



Student Entrepreneurship Across the Globe:

Intentions and Activities

Report for England 2013/2014



Small Business Research Centre

**Kingston
University**
London

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1. Introduction

1.1. Background of the study¹

Global University Entrepreneurial Spirit Students' Survey (GUESSS) is an international research project which investigates the entrepreneurial intentions and activities of students using a geographical and temporal comparison. It has been founded at the Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen (KMU-HSG) in 2003. The survey is conducted every two years. Thirty four countries participated in the sixth edition of GUESSS in 2013/2014.

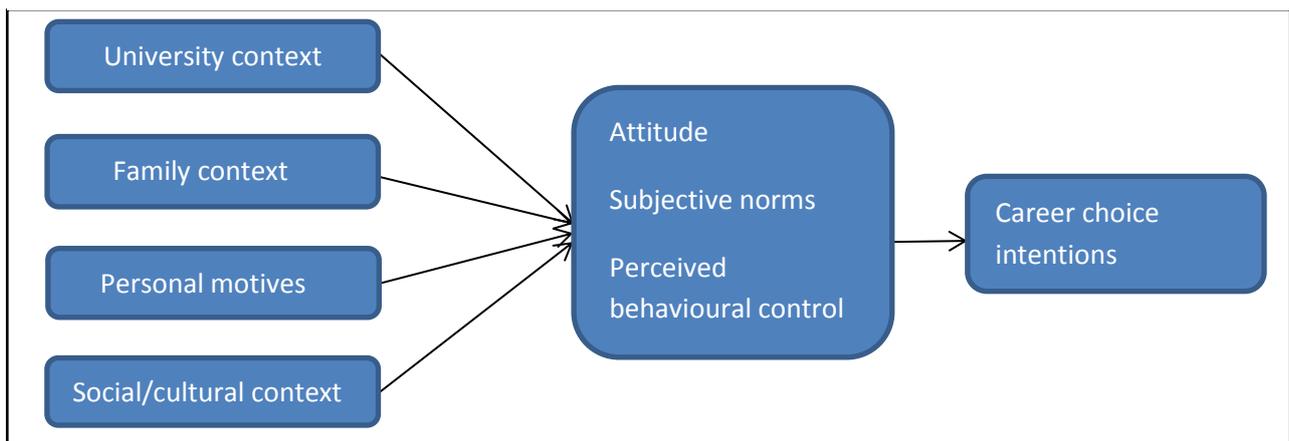
As an entrepreneurship research platform, GUESSS helps to identify antecedents and boundary conditions in the context of new venture creation and entrepreneurial careers in general and helps the participating countries to reflect on their entrepreneurial spirit with regard to specific basic founding conditions that drive students to become entrepreneurs.²

1.2. Theoretical framework

The theoretical foundation of GUESSS is the Theory of Planned Behaviour (Ajzen, 1991, 2002; Fishbein & Ajzen, 1975).³ Its underlying argument is that the intention to perform a specific behaviour is influenced by three main factors: attitude toward the behaviour, subjective norms, and perceived behavioural control.

At GUESSS the focus is on career choice intentions in general and entrepreneurial intentions in particular. Additional factors that may impact the evolvement of career choice or entrepreneurial intentions through the three main elements of TPB are investigated. Examples are the university context, the family context, personal motives, and the social/cultural context. The overall theoretical framework is illustrated in the following figure.

Figure 1. Theoretical framework



¹ <http://www.guesssurvey.org/index.html>

² For more information about GUESSS see <http://www.guesssurvey.org>

³ Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior. An introduction to theory and research*. New York: Addison-Wesley; Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211; Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(1), 1-20.

1.3. Project organisation and data collection procedure

On an international level, GUESSS is coordinated by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen, Switzerland. In England, the survey was conducted by a team of researchers from Small Business Research Centre, Kingston University. Data is collected and prepared centrally.

2. Participants and Sample

2.1. Universities and response rate

In 2013 thirty four countries participated in the GUESSS project. The survey gathered 109,026 responses from 759 universities all over the world, of which 654 responses were from England (0.6% of total). Overall, students from 20 universities took part, with the core of the English sample drawn from 11 universities (Table 1).

Table 1. The English sample

University	N	%
Aston University	91	13.9
Coventry University	16	2.4
Kingston University	25	3.8
Manchester Metropolitan University	74	11.3
Middlesex University	294	45
University for the Creative Arts	18	2.8
University of Buckingham	7	1.1
University of Hull	18	2.8
University of Kent	10	1.5
University of Plymouth	54	8.3
University of Sussex	22	3.4
Other	25	4.1
Total	654	100

**The category 'Other' includes universities with less than 5 responses and students who did not state their university.*

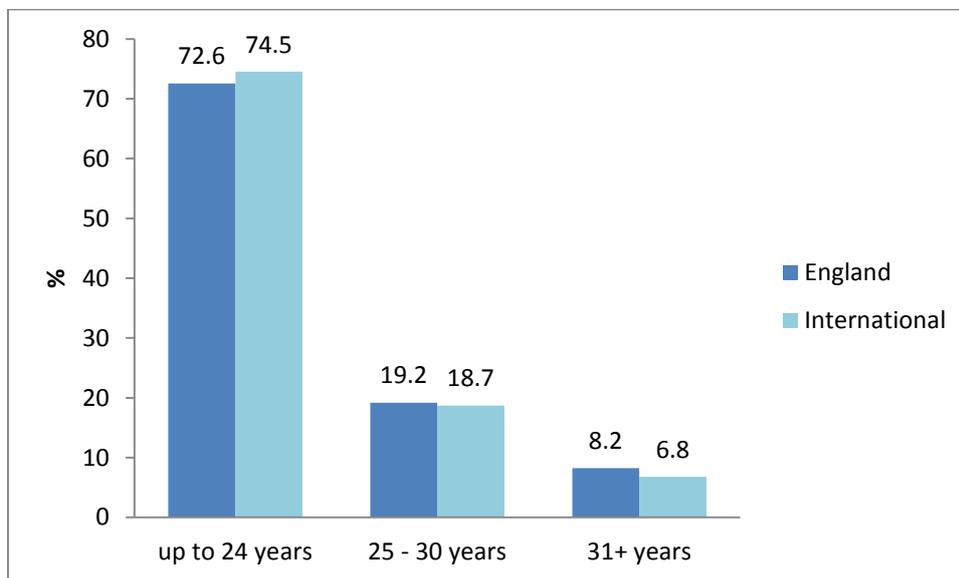
The response rate for England is based on named universities in the table above and is estimated to be 1.2% (52,498 students addressed in England).

2.2. Student demographics

Age of respondents

The age profile of the English sample is shown in Figure 2. Respondents were divided into three categories: up to 24 years, 25 – 30 years, and 31+ years. Most students (72.6%) can be found in the age category ‘up to 24 years’. Almost 20% are aged between 25 and 30 years old, which is slightly more than in the international sample as a whole. There were more respondents in the 31+ category in England than in the international sample.

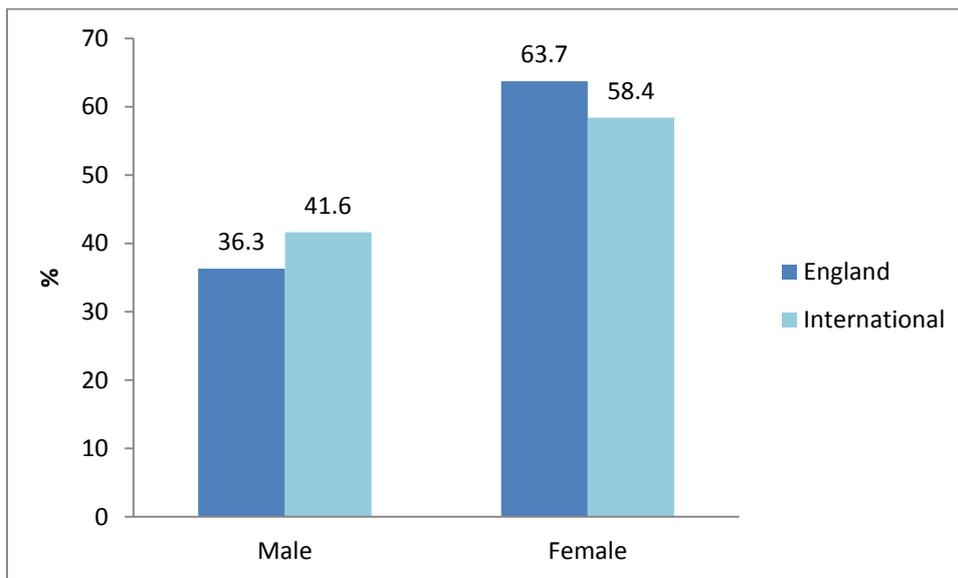
Figure 2. Age of respondents



Gender

In terms of gender, more female than male students participated in the GUESSS survey: 63.7 % vs. 36.3 % respectively. This distribution is similar to the GUESSS survey 2011. There were minor differences when comparing the sample from England with the international sample by gender of respondents (Figure 3), although the difference between males and females in England was greater.

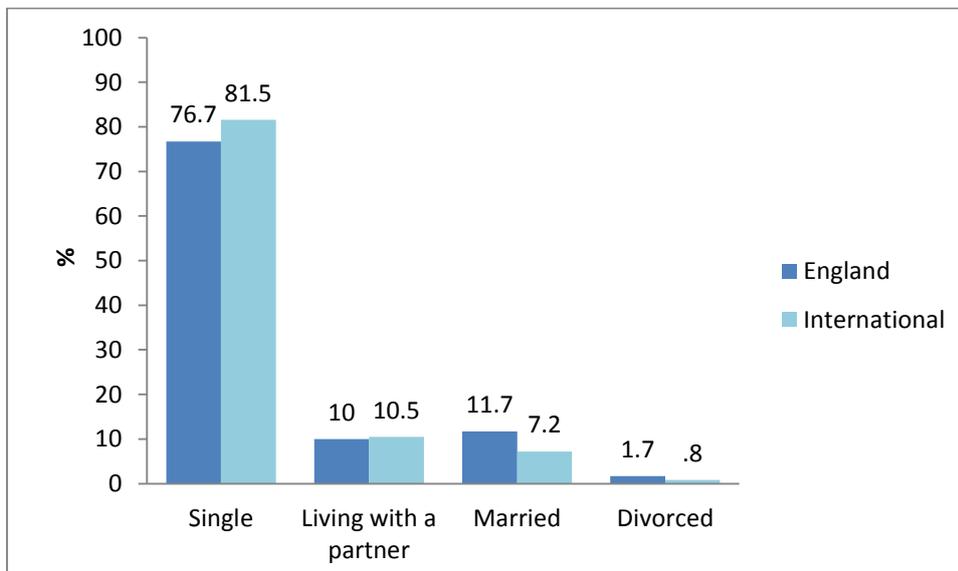
Figure 3. Respondents by gender



Marital status

In both English and international samples a majority of the students was single (76.7% and 81.5% respectively). Around 10% of respondents were living with a partner, there were more married students in the English sample (11.7% vs. 7.2%); less than 2 per cent were divorced. The marital status of respondents reflects the largely young age cohort in the samples.

Figure 4. Respondents by marital status



The vast majority of respondents have 1 or more siblings (88.2%). The number of older siblings in the sample is categorised using classes from 0 ('no older siblings') to '5 or more siblings'. This question can help understand the probability or need to take over the family business in the future (if there is one), which can impact students' entrepreneurial intentions.

Almost 40 % of the respondents (39%) do not have older brothers or sisters, around one third have only one sibling (32.1%), and less than 30% of the respondents have 2 or more siblings.

Nationality of respondents

The largest proportion of respondents identified the UK as a country of their nationality (54.3%) (Table 2). The next largest nationality was German (3.3%), followed by Polish (2.4%), Chinese (2.2%) and Indian (2.2%). The relatively large proportion of nationalities other than English reflects the increasing number of international students studying at English universities.

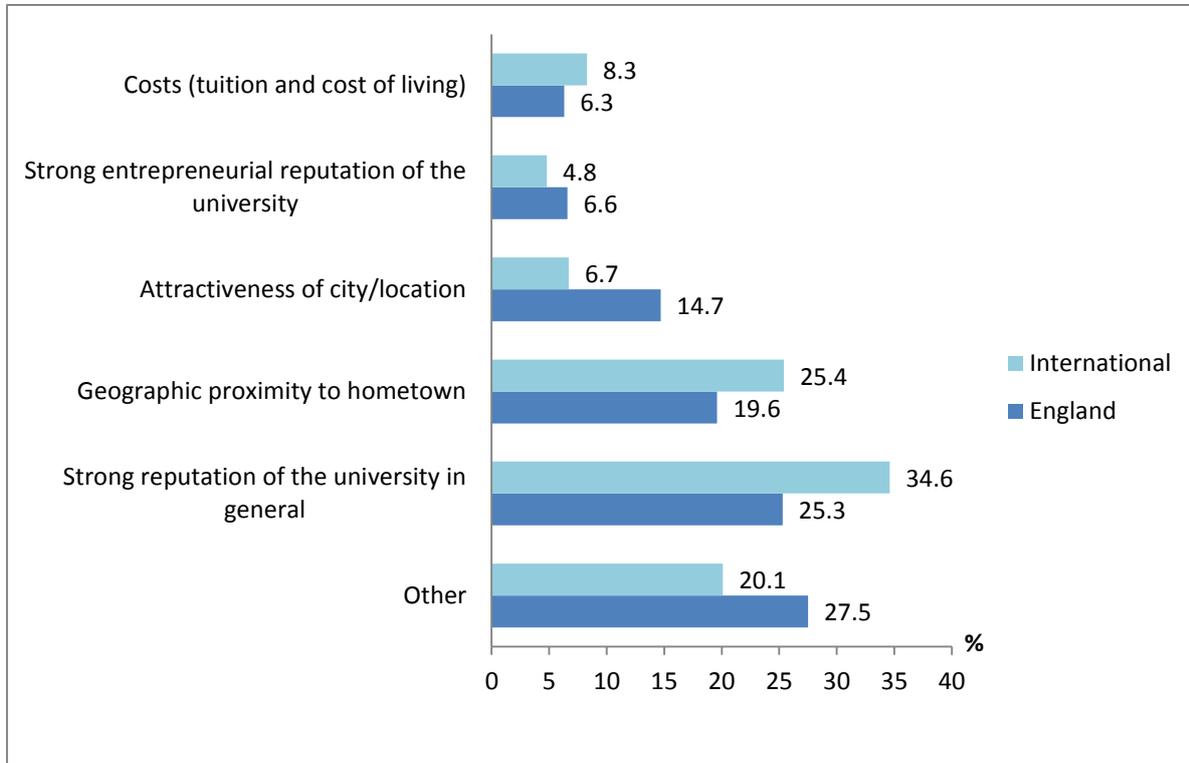
Table 2. Nationality of respondents

Nationality	N	%
UK	344	54.3
China	14	2.2
India	14	2.2
Malaysia	4	.6
Germany	21	3.3
Poland	15	2.4
Spain	6	.9
Italy	6	.9
France	10	1.6
USA	5	.8
Other	195	30.8
Total	634	100

**20 missing*

2.3. University studies

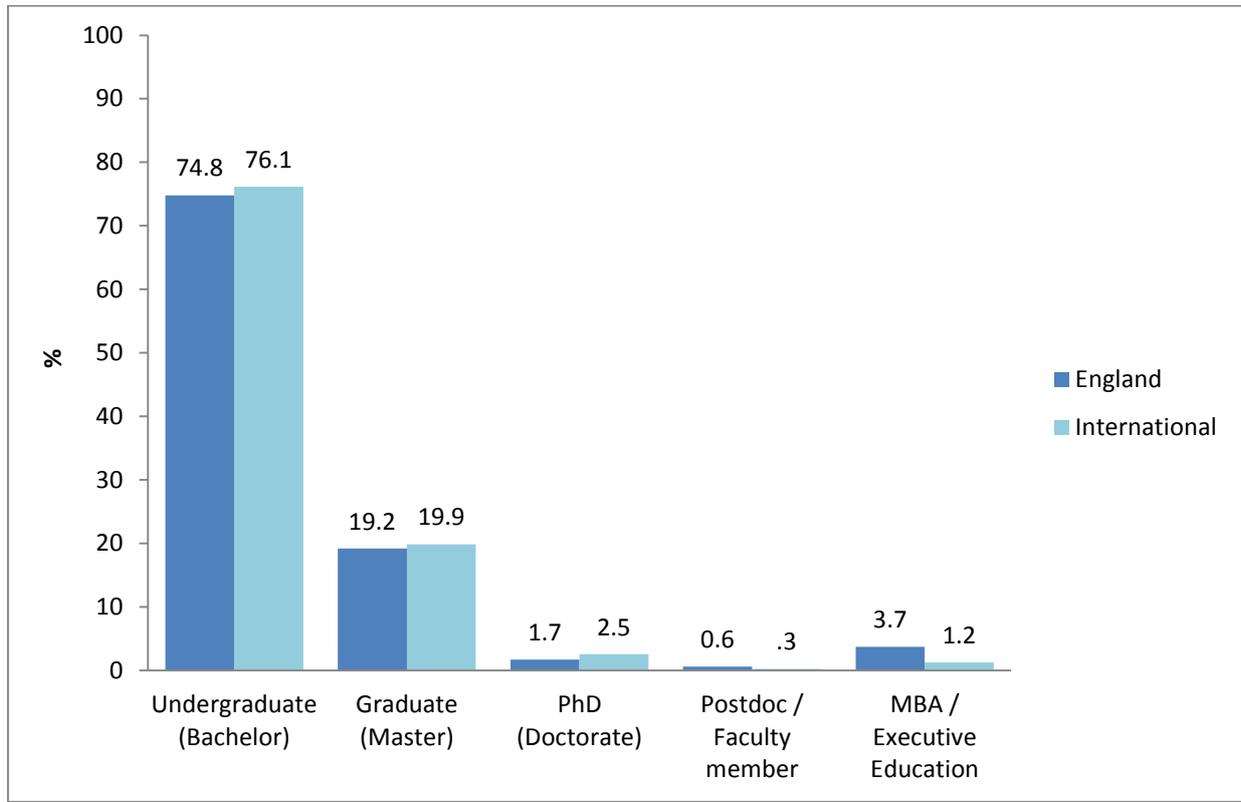
Figure 5. Reasons for university choice



According to the survey, the most important factors for university choice among the respondents from English universities are ‘Strong reputation of the university in general’ and ‘Geographical proximity to hometown’ (25.3% and 19.6%); ‘Strong entrepreneurial reputation of the university’ and ‘Costs’ are the least important factors. The difference between the English and the international samples’ perceptions of the importance of various factors is illustrated in Figure 5.

The majority of all students in the English sample (74.8%) are undergraduate students (Bachelor), with 19.2% being graduate (Master) students, which is just slightly less than in the international sample (76.1% and 19.9% respectively). The percent of doctorate students is also slightly lower – 1.7% vs. 2.5%, but there are more MBA students in the English sample compared with the international sample – 3.7% vs. 1.2%.

Figure 6. Current level of study by sample



In the English sample 63 students also indicated that they were exchange students (9.8%).

Table 3 gives an overview of the different fields of studies among the respondents in the English sample in comparison with the international sample.

The field of study can be seen as one of the key factors for career choice intentions and, in particular, for entrepreneurial intentions. In the English sample the proportion of students studying Business/Management was much greater than in the international sample – 43% vs. 22.4%. This may be a reflection of the contacts used for the survey and the higher proportion of students interested in completing a survey on entrepreneurship coming from business and management studies.

Table 3. Study field by sample

Field of study	England		International	
	N	%	N	%
Business / Management	264	40.4	24386	22.4
Law	20	3.1	3955	3.6
Economics	21	3.2	9363	8.6
Other social sciences (including education)	60	9.2	8789	8.1
Engineering and architecture	31	4.7	16489	15.1
Mathematics and natural sciences	14	2.1	5352	4.9
Information science / IT	27	4.1	6116	5.6
Medicine and health sciences	60	9.2	8043	7.4
Agricultural science, forestry, and nutrition science	0	0	2181	2
Linguistics and cultural studies (including psychology, philosophy, religion)	41	6.3	5507	5.1
Art, science of art	31	4.7	1729	1.6
Other	85	13.0	17019	15.6
Total	654	100.0	108929	100

**97 missing in the International sample*

In order to facilitate a comparative analysis, the study fields from Table 3 were grouped into three main categories: ‘Business, economic, and law’ (BECL), ‘Natural sciences and medicine’ (NSM), and ‘Social sciences’ (SSC). BECL includes ‘Business / Management’, ‘Economics’, and ‘Law’; NSM includes ‘Engineering and architecture’, ‘Mathematics and natural sciences’, ‘Information science / IT’, ‘Agricultural science, forestry, and nutrition science’, and ‘Medicine and health Sciences’; and SSC comprises ‘Linguistics and cultural studies (including psychology, philosophy, religion)’ as well as ‘Other social sciences’.

(including education)’. The additional category ‘Other’ includes the actual ‘Other’ category plus ‘Art, science of art’.⁴ The distribution of broad study fields is shown in Figure 7.

Figure 7. Study fields in groups in England

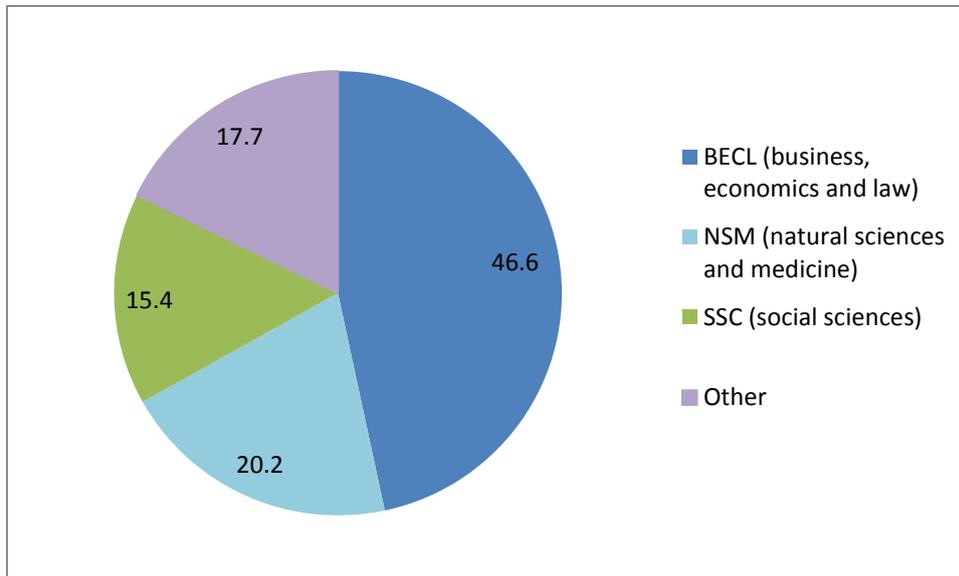
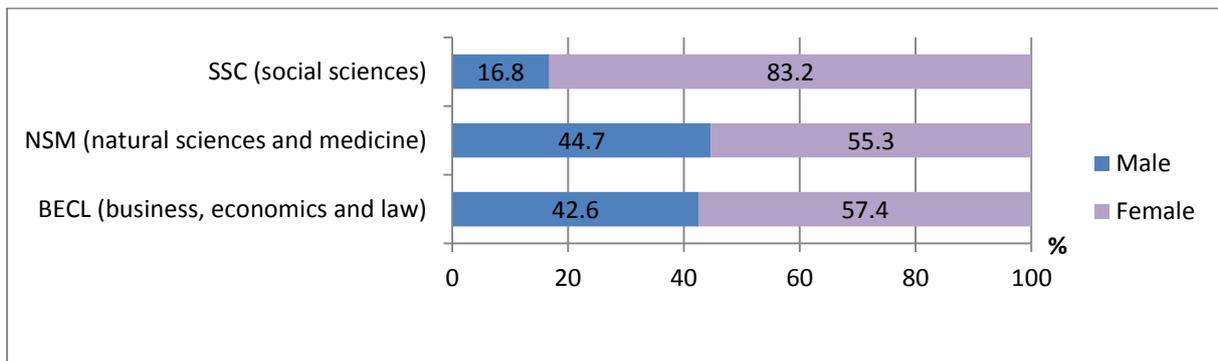


Figure 8 shows that female students dominate in all three groups; Social Sciences had significantly larger proportion of female respondents (83.2%) compared with Natural Sciences and Medicine (55.3%) and Business, Economics and Law (57.4%).

Figure 8. Students' gender across study fields

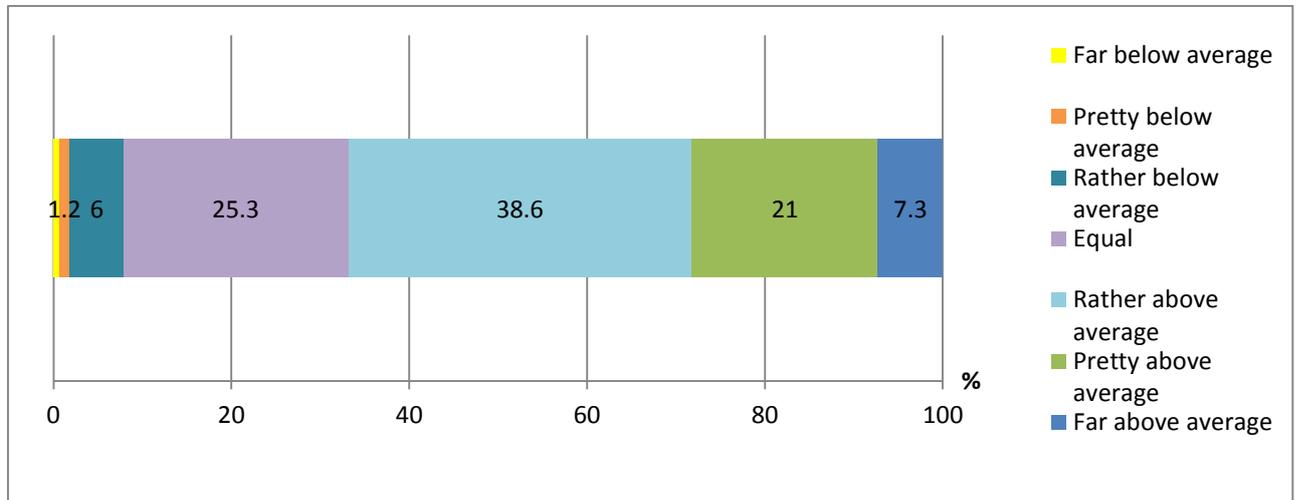


Students were asked to rate their average study performance on a scale from 1 (far below average) to 7 (far above average) (Figure 9). The average value for the English sample is 4.92, which is slightly higher compared with the international average of 4.78. Only 7.8% of all the English students see themselves as being below average; 66.9% of students assess their

⁴ The approach was adopted from: Sieger, P., Fueglistaller, U. & Zellweger, T., 2014. Student Entrepreneurship Across the Globe: A Look at Intentions and Activities. St.Gallen: Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen (KMU-HSG).

study performance as above average. Clearly these students considered themselves to be relatively successful in their studies.

Figure 9. Rating of average study performance by students (N=648)



In the English sample 40% of students have a regular job in addition to their studies, which is higher than in the international sample (36.3%). Among those students, 23.8% work 10 hours or less, 36.7% work from 11 to 20 hours per week, 16.1% work 21-30 hours, 13.6% work 31-40 hours, 9.8% work more than 40 hours per week.

The average number of hours per week for England is around 20 hours, which is less than in the international sample (England mean – 21.52, SD – 12.543; international mean – 25.75, SD – 14.466). This may be influenced by the fees and cost of living that English students have to cover for themselves.

3. Career Choice Intentions

3.1. General overview

Table 4 shows changes in the career choice intentions of students, comparing their intentions immediately after graduation with five years later. Whilst after graduation the majority of students in England prefer to work as employees in medium- and large-sized firms (16.7% and 26.3%), five years after graduation the majority intend to be entrepreneurs working in their own firms (33.5%). The largest change in career choice is in ‘founder’ category, which increases by 26% five years after graduation.

Table 4. Career choice intentions right after studies and 5 years after studies (N=654)

	Career path right after studies	Career path 5 years later
An employee in a small firm (1-49 employees)	13.8%	4%
An employee in a medium-sized firm (50-249 employees)	16.7%	8.1%
An employee in a large firm (250 or more employees)	26.3%	19.3%
An employee in a non-profit organization	2.3%	3.1%
An employee in Academia (academic career path)	6.1%	6.3%
An employee in public service	13.9%	8.9%
A founder (entrepreneur) working in my own firm	7.5%	33.5%
A successor in my parents' / family's firm	1.1%	1.8%
A successor in a firm currently not controlled by my family	.2%	2.6%
Other / do not know yet	12.2%	12.5%
Total	100%	100%

In order to facilitate the analysis, we divided students' career choice intentions into four broad categories: employees, founders, successors, and others. Table 5 shows the distribution of career intentions immediately after graduation and 5 years later.

Table 5. Career type intentions right after studies and five years after studies

	Career path right after studies		Career path 5 years later	
	N	%	N	%
Employee	517	79.1%	324	49.7%
Founder	49	7.5%	219	33.5%
Successor	8	1.3%	29	4.4%
Other	80	12.2%	82	12.5%
Total	654	100%	654	100%

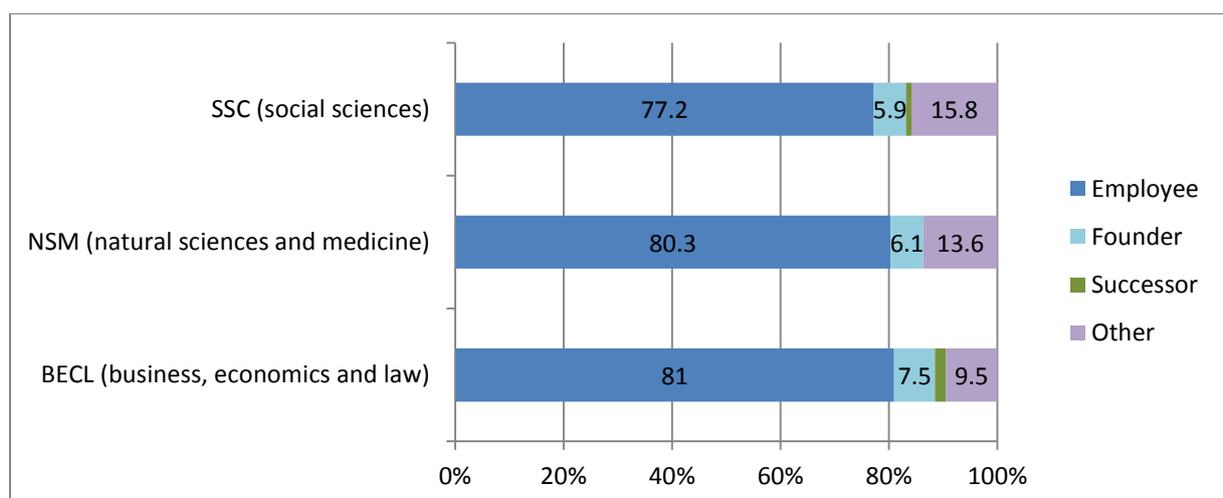
χ^2 (df=3) = 711.278 p<0.001

Note: Responses to the career path right after studies and career path 5 years later questions follow significantly different distributions.

3.2. Career choice across fields of study

Figure 10 shows the higher levels of interest in business ownership amongst Business Economics and Law Students. However, it is interesting to note that these differences are relatively small immediately after graduation.

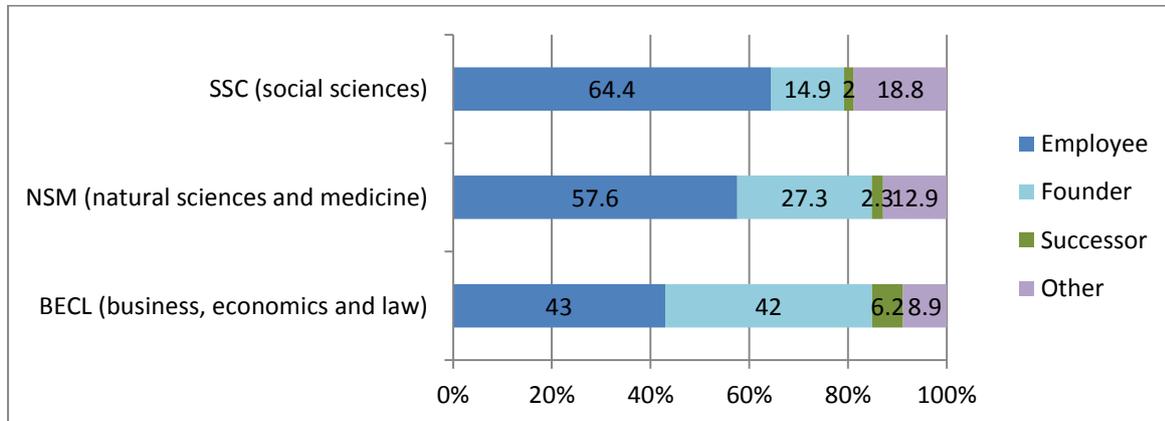
Figure 10. Career choice groups by study field directly after studies



An analysis of the differences in intentions 5 years after studies reveals a substantial difference between BECL and SSC and NSM students. The interest amongst NSM students

is, however, not insignificant with over a quarter expressing an interest in an entrepreneurial career.

Figure 11. Career choice groups by study field 5 years after studies



3.3. Gender comparisons

The share of intentional founders among male students immediately after studies is considerably higher than among female students (11% vs. 5.5%). More males intend to pursue a career path as a successor, be it in the parents’ firm or in a firm not owned by one’s parents, compared with females (2.1% vs. 0.7%).

Table 6. Career intentions of male and female students

	Right after study		5 years later	
	Male	Female	Male	Female
Employee	76.9%	80.3%	41.4%	54%
Founder	11%	5.5%	43.5%	28%
Successor	2.1%	0.7%	6%	3.6%
Other	10.1%	13.5%	9.3%	14.5%
Total	100%	100%	100%	100%

Note: For ‘Right after Study’ we observe statistical significant differences for the ‘Founder’ category only ($p < 0.05$). For ‘5 years later’ we observe statistical significant differences for all the categories except ‘Successor’ ($p < 0.05$). Within the gender groups, the observed differences amongst career intentions were found to be statistically significant ($p < 0.01$).

Five years after completion of studies, the difference is even larger: 43.5% of male students and only 28% of all female students see themselves as entrepreneurs. The share of intentional successors among females is also smaller.

4. Determinants of Entrepreneurial Intentions

4.1. A closer look at entrepreneurial intentions

For analysis of entrepreneurial intentions students were asked to indicate their level of agreement to a number of statements from 1 (strongly disagree) to 7 (strongly agree). This approach allows to produce a more detailed picture of entrepreneurial intentions and evaluate an entrepreneurial spirit of students, shifting away from simple 'yes' or 'no' response to the question whether they are going to become an entrepreneur.

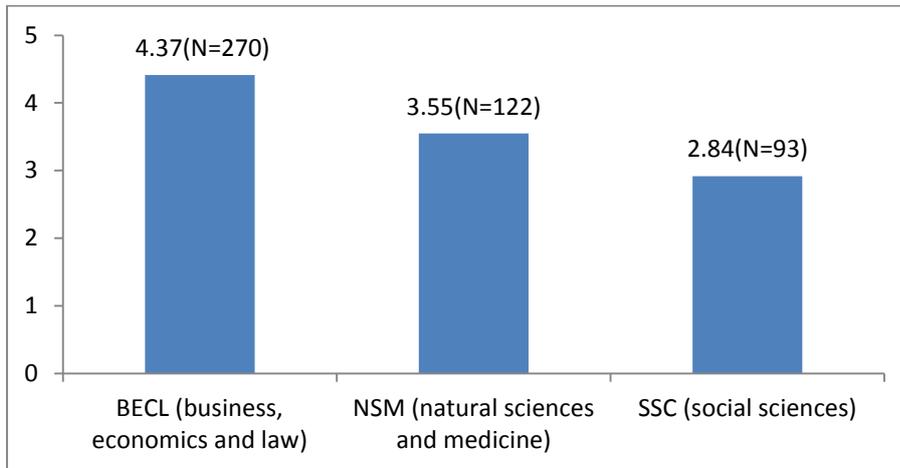
Table 7. Entrepreneurial intention indicators

	N	Mean	SD
I am ready to do anything to be an entrepreneur	593	3.52	2.036
My professional goal is to become an entrepreneur	597	3.72	2.220
I will make every effort to start and run my own firm	596	3.85	2.222
I am determined to create a firm in the future	598	4.03	2.270
I have very seriously thought of starting a firm	594	3.94	2.300
I have the strong intention to start a firm someday	597	4.18	2.356

An aggregated entrepreneurial intention index was generated by calculating the mean of all six answers/variables from Table 7. Further, the average value of this index was used to understand the strength of entrepreneurial intentions across study fields and gender shown in Figures 12 and 13.

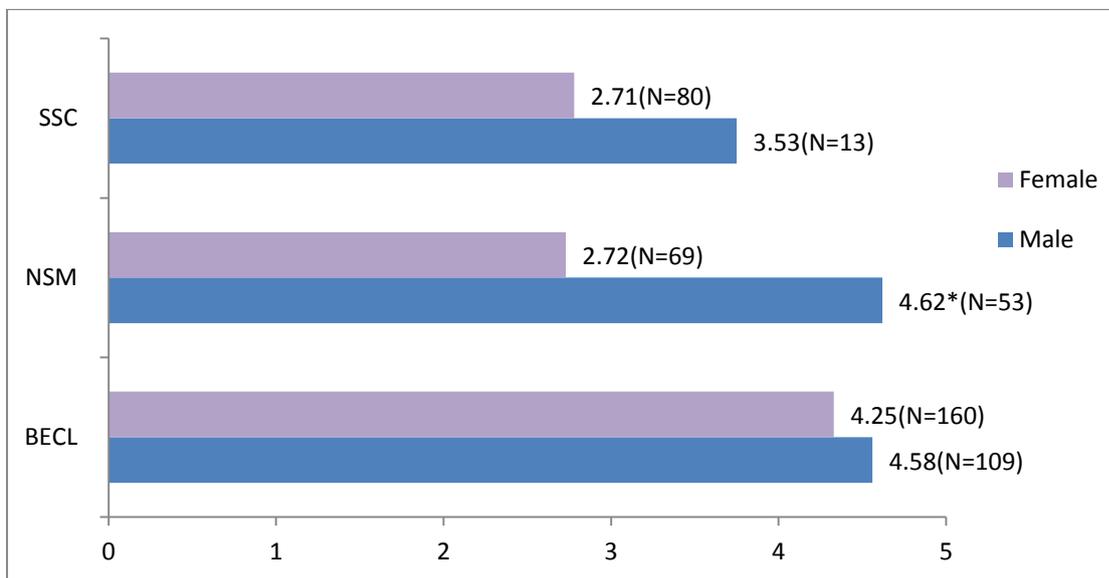
The results show that students undertaking BECL had stronger entrepreneurial intentions than NSM and SSC (Figure 12). Male students had stronger entrepreneurial intentions across all disciplines. However, the gap in intentions was highest in NSM and lowest in BECL.

Figure 12. Strength of entrepreneurial intentions across study fields



Note: An ANOVA test produces a significant value ($F(3, 585)=14.693$ $p<0.001$). A post hoc test shows that BECL had significantly higher entrepreneurial intentions than NSM and SSC. The difference between NSM and SSC is not significant. (The category ‘Other’ is not included in the chart ($N=104$; index 3.82): no sig. difference between BECL and Other, between NSM and Other. However, there is sig. difference between SSC and Other.)

Figure 13. Strength of entrepreneurial intentions across gender

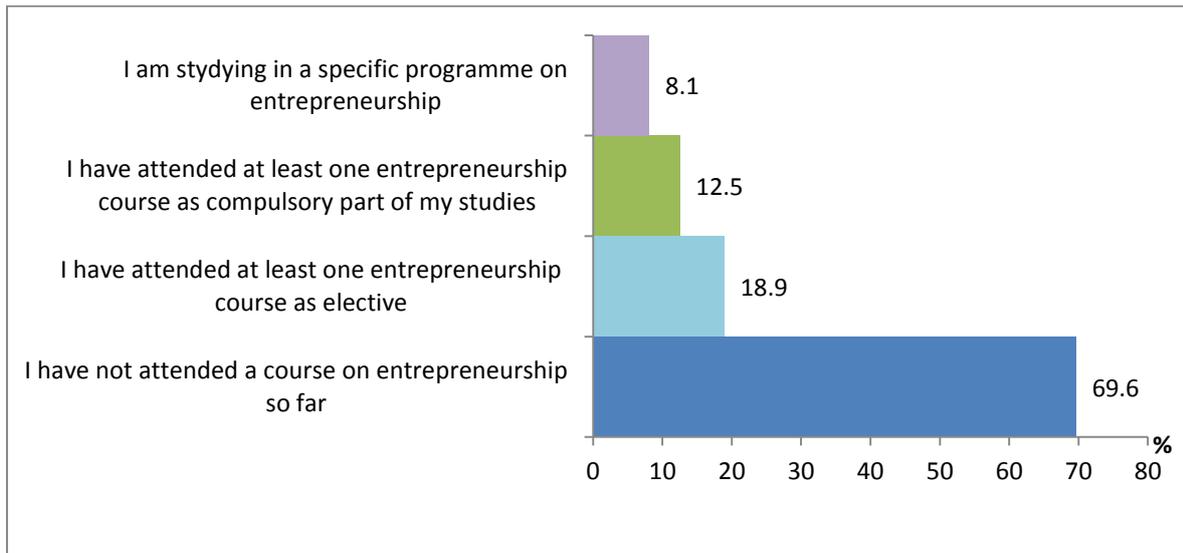


* $p<0.001$

4.2. The university context

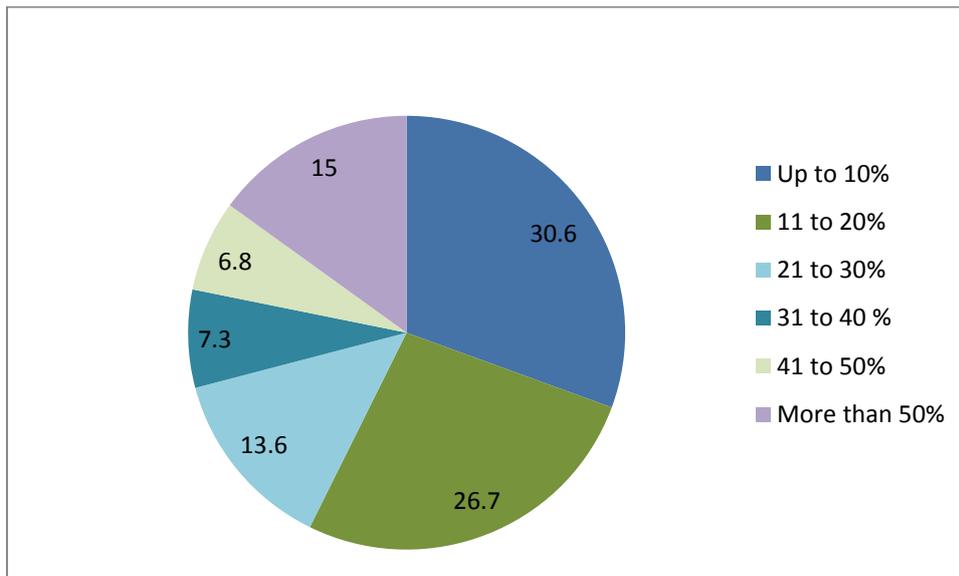
The literature suggests that the university context, its provision and engagement in entrepreneurial education, can affect students' entrepreneurial intentions. Students were asked to what extent they have been attending entrepreneurship-related courses. The results indicate that 69.6% of the respondents have not yet taken an entrepreneurship course. Only 8.1% were in a specific entrepreneurship programme and 12.5% attended a compulsory entrepreneurship course (Figure 14).

Figure 14. Attendance of entrepreneurship courses (N=641) (multiple answers possible)



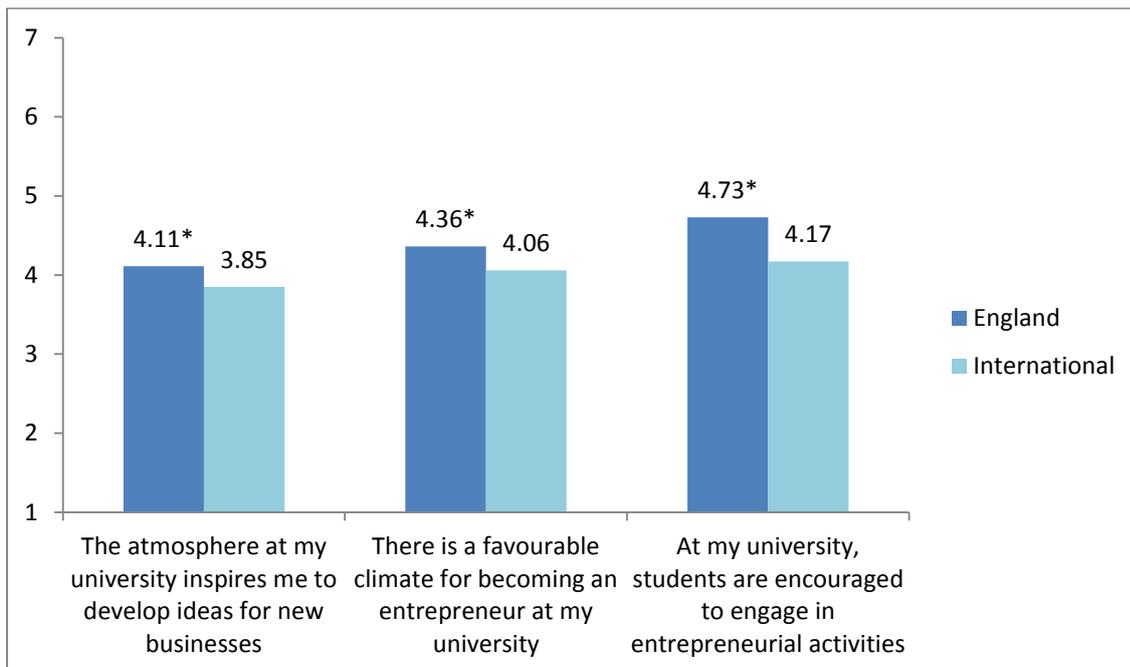
Of those who were taking entrepreneurship courses, students were also asked what percentage of their total study time they devoted to entrepreneurship courses. In England the average is 22.75% with the median 20, compared with the global average of 25.9% with the same median. Figure 15 shows that around 30% of all students have spent 10% or less of their total study time on entrepreneurship courses. Over half of the sample (57.3%) have spent up to 20% of their study time for this type of courses, and only 15% of students have spent more than 50% on entrepreneurship courses.

Figure 15. Percentage of study time spent in entrepreneurship classes (N=206)



The entrepreneurial climate at universities can be another factor that has an impact on entrepreneurial intentions of students. Students were asked to what extent they agree or disagree (using a seven-point scale where 1=not at all, 7=very much), with a range of statements regarding their university and their learning experience. The average importance of different factors is illustrated in Figure 16. Overall, the results show that the entrepreneurial climate in English universities is more stimulating for entrepreneurial career/activities than the international average.

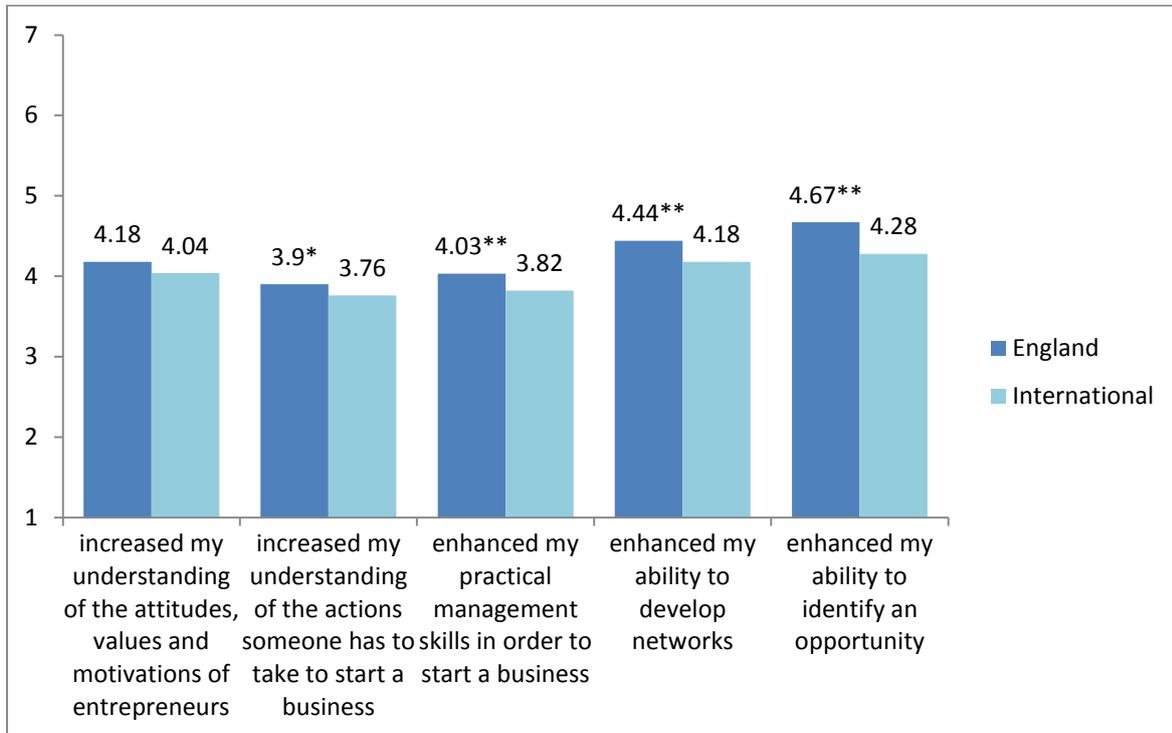
Figure 16. The university environment



*p<0.001 Note: All the mean differences are small but significant (the Cohen's d effect size values are 0.14, 0.17 and 0.3 respectively).

In order to understand how much students have been learning at their university with regard to entrepreneurship, they were asked to indicate the extent to which they agree to the statements about their learning progress during their studies (1=not at all, 7=very much). Again, the figures for the English sample are higher than the average across the globe.

Figure 17. Learning process during studies (Attendance of the courses and offerings:...)



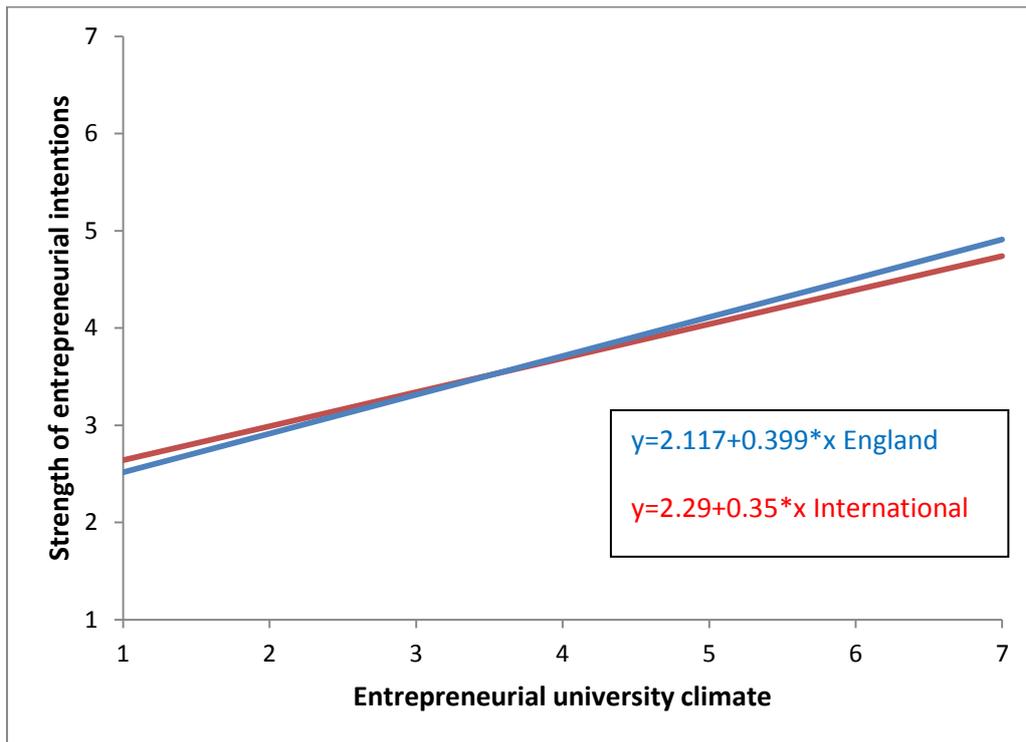
* $p < 0.05$, ** $p < 0.01$

Note: For those variables that show a significant difference the Cohen's d effect size values are 0.07, 0.11, 0.15 and 0.22 respectively.

Two diagrams presented below (regression slopes in Figure 18 and Figure 19) answer the question whether English universities can enhance students' entrepreneurial intentions and how this differs from the international trend.

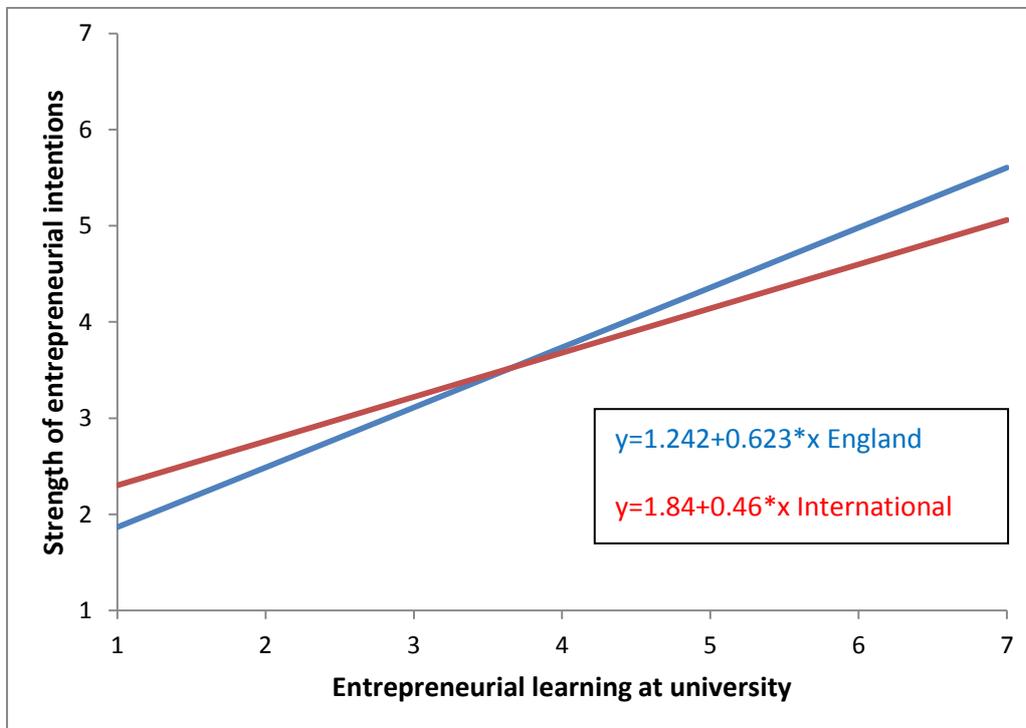
Figure 18 indicates a positive relationship between the entrepreneurial climate of the university and strength of entrepreneurial intentions of students, which is similar to the international sample. Figure 19 indicates a positive relationship between entrepreneurial learning and the strength of entrepreneurial intentions of students. This also shows a significant difference in the magnitude of the effect of entrepreneurial learning between England and the international sample: the effect of entrepreneurial learning on intentions is stronger in England.

Figure 18. Entrepreneurial university climate and strength of entrepreneurial intentions



Note: The regression slopes are not significantly different (p=0.3503)

Figure 19. Entrepreneurial learning and strength of entrepreneurial intentions



Note: The regression slopes are significantly different (p=0.0017).

*Young Enterprise*⁵

Young Enterprise offers a range of programmes at secondary and tertiary levels of education. In the English sample 12.6% of all students (N=82) took part in Young Enterprise Programmes (Table 9). The most popular offerings were graduate enterprise programmes (89% of those who took part), company programmes (81.7%), ‘start up’ programmes (62.2%), and team programmes (62.2%).

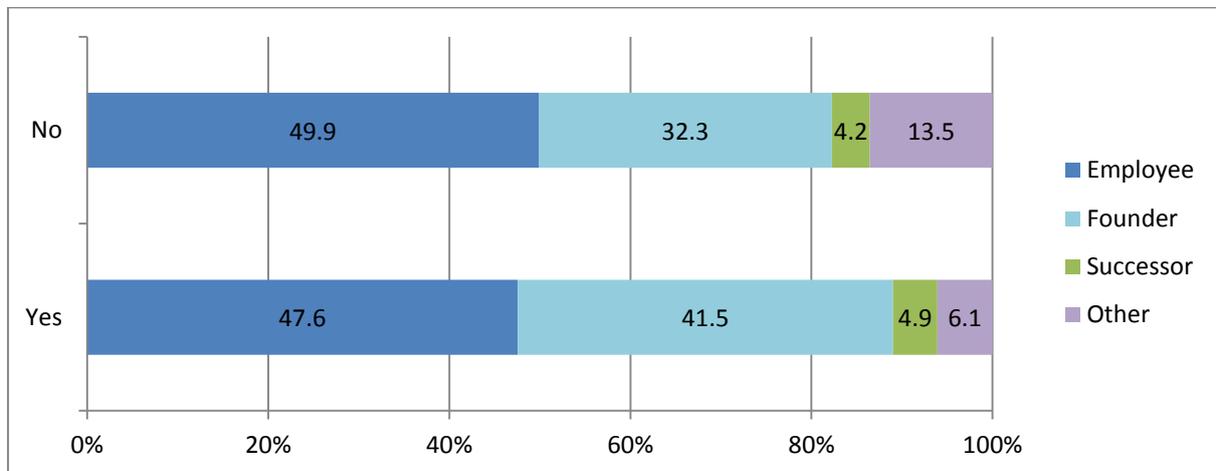
Table 8. Participation in Young Enterprise Programmes (multiple answers possible)

Type of YE programme	N	%
Graduate enterprise programmes	9	1.4
Company programmes	15	2.3
‘Start up’ programmes	31	4.7
Team programmes	31	4.7
Other	17	2.6

Figure 20 shows that those students who participated in Young Enterprise Programmes were more likely to choose starting a business as a career option than non-participating students (41.5% *vs.* 32.2%). However, there was only a minor difference in terms of choosing business succession (4.9% *vs.* 4.2%). This suggests that participation in a Young Enterprise programme has an effect on career intentions. However, the limited sub-sample sizes renders further statistical analyses and tests of significance problematic.

⁵ Young Enterprise is the UK’s largest business and enterprise education charity that was founded in 1962 in order to build a connected world of young people, business volunteers and educators, inspiring each other to succeed through enterprise. It offers a range of programmes for every year of education from the age of 4 to 25 designed to educate young people in the UK in the organisation, methods and practice of commerce and industry and in related subjects. <http://www.young-enterprise.org.uk/>

Figure 20. Career choice intentions and participation in Young Enterprise Programmes (5 years after studies)



Note: We are not able to find a relationship between participating in Young Enterprise Programmes and career intentions. However, this is likely to be due to the small proportion of the respondents who took part in YEP (N=82).

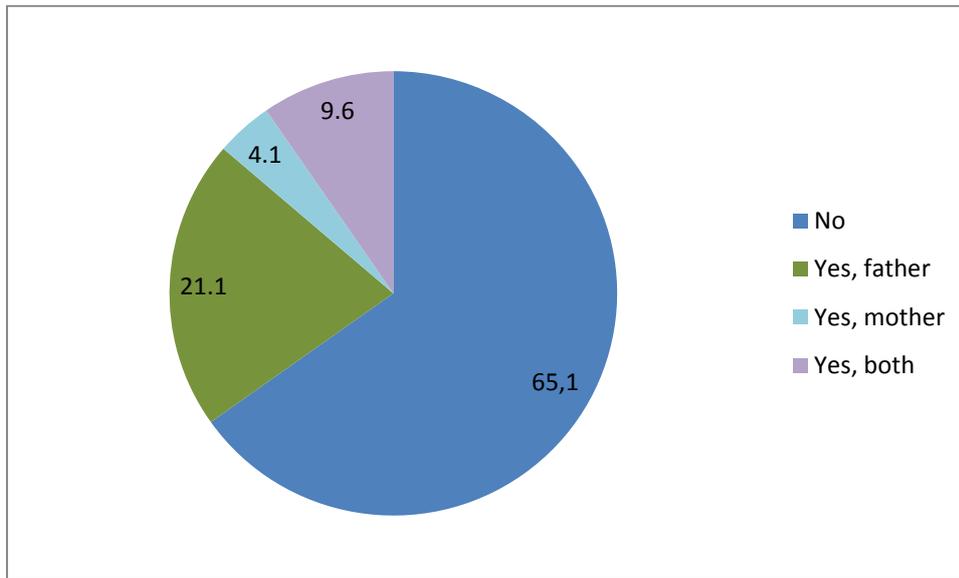
Among those who took part in Young Enterprise Programmes the percentage of students who already run their own business is also higher comparing to those who did not take part (11% vs. 6.9%). χ^2 (df=1)=1.783 p=0.182 (there is no significant difference).

4.3. The family context

The literature suggests that family is an important influence on the entrepreneurial intentions of students, in particular, the occupational background of parents. In order to explore how it influences children's career choice intentions, the students were asked if one of their parents or both are self-employed.

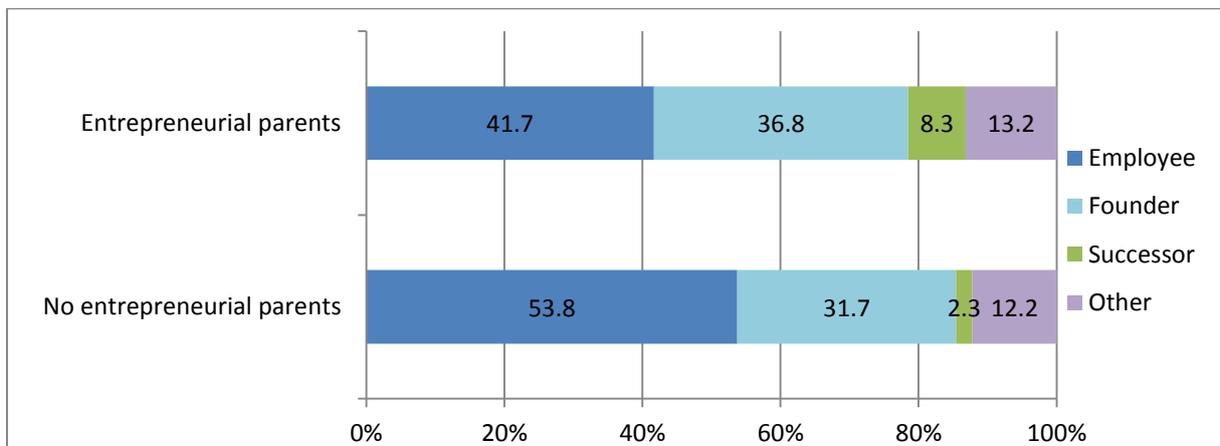
Almost two thirds of the sample reported that neither of their parents were self-employed; 21.1% had a self-employed father; just over 4% had a self-employed mother; and for nearly 10% of the sample both parents were self-employed (Figure 21). The percentage of students who have self-employed parents is slightly higher in the English sample compared with the international sample (34.9% compared with 31.4% for the international sample).

Figure 21. Existence of self-employed parents (N=654)



Further the career choice intentions among students were examined for those with and without entrepreneurial parents. The tendency in the English sample is clear: students with entrepreneurial parents are more likely to choose an entrepreneurial career path (i.e. become a founder or successor) 5 years after completion of their studies, compared with those without entrepreneurial parents (45.1% vs. 34%). Not surprisingly, the percentage of respondents who intend to become a ‘Successor’ is significantly higher amongst those with entrepreneurial parents, as they have potentially the opportunity to take over family business in the future. These findings support the thesis that having entrepreneurial family background affects the career choice of children. These patterns were reflected at the international level.

Figure 22. Career choice intentions by family background 5 years after studies



χ^2 (df=3) =17.666 p<0.01 Note: ‘With entrepreneurial parents’ N=228, ‘No entrepreneurial parents’ N=426. The difference in those who see themselves as founders is not big enough to be classified as statistically significant (the adjusted standardized residuals are -1.3 for those without entrepreneurial parents and 1.3 for those with entrepreneurial parents (<2)).

4.4. The role of personal motives

Career motives are an important determinant of career choice intentions. We examined how students assess the importance of different motives when they decide about their future career path, using a range from 1 (not important at all) to 7 (very important). Figure 23 shows that 'Realize your dream' was the most important motive for selecting a particular career path (6.2), followed by 'Have an exciting job' (6.11). Notably, 'Be your own boss' was the least important reason for following a particular career path (4.57).

Figure 23. Importance of different career motives (multiple response; minimum N= 637)

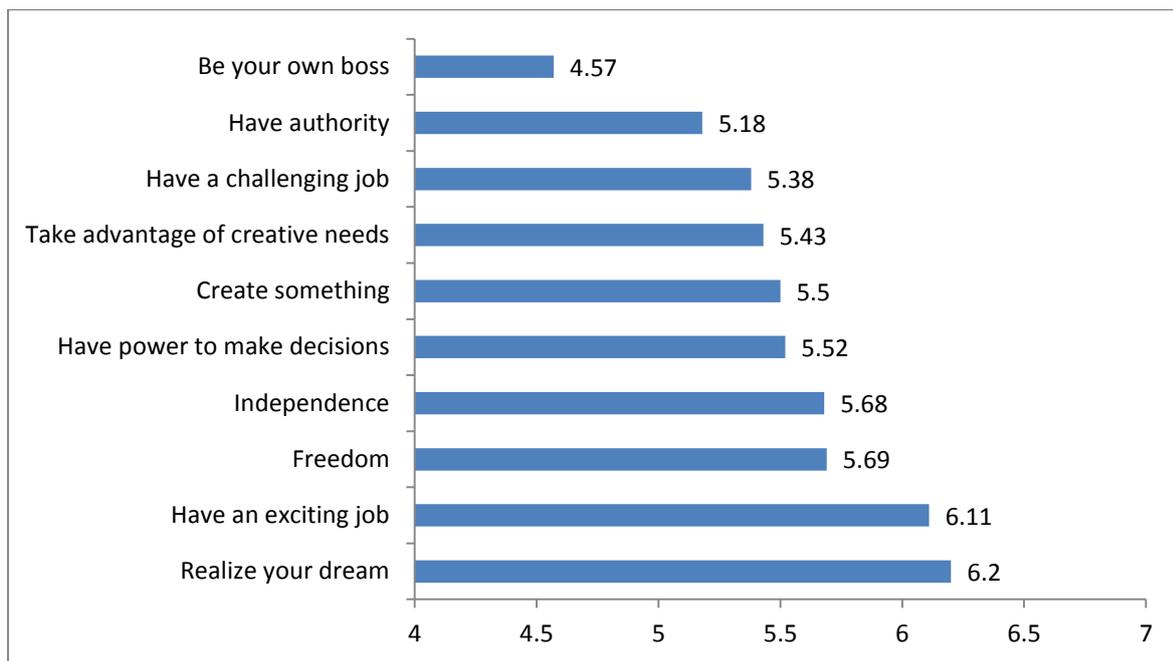
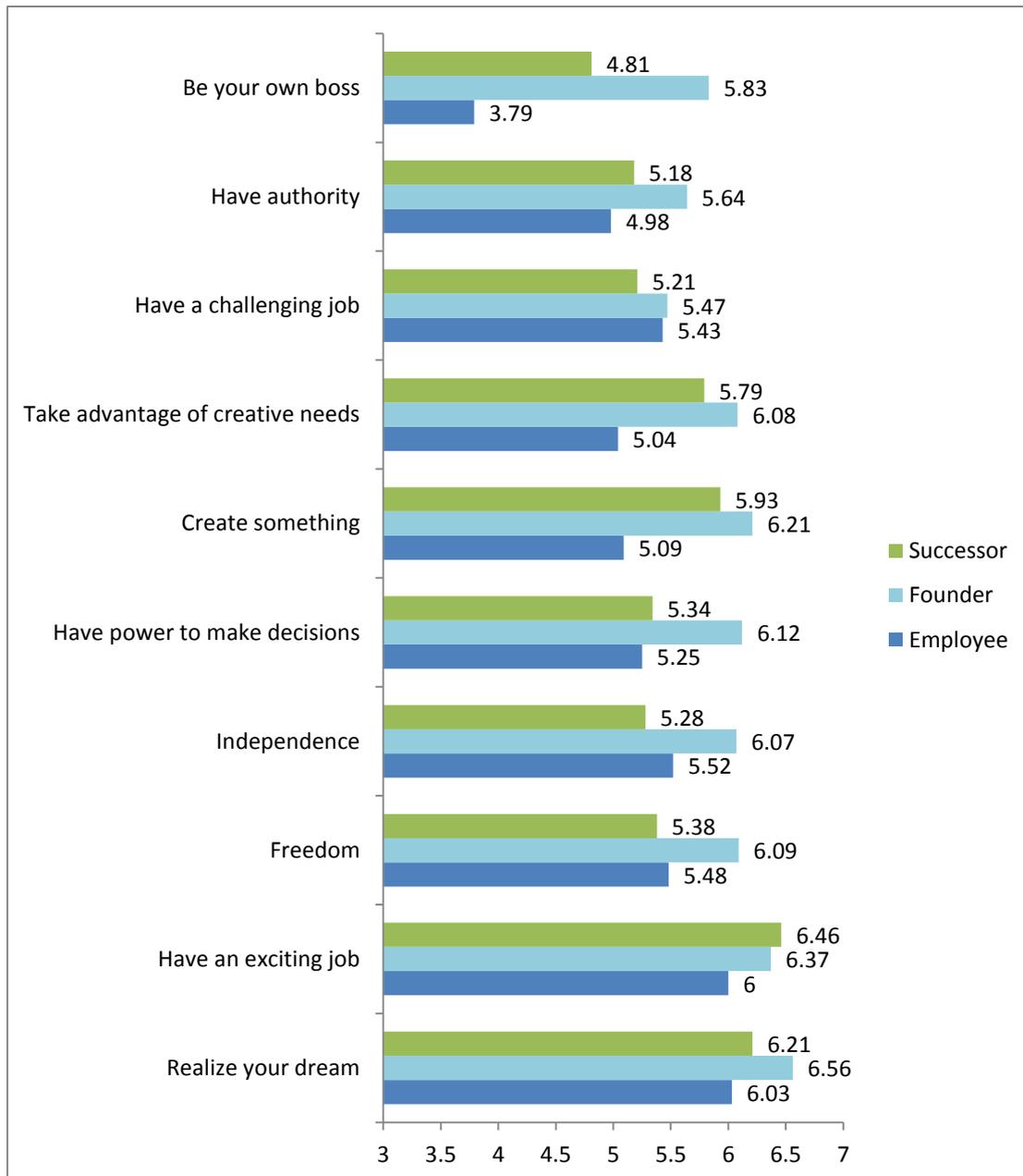


Figure 24 shows the importance of the abovementioned motives for different career paths (Founder, Employee, Successor). The sample shows that the most important motives for intentional founders are 'Realize your dream', 'Have an exciting job', 'Create something', and 'Have power to make decisions'.

A more detailed statistical analysis of the result shown in Figure 24, allows us to say that 'Freedom', 'Independence', 'Have power to make decisions', 'Be your own boss' are significantly more important for intentional founders compared with other career paths.

Figure 24. Importance of career motives across different career groups (5 years after studies)



4.5. The social and cultural context

Social and cultural factors, as well as the reactions students expect from their close peers, may also influence the career choices. Students were asked how people in their environment (family members, friends, fellow students) would react if they would pursue a career as an entrepreneur, using the scale from 1 (very negatively) to 7 (very positively). The mean value

of the aggregated items for the English sample was 5.56 suggesting a positive anticipated reaction. However, this average places England in the middle of the international sample results (the mean value of the aggregated items differs from 4.22 (Japan) to 6.26 (Mexico) with the global average of 5.53). Hence, this suggests that the subjective norms with regard to entrepreneurship are quite positive for students in the English sample.⁶

Further, students were asked to indicate their level of agreement with a number of statements in order to assess to what extent becoming an entrepreneur (creating an own firm/business) is regarded as risky (1=strongly disagree, 7=strongly agree). For England the aggregated mean score was 4.58, which is significantly below the international average of 4.85. In other words, the risk perception of becoming an entrepreneur by students in England is relatively low.⁷

Overall, the results contribute to the debate on the relationships between subjective norms and entrepreneurial intentions discussed in the International Report of the GUESSS Project 2013/2014 about the crucial relevance of the social and institutional context.⁸

5. Entrepreneurial Intentions Across Time

In order to evaluate the strength of entrepreneurial intentions across time, the results of the survey 2013/2014 were compared with the GUESSS survey 2011. The samples were almost the same size – 648 responses in 2011 and 654 in 2013/2014, but they differ in terms of the participating universities (only about one third of them took part in both surveys). As data analysis suggests, entrepreneurial intentions among students are lower in 2013/2014 compared with 2011, both in England and internationally (Table 9). In England the percentage of students who would like to pursue an entrepreneurial career (potential founders and successors) right after finishing their studies dropped significantly – from 19.7% in 2011 to 8.8% in 2013/2014. However, the difference between those who would like to pursue an entrepreneurial career 5 years after studies is not so great: 49% in 2011 vs. 37.9% in 2013/2014 (see final column Table 9).

Table 9. Intentional entrepreneurs (founders and successors) – changes across time

	International		England	
	After studies	5 years after	After studies	5 years after
2013/2014	6.6%	32.5%	8.8%	37.9%
2011	14.9%	42.9%	19.7%	49%

⁶ See: The social and cultural context in *Student Entrepreneurship Across the Globe: A Look at Intentions and Activities*. International Report of the GUESSS Project 2013/2014, pp.35-38.

http://www.guesssurvey.org/PDF/2013/GUESSS_INT_2013_REPORT.pdf

⁷ Ibid.

⁸ Ibid.

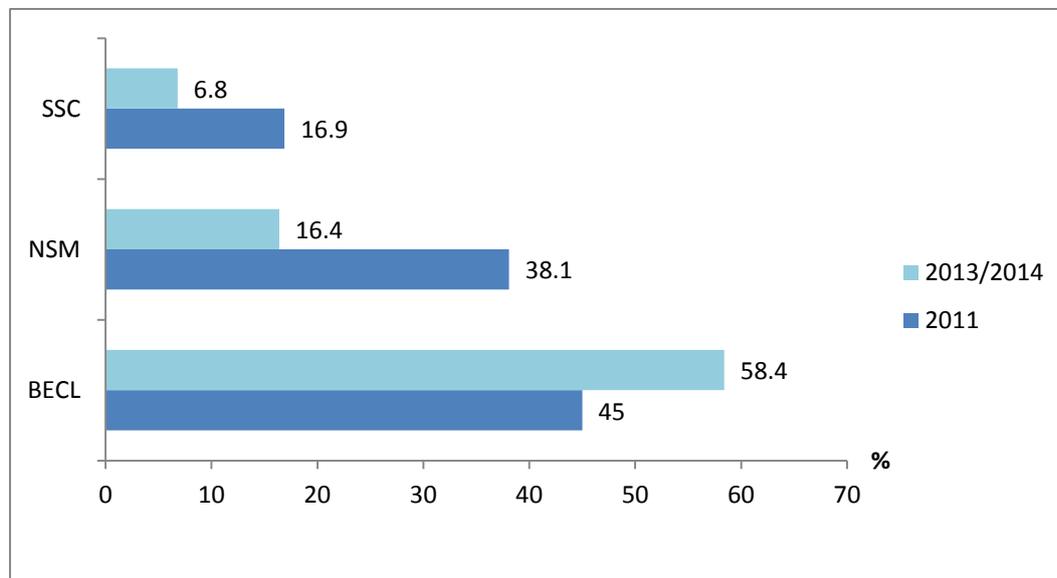
If we pay attention to intentional founders only, the difference between 2011 and 2013/14 narrows somewhat (see Table 10). This is especially the case for England 5 years after studies (39.7% vs. 33.5%). Although the reasons for this narrowing are not obvious in the data, this may be a result of students having an increased awareness of the human, financial and social capitals needed to start and run a business. Clearly this is one of the most startling results of the survey and require more in-depth analysis and discussion.

Table 10. Intentional founders – changes across time

	International		England	
	After studies	5 years after	After studies	5 years after
2013/2014	5.2%	28.4%	7.5%	33.5%
2011	11%	34%	14.8%	39.7%

The share of intentional founders across disciplines has also changed (Figure 25). The share of students with entrepreneurial intentions after 5 years, is greater among BECL students in 2013/2014, and much less among NSM and SSC students. This drop in intentions amongst NSM and SSC students may raise concerns for those seeking to expose entrepreneurship to students in non-business related fields.

Figure 25. Share of intentional founders across disciplines (5 years after studies)



$\chi^2(df=2)=50.843$ $p=0.000$ (the significantly different distribution)

Note: In order to test for significant difference in distribution of intentional founders across disciplines, new proportions for disciplines for 2013/2014 were calculated to exclude the category ‘Other disciplines’ in order to facilitate the comparison with 2011 data where this category was not used. As such, the following percentages were used for 2013/2014 to test for significance: BECL – 71.6%, NSM – 20%, SSC – 8.3% (total 99.9%).

6. Entrepreneurial Activities

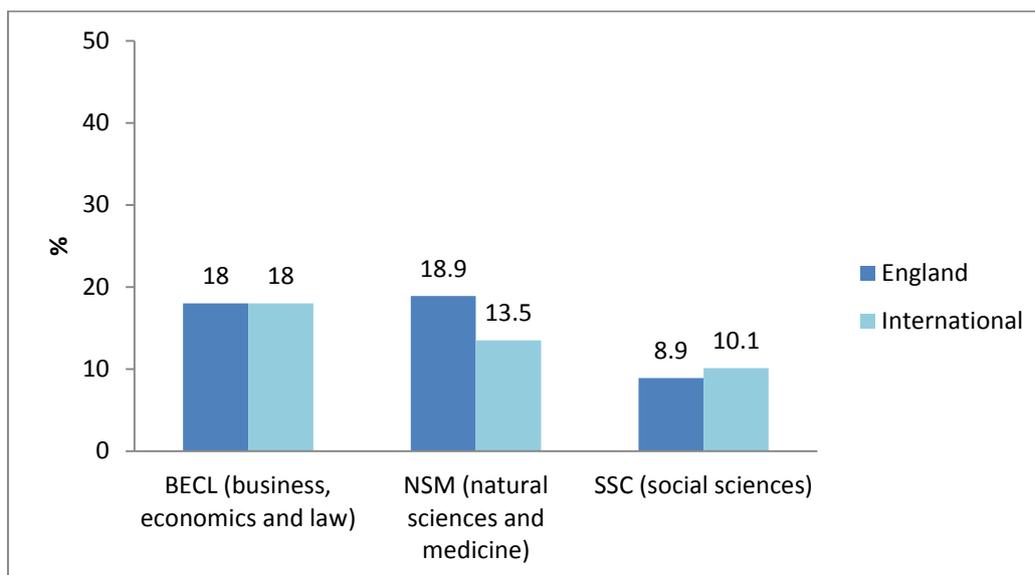
Those students who are in process of starting their own business and those who are running their own business/self-employed are of a particular interest for the GUESSS project.

In the English sample 7.3% of the students were self-employed/running their own business at the time of the survey. A further 18% of the students were trying to start their own business. These figures are relatively higher compared with the international sample, where overall, 5.5% were already running their own business and 15.1% of the respondents were trying to start their own business.

6.1. Nascent entrepreneurs

In the survey students were asked whether or not they had an intention to start their own business. The results are shown in Figure 26 by field of study and between the English and international samples.

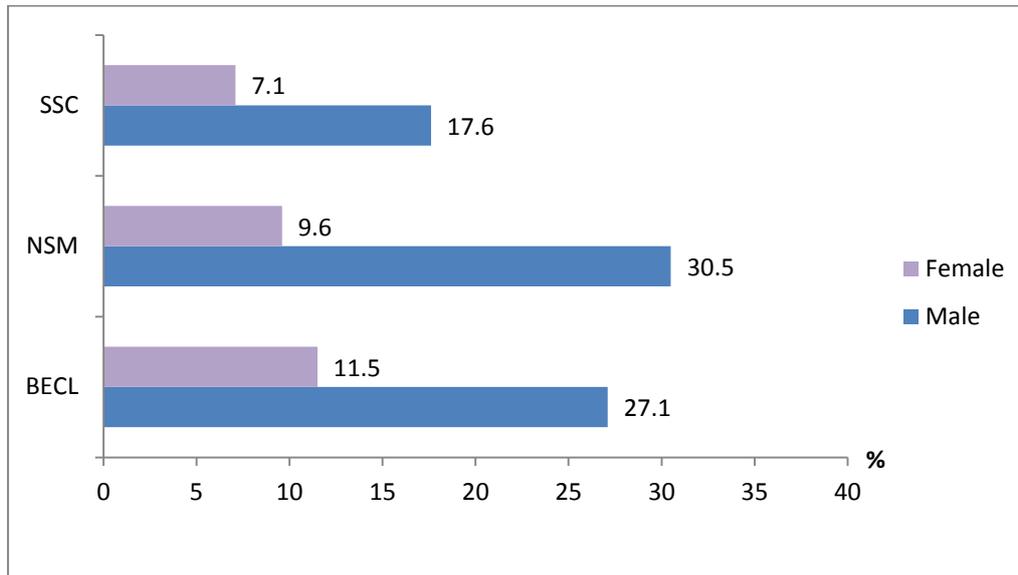
Figure 26. Share of nascent entrepreneurs among BECL, NSM and SSC students



The average for BECL students intending to start a business in the English and international samples is 18%. However, the share of those students studying NSM drops to 13.5% in the international sample compared with 18.9% in the English sample. In both samples, the lowest share of nascent entrepreneurs is in the social sciences.

Gender differences with regard to nascent entrepreneurs for the English sample are illustrated in Figure 27. The results show that there are significantly fewer nascent female than male entrepreneurs. This relationship held across all study fields with the largest gap been in NSM.

Figure 27. Share of nascent entrepreneurs across gender and field of study



Plans of the nascent entrepreneurs

In the English sample, the nascent student entrepreneurs intend to start their firm, on average, in 12 months (in the international sample in 13.2 months). The new firms are likely to be a full-time employment proposition: the respondents plan to invest 54.3% of their average weekly working time in the business (median = 50) compared with the international average of 61.6%.

Figure 28 provides an overview of the activities already completed by the nascent entrepreneurs, illustrating how far they proceeded in founding their business. This demonstrates that their plans are not merely thoughts but have involved some effort and real actions. Collecting relevant information was the most popular gestation activity, with more than half of nascent entrepreneurs having ‘Collected information about markets or competitors’, over 40% have already ‘wrote a business plan’, but only 14.8% have ‘registered a company’.

Figure 28. Gestation activities conducted by nascent entrepreneurs (N=115) (multiple answers possible)

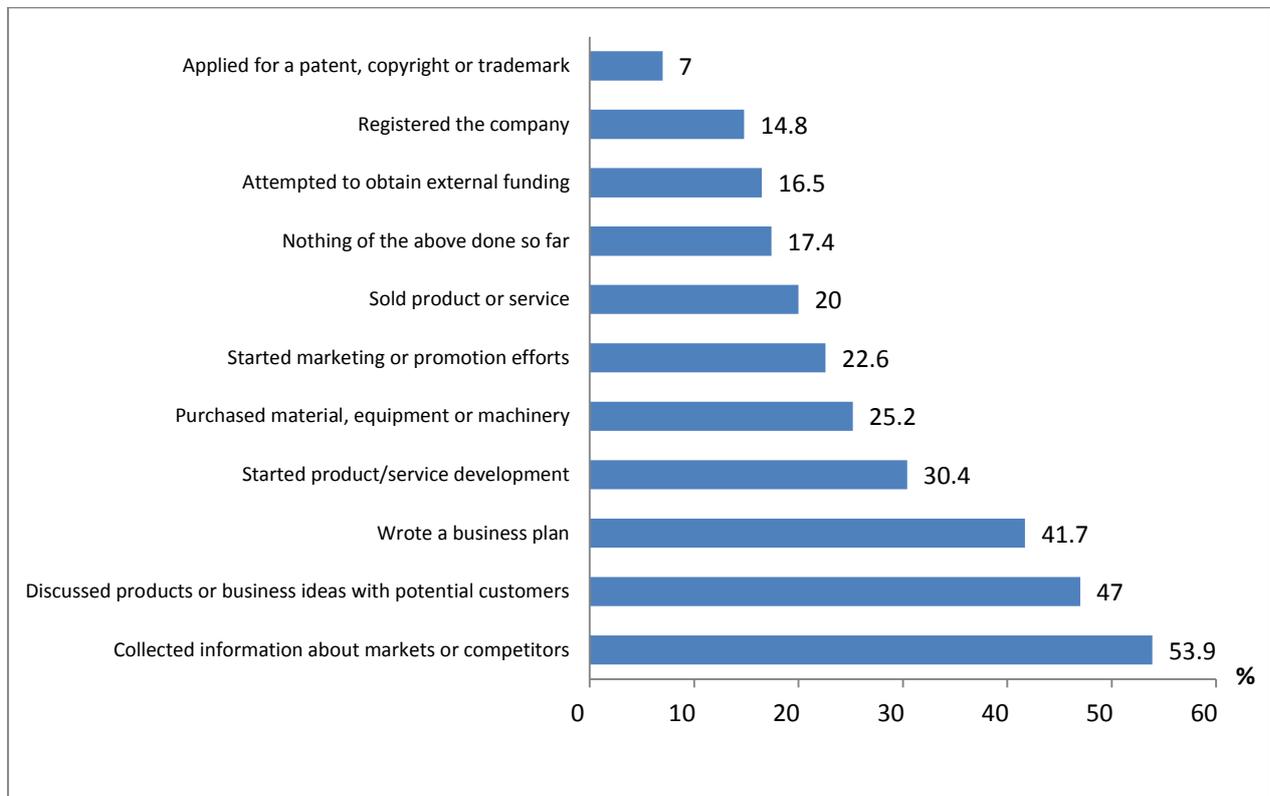


Figure 29 shows the industry sectors of the planned firms. The most attractive sector for starting a business for English students is the trade/retail industry (24%), followed by 'Marketing, advertising and design', 'Health services' and 'IT and communication' (10.4% each). 'Education and training' and 'Manufacturing' were also attractive for 6.1% of students. These were followed by 'Consulting', 'Tourism and Leisure' and other services (4.3%). Construction and architecture were less popular, possibly reflecting the nature of the sample of students in the survey.

Figure 29. Industry sectors of planned firms (N=115)

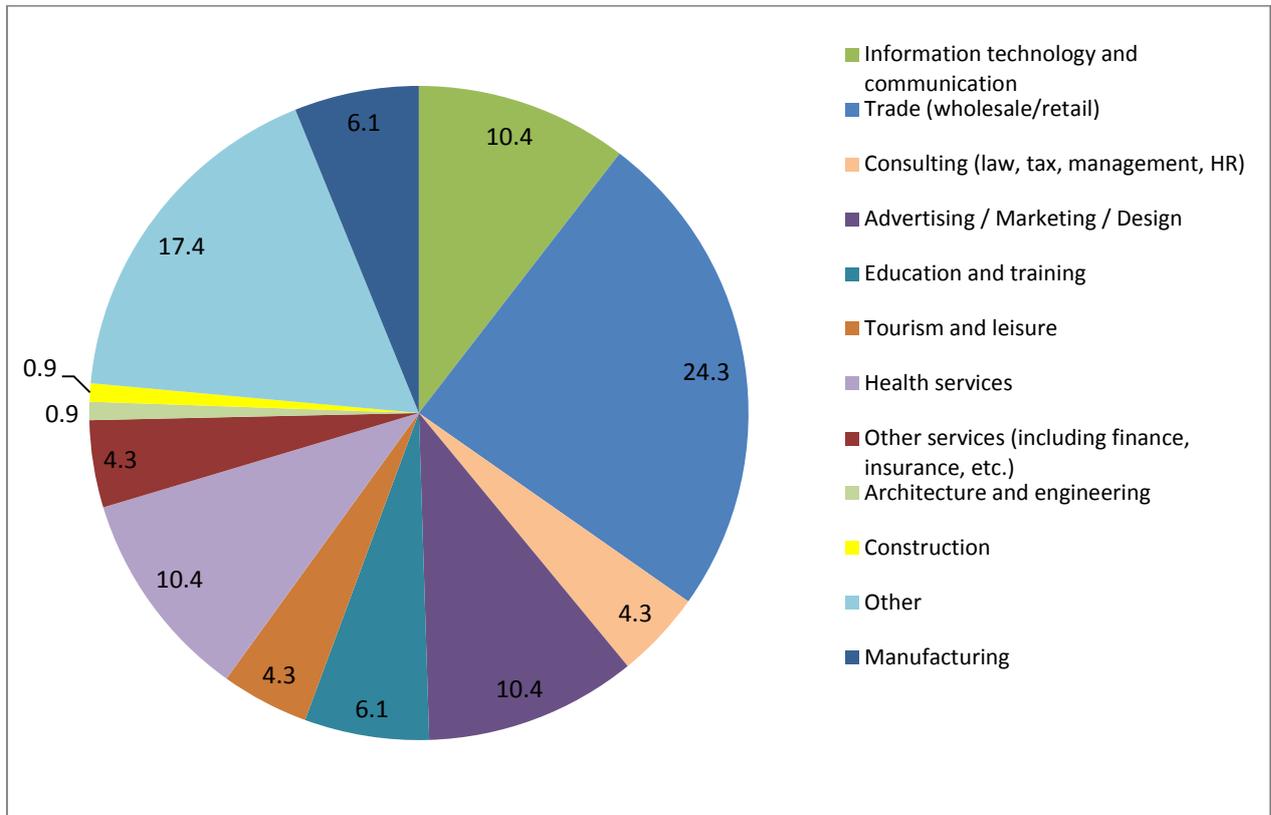
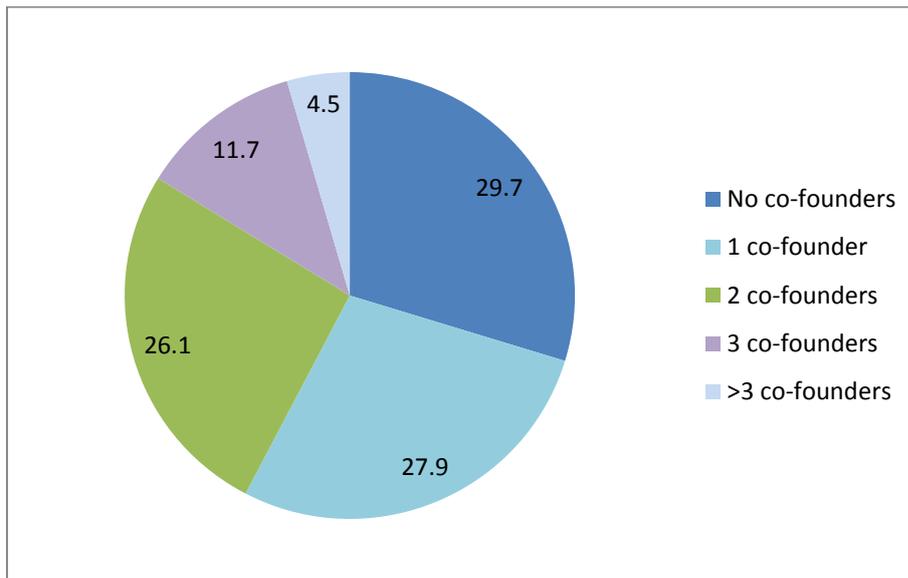


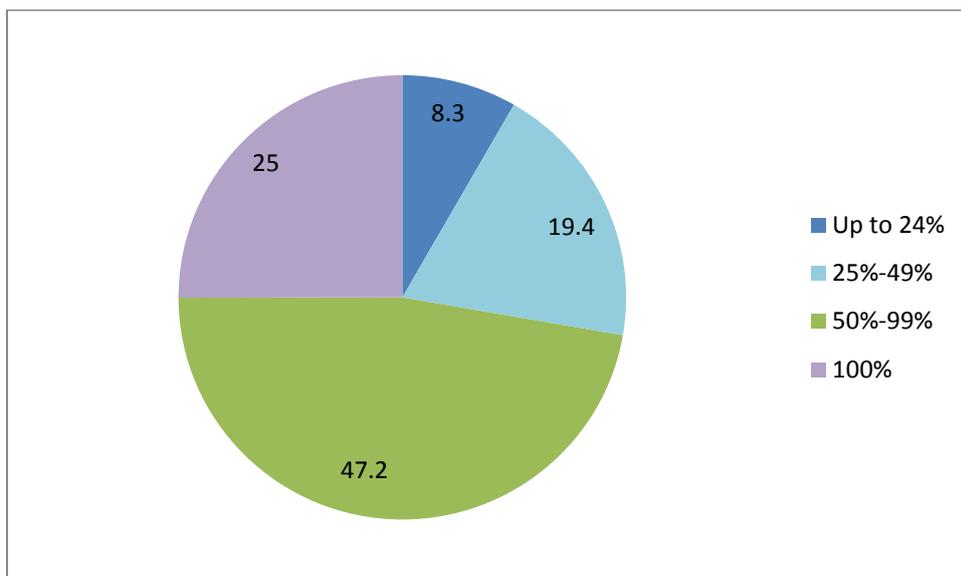
Figure 30 provides data on the anticipated number of co-founders in the future business of the respondents. The mean for the English sample is 2.33 suggesting that these young people do not want to ‘go it alone’. This average is higher than in the international sample (1.27). However, around 30% of nascent entrepreneurs in the English sample intend to create their firms with no co-founders.

Figure 30. Number of co-founders (N=111)



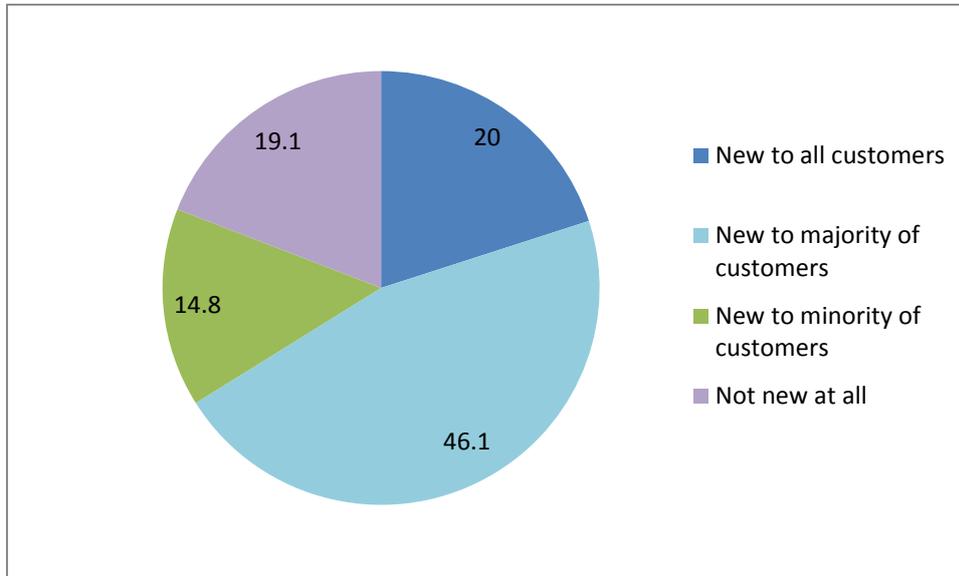
A quarter of the nascent entrepreneurs in the English sample will own all the firm's equity, almost half will own between 50% and 99%, approximately three out of 10 respondents will own less than 50% (Figure 31). On average, the equity share of the nascent entrepreneurs – that is the percentage ownership of the company – is estimated to be 62.8% (median 60%). Compared with the international sample, in England the nascent entrepreneurs see themselves as owning a smaller proportion of the firm's equity – for the international sample these figures are 66% and 61%.

Figure 31. Nascent entrepreneurs' equity share in the planned firms (N=108)



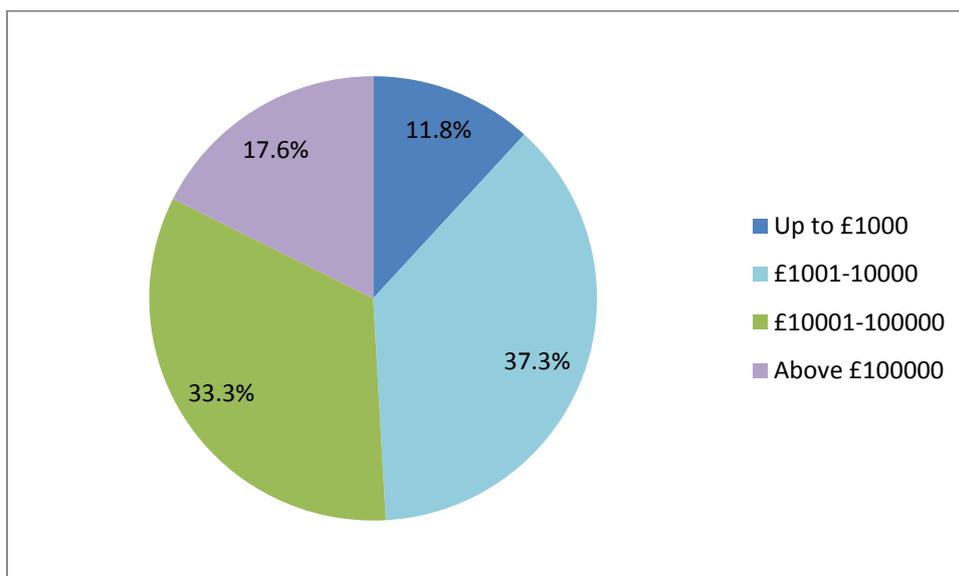
Nascent entrepreneurs were also asked to what extent their service or product will offer something new to what is already offered in the market. The vast majority of the nascent entrepreneurs in England (66.1%) aim to offer something that would be completely new to all customers, or to a majority of customers; only 19.1% plan to focus on offerings that already exist in the market (Figure 31).

Figure 32. Degree of newness of the planned firms' offerings (N=115)



The percentage of those who plan to offer something completely new is slightly higher in the English sample compared with the international sample (20% vs. 17.8). As such, the degree of newness among planned firms is high, most probably involving an innovative approach to their services and products.

Figure 33. Money needed to start business (N=51)

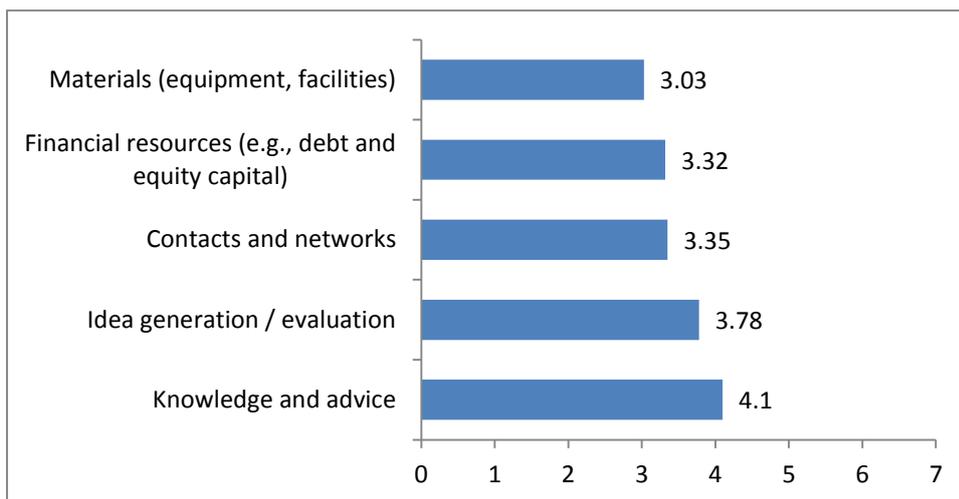


Only a minority of nascent entrepreneurs were able to provide information on the amount of funds they would need to start a business. The amounts nascent entrepreneurs think that they would require ranged from £100 to £20,000,000; almost half would need less than £10,000 and one third between £10,000 to £100,000 (Figure 33).

Students were asked to what extent their parents would support them in the founding process (using a seven-point scale where 1=not at all, 7=very much).

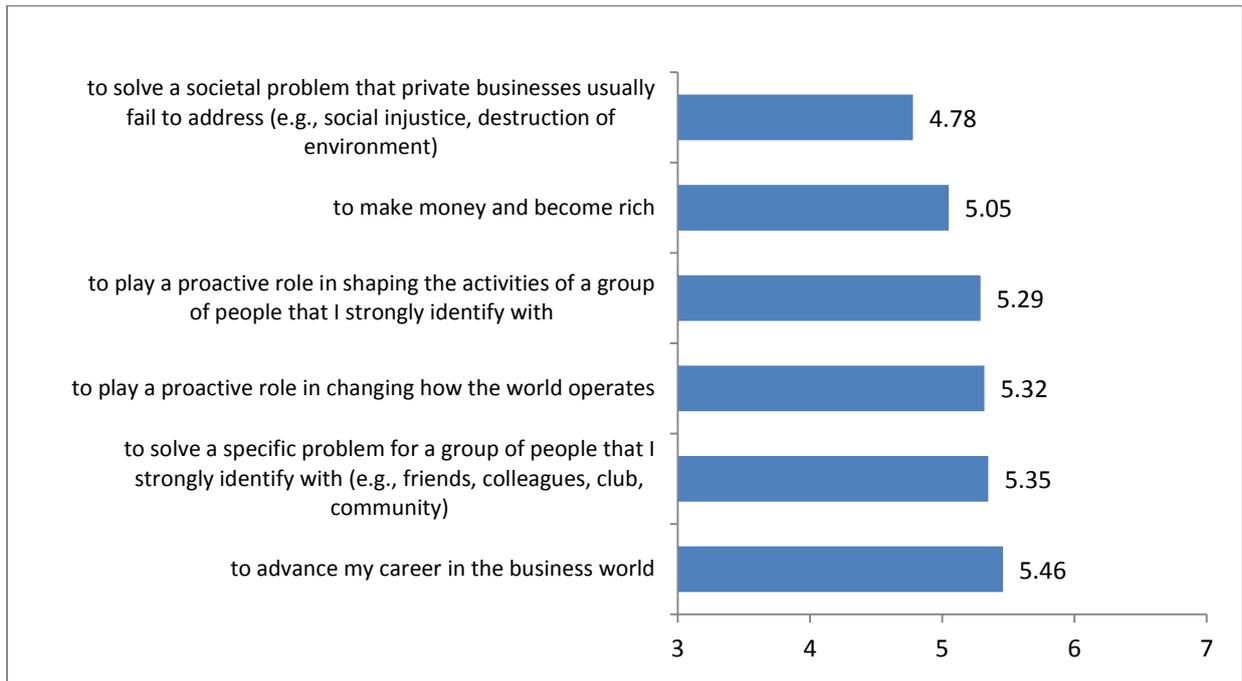
Amongst the five types of support offered in the survey, ‘Knowledge and advice’, followed by ‘Idea generation/evaluation’ (non-material types of resources) were rated as most anticipated. Clearly, these young people were looking for support over and above mere financial and material resources, suggesting that they were looking for additional human and social capital.

Figure 34. Anticipated parental support in the founding process (N=111; multiple response)



Personal reasons appear to be the most important motivations for nascent entrepreneurs in starting their business (Figure 35). A number of different types of motivations were offered. The strongest was ‘to advance my career’ (5.46), followed by ‘to solve a specific problem for groups of people’ they strongly identify with (5.35). ‘Making money’ and ‘Solving societal problems’ appear to be less popular motives.

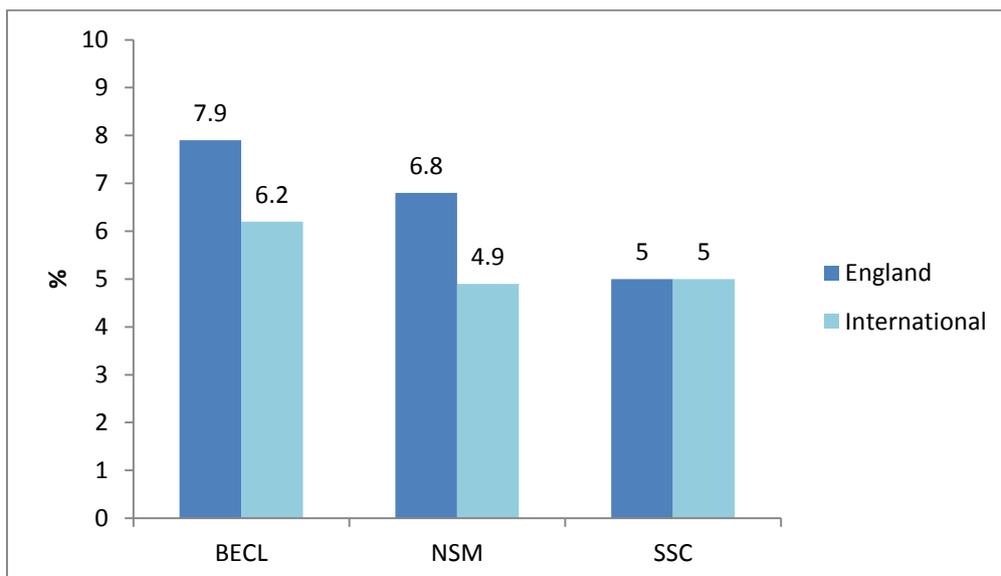
Figure 35. Motivation for founding own business – ‘I will create my own firm in order to ...’ (N=113, using a scale from 1 to 7)



6.2. Active founders

In the GUESSS survey special attention was paid to those students who are already running their own business or are self-employed (active entrepreneurs). In the English sample 7% of the respondents identified themselves as entrepreneurs, which is higher than global number of 5.5%.

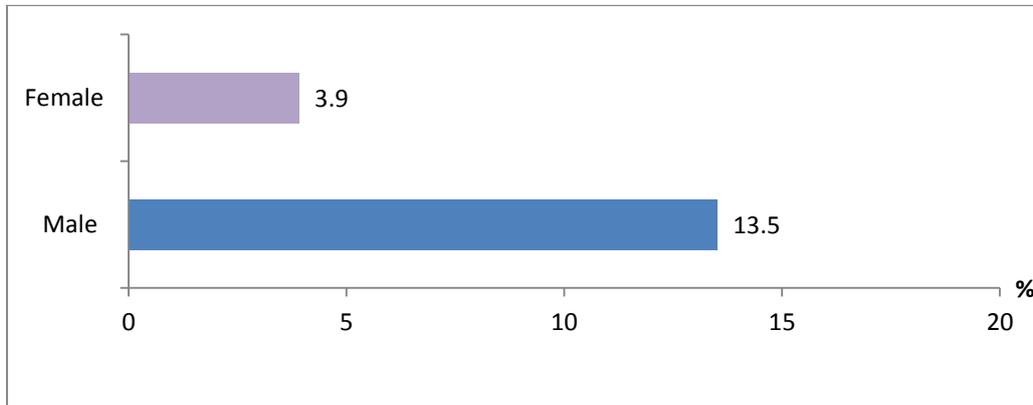
Figure 36. Share of active entrepreneurs across study fields



If we examine the number of active founders across study fields (Figure 35), the share of active entrepreneurs is highest among BECL students (7.9% in England vs. 6.2%

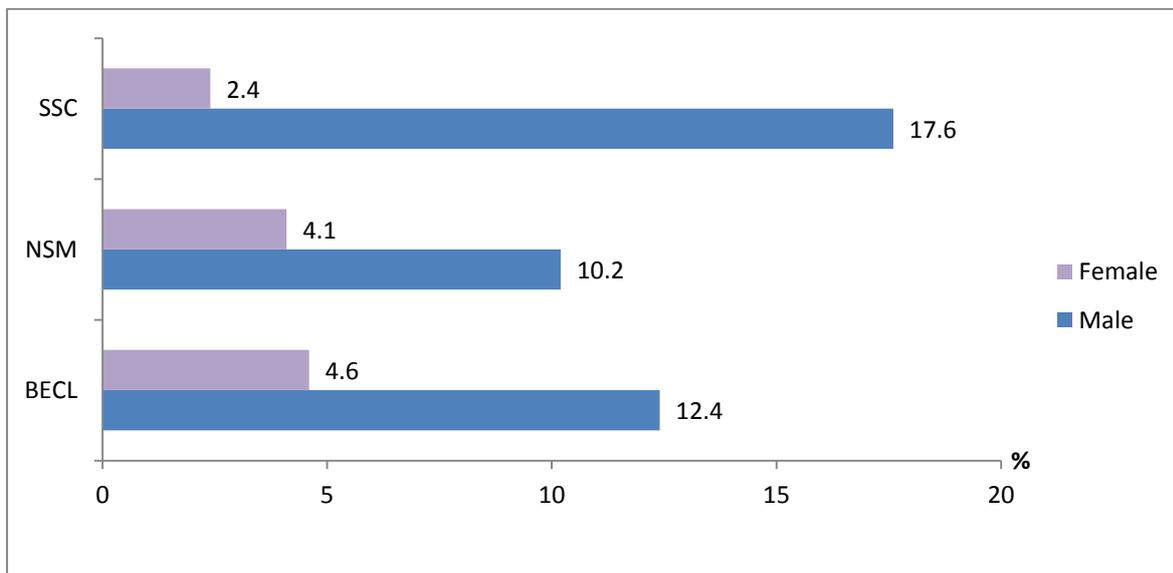
internationally). There are also more active entrepreneurs among NSM students in England compared with the international sample (6.8%), but the share of SSC students is similar (5% for both samples).

Figure 37. Share of active entrepreneurs across gender



The gender gap among active entrepreneurs is large: 13.5% of male students, in the sample as a whole, are running their own business (N=32) compared with only 3.9% of females (N=16) (Figure 37). This also varied according to subject fields (Figure 38).

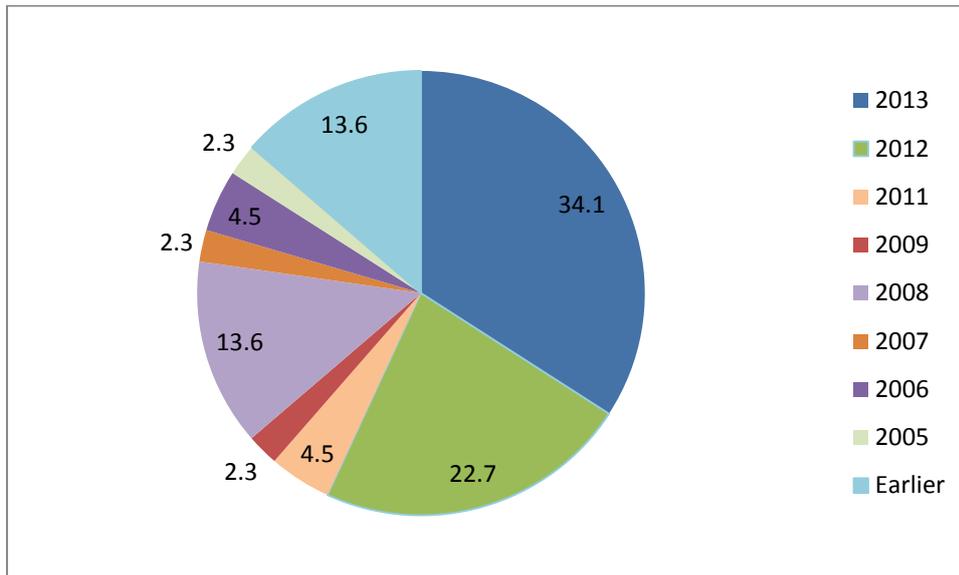
Figure 38. Share of active entrepreneurs across gender and field of study



The existing firms

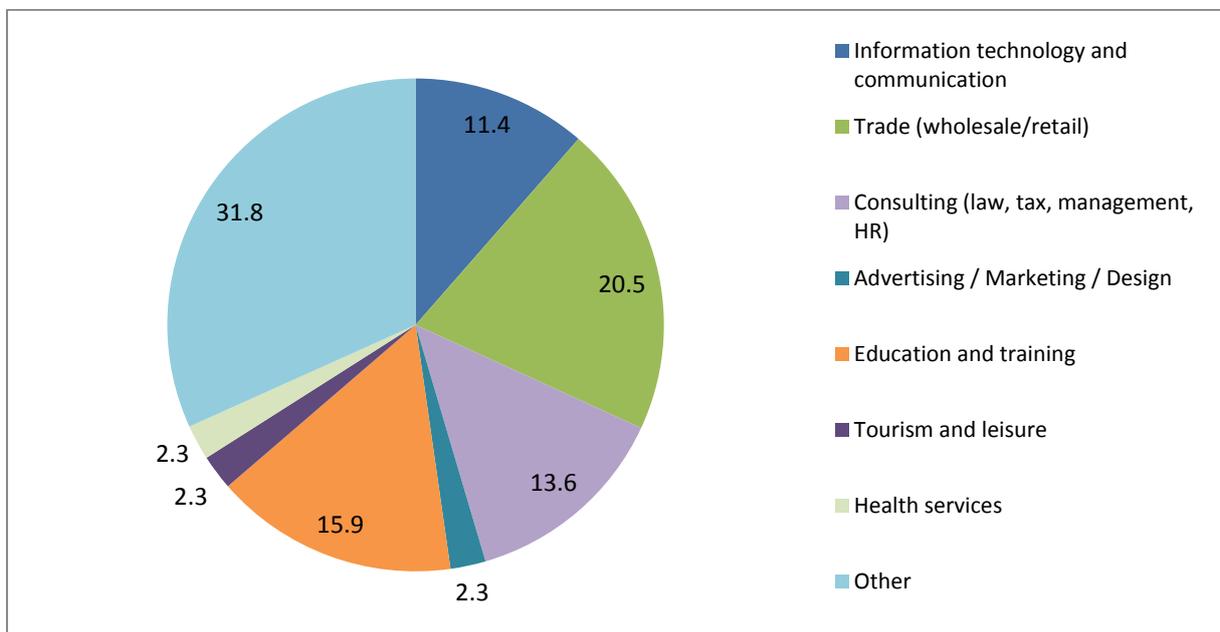
On average, the existing firms are 5 years old (4 years old in the international sample). Most of the firms in the English sample were created in 2013 (34.1%) and 43.2% of the existing firms were created before 2011 (Figure 39). Other evidence shows that the active entrepreneurs spend around 27 hours per week on their own firm (N=43).

Figure 39. Founding year of the existing firms (N=44)



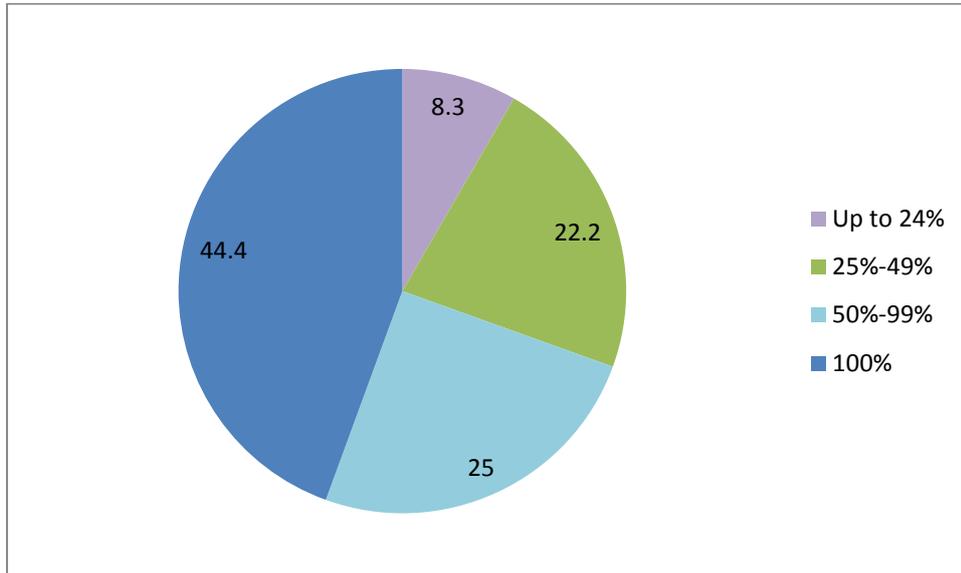
The most popular sectors are ‘Trade: wholesale and retail’ (20.5%), ‘Education and training’ (15.9%), ‘Consulting’ (13.6%) and ‘IT and communication’ (11.4%).

Figure 40. Industry sector of existing firms (N=44)



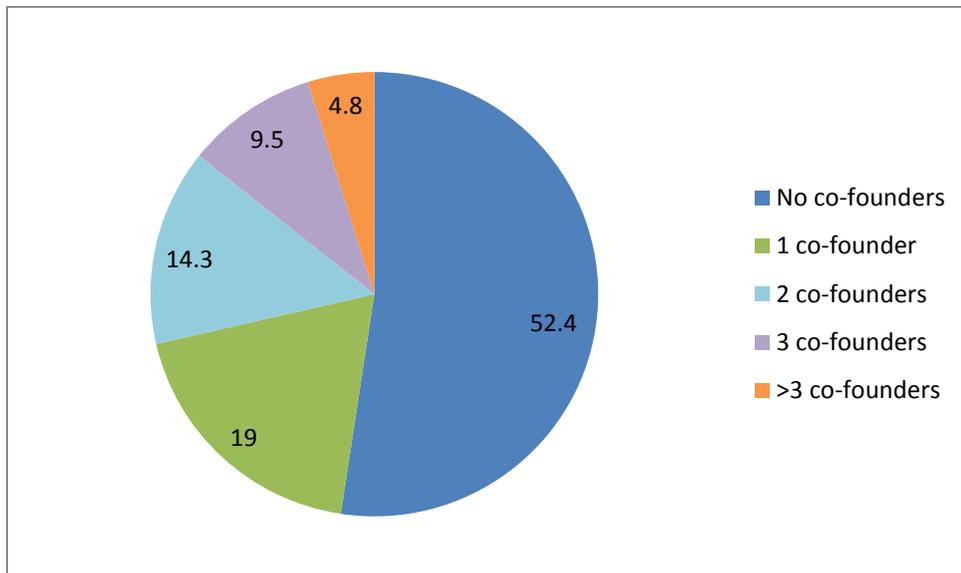
The average share of equity that the active entrepreneurs own is 66.9% in the English sample, which is similar to global figure of 68.7% (Figure 41).

Figure 41. Equity share of active entrepreneurs



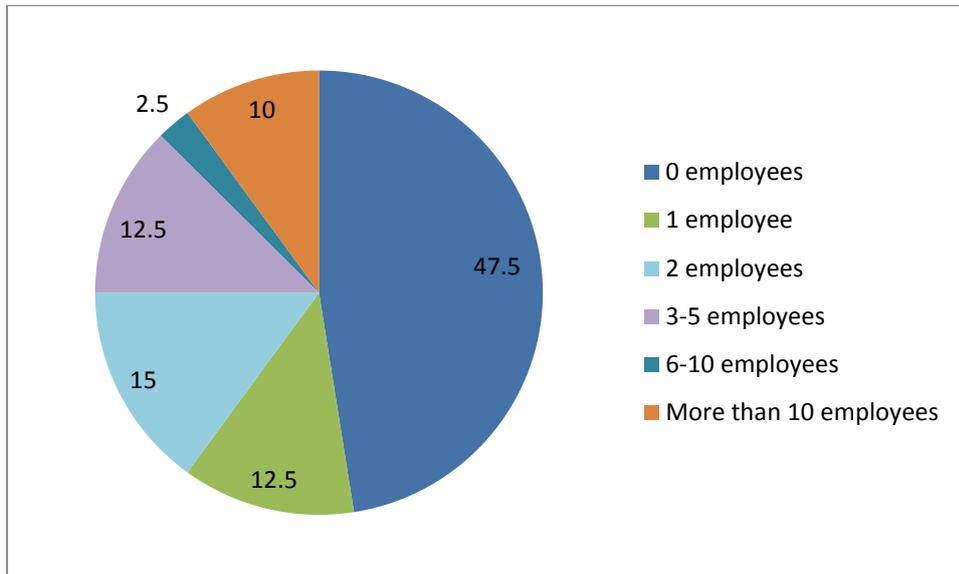
More than half of the active entrepreneurs have no co-founders, and around one fifth one co-founder (mean is 1.95).

Figure 42. Number of co-founders among active entrepreneurs (N=42)



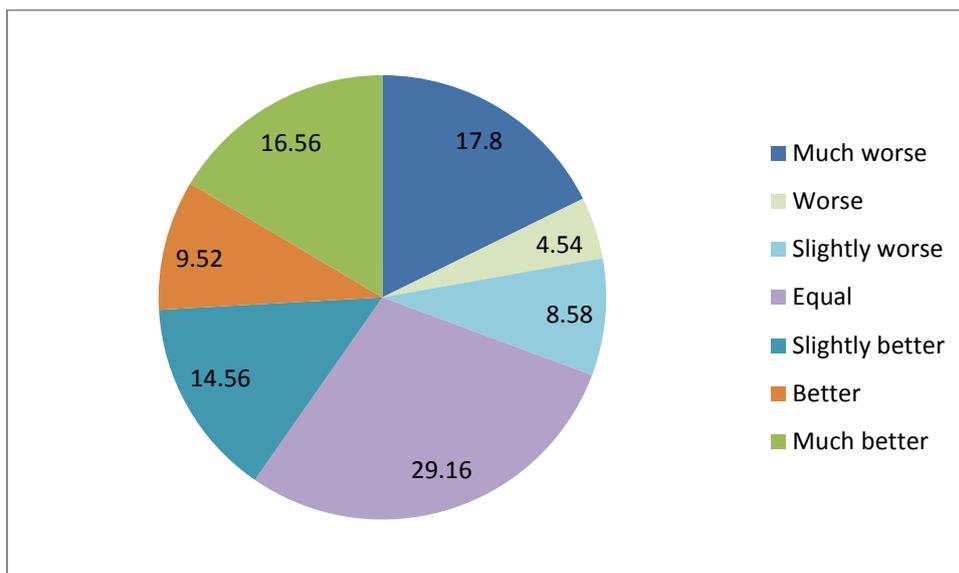
The average number of employees working in existing firms is 3.2 although almost half of the active entrepreneurs do not have any employees at all (47.5%) (Figure 43).

Figure 43. Employees in the existing firms (N=40)



Respondents were asked to rate the performance of their firms compared with competitors using the scale from 1 (much worse) to 7 (much better). Performance measures included sales growth, market share growth, profit growth, job creation, and innovation in order to facilitate the comparison. Over 40% of active entrepreneurs believe that their firms perform better than competitors (slightly better, better or much better) (Figure 44). The average value for the English sample matches global estimates (4.1).

Figure 44. Performance of existing firms (N=40)



7. Summary and Conclusion

The GUESSS survey 2013/2014 presents findings and insights into students' entrepreneurial intentions and activities, which included over 100, 000 responses from 34 countries. A unique dataset allowed us to analyse data for England and to compare the findings with global trends.

The English and international evidence confirms that personal characteristics, motivation factors, social context, university offerings and family business background are all associated with entrepreneurial intentions of young people.

The survey in England included 654 respondents from 20 universities. Care should be taken regarding claims of representativeness of the student population across England, as the sample includes a limited number of universities and from these an uneven number of survey respondents.

Most of the respondents were under 25 years old (72.6%), which is slightly less than in the international sample. In both samples there were more females than males, and in England the difference is wider. More than half of the English sample identified UK as the country of their nationality (54.3%), reflecting the international nature of the student population in England more broadly. In both the English and international samples the majority of respondents were undergraduates. Almost half of all respondents were studying Business/Management, Economics or Law (BECL category).

The study shows that students regard an entrepreneurial career path as an attractive option. However, this was manifested very carefully: 7.5% are planning to start their own business immediately after finishing their studies and 33.5% five years after their studies. Hence, despite being attracted to business ownership, many of students prefer to have several years of work experience in small, medium-sized or large firms before starting their own business. There is a higher level of interest in business ownership amongst Business/Management, Economics and Law students, and this difference becomes substantial 5 years after studies. Significant differences in entrepreneurial intentions across gender were also revealed: entrepreneurial intentions are stronger among male students across all study fields.

There are a large number of entrepreneurial training and courses offered at universities in England. Around 30% of students in England have attended or were studying a course on entrepreneurship and 12.6% took part in Young Enterprise (YE) programmes. Among students who participated in YE the percentage of those who identified 'starting a business' as a career option was higher than among non-participating students (41.5% vs. 32.2%).

This study indicates a positive relationship between a entrepreneurial university climate and learning in English universities and the entrepreneurial intentions of students. The analysis

also found a significant difference in the magnitude of the relationship between England and international regarding the level of entrepreneurial learning and entrepreneurial intentions – the relationship in England is stronger compared with the global trend. This may be interpreted as underlining the crucial role that the university context plays in England when it comes to the formation of entrepreneurial intentions.

Students with entrepreneurial parents are more likely to choose an entrepreneurial career path 5 years after completion of their studies compared with those without entrepreneurial parents: 45.1% vs. 34%. Perhaps this difference is not as large as could be expected. Not surprisingly, the percentage of the respondents who choose to become a successor is significantly higher among those with entrepreneurial parents, as they have potentially the opportunity to take over family business in the future. Overall, these findings support the thesis about the role of family background in shaping the career choice intentions of young people.

Social and cultural factors might also affect the choice of an entrepreneurial career. The study shows that subjective norms, that is the perceived reactions of family members, friends, and fellow students to choosing an entrepreneurial career path, are quite positive for students in England. The mean value for the English sample was 5.56 positioning England in the middle of the international sample with the global average of 5.53. The risk perception among students in England is quite low compared with the global estimate (4.58 vs. 4.85).

The comparative analysis of two surveys over time (2011 and 2013/2014) shows that entrepreneurial intentions among students in England have decreased over the past few years, and these differences are significant. This is also reflected in the international sample as a whole.

Regarding nascent entrepreneurs, the percentage of those who are trying to start a business is higher in England compared with the international sample (18% vs. 15.1%). The industry sectors for new businesses are very diverse, but the most attractive sector for students in England is retail and wholesale. The majority of students are planning to be sole owners or main share-holders of their businesses. The planned firms are expected to be quite innovative – four out of five aim to offer products or services that would be new at least to some of their customers. In thinking through the plans to establish their business, students were researching their customer base, developing a business plan and starting product/service development indicating that their ambitions were underpinned with action. Potentially, universities could play a more serious role here helping students who are interested in starting a business with additional training and advice.

A minority of the surveyed students in England already ran their own business – ‘active entrepreneurs’ – although the percentage is higher than in the international sample (7% vs. 5.5%). The share of active entrepreneurs is highest among BECL students. More than half of the active entrepreneurs have no co-founders and around a fifth have only one co-founder. The most popular sectors are trade, education and training, consulting, IT and communication. The majority of active entrepreneurs see their business as successful, stating that their firms perform equal or better than competitors.

Overall, this study shows that students based in English universities have a range of career intentions and experiences. The English study was also found to differ from the international survey in relation to a variety of characteristics. The results of the survey provide in-depth insights into students' entrepreneurial intentions and activities and will help to define directions for further research and analyses.