette 3 (71%). The third cluster is loosely matched at 69%, and deals with the individual as the root cause of problems and issues. A distinction can be seen between the individual and the team, and the difficulties caused by the former are dealt with by the latter.</p> <p>Two major groups are formed, in which communication processes are excluded, as they only yield a 60% similarity. Group 1 deals with teams and goal achievement, and recognises an under-performing individual and gives a preference for this to be protected against. The second group deals with teams and team effort, and the ability of the team to successfully respond to issues.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>65%</p> <p>15%, with a weaker third component that accounts for 8% of the variance.</p> <p>Teams pulling together in preference to the isolation of individuals</p> <p>Communication processes</p> <p>Reactive as opposed to proactive environment</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	11
Project	D
Stage 1 - Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>10 Team relationships and team dynamics, and the contribution made by communications. Themes include cooperation as opposed to conflict, and issues and problem resolution through communication. Wide.</p> <p>Team formation resulted from early issues within the project. This has been built around individuals interacting, supported by developing communication channels that aid cooperation. Team working has been enhanced, through high levels of communication that have addressed specific issues, and that are leading to successful outcomes.</p>
Stage 2 - Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two main cluster groupings are evident. The first, with an 80% match, deals with issue resolution being instrumental in developing a team response, and where team cohesion is disrupted by specific individuals this may be a requirement. The second grouping has a number of looser associations centred on vignettes 1 and 2 (75%), and deals with the response of the team to an issue or incident.</p> <p>Two minor groups are noted. The first comprises constructs 5 and 6 (which have an 89% similarity), and deals with team formation being driven by specific issues that need to be resolved; as teams form they have the capability to deal with a wider range of issues. The second grouping of constructs 2 and 4 (86%) deals with deadlines, and indicates that longer-term issues tend to be associated with the outcomes of the project, while short-term issues tend to be related to individuals.</p>
Stage 3 - Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2 principal and 1 minor</p> <p>42%</p> <p>30% + 14%</p> <p>Factors associated with well structured teams</p> <p>Planning for project delivery in contrast to maintenance of a situation</p> <p>Long term versus short term</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	34
Project	E
Stage 1 - Inspection	
<p>Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette commentary</p>	<p>10 Grid details issues relating to team structure, relationships and process. Key themes include building team relationships in preference to brinkmanship, good process, close and joint working. Wide, all elements are rated on all constructs.</p> <p>Vignette 8 mirrors vignette 1, and very closely aligns with the ideal environment represented by vignette 9. This can be construed as a situation in which relationships are built at a team level, involving a blending of organisations. Work is jointly undertaken, with good process, within a well defined structure, resulting in a good performance.</p>
Stage 2 - Cluster Analysis	
<p>Element Relationships</p>	<p>Three cluster groupings are noted, formed of a core grouping that can be extended. The first group comprises vignettes 8 and 9 (100% match), with vignette 1 (85%) reflecting the early stages of team formation. Vignette 7, however this is considered to be an error in the rating process. Vignettes 4 and 5 (87.5%) cluster with 3 ratings showing a 1-point delta and 1 rating with a 2-point delta. This indicates the lack of process and structure, and the organisational disconnection exhibited by the vignettes. The final cluster of 2 and 6 (80%) deals with the benefits of working together to close the deal, and indicates the dis-benefits that can result from a rogue individual within the project environment.</p>
<p>Construct Relationships</p>	<p>The constructs are highly clustered (with a greater than 84% match), however there are 4 closely aligned pairs with a 92% match. These are 1 & 8 and 5 & 7, and extend to include 3 & 9 and 2 & 6. These are all highly mirroring with no more than 2 ratings showing a 1-point delta on each pair, with the exception of 1 rating on 2 & 6 with a 2-point delta. The first pair groups team working with good relationships. The second brings together joint working as an indicator of a well defined structure and the third connects teams with good processes.</p>
Stage 3 - Principal Components Analysis	
<p>Number of Components Major (variance %) Minor (variance %) First Component Label Second Component Label Third Component Label</p>	<p>3 56% 21% + 10% Team working versus the outlying individual (vignette 1 vs 6) Blended organisations in preference to them and us relationships Good team relationships versus brinkmanship</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	40
Project	E
Stage 1 - Inspection	
Number of Constructs Elicited	12
Summary of Grid	Positive aspects of team working. Key themes include working together, identifying solutions and common goals, ownership and active communications channels.
Vignette Spread (Wide, Narrow, Scattered to Able)	Wide, all vignettes are rated on all elements.
Vignette Commentary	Vignettes 1 and 8 are reflective of the highly conducive environment outlined by vignette 9. The situation would be typified by a focus on people within a team context, in which there is positive interaction and a focus on a common goal. The solution is owned by the team and there are well developed active communications channels at work.
Stage 2 - Cluster Analysis	
Element Relationships	Four element clusters are noted, matching higher than 80%. Vignettes 1 and 8 have a 96% match and only two ratings have a 1-point delta; vignette 1 represents a highly oriented, successful team environment. The second cluster, formed by vignettes 5 and 9 (92%) and extending to vignette 2 (87%), indicates that normal working is subject to the tensions described by vignette 5. Three ratings show a small delta, the most pronounced being on construct 7, in which the team and its aspects of vignette 5 are reported. Vignettes 6 and 7 have three ratings with a 1-point delta and a 92% match that reflects the negative dis-benefits of disruptive or poorly performing individuals in teams. The final cluster of vignettes 3 and 4 (81%), with 3 ratings showing a 1-point delta, and a further 2 ratings with a 2-point delta, reflects the team level status of vignette 3 and the enhanced process negotiated to improve the situation.
Construct Relationships	With the exception of one construct, all remaining clusters have a greater than 83% match. Two sub-level cluster groupings are evident. The first cluster brings together constructs 3, 5 and 6, which deal with working together in teams. With the exception of 3 ratings across 3 constructs, all ratings mirror Vignette 2 reflects the situational tensions of deal closure. The second grouping brings together constructs 8 to 12, with a core pair matching at 97% (constructs 10 and 12), reflecting team ownership as being most conducive. Two ratings across 5 constructs show a small delta.
Stage 3 - Principal Components Analysis	
Number of Components	2
Major (Variance %)	71%
Minor (Variance %)	12%
First Component Label	People working well in team environments
Second Component Label	People at distance from the environment
Third Component Label	Not defined

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	41
Project	E
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11 Team relationships. Key themes include conflict and tension within relationships, the strength of relationship, interdependency and communications. Wide, all vignettes are rated on all constructs.</p> <p>Vignette 1 mirrors the highly conducive environment detailed in vignette 9, as does vignette 8, in which a level of tension is evident as the integrated team environment develops. A conducive environment is summarized as one in which there is a strong relationship and mutual dependency. Communications are well developed, results are obtained and leadership is strong.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Two cluster groups are noted. The first brings together vignettes 1, 8 and 9, which, with the exception of 1 rating that shows a 1-point delta, are mirror rated. The one rating reflects the slightly greater level of tension in vignette 8, following the move to work closer together. The second clustering has two sub groups. The first brings together vignettes 3 and 5 (88%). Three ratings show a 1-point delta and a further one rating shows a 2-point delta, reflecting the lack of leadership, direction and non-collaborative working of vignette 3. The second branch comprises vignettes 4 and 7 (80%), which focus on a lack of leadership and the remedial action taken in a situation. Ratings are typically 1-point different, reflecting aspects of relationships that are less conducive to good working outcomes.</p> <p>A closely matched cluster is formed of constructs 1, 2, 4 and 8 (greater than 92%); a conducive environment is reflected by construct 11, and the majority of ratings show no delta. A conducive environment is represented by close relations, excellent communications, smooth running, collaboration and interdependency, that results in end results being obtained. The second smaller cluster formed of constructs 3 and 9 (86%) has two ratings with a 1-point delta and one rating with a 2-point delta, indicating that while service performance is poor, remedial action has been identified.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>1 85%</p> <p>Strong interdependent relationships achieve the end results (vignettes 1,8 and 9) Not defined Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	47
Project	E
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>10 Aspects of team interaction include the benefits of planning, an integrated one-team approach, issues of individual underperformance, common goals, communications and integration vs confrontation. Wide, all vignettes are rated on all constructs. The ideal situation represented by vignette 9 is rated principally at the mid-point on all constructs, reflecting a pragmatic view, perhaps. Where there is a tendency towards the poles, this indicates that communications are a blocker, and that there is a need for an action plan, and that integrated working would be beneficial.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships Construct Relationships</p>	<p>Four cluster groups are noted. Vignettes 2 and 4 (87%) and 5 and 9 (85%) create a further match of 82%. A third cluster is formed by vignettes 1 and 8 (78%); a final match of 67% connects vignettes 6 and 7. The core grouping of 2,4,5 and 9 has an underlying theme of meeting to resolve problems and move forwards, and is reflective of what happens in real life situations. 50% of the ratings match for each vignette, in the majority of cases with no more than a 1-point delta, and in only one case with a two point delta. The rating profile is typically central, reflecting the ideal environment in vignette 9. Majority matching of >90%. Clustering group formed of constructs 3 and 4 (97%), extending to 7 (92%) and 10 (90%). The core cluster of 3 and 4 shows only one 1-point delta; when the cluster is extended to include 7 and 10, both have two ratings with a 1-point delta. The core clustering relates to integrated working and a focused one-team approach, widening to the establishment of relationships with a lack of clarity. The second cluster formed of constructs 6 and 9 has two ratings with a 1-point delta, reflecting team cohesion and integrated working.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %) First Component Label Second Component Label Third Component Label</p>	<p>3 63% 14% + 11% Integrated team with focus Common goal achievement Individuals causing team tensions</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	1
Project	F
Stage 1 – Inspection	
<p>10</p> <p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>The grid focuses on relationships and team dynamics. Key themes are issues and problems to be resolved, cohesion, collaboration and outcomes.</p> <p>The ratings are mainly at the poles, with a small number mid-scale.</p> <p>The teams are working in close association with each other. Issues are anticipated, there is a focus on the outcome, and a recognition of the need for efficiency. This creates a highly conducive environment for working together, reflected in vignette 9 being the ideal and most conducive environment, and further supported by vignettes 8 and 1, which deal with team development and boundary removal.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Three cluster groupings are noted. The first, comprising vignettes 8 and 9 (95%), recognises the highly conducive environment that is created by close working, team interaction and outcomes. The second grouping, comprising vignettes 3 and 6 (87.5%), relates to issues associated with individuals and the negative effect that they can have on outcomes. The third cluster, comprising vignettes 4 and 5 (82.5%), also relates to boundaries being in evidence between individuals and within teams, and the need to act on this, which can require individuals to be replaced.</p> <p>Three construct groupings are noted. The first concerns highly conducive environments (constructs 7 and 10, which have a 97% match) and successful outcomes. The second connects the benefits of communication and problem avoidance (8 and 3 at 92%), and the third cluster of constructs, 4 and 5 at 89%, recognises that failure needs action to resolve problems and achieve a positive outcome.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>75%</p> <p>12%</p> <p>Key features of a successful relationship Collaborative versus non-collaborative relationships Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	5
Project	F
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11 Grid focuses on team dynamics and the requirements for meeting objectives that lead to successful outcomes. Key themes include integration, close working, boundary removal, communication and good processes. Wide, all elements are rated on all constructs.</p> <p>A conducive working environment is reflective of people working together in teams, closely integrated utilising integrated processes to achieve mutual objectives. This is reflected by the vignettes 1 and 2, in which, at project financial close and building handover, teams worked together to achieve a mutually beneficial outcome.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>The close integration associated with a major project milestone gives rise to a conducive environment. This relates to having a common outcome, defined processes and a jointly delivered set of objectives. Vignettes 1 and 8 mirror match, except for 2 constructs in which there is a 1-point delta, and one further construct in which there is a 2-point delta, reflecting the individual dynamic in vignette 8. Vignettes 2 and 5, which relates to the removal of barriers, are also closely matched (82%), and 6 and 7 (also 82%) include a 1-point delta – with the exception of construct 8, which is associated with processes, and in the case of vignette 7, in which there is a substantial lack of process.</p> <p>People working in teams enable integrated processes to develop and relationship boundaries to be removed. Incremental as opposed to radical change is very closely associated with a more conducive environment. Constructs 7, 4 and 5 (89%) show a 1-point delta associated with the removal of the 'them and us' barrier and the need for integration to successfully deliver objectives. The lack of integration that results in poor communication leads to collective under performance (constructs 3 and 9, 86%). The close association of construct 4 with a conducive environment (86%) relates to the benefits of close integrated working.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>3</p> <p>56%</p> <p>17% + 12%</p> <p>Features associated with a productive team</p> <p>Clarity of objectives</p> <p>Team as distinct from individual working</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	12
Project	F
Stage 1 – Inspection	
<p>7 Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>Reflects the individual and team relationships and whether issues are associated with individuals or at a team level. Key factors are the meeting of objectives, the contribution made by communication, and the relationship between the individual and the team. Mainly at construct poles, all vignettes are rated on constructs.</p> <p>Vignette 9 is seen as creating a highly conducive environment in which collective team working is evident, resulting in objectives being met. This is closely associated with the situation in vignette 8, in which boundaries are removed and integrated processes, including communication, are developed.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships Construct Relationships</p>	<p>Two major groups are created which have a number of sub-group structures. Group 1 brings together vignettes 3 and 6 (89%), which are associated with issues and problems created by individuals, and the resultant actions taken are seen progressively in vignette 7 and 4 (75%). The second group relates vignettes 8 and 9 (82%) which have a 68% similarity to vignettes 1 and 2. Vignettes 8 and 9 reflect the most conducive environments, created by boundary removal, close working in partnership, enhanced communication and process. Vignettes 1 and 2, while only having a 68% match, display positive elements, including pulling together to meet objectives.</p> <p>Three cluster groups are noted. Constructs 3 and 6 (83%) reflect the team/individual leadership dynamic within the project, recognised by the higher leader focus of vignette 4 in which a leadership change is required. The second clustering (78%) indicates that a more conducive environment is attained when the focus is at a team and not an individual level. The third grouping has a core of constructs 4 and 5 (75%), and relates to a recognition that collective working is associated with well managed situations, while lack of working together can lead to under performance. Collective working leads to a more conducive environment (75%).</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %) First Component Label Second Component Label Third Component Label</p>	<p>3 54% 21% + 11%</p> <p>Well managed situations are more conducive (reflective of vignettes 8 and 9) Communication and collective working lead to objectives being met Team working versus individualism (see vignette 1)</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	13
Project	F
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid Vignette Spread (Wide, Narrow, Skewed to Pole) Vignette Commentary</p>	<p>9 The interplay of the individual with the team and how the dynamics influence the meeting of objectives. Key themes include the positive role of communications and cooperation, the focus on similar outcomes, and planning and working together on problems. Wide, all vignettes are rated on all constructs.</p> <p>A strong focus on the role of the individual and the contribution made by him or her, both positive (vignettes 8 and 9) and negative (vignettes 6 and 7). The ratings of vignettes 6 to 9 are closely associated (having a 1-point delta), reflecting the conducive environment that is established through planning, and by cooperating at a team level, which reduces conflict and leads to objectives being met and outcomes being achieved.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships Construct Relationships</p>	<p>Three cluster groupings are noted which have a number of sub-level branches. The negative effect of an individual's under-performance (vignettes 6 and 7 are almost mirror matches, at 97%), and only two constructs have a 1-point delta. In the second grouping of vignettes, 8 and 1 (92%), the individual works positively in achieving team success, and it is seen as a highly conducive environment (vignette 9, 75%). The third grouping of vignettes 2 and 5 (86%) and 3 and 4 (83%), which have a joint 80% similarity, reflects the positive role of the individual in team success, and how changing an individual and enhancing communications brings improvement.</p> <p>The majority of constructs have a more than 90% similarity. The first grouping relates to teams working together, resolving problems by having a common focus (vignettes 3 and 4, 100%; 2, 95%; 1, 91%, in which 2 ratings show a 1-point delta). This is closely aligned with a second grouping, indicating that planning is an important factor in achieving a positive outcome (95% match) and creating a conducive environment.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components Major (Variance %) Minor (Variance %) First Component Label Second Component Label Third Component Label</p>	<p>2 82% 8% Positive outcomes from teams interacting (vignettes 1 and 8) The desire to achieve versus the perfect outcome Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	14
Project	F
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>11 Moving from individual to team working and partnership. Themes include the contribution made by the individual, problem causation, confrontation, processes and outcomes. Wide, all vignettes are rated on all constructs.</p> <p>The most conducive environment is one in which individuals are working closely and pulling together (vignettes 1 and 8). The ratings for vignettes 3, 4 and 5 are aligned, typically with a 1 to 2-point delta, reflecting the benefits of the enhanced communications that lead to boundary removal. Also, the impact of an underperforming individual closely relates to vignettes 6 and 7.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>One isolated cluster pulls together vignettes 1, 9 (97%) and 8 (93%); with the exception of four 1-point ratings delta, they are mirror ratings, reflecting conducive environments, including partnership working, interacting teams, appropriate process, the individual and his or her contribution. The remainder of the vignettes create 2 sub-groups. The first brings together vignettes 3,4 and 5, reflecting the benefits of acknowledging cultural differences to reduce confrontation and create team-working. The negative aspects of a less conducive environment are reflected by vignettes 6 and 7, in which the only differentiator is the confrontation in vignette 6.</p> <p>Three cluster groupings are noted. The first (in which there is 92% similarity), reflects a highly conducive environment in which a partnership has been achieved and is sustainable (constructs 11 and 1), coupled with appropriate process, represented by construct 3 (89%). The second cluster reflects the negative effect an individual has on team working (92%), and the third indicates that a lack of acknowledgement of cultural difference results in individuals not working well together (83%).</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>2</p> <p>71%</p> <p>12%</p> <p>Benefits of positive team dynamics and interaction (vignettes 1, 8 and 9) Problems and confrontation are detractors to successful outcomes (the 'them and us' of vignette 5) Not defined</p>

Summary of Repertory Grid Analysis for each Respondent	
Interviewee	17
Project	F
Stage 1 – Inspection	
<p>Number of Constructs Elicited Summary of Grid</p> <p>Vignette Spread (Wide, Narrow, Skewed to Pole)</p> <p>Vignette Commentary</p>	<p>8</p> <p>Focus is relationship interaction dynamics. Key themes include the relationship between process as a means to resolve problems that leads to successful solutions and outcomes, relationship harmony and discord, and time horizons. Wide, all vignettes are rated on all constructs.</p> <p>The environments noted in vignettes 1, 8 and 9, in which individuals pull together to meet a mutually beneficial objective, are seen as highly conducive. These are solution- and outcome-focused environments.</p>
Stage 2 – Cluster Analysis	
<p>Element Relationships</p> <p>Construct Relationships</p>	<p>Elements are clustered into two main groups. Vignettes 1, 8 and 9 have a 100% match, reflecting the team environment created by removing barriers, close working, enhanced process, planning and communications. The second group is more representative of conflict between the organisations; with a similarity score of 85%, vignettes 5 and 7 indicate the disharmony created by problems, although both of these vignettes do indicate a solution. The group can be extended to include vignettes 4 (81%) and 6 (81%), in which the focus and resolution is at an individual level.</p> <p>With the exception of solution versus the identification of the symptom, the remaining constructs have a 86% similarity. Three smaller grouping are noted, comprising solutions, outcomes and harmonious relationships, which are identified as being the key factors in creating conducive environments.</p>
Stage 3 – Principal Components Analysis	
<p>Number of Components</p> <p>Major (Variance %)</p> <p>Minor (Variance %)</p> <p>First Component Label</p> <p>Second Component Label</p> <p>Third Component Label</p>	<p>1</p> <p>85%</p> <p>Focus on solutions to achieve harmony and long-term outcomes (reflected in vignettes 1, 8 and 9)</p> <p>Not defined</p> <p>Not defined</p>

Appendix J

Refs:		SVS	Honey Content Analysis				Principal Components Analysis	
Respondent	Project	Values orientation	High	Intermediate	Low	Summary of constructs allocated to group identity category	Major Component	Major Component Label
			<i>Construct reference</i>					
R28	A	ST; marginal OTC		28.09	28.06	People and personal relationships	50%	Long-standing openness and maturity in relationships enables goal attainment.
R30	A	ST-SE; marginal OTC	30.09 30.10	30.03		Team-working resolves problems	65%	Teams create learning environments
R27	B	ST-SE; Strong OTC	27.05			Team-working	71%	Teams that work together pull together, communicate well and work to a defined goal.
R48	B	ST-SE	48.05 48.07			Partnership and team-working	45%	Good communications aids better planning
R46	C	Strong ST; strong OTC			46.07	Team-working and team effort	82%	Teams that work together achieve positive outcomes.
R45	C	ST-SE (marginal SE); marginal OTC			45.09	Team cooperation	49%	Joint working aids project delivery

R3	D	SE; strong OTC			3.01	Partnership	60%	Benefits of partnership working.
R4	D	ST-SE (marginal SE); marginal OTC	4.07 4.09	4.06		Boundary removal for team-working success	70%	Team building and performance
R34	E	ST; marginal OTC	34.02	34.05 34.10	34.04	Boundary removal leads to team- working and good performance	56%	Team-working in preference to outlying individual.
R41	E	ST; marginal OTC		41.06		Strong relationships	85%	Strong interdependent relationships achieve end results
R5	F	ST; OTC Marginal		5.09		Integrated team approach	56%	Productive team attributes.
R1	F	ST; marginal OTC		1.09		Cohesive team	75%	Successful relationship attributes

Notes to accompany table

SVS – (from the Schwartz Value Survey Instrument) individuals' values orientation is denoted by: ST = self-transcendence; SE = self-enhancement; OTC = openness-to-change; Con = conservation.

Honey Content Analysis – references to high, intermediate and low categories followed allocation by 1/3rds to each group after a Honey Content analysis was carried out. The numeric references relate the respondent to the construct. The summary provides a summated label for constructs allocated to the category.

Principal Components Analysis – the principal component label is provided together with the variance percentage accounted for by the component; the higher the percentage, the greater the variance accounted for by the component, in terms of an individual's behaviour

Appendix K

Respondent	Project	Sector	Values Orientation	Honey Content Analysis			Summary of Construct Labels for High and Intermediate Categories	Major Component	Major Component Label
				High	Inter	Low			
28	A	Pu	ST	28.01 28.03	28.02 28.09 28.12	28.06	Maturity in relationships enhances communications	50%	Long-standing openness and maturity in relationships enables goal attainment
30	A	Pr	ST/ SE	30.07 30.09 30.10	30.03 30.08		Boundary removal and team-working resolves problems	65%	Teams create learning environments
27	B	Pu	ST/ SE	27.05	27.03 27.04		Boundary removal and team-working	71%	Teams that work together pull together, communicate well and work to a defined goal
48	B	Pr	ST/ SE	48.05 48.07	48.06		Team-working and partnership peer relationships	45%	Good communications aid better planning
46	C	Pu	ST	46.05		46.07	Team-working and team effort	82%	Teams that work together achieve positive outcomes.
45	C	Pr	ST/ SE		45.08	45.09	People interaction enables objectives to be met	49%	Joint working aids project delivery
3	D	Pu	SE	3.04	3.08	3.01	Partnership working supports mutual goals being satisfied.	60%	Benefits of partnership working

4	D	Pr	SE	4.03 4.07 4.09 4.10	4.01 4.05 4.06		Boundary removal and joint working for mutual team success	70%	Team building and performance
34	E	Pu	ST	34.02 34.06	34.01 34.05 34.10	34.04	Team-working and open communications channels aid process integration.	56%	Team-working in preference to outlying individual
41	E	Pr	ST	41.08	41.06 41.07		Collaboration, dependency and excellent communications assist with meeting mutual objectives	85%	Strong interdependent relationships achieve end results
5	F	Pu	ST		5.05 5.07 5.09		Integrated team approach delivers objectives	56%	Productive team attributes
1	F	Pr	ST		1.08 1.09		Team cohesion assists mutual objective satisfaction	75%	Successful relationship attributes

References

- Adams, J.S. (1976) The structure and dynamics of behavior in organizational boundary roles. *The handbook of industrial and organizational psychology*, pp. 1175-1199.
- Adams, P.H. (1995) Ontology and research strategy – paradigmatic consequences to social enquiry. In: Elfing, T., Siggard Jensen, H. and Money, A., (eds.) *European research paradigms in business studies*, Denmark: AKA – Print.
- Ahrne, G. (1997) *Social organizations*, 3rd edn. London: Sage.
- Ajzen, I. (1991) The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, pp. 179-211.
- Ajzen, I. and Fishbein, M. (1977) Attitude-behaviour relations: a theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), pp. 888-918.
- Alderfer, C.P. and Smith, K.K. (1982) Studying intergroup relations embedded in organizations. *Administrative Science Quarterly*, 27, pp. 35-65.
- Aldrich, H. and Herker, D. (1977) Boundary roles and organization structure. *Academy of Management Review*, 2, pp. 217-230.
- Aldrich, H.E. and Pfeffer, J. (1976) Environments of organizations. In: Inkeles, A. (eds.) *Annual Review of Sociology*, Palo Alto, CA, Vol. 2, pp.79-105.
- Aldrich, H. and Whetton, D.A. (1981) Organizational sets, action-sets and networks: making the most of simplicity. In: *Handbook of organizational design*, Vol. 1, Nystrom, P.C and Starbuck, W.H. (eds.) Oxford: Oxford University Press. pp. 385 – 408.
- Alexander, E.R. (1995) *How organizations act together*, Amsterdam: Gordon & Breach .
- All-Party Parliamentary Group on Management (2002) *Managing Public Private Partnerships - are they still viable post-Railtrack?* London: APPGM.
- Allen, G. (2001) The private finance initiative (PFI), Research Paper 01/117, London: Economic Policy and Statistics Section: House of Commons Library.
- Allen, G. (2003) The private finance initiative (PFI), Research Paper 03/79, London: Economic Policy and Statistics Section: House of Commons Library.
- Andersen, P.H. (1995) Ontology and research strategy: paradigmatic consequences to social enquiry. In: Elfing, T., Siggard Jensen, H. and Money, A. (eds.) *European Research Paradigms in Business Studies*, Denmark: AKA –Print.
- Argyle, M. (1991) *Cooperation: the basis of sociability*, London: Routledge.

Argyris, C. and Schön, D. (1978) *Organizational learning: a theory of action perspective*, Reading, Mass: Addison Wesley.

Argyle, M. (1994) *The psychology of interpersonal behaviour*, 5th edn. London: Penguin Books.

Axelrod, R. (1984) *The evolution of cooperation*. New York: Basic Books.

Bach, S. (2004) *Employment relations and the Health Service: the management of reforms*. London: Routledge.

Bannister, D. and Fransella, F. (1971) *Inquiring man: the theory of personal constructs*. Middlesex, England: Penguin Books.

Barlett, C.A. and Ghoshal, S. (1993) Beyond the M-form: toward a managerial theory of the firm. *Strategic Journal of Management*, 14, pp. 23-46.

Barnard, C.I. (1968) *The functions of the executive*, 30th Anniversary edn. London: Harvard University Press.

Barringer, B.R. and Harrison, J.S. (2000) Walking a tightrope: creating value through interorganizational relationships. *Journal of Management*, 26(3), pp. 367-403.

Beetham, D. (1987) *Bureaucracy*. Milton Keynes: Oxford University Press.

Bell, R. (2002) Keys to effective procurement. In: Neville, T., (ed.) *PFI: practical perspectives*, London: ACCA.

Beveridge Sir, W. (1942) *Social Insurance and Allied Services*. Cmnd 6404, London: HMSO.

Bilsky, W. and Schwartz, S.H. (1994) Values and personality. *European Journal of Personality*, 8, pp. 163-181.

Blunden, M. (1984) Interorganizational relations. In: Paton, R., Brown, S., Spear, R., Chapman, J., Floyd, M. and Hamwee, J., (eds.) *Organizations: cases issues and concepts*, London: Harper & Row.

✓ Boyle, S. and Harrison, A. (2000a) PFI in Health: the story so far. In: Kelly, G. and Robinson, P., (eds.) *A healthy partnership: the future of public private partnerships in the health service*, London: IPPR.

✓ Boyle, S. and Harrison, A. (2000b) Private finance and service development. Autumn 2000, Kings Fund. Health Care UK. Available at: www.kingsfund.org.uk/ekingsfund/html/pfi.html. (Accessed: 27 May 2007).

Braithwaite, V.A. and Scott, W.A. (1991) Values. In: Robinson, J. P., Shaver, P. R., and Wrightsman, L. S. (eds.) *Measures of Personality and Social Psychological Attitudes*, San Deigo: Academic Press, pp 661-753.

-
- Brewerton, P. and Millward, L. (2001) *Organizational methods*, London: Sage.
- Broadbent, J., Gill, J. and Laughlin, R. (2001) A healthy balance? *Financial Management*, pp. 12-14.
- ✓ Broadbent, J. and Laughlin, R. (1999) The private finance initiative: clarification of a future research agenda. *Financial Accountability and Management*, 15(2), pp. 95-114.
- Burns, T. and Stalker, G.M. (1961) *The management of innovation*, London: Tavistock.
- Burrell, G. and Morgan, G. (2001) *Sociological paradigms and organizational analysis*, London: Ashgate.
- ✓ Campaign for Architecture in the Built Environment (2003) *Creating Excellent Buildings : a guide for clients*. London: CABE.
- Carroll, P. and Steane, P. (2000) Public-private partnerships: sectoral perspectives. In: Osborne, S.P., (ed.) *Public-Private Partnerships: theory and practice in international perspective*, London: Routledge.
- Carvel, J. (February 27, 2007) Hewitt approves seven PFI hospitals at cost of 1.5bn (pounds). *The Guardian*.
- Cassell, C. and Symon, G. (1999) *Qualitative methods in organizational research: a practical guide*, London: Sage.
- Chatman, J.A. and Barsade, S.G. (1995) Personality, organizational culture: evidence from a business simulation. *Administrative Science Quarterly*, 40, pp. 423-443.
- Chatman, J.A., Polzer, J.T., Barsade, S.G. and Neale, M.A. (1998) Being different yet feeling similar: the influence of demographic composition and organizational culture on work processes and outcomes. *Administrative Science Quarterly*, 43, pp. 749-780.
- Chen, C.C., Chen, X. and Meindl, J.R. (1998) How can cooperation be fostered? The cultural effects of individualism-collectivism. *The Academy of Management Review*, 23(2), pp. 285-304.
- Chen, Y., Brockner, J. and Katz, T. (1997) Individual-primacy and collective-primacy as bases for ingroup bias: evidence from the United States and the Peoples Republic of China. *Paper presented to the Academy of Management*. Boston.
- Child, J. (1972) Organizational structure, environment and performance: the role of strategic choice. *Sociology*, 1, pp. 2-22.
- Child, J. and Faulkner, D. (1998) *Strategies of co-operation*, Oxford: Oxford University Press.

-
- Churchill, Jr. G. A. (1979) A paradigm for developing better measures of marketing constructs. *Journal of Marketing*, 16, pp. 64-73.
- Clark, T., Elsby, M. and Love, S. (2001) Briefing Note No.20, London: The Institute of Fiscal Studies.
- Clemmer, T.P., Spuhler, V.J., Berwick, D.M. and Nolan, T.W. (1998) Cooperation: The Foundation of Improvement. *Annals of Internal Medicine*, 128, pp. 1004-1009.
- Coase, R. H. (1937) The nature of the firm. *Economica*, 4(16), pp. 385-405.
- Cohen, W. and Levinthal, D. (1990) Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, 35, pp. 128-152.
- Colling, T. (1999) Tendering and outsourcing , working in the contract state? In: Corby, S. and White, G., (eds.) *Employee relations in the public services: themes and issues*, London: Routledge.
- Corby, S. and White, G. (1999) *Employee relations in the public services: themes and issues*, London: Routledge.
- Corry, D. (2003) "Could do better". *Public Finance*, pp. 22 - 25.
- Corry, D. (2002) A worthwhile wobble? *Public Finance*.
- Corry, D., Le Grand, J. and Radcliffe, R. (1997) *Public private partnerships: a marriage of convenience or the permanent commitment?*, London: IPPR.
- Cote, J. and Yehle, A. (1991) A Model of Role Enactment and Strain in Organizations. *Journal of Social Behavior and Personality*, 20(4), pp. 873-888.
- Cox, T.H. (1996) Intergroup conflict. In: Shafritz, J.M. and Ott, J.S., (eds.) *Classics of Organization Theory*, 4th edn. Florida, USA: Harcourt Brace & Company.
- Cronbach, L.J. (1951) Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, pp. 297-334.
- Currall, S.C. and Judge, T.A. (1995) Measuring trust between organizational boundary role persons. *Organizational Behavior and Human Decision Processes*, 64(2), pp. 151-170.
- Cyert, R.M. and March, J.G. (1963) *A Behavioral Theory of the Firm*, 2nd edn. Englewood Cliffs, NJ: Prentice Hall.
- Davidov, E., Schmidt, P. and Schwartz, S.H. (2008) Bringing values back in: the adequacy of the european social survey to measure values in 20 countries. *Public Opinion Quarterly*, 72(3), pp. 420-445.

-
- Davison, W.P. (1983) The third-person effect in communication. *Public Opinion Quarterly*, Vol. 47, pp.1-15.
- Dawes, R.M. (1980) Social dilemmas. *Annual Review of Psychology*, 31, pp. 169-193.
- de Leeuw, E.D. and van der Zouwween, Z.J. (1988) Data quality in telephone and face to face surveys: a comparative meta-analysis. In: Groves, R.M. et al., (eds.) *Telephone Survey Methodology*, 2nd edn. pp. 283-300. New York: John Wiley & Sons.
- DeVellis, R.F. (2003) *Scale development: theory and applications*, 2nd edn. Thousand Oaks, CA: Sage.
- Deakin, S., Lane, C. and Wilkinson, F. (2001) Contract law, trust relations and incentives for co-operation: a comparative study. In: Deakin, S. and Michie, J., (eds.) *Contracts, co-operation and competition: studies in economics management and law*, Oxford: Oxford University Press.
- Deakin, S. and Michie, J. (2001) The theory and practice of contracting. In: Deakin, S. and Michie, J., (eds.) *Contracts, co-operation, and competition: studies in economics, management and law*, Oxford: Oxford University Press.
- Deal, T. and Kennedy, A. (2000) *Corporate cultures: the rites and rituals of corporate Life*, Cambridge, Massachusetts: Perseus Publishing.
- Dempsey, M. and McKeivitt, D. (2001) UNISON and the people side of mergers. *Human Resource Management Journal*, 11(2), pp. 4-16.
- Denscombe, M. (1998) *The good research guide for small-scale social research projects*, UK: Open University Press.
- Denzin, N.K. and Lincoln, Y.S. (1998a) *The landscape of qualitative research*, UK: Sage.
- Denzin, N.K. and Lincoln, Y.S. (1998b) *Strategies of qualitative enquiry*, UK: Sage.
- Department of Health (2003) Building on the best: choice, responsiveness and equity in the NHS. Cmnd 6079, London: The Stationery Office.
- Department of Health (2000) Changing the relationship between the NHS and the private sector. London: Department of Health.
- Department of Health (2001a) The NHS Plan: investment and reform for NHS hospitals. Cmnd 4818-1, London: Department of Health Publications.
- Department of Health (2001b) Shifting the balance of power: securing delivery. London: Department of Health Publications.

-
- Department of Health (1984) Griffiths Report, NHS Management Inquiry Report. London: Department of Health Publications.
- DiMaggio, P.J. and Powell, W.W. (1983) The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, pp. 147-160.
- Domberger, S. (1998) *The contracting organization*, New York, USA: Oxford University Press.
- Donaldson, L. (2001) *The contingency theory of organizations*, London: Sage Publications.
- Dose, J.J. (1997) Work values: an integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology*, 70, pp. 219-240.
- Dovidio, J.F., Gaertner, S.L. and Kawakami, K. (2003) Intergroup contact: the past, present and the future. *Group Processes & Intergroup Relations*, 6(1), pp. 5-21.
- Du Gay, P. (2000) *In praise of bureaucracy*, London: Sage.
- Earley, P.C. (1989) Social loafing: a comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, 34, pp. 565-581.
- Easterby-Smith, M., Thorpe, R. and Holman, D. (1996) Using repertory grids in management. *Journal of Industrial Training*, 20(3), pp. 3-30.
- Editorial (1990) The 'post modern' NHS. *Healthmatters*, issue 4, p. 1
- Eisenhardt, K.M. (1989) Agency theory: an assessment and review. *Academy of Management Journal*, 14(1), pp. 57-64.
- Emmerson C., Frayne C. and Goodman A. (2000) *Pressures in UK healthcare: challenges for the NHS*, London: Institute for Fiscal Studies.
- England, G.W. (2001) Personal value systems of American managers. *Academy of Management*, March, pp. 53-68.
- Evan, W.M. (1976) *Organization Theory*, New York: John Wiley & Sons.
- Falconer, P.K. and McLaughlin, K. (2000) Public-private partnerships and the 'New Labour' government in Britain. In: Osborne, S.P., (Ed.) *Public-private partnerships: theory and practice in international perspective*, London: Routledge.
- Faulkner, D. and de Rond, M. (2000) (eds.) *Cooperative strategy: economic, business and organizational issues*, Oxford: Oxford University Press.
- Ferlie, E., Lynn, L. and Pollitt, C. (2007) *The Oxford Handbook of Public*

-
- Management*, Oxford: Oxford University Press.
- Fichman, M. and Levinthal, D.A. (1991) Honeymoons and the liability of adolescence: a new perspective on duration dependence in social and organizational relationships. *Academy of Management*, 16(2), pp. 442-468.
- Finegan, J.E. (2000) The impact of person and organizational values on organizational commitment. *Journal of Occupational and Organizational Psychology*, 73, pp. 149-169.
- Fiske, A.P. (2002) Using individualism and collectivism to compare cultures - a critique of the validity and measurement of the constructs: comment on Oyserman et al. (2002). *Psychological Bulletin*, 128(1), pp. 78-88.
- Fox, J. and Tott, N. (1999) *The PFI handbook*, Bristol, England: Jordan.
- Fransella, F., Bell, R. and Bannister, D. (2004) *A manual for repertory grid technique*, 2nd edn. Chichester: John Wiley & Sons.
- Frey, J.H. (1989) *Survey research by telephone*, Newbury Park: Sage.
- Fulop, L. (2004) Interorganizational networking. In: Linstead, S., Fulop, L. and Lilley, S., (eds.) *Management and organization: a critical text*, pp. 539-587. Hampshire: Palgrave Macmillan.
- Gaffney, D., Pollock, A.M., Price, D. and Shaoul, J. (1999a) NHS capital expenditure and the private finance initiative - expansion or contraction? *British Medical Journal*, 319, pp. 48-51.
- Gaffney, D., Pollock, A.M., Price, D. and Shaoul, J. (1999b) The private finance initiative: PFI in the NHS - is there an economic case? *British Medical Journal*, 319, pp. 116-119.
- Gaffney, D., Pollock, A.M., Price, J. and Shaoul, J. (1999c) The politics of the private finance initiative and the new NHS. *British Medical Journal*, 319, pp. 249-253.
- Gainsbury, S. (2007) Surplus to requirements: there's much rejoicing as last year's NHS deficits turn into surpluses. But are things what they seem? *Public Finance* October, 2007, pp. 22-23.
- Ghobadian, A., Gallear, D., O'Regan, N. and Viney, H. (2004) *Public-private partnerships: policy and experience*, Hampshire: Palgrave MacMillan.
- Giddens, A. (1984) *The constitution of society: outline of the theory of structuration*, Cambridge: Polity Press.
- Giddens, A. (1998) *The third way*, Cambridge: Polity Press.

-
- Gill, J. and Johnson, P. (2002) *Research methods for managers*, 3rd edn. London: Sage.
- Gillham, B. (2001) *Case study research methods*, London: Continuum.
- Gouveia, V.V., de Albuquerque, F. J. B., Clemente, M. and Espinosa, P (2002) Human values and social identities: a study in two collectivist cultures. *International Journal of Psychology*, 37(6), pp. 333-342.
- Granovetter, M. (1985) Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, 91(3), pp. 481-510.
- Green, R. (1995) A collaborative relationship does not mean a cosy relationship. *Petroleum Review*, Jan, pp. 16-17.
- Grimshaw, D. and Hebson, G. (2005) Public-private contracting: performance, power and change at work. In: Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H., (eds.) *Fragmenting work: blurring organizational boundaries and disordering hierarchies*, Oxford: Oxford University Press.
- Grimshaw, D., Marchington, M., Rubery, J. and Willmott, H. (2005a) Fragmenting work across organizational boundaries. In: Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H., (eds.) *Fragmenting work: blurring organizational boundaries and disordering hierarchies*, Oxford: Oxford University Press.
- Grimshaw, D., Willmott, H. and Rubery, J. (2005b) Inter-organizational networks: trust, power, and the employment relationship. In: Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H., (eds.) *Fragmenting work: blurring organizational boundaries and disordering hierarchies*, Oxford: Oxford University Press.
- Grout, P.A. (1997) The economics of the private finance initiative. *Oxford Review of Economic Policy*, 13(4), pp. 53-66.
- Groves, R.M. (1989) *Survey errors and survey costs*, New York: Wiley.
- Gulati, R. (1998) Alliances and networks. *Strategic Management Journal*, 19, pp. 293-317.
- Gummer, B. (1990) Current perspectives on inter-organizational relationships. *Administration in Social Work*, 14(4), pp. 117-128.
- Guttman, L. (1968) A general nonmetric technique for finding the smallest coordinate space for a configuration of points. *Psychometrika*, 33, pp. 469-506.
- Guttman, L. (1977) What is not what in statistics. *The Statistician*, 26(2), pp. 81-107.
- Hair, J., Anderson, R., Tatham, R. and Black, W. (1998) *Multivariate Data Analysis*,

-
- 5th edn. Upper Saddle River, NJ: Prentice-Hall.
- Hall, R.H. (2002) *Organizations: structures processes and outcomes*, 8th edn. New Jersey, USA: Prentice Hall.
- Ham, C. (2004) *Health policy in Britain*, 5th edn. Hampshire: Palgrave MacMillan.
- Hamel, G. (1991) Competition for competence and interpartner learning within international alliances. *Strategic Management Journal*, 12, pp. 83-103.
- Heide, J.B. and Miner, A.S. (1992) The shadow of the future: effects of anticipated interaction and frequency of contract on buyer-seller cooperation. *Academy of Management Journal*, 35(2), pp. 265-291.
- Hillebrand, B. and Biemans, W.G. (2003) The relationship between internal and external cooperation: literature review and propositions. *Journal of Business Research*, 56, pp. 735-743.
- Hitlin, S. and Piliavin, J. (2004) Values: reviving a dormant concept. *Annual Review of Sociology*, 30, pp. 359-393.
- Homer, P. M. and Kahle, L. R. (1988) A structural equation test of the value-attitude-behaviour hierarchy. *Journal of Personality and Social Psychology*, 54(4), pp. 638-646.
- HM Treasury (2008) Making changes in operational PFI projects. 36th Report of the Public Accounts Select Committee. HC 332, London: House of Commons.
- HM Treasury (2007) Budget Statement 2007 chapter C: the public finances. London: HM Treasury.
- HM Treasury (2003) PFI: meeting the investment challenge. London: HM Treasury.
- HM Treasury (2006) PFI: strengthening long-term partnerships. London: HM Treasury.
- Hofstede, G. (2001) *Culture's consequences*, 2nd edn. London: Sage.
- Homer, P. and Kahle, L. (1988) A structural equation test of the value-attitude-behaviour hierarchy. *Journal of Personality and Social Psychology*, 54(4), pp. 638-646.
- Health Act: parts 1-7. 2006 (S.I. 2006/3368), London: HMSO.
- Health and Social Care (Community Health and Standards) Act. (2003), London: HMSO.
- House of Commons Social Services Committee (1984) Report 209, London: HMSO.

-
- Hui, C.H. (1988) Measurement of individualism-collectivism. *Journal of Research in Personality*, 22, pp. 17-36.
- Hui, C.H. and Triandis, H.C. (1986) Individualism-collectivism: a study of cross cultural researchers. *Journal of Cross-Cultural Psychology*, 17(2), pp. 225-248.
- Hussey, J. and Hussey, R. (1997) *Business Research. a practical guide for undergraduate and postgraduate students*. London: MacMillan Press.
- Institute for Public Policy Research (2001) *Building Better Partnerships: the final report of the Commission on Public Private Partnerships*. London: IPPR.
- Jankowicz, A.D. (2005) *Business research projects*, 4th edn, London: Thomson Learning.
- Jankowicz, D. (2004) *The easy guide to repertory grids*, Chichester: John Wiley & Sons.
- Jankowicz, D. (2000) From learning organization to adaptive organization. *Management Learning*, 31(4), pp. 471-490.
- Jarillo, J.C. (1998) On strategic networks. *Strategic Management Journal*, Vol 9, pp. 31-41.
- Jones, J. (2000) The private finance initiative: spinning out the defense. *British Medical Journal*, 320, pp. 1460-1461.
- Kanter, R.M. (1984) *The change masters: corporate entrepreneurs at work*. London: George Allen and Unwin.
- Katz, D. and Kahn, R.L. (1966) *The social psychology of organizations*, New York : John Wiley & Sons.
- Kelliher, C. (1996) Competitive tendering in NHS catering: a suitable policy. *Employee Relations*, 18(7), pp. 62-76.
- Kelly, G. (2000) *The new partnership agenda*, London: IPPR.
- Kelly, G.A. (1963) *A theory of personality: the psychology of personal constructs*, London: Norton.
- Kelly, J. and Whittlestone, P. (2000) Innovation for the future of PFI. In: Kelly, J. and Robinson, P., (eds.) *A healthy partnership: the future of public-private partnerships in the health sector*, London: IPPR.
- Kim, U., Triandis, H.C., Kâgitçibasi, Ç., Choi, S.-C. and Yoon, G. (1994) *Individualism and collectivism; theory, method and applications*, United Kingdom: Sage.

-
- Kings Fund (2002) *The future of the NHS: a framework for debate*, London: Kings Fund.
- Kitayama, S. (2002) Culture and basic psychological processes - towards a system view of culture: comment on Oyserman et al. (2002). *Psychological Bulletin*, 128(1), pp. 89-96.
- Kitwood, T. M. and Smithers, A. G. (1975) Measurement of human values: an appraisal of the work of Milton Rokeach. *Educational Research*, 17(3), pp. 175-180.
- Klein, R. (2006) *The new politics of the NHS*, 5th edn. Oxford: Radcliffe.
- Kluckhohn, C.K. (1951) Values and value orientations in the theory of action. In: Parsons, T and Shils, E.A. (eds.) *Toward a General Theory of Action*, Cambridge, MA: Harvard University Press.
- Kluckhohn, F.R. and Strodtbeck, F.L. (1961) *Variations in value orientations*, Evanston, IL: Row, Peterson and Company.
- Koch, J.R. and Johnson, D.P. (1997) The ecumenical outreach coalition: a case study of converging interests and network formation for church and community cooperation. *Non Profit and Voluntary Sector Quarterly*, 26, pp. 343-358.
- Kogut, B. (1988) Joint ventures: theoretical and empirical perspectives. *Strategic Management Journal*, Vol. 9, pp. 319-332.
- Korsgaard, M.A., Schweiger, D.M. and Sapienza, H.J. (1995) Building commitment, attachment, and trust in strategic decision-making teams: the role of procedural justice. *Academy of Management Journal*, 38(1), pp. 60-84.
- Kuhn, T. (1970) *The structure of scientific revolutions*, Chicago: Chicago University Press.
- Kumar, N., Stern, L.W. and Anderson, J.C. (1993) Conducting interorganizational research using key informants. *Academy of Management Journal*, 36(3), pp. 1633-1645.
- Labour Party General Election Manifesto 2001. London: Labour Party.
- Lawrence, P. and Lorsch, J. (1967) Differentiation and integration in complex organizations. *Administrative Science Quarterly*, 12, pp. 1-30.
- Lazar, F.D. (1997) Partnering-new benefits from peering inside the black box. *Journal of Management in Engineering*, 13(6), pp. 75-83.
- Le Grand, J. (2003) *Models of public service provision: command and control, networks or quasi-markets*. London: HM Treasury.

-
- Levine, S. and White, P.E. (1961) Exchange as a conceptual framework for the study of interorganizational relationships. *Administrative Science Quarterly*, 5, pp. 583-601.
- Levy, J.D. (2006) *The state after statism: new state activities in the age of liberalization*, Massachusetts: Harvard University Press.
- Lewin, A.Y. and Volberda, H.K. (1999) Prolegomena on coevolution: a framework for research on strategy and new organizational forms. *Organizational Science* 10(5), pp. 519-534.
- Lewis, R. and Dixon, J. (2005) NHS market futures: exploring the impact of health service market reforms. London: Kings Fund.
- Lopopolo, R.B. (2001) Development of the professional role behaviors survey (PROBES). *Physical Therapy*, 81(7), pp. 1317-1327.
- Luce, D.R. and Raiffa H (1957) *Games and decisions: introduction and critical survey*, New York: John Wiley and Sons.
- Marchington, M., Grimsham, D., Rubery, J. and Willmott, H. (2005a) *Fragmenting work: blurring organizational boundaries and disordering hierarchies*, Oxford: Oxford University Press.
- Marchington, M., Vincent, S. and Cooke, F.L. (2005b) The role of boundary-spanning agents in inter-organizational contracting. In: Marchington, M., Grimshaw, D., Rubery, J. and Willmott, H., (eds.) *Fragmenting work: blurring organizational boundaries and disordering hierarchies*, Oxford: Oxford University Press.
- Markus, H.R. and Kitayama, S. (1991) Culture and the self: implications for cognition, emotion and motivation. *Psychological Review*, 98(2), pp. 224-253.
- Mavondo, F.T. and Rodrigo, E.M. (2001) The effect of relationship dimensions on interpersonal and interorganizational commitment in organizations conducting business between Australia and China. *Journal of Business Research*, 52(2), pp. 111-121.
- May, T. (2001) *Social research, issues, methods and process*, Buckingham: Open University Press.
- Maynard, A., Chote, R., Appleby, J. and McKeown, A. (2007) Funding health care: 2008 and beyond. Report from the Leeds Castle summit. London: Kings Fund.
- McAllister, D.J. (1995) Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), pp. 24-59.
- McDonald, P. and Gandz, J. (1992) Getting value from shared values.

-
- Organizational Dynamics*, pp. 64-77.
- McDonald, P. and Gandz, J. (1991) Identification of values relevant to business research. *Human Resource Management*, 30(2), pp. 217-236.
- McQuaid, R. (2000) The Theory of partnership: why have partnerships?. In: S. Osborne (ed.), *Public-Private Partnerships: theory and practice in international perspective*, London: Routledge.
- McNally, K personal communication April 2004. Reliability of INDCOL instrument. Triandis, H. C.
- McNally, K personal communication April 2004. Reliability of Schwartz Value Survey instrument. Schwartz, S. H.
- Mead, M. (1967) *Cooperation and competition among primitive people*. Boston: Beacon.
- Meek, V.L. (1988) Organizational culture: origins and weaknesses. *Organizational Studies*, 9(4), pp. 453-473.
- Merton, R.K. (1968) *Social theory and social structure*, 2nd edn. New York: The Free Press.
- Messick, D.M. and Brewer, M.B. (1983) Solving social dilemmas. *Review of Personality and Social Psychology*, 4, pp. 11-44.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis*, 2nd edn. London: Sage.
- Miles, R.E. and Snow, C.C. (1978) *Organizational strategy, structure and process*. New York: McGraw-Hill.
- Moorman, R.H. and Blakely, G.L. (1995) Individualism-collectivism as an individual difference predictor of organizational citizenship behaviour. *Journal of Organizational Behaviour*, 16(2), pp. 127-142.
- Morgan, R.M and Hunt, S.D. (1994) The commitment-trust theory of relationship marketing. *Journal of Marketing*, July, pp. 20-38.
- Mowery, D.C., Joanne, E.O. and Silverman, B.S. (1996) Strategic alliances and interfirm knowledge transfer. *Strategic Management Journal*, Winter, pp. 77-91.
- Murnighan, J.K. (1994) Game theory and organizational behavior. In: Staw, B.M. and Cummings L. L., (eds.) *Research in organizational behavior*, 16th edn. pp. 83-124. Greenwich CT: JAI Press.
- Nash, J. (1950) The bargaining problem. *Econometrica*, Vol 18(2), April, pp. 155-162.

-
- National Audit Office (2005a) Darrent Valley Hospital: the PFI contract in action. HC 209, London: National Audit Office .
- National Audit Office (2006a) Good practice briefing for PFI/PPP. London: National Audit Office.
- National Audit Office (2007a) Improving the PFI tendering process, HC 149, London: National Audit Office.
- National Audit Office (2003) PFI: construction performance. HC 371, London: National Audit Office.
- National Audit Office (2004) PFI: the STEPS deal. HC 530, London: National Audit Office.
- National Audit Office (2000) The refinancing of the Fazakerley Prison PFI. HC 584, London: National Audit Office.
- National Audit Office (2005b) The refinancing of the Norfolk and Norwich PFI Hospital: how the deal can be viewed in light of the refinancing. HC 78, London: National Audit Office.
- National Audit Office (2006b) Update on PFI debt refinancing and the PFI equity Market, HC 1040, London: National Audit Office.
- National Audit Office (2007b) Update on PFI debt refinancing and the PFI equity Market, HC 158, London: National Audit Office
- NHS Executive (2007) Public private partnerships in the National Health Service: the private finance initiative. Department of Health.
- Nicholson, C. (2000) The PFI in health. *New Economy*, 7(3), pp. 138-142.
- Nonaka, I. and Takeuchi, H. (1995) *The knowledge-creating company: how Japanese companies create the dynamics of innovation*, New York: Oxford University Press.
- Nunnally, J.C. and Bernstein, I.H. (1994) *Psychometric Theory*, 3rd edn. New York: McGraw-Hill.
- O'Reilly III, C.A., Chatman, J. and Caldwell, D.F. (1991) People and organizational culture: a profile comparison approach to assessing person-organizational fit. *Academy of Management*, 34(3), pp. 487-516.
- Oishi, S., Schimmack, U., Diener, E. and Suh, E.M. (1998) The measurement of values and individualism-collectivism. *Personality and Social Behaviour Bulletin*, 24(11), pp. 1177-1189.
- Oppenheim, A.N. (2001) *Questionnaire design: interviewing and attitude measurement*. New York: Continuum.

-
- Organ, D.W. (1990) The motivational basis of organizational citizenship behaviour. *Research in Organizational Behaviour*, 12(4), pp. 43-72.
- Oyserman, D., Coon, H.M. and Kemmelmeier, M. (2002a) Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analysis. *Psychological Bulletin*, 128(1), pp. 3-72.
- Oyserman, D., Coon, H.M. and Kemmelmeier, M. (2002b) Cultural Psychology, a new look: reply to Bond (2002), Fiske (2002), Kitayama (2002), and Miller (2002). *Psychological Bulletin*, 128(1), pp. 110-117.
- Palmer, K. (2006) NHS reforms: getting back on track. London: Kings Fund.
- Parker, M. (2000) *Organizational culture and identity*, London: Sage.
- Parkhe, A. (1993) Strategic alliance structure: a game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36(4), pp. 794-829.
- Parsons, T. (1960) *Structure and process in modern societies*, Glencoe, Ill: Free Press.
- Parsons, T. and Schils, E. (1951) *Towards a general theory of action*, Cambridge MA: Harvard University Press.
- Paton, C. (2006) *New Labour's state of health*, Hampshire: Ashgate.
- Patterson, P.G. and Spreng, R.A. (1997) Modelling the relationship between the perceived value, satisfaction and repurchase intentions in business-to-business, services context: an empirical examination. *International Journal of Service Industry Management*, 8(5), pp. 414-434.
- Peng, K., Nisbett, R.E. and Wong, N.Y.C. (1997) Validity problems comparing values across cultures and possible solutions. *Psychological Methods*, 2(4), pp. 329-344.
- Peston, R. (2006) *Brown's Britain*, London: Short Books.
- Pfeffer, J. (1997) *New directions for organization theory*, New York: Oxford University Press.
- Pfeffer, J. and Salancik, G.R. (1978) *The External Control of Organizations: a resource dependence perspective*. New York: Harper and Row.
- Pfeffer, J. and Salancik, G.R. (1980) Determinants of supervisory behaviour: a role set analysis. In: Katz, D., Kahn, R.L. and Adams, J.S., (eds.) *The study of organizations*, San Francisco: Jossey-Bass Publishers.
- Pollock, A., Dunnigan, M., Gaffney, D., MacFarlane, A. and Majeed, F.A. (1997)

- What happens when the private sector plans hospital services for the NHS: three case studies under the private finance initiative. *British Medical Journal*, 314, p. 1266
- Pollock, A., Price, D. and Pluyer, S. (2005) The private finance initiative: a policy built on sand. London: UNISON.
- Pollock, A.M. (2005) *NHS plc*, London: Verso.
- Pollock, A.M., Dunnigan, M.D., Gaffney, D., Price, D. and Shaoul, J. (1999) Planning the "New" NHS: Downsizing for the 21st century. *British Medical Journal*, 319, pp. 179-184.
- Pollock, A.M., Shaoul, J. and Vickers, N. (2002) Private finance and "value for money" in NHS hospitals: a policy in search of a rationale? *British Medical Journal*, 324, pp. 1205-1209.
- Powell, W.W. (1990) Neither market nor hierarchy: network forms of organization. *Research in organizational behavior*, 12, pp. 295-336.
- Powell, M. (2003) Quasi-markets in British health policy: a perspective. *Social Policy & Administration*, 37(7), pp. 725-741.
- Pratt, J. and Beaulieu, P. (1992) Organizational culture in public accounting: size, technology, rank and functional area. *Accounting Organizations and Society*, 17, pp. 667-684.
- Probst, T.M., Carnevale, P.J. and Triandis, H.C. (1999) Cultural values in intergroup and single group Social dilemmas. *Organizational Behaviour and Human Decision Process*, 77(3), pp. 171-191.
- Public Accounts Committee (1998) Part 4, The Civil Service today. HL55-I, London: House of Lords.
- Rangan. S., Samii, R. and Van Wassenhove, L. (2006) Constructive partnerships: when alliances between private firms and public actors can enable creative strategies. *Academy of Management Review*, 31(3), pp. 738-751.
- Rappaport, A. (1966) *Two person game theory: the essential ideas of Anatol Rappaport*. Ann Arbor: University of Michigan Press.
- Reallo, A., Allik. J. and Vadi, M. (1997) The hierarchical structure of collectivism. *Journal of Research in Personality*, 71, pp. 1037-1054.
- Rhodes, R.A.W. (1996) From institutions to dogma: tradition, eclecticism, and ideology in the study of British public administration. *Public Administration Review*, 56(6).
- Rhodes, R.A.W. (1994) The hollowing out of the state: the changing nature of the

-
- public service in Britain. *The Political Quarterly*, 65(5).
- Riege, A.M. (2003) Validity and reliability tests in case study research: a literature review with "hands-on" applications for each research phase. *Qualitative Market Research*, 6(2), pp. 75-86.
- Ring, P.S. (1996) Fragile and resilient trust and their roles in economic exchange. *Business & Society*, Vol. 35, pp.148-75.
- Ring, P.S. and Van de Ven, A.H. (1994) Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19(1), pp. 90-118.
- Ring, P.S. and Van de Ven, A.H. (1992) Structuring cooperative relations between organizations. *Strategic Management Journal*, 13(7), pp. 483-498.
- Robinson, R. (1996) The impact of NHS reforms 1991-1995: a review of research evidence. *Journal of Public Health Magazine*, 18(3), pp. 337-342.
- Roeber, R.J.C. (1973) *The organization in a changing environment*, Reading, Massachusetts: Addison-Wesley .
- Rohan, M. (2000) A rose by another name? The values construct. *Journal of Personality and Social Psychology Review*, 4(3), pp. 255-277.
- Rokeach, M. (1973) *The nature of human values*, New York: The Free Press.
- Rokeach, M. (1979) *Understanding human values: individual and societal*, New York: The Free Press.
- Romanelli, E. (1991) The evolution of new organizational forms. *Annual Review of Sociology*, 17, pp. 79-103.
- Royal Commission on the National Health Service. Chairman: Sir Alec Merrison. (1979) Cmnd 7615, London: HMSO.
- Ruane, S. (2001) Its the same old song. *Healthmatters*, pp. 16-17.
- Ruane, S. (1997) Public-private boundaries and the transformation of the NHS. *Critical Social Policy*, 17(51), pp. 53-78.
- Ruane, S. (2002) Public-private partnerships - the case of PFI. In: Glendenning, C., Powell, M. and Rummery, K., (eds.) *Partnerships: A "Third Way" approach to delivering welfare*, Cambridge: Polity Press.
- Sachdev, S. (2001) *Contracting culture: from CCT to PPP's*. London: UNISON.
- Salaman, G. (1979) *Work organisations: resistance and control*, London: Longman .

-
- Schein, E.H. (1985) How culture forms, develops and changes. In: Kilmann, R.H.e.al., (Ed.) *Gaining control of the corporate culture*, San Francisco, California: Jossey-Bass.
- Scholz, R.W. and Tietje, O. (2002) *Embedded case study methods: integrating qualitative and quantitative knowledge*, London: Sage.
- Schwartz, S.H. (1994) Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), pp. 19-45.
- Schwartz, S.H. (2001) Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5), pp. 519-542.
- Schwartz, S.H. (1990) Individualism-collectivism; critique and proposed refinements. *Journal of Cross-Cultural Psychology*, 21(2), pp. 139-157.
- Schwartz, S.H. (1992) Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, pp. 1-65.
- Schwartz, S.H. (1996) Values priorities and behaviour: applying a theory of integrated value systems. *The Psychology of Values: the Ontario Symposium*, 8, pp. 1-24.
- Schwartz, S.H. and Bilsky, W. (1987) Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3), pp. 550-562.
- Schwartz, S.H. and Bilsky, W. (1990) Towards a theory of the universal content and structure of values: extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, 58(5), pp. 878-891.
- Schwartz, S.H. and Sagiv, L. (1995) Identifying culture-specifics in the content and structure of values. *Journal of Cross-Cultural Psychology*, 26(1), pp. 92-116.
- Schwartz, S.H., Verkassalo, M., Antonovsky, A. and Sagiv, L. (1997) Value properties and social desirability: much substance, some style. *British Journal of Social Psychology*, 36, pp. 3-18.
- Secretary of State for Health (2008) High Quality Care For All: NHS Next Stage Review Final Report . Cmnd 7432, Department of Health.
- Secretary of State for Health (1997) The New NHS. Cmnd 3807, London: The Stationery Office.
- Secretary of State for Health (2006) Our Health our care our say: a new direction of Community Services. Cmnd 6737, London: The Stationery Office.
- Sedwick, R.C. (1974) *Interaction: interpersonal relationships in organizations*, New

- Jersey: Prentice-Hall.
- Segall, M.H., Lonner, W.J. and Berry, J.W. (1998) Cross cultural psychology as a scholarly discipline. *American Psychologist*, 53(10), pp. 1101-1110.
- Sekaran, U. (2000) *Research methods for business*, New York: John Wiley & Sons.
- Select Committee on Health (2002) *Health-First Report: the role of the private sector in the NHS*. London: Health Committee Publications: House of Commons.
- Shand, A.F. (1896) Character and emotions. *Mind*, Vol ns-5(18), pp. 203-226.
- Sheppard, B.H. and Tuchinsky, M. (1996) Interfirm relationships: |a grammar of pairs. *Research in Organizational Behavior*, 18, pp. 331-373.
- Silverman, D. (2000) *Doing qualitative research: a practical guide*, London: Sage.
- Simon, H.A. (1997) *Administrative behavior: a study of decision-making processes in administrative organizations*, 4th edn. New York: The Free Press.
- Singelis, T.M., Triandis, H.C., Bhawuk, D.P.S. and Gelfand, M.J. (1995) Horizontal and vertical dimensions of individualism and collectivism: a theoretical and measurement refinement. *Journal of Cross-Cultural Psychology*, 29, pp. 240-275.
- Smith, K.G., Carroll, S.J. and Ashford, S.J. (1995) Intra and interorganizational cooperation: toward a research agenda. *Academy of Management Journal*, 38(1), pp. 7-23.
- Söllner, A. (1999) Assymetrical commitment in business relationships. *Journal of Business Research*, 46(3), pp. 219-233.
- Soloman, M.R., Surprenet, C., Czepiel, J.A. and Gutman, E.G. (1985) A role theory perspective on dyadic interactions: the service encounter. *Journal of Marketing*, 49, pp. 99-111.
- Spector, P.E. (1992) *Summated rating scale construction: an introduction*, Newbury Park, CA: Sage.
- Steensma, H.K., Marino, L. and Weaver, K.M. (2000) Attitudes toward cooperative strategies: a cross cultural analysis of entrepreneurs. *Journal of International Business Studies*, 31(4), pp. 591-609.
- Stevens, S. (2004) Reform strategies for the English NHS. *Health Affairs*, 22(3), pp. 37-44.
- Strati, A. (2000) *Theory and method in organizational studies*, London: Sage.
- Sussex, J. (2001) The economics of the private finance initiative in the NHS. The Office of Health Economics. Available at:

- www.ohe.org/private_finance_initiative.htm. (Accessed 27 May 2002).
- Sussex, J. (2002) The NHS and PFI. In: Neville, T., (Ed.) *PFI: practical perspectives*, London: ACCA.
- Symon, G. and Cassell, C. (1999) *Qualitative methods and analysis of organizational research*, London: Sage .
- Thibaut, J. and Kelley, H.H. (1967) *The social psychology of groups*, 2nd edn. New York: Wiley.
- Thorelli, H.B. (1986) Networks: between markets and hierarchies. *Strategic Management Journal*, 7, pp. 37-51.
- Thorlby, R. and Maybin, J. (2007) Health and ten years of Labour Government: achievement and challenges. London: Kings Fund.
- Timmins, N. (1995) *The five giants: a biography of the welfare state*, UK: Harper Collins.
- Timmins, N. (November 8, 2001) NHS may use continental healthcare providers. *Financial Times* FT.
- Timmins, N. (June 8, 2007) Public-private projects set to shrink. *Financial Times* FT.
- Tjosvold, D. (1988) Cooperative and competitive dynamics within and between organizational units. *Human Relations*, 41(6), pp. 425-436.
- Triandis, H.C. (1993) Collectivism and individualism as cultural syndromes. *Cross-Culture Research*, 27(3-4), pp. 155-180.
- Triandis, H.C. (1995) *Individualism and collectivism*, Boulder, Colorado: Westview Press.
- Triandis, H.C. (1996) The psychological measurement of cultural syndromes. *American Psychologist*, 51(4), pp. 407-415.
- Triandis, H.C. (1989) The self and social behavior in differing cultural contexts. *Psychological Review*, 96(3), pp. 506-520.
- Triandis, H. (1999) Cross Cultural Psychology. *Asian Journal of Social Psychology*, 2, pp. 127-143.
- Triandis, H.C., Bontempo, R., Betancourt, H., Bond, M., Leung, K., Brenes, A., Georgas, J., Hui, C.H., Marin, G., Setiadi, B., Sinha, J.B.P., Verma, J., Spangenberg, J., Touzard, H. and de Montmollin, G. (1986) The measurement of the etic aspects of individualism and collectivism across cultures. *Australian Journal of Psychology*, 38(3), pp. 257-267.

-
- Triandis, H.C., Brislin, R. and Hui, C.H. (1988) Cross-cultural training across the individualism-collectivism divide. *International Journal of Intercultural Relations*, 12, pp. 269-289.
- Triandis, H.C., Chan, D.K.-S., Bhawuk, D.P.S., Iwao, S. and Sinha, J.B.P. (1995) Multimethod probes of allocentrism and idiocentrism. *International Journal of Psychology*, 30(4), pp. 461-480.
- Triandis, H.C. and Gelfand, M.J. (1998) Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74(1), pp. 118-128.
- Triandis, H.C., Leung, K., Villareal, M.J. and Clack, F.L. (1985) Allocentric versus idiocentric tendencies: convergent and discriminant validation. *Journal of Research in Personality*, 19, pp. 395-415.
- Triandis, H.C., McCusker, C. and Hui, C.H. (1990) Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology*, 59(5), pp. 1006-1020.
- Triandis, H.C. and Singelis, T.M. (1998) Training to recognize individual differences in collectivism and individualism within culture. *International Journal of Intercultural Relations*, 22(1), pp. 35-47.
- Tsivacou, I. (1997) The self-learning process and its implementation in a state bureaucracy. *Management Learning*, 28(3), pp. 259-281.
- UNISON (2002a) PFI: Failing our Future - A Union audit of the Private Finance Initiative. London: UNISON.
- UNISON (2007) Positively public briefing. London: UNISON.
- UNISON (2002b) Profiting from PFI. London: UNISON.
- UNISON (2004) UNISON comments on new Treasury guidance for PFI. London: UNISON.
- Useem, J., Useem, R. and Donoghue, J. (1963) Men in the middle of the third culture: the roles of the American and non-Western people in cross-cultural administration. *Human Organization*, pp. 169-179.
- Von Neumann, J. and Morgenstern, O. (2007) *Theory of games and economic behavior (Sixtieth-anniversary commemorative edition)*. USA: Princeton University Press.
- Wagner, J.A. (1995) Studies of individualism-collectivism effects on cooperation in groups. *Academy of Management Journal*, 38(1), pp. 152-172.
- Wagner, J.A. and Moch, M.K. (1986) Individualism-collectivism; concept and

- measure. *Group & Organization Studies*, 11(3), pp. 280-304.
- Wanless, D. (2002) *Securing our future health: taking a long-term view. Final report.* London: HM Treasury.
- Wanless, D. (2001) *Securing our future health: taking a long-term view. Interim report.* London: HM Treasury.
- Wanless, D., Appleby, J., Harrison, A. and Patel, D. (2007) *Our future health secured? A review of NHS funding & performance.* London: Kings Fund.
- Webster, C. (2002) *The National Health Service: a political history*, 2nd edn. Oxford: Oxford University Press.
- Webster, C. (1988) *Peacetime history, the health services since the war, volume 1, problems of healthcare: the national health services before 1957*, London: HMSO.
- Wehner, T., Clases, C. and Bachman, R. (2000) Co-operation at work: a process-orientated perspective on joint activity in inter-organizational relations. *Ergonomics*, 43(7), pp. 983-997.
- Weiner, Y. (1988) Forms of value systems: a focus on organizational effectiveness and cultural change and maintenance. *Academy of Management Review*, 13(4), pp. 534-545.
- Weiss, L. (2003) *States in the global economy: bringing domestic institutions back in*, Cambridge: Cambridge University Press.
- Whetten, D.A. (1981) Interorganizational relations: a review of the field. *Journal of Research of Higher Education*, 52(1), pp. 1-28.
- Whiteley, W. and England, G. W. (1980) Variability in common dimensions of managerial values due to value orientation and country differences. *Personnel Psychology*, 33, pp. 77-89.
- Williams, J. (1998) *A better state of health, a prescription for the NHS*, London: Profile Books; Social Market Foundation.
- Williams, M. and May, T. (2000) *Introduction to the philosophy of social science*, London: Routledge.
- Williamson, O. (1975) *Markets and hierarchies: analysis and antitrust implications*, New York: Free Press.
- Williamson, O. (1985) *The economic institutions of capitalism*, New York: Free Press.
- Wright, K. (1998) *The NHS White Papers, Research Paper 98/15*, London : Social

Policy Section: House of Commons Library.

- Wright, R. (2004) Mapping Cognitions to better understand attitudinal and behavioural responses in appraisal research. *Journal of Organisational Behaviour*, 25, pp. 339-374.
- Yin, R. (1993) *Applications of case study research*, London: Sage .
- Yin, R. (1994) *Case study research: design and methods*, 2nd edn. London: Sage .
- Young-Ybarra, C. and Wiersema, M. (1999) Strategic flexibility in information technology alliances: the influence of transaction economics and social exchange theory. *Organizational Science*, 10(4), pp. 439-459.
- Zaheer, A., McEvily, B. and Perrone, V. (1998) Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organizational Science*, 9(2), pp. 141-159.
- Zajac, E.J. and Olsen, C.P. (1993) From transaction cost to transaction value analysis: implications for the study of interorganizational strategies. *Journal of Management Studies*, 30, pp. 130-146.