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**Evaluating the employability paradox: When does organizational investment in
human capital pay off?**

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Abstract

The paper explores the notion of the employability paradox which notes that while organizations investing in the career and competency development of their workforce can benefit from higher performance, they also risk losing more employable staff to competitors. Building on contributions from social exchange theory and signalling theory we develop a model exploring the circumstances under which investment in career development benefits employees and organizations. We test our model in a longitudinal study following graduates entering the labour market. Our results show that when organizations signal that they care about employees by investing in their career development *and* individuals are receptive to such signals and proactively seek to manage their careers, investment in career development has a positive impact on organizational commitment and intention to stay with one's employer. Our findings indicate that the idea of the employability paradox is simplistic and lacks theoretical and empirical support.

Keywords: employability paradox; perceived employability; career development practices; protean career; employee retention.

Introduction

For many years, academics and practitioners have debated the extent to which organizations stand to gain from investing in employees' career development (De Cuyper & De Witte, 2011; De Cuyper, Van Der Heijden & De Witte, 2011; Nelissen, Forrier & Verbruggen, 2017). It has been argued that while more competent employees are more productive and make a stronger contribution to organizational performance (Van der Heijde & Van der Heijden, 2006), investment in employee career development can have unintended consequences. More competent employees have stronger "possibilities of obtaining and maintaining employment" (Vanhercke, De Cuyper, Peeters & De Witte, 2014: 594) both internally (internal employability) but also in the external labour market (external employability). While internal employability is beneficial for organizations who can utilize human capital more fully (Van der Heijde & Van der Heijden, 2006), employees' perceptions of their external employability can potentially result in them leaving the organization that developed them before the investment has been recouped (Benson, Finegold, & Mohrman, 2004). The dilemma around the risks and the benefits of investing in employee development has been encapsulated in what some have termed the employability paradox (De Cuyper & De Witte, 2011; Nelissen et al., 2017).

The potential tension between developing and retaining employees has been a focal point for research for more than a decade (Van der Heijde & Van der Heijden, 2006). Several studies have evaluated the link between perceived external employability (PEE) and employee retention. The research, however, has a number of important limitations. Some studies have analysed the association between PEE and turnover while largely ignoring the extent to which employees have actually benefitted from organizational investment in career development practices (CDPs) (e.g. De Cuyper & De Witte, 2011).

Other contributions have considered the impact of individual development practices on PEE and organizational attachment (Nelissen et al., 2017) overlooking that human resource management (HRM) is best viewed as a system of well-integrated and properly implemented practices (Guest, 2011).

Our paper builds on and extends this body of research by discussing some of the conditions under which PEE leads to employee retention. More specifically, our paper contributes to the literature in three ways. First, we address a key tenet of the employability paradox by exploring the role of CDPs – an integrated set of practices aimed at developing employees’ capabilities - in benefitting individuals through enhancing and sustaining their employability perceptions.

Second, we discuss the consequences of organizational investment in employee career development. Drawing on the HRM literature and on signalling and social exchange theories we argue that investment in employees’ career development sends a clear signal that the organization cares about its employees and elicits a norm of reciprocity that should result in higher levels of attachment and retention (Connelly, Certo, Ireland & Reutzel, 2011; Cropanzano, Anthony, Daniels & Hall, 2017). We therefore present a counter-argument to the core tenet of the employability paradox, namely that organizational investment in career development increases both PEE and, in turn, higher employee turnover.

Thirdly, we contribute to further understanding the association between investment in employee development, perceptions of external employability and organizational attachment by considering characteristics of the recipients of CDPs and, more specifically, their protean career orientation (PCO). Contemporary careers have been depicted as “more independent from organizations than they used to be in times of more predictability” (Van Der Heijden & De Vos, 2015: 4). Individuals are encouraged to take

ownership of their careers and to seek personally meaningful work experiences (Briscoe & Hall, 2006). These values and preferences have largely been encapsulated by the notion of the protean career defined as “one in which the person, not the organization, is in charge, the core values are freedom and growth, and the main success criteria are subjective (psychological success) vs. objective (position, salary)” (Hall, 2004: 4). Individuals navigating the new career landscape view employability as a key success factor (Arthur & Rousseau, 1996); they are therefore likely to seek organizations that invest in their development and to change employers if their career development needs are unmet.

We present a model exploring links between PEE and employee attachment to the organization (organizational commitment and intention to quit) considering the role of career development practices and of the protean orientation. We test our model among a sample of graduates followed from the final year at university into the first two years of their careers. We focus on individual perceptions of their own external employability because unlike other approaches to employability that are more suited to capture the views of people in employment, PEE has been studied in a wider variety of groups, including graduating students with no work experience (Vanhercke et al., 2014). The choice of graduates to test the model is relevant for two main reasons. First, our group is composed predominantly of individuals at an early career stage which is characterized by exploration and job churning (Farber, 2007). Our findings are therefore complementary to the extant literature focusing on the relationship between employability, commitment and labour turnover which has been predominantly conducted with employees more likely to be consolidating their careers. For example, Benson et al.’s (2004) participants had a mean tenure of 14.1 years while De Cuyper and De Witte’s (2011) research covered employees from the service and education sectors with mean tenures of 5 and 12 years

respectively. Second, there is also evidence that organizations allocate more resources to developing younger workers, consequently enhancing their employability perceptions (Froehlich, Beusaert & Segers, 2015). All these factors increase the risks associated with organizational investment in career development of recent graduates. We discuss the rationale and empirical support for our hypotheses in the following sections.

The model and hypotheses

The relationship between PEE and employee attachment

PEE is associated with the belief that one can switch employers without incurring significant losses (Rothwell & Arnold, 2007). It therefore resonates with notions of perceived ease of movement, perceived job alternatives and movement capital which have been extensively discussed as antecedents of turnover (Forrier, Verbruggen & De Cuyper, 2015). Moreover, it addresses debates in the new career literature where employability is discussed as a key career success factor in a context where job security and stable employment have declined (De Vos & Soens, 2008; Drenzo, Greenhaus & Weer, 2015). Employability can therefore be viewed as a personal resource which is “tied to the person, his or her resiliency, and feelings of being able to control and impact upon the environment” (De Cuyper, Makikangas, Kinnunen, Mauno & De Witte, 2012: 771).

Empirical evidence supports the negative association between PEE and organizational attachment. De Cuyper et al. (2011) and Nelissen et al. (2017) reported positive associations between PEE and turnover intentions while Philippaers, De Cuyper, Forrier, Elst & Hans De Witte (2016) found a negative association with organizational commitment. In the same vein, Onyishi, Enwereuzor, Ituma & Omenma (2015) found that perceived employability was associated with anticipatory job search behaviours. We therefore propose that:

H1a: PEE at time 1 is positively associated with intention to quit at time 2.

H1b: PEE at time 1 is negatively associated with organizational commitment at time 2.

The role of CPDs in sustaining perceptions of external employability

Despite the focus on independent careers in the ‘new career’ literature, the organization remains a key context of career enactment and plays an important role in shaping employability (Clarke, 2013). There is consistent evidence of a positive association between organizational career development and employability. In a study of Dutch academics, Van der Heijden, Boon, Van der Klink and Meijs (2009) showed that participation in formal and informal learning activities was positively associated with perceived employability. Studying employees in the financial sector, De Vos, De Hauw and Van der Heijden (2011) also found that participation in competency development initiatives, including mentoring and training, as well as organizational, supervisor and peer support for competency development, were associated with the development of employability competences.

In these studies, organizational CDPs are analysed as antecedents of employability. While this is useful, we are particularly interested in their role in sustaining PEE over time. There are two reasons for this. First, our approach is aligned with the perspective on sustainable careers which calls for a more holistic view of how individuals “remain healthy, productive, happy and employable” (De Hauw & Greenhaus, 2015: 224) across the lifespan. It is argued that contemporary careers are more dynamic and fluid, challenging individuals to move through frequent cycles of continuous learning and exploration (Mirvis and Hall, 1994). Sustaining employability over time and avoiding skill obsolescence is therefore a major factor of career success and a condition for engaging in inter-organizational career mobility. Second, our approach also considers contributions from the turnover literature which criticizes static perspectives on voluntary

inter-organizational career mobility and emphasises the need to further understand how the processes underpinning the decision to change employers unfold over time (Lee & Mitchell, 1994). In summary, we argue that CDPs play an important role in sustaining employability and access to opportunities in (the internal and) the external labour market. The positioning of CDPs as a moderator allows us to explore the first key argument of the employability paradox, namely that these practices greatly benefit staff by sustaining or enhancing their employability perceptions. CDPs are particularly important for individuals at an early career stage who lack knowledge about career self-management (King, 2004) and how to search for and obtain desired jobs and therefore look to their employer to provide relevant development experience (Sturges, Guest, Conway & Mackenzie Davey, 2002). We therefore propose that:

H2: The association between PEE at time 1 and PEE at time 2 will be more positive when more career development practices are experienced than when fewer practices are experienced.

The role of CDPs in the link between PEE and employee attachment

The employability paradox suggests that organizations may fail to capitalize on the implementation of CDPs because individuals who benefit from this investment can more easily move to another organization in exchange for better pay or position (De Cuyper et al., 2011). We argue that this claim lacks solid theoretical and empirical support. Several studies have explored factors influencing the association between perceived employability and organizational retention, such as job control and social support (De Cuyper, Mauno, Kinnunen and Mäkikangas, 2011) and the perception of attractive job alternatives in the internal and external labour markets (De Cuyper and De Witte, 2011).

However, the role of organizational investment in career development has rarely been directly investigated. One notable exception is a study by Nelissen et al. (2017) who focused on the association between six CDPs, perceived employability and turnover. They showed that investment in employee development was more strongly associated with internal than with external employability; but no consistent association was found between perceived (internal and external) employability, turnover intentions and quits. A limitation of their study, however, is that they looked at each practice in turn overlooking a key tenet in the HRM literature suggesting that “effective deployment of human resources depends on the application of a distinctive combination of practices” (Guest, Michie, Conway, & Sheehan, 2003: 292). We therefore look at CDPs as a bundle and aim to advance the field by drawing on contributions from social exchange theory and signalling theory to propose a counter argument to the employability paradox, namely that organizational investment in employee development will be positively associated with both PEE and organizational attachment.

Social exchange theory proposes that in the employment relationship, informal social and implicit exchanges develop. One such exchange might be organizational investment in an individual’s career development in exchange for displays of loyalty and commitment. The theory rests upon a norm of reciprocity whereby receipt of some kind of investment creates a sense of obligation to reciprocate in some way. A recent major review suggests that these basic tenets of social exchange theory continue to be largely supported (Cropanzano et al., 2017). The implication is therefore that greater investment in career development will be reciprocated with stronger attachment to the organization, a proposition in direct contrast to the employability paradox.

We further argue that signalling theory refines social exchange theory in a number of ways. Signalling theory proposes that the sender, the message and the receiver of any

message will influence the impact of that message. Research reveals that promises about provision of career development opportunities are often not delivered with consequent high labour turnover, particularly among recent graduates (Sturges et al., 2002). The signal that career development will be provided, reinforced by its actual delivery, creates a powerful message of organizational commitment to employees. As Stiglitz (2002:473) noted “actions convey information (that) leads people to alter their behaviour”. Connelly et al. (2011), in their review of signalling theory, note the importance of the frequency, intensity and consistency of messages. In this context, we argue, in line with HRM theory about the importance of bundles of practices, that the use of a greater amount and range of CDPs is likely to strengthen the message of organizational commitment to career development of employees. This positive message from the sender, namely the organization and its management agents, is likely to be reciprocated by the employee in the form of stronger attachment to the organization.

In summary, the central argument of the employability paradox does not take sufficiently into account the importance of social exchanges and the signals sent to employees by carefully implemented sets of CDPs and the reciprocity they elicit among the workers. We therefore propose that:

H3a: CDPs will moderate the mediated relationship between PEE at time 1 and intention to quit at time 2 (with PEE at time 2 as the mediator) such that the conditional effect will be more negative when more practices are experienced than when fewer practices are experienced.

H3b: CDPs will moderate the mediated relationship between PEE at time 1 and organizational commitment at time 2 (with PEE at time 2 as the mediator) such that the

conditional effect will be more positive when more practices are experienced than when fewer practices are experienced.

The role of the PCO in the association between PEE, CDP and employee attachment

In considering the circumstances under which individuals reciprocate organizational investment in career development by remaining with their employer it is important to consider the recipients of such practices. Signalling theory proposes that the effectiveness of signals is influenced by the characteristics of the receiver including the extent to which they are scanning the environment for specific signals and are then able to interpret and derive meaning from them (Connelly et al., 2011). In this context, we propose that a PCO, reflected, *inter alia*, in a strong interest in personal career development and employability, will be associated with a more positive response.

A PCO is associated with being flexible and adaptable, resilient and able to cope with uncertainty, and taking control and ownership over the development of one's human capital (Clarke, 2008). Sustaining (internal and external) employability is an important condition for enacting a protean career and accessing desired work opportunities. This has been reported, for example, by De Vos and Soens (2008) who identified employability as a key antecedent of career success among individuals with a high PCO. Those with a high PCO are therefore particularly likely to value organizational practices that help to enhance employability.

In discussing the role of the PCO in shaping the association between perceptions of external employability and organizational attachment it is important to note that while individuals with a high PCO may scan the environment for career opportunities, they will not necessarily wish to change organizations. The PCO - in contrast with the idea of the boundaryless career - does not imply a specific pattern of career mobility (Briscoe, Hall and DeMuth, 2006). Indeed, evidence shows a positive association with organizational

commitment (Porter, Woo & Tak, 2015) and a negative link with intention to quit the organization (Rodrigues et al., 2015). There is also evidence that those who are more proactive in managing their careers have higher expectations about organizational career development (De Vos, Dewettinck and Buyens, 2009), and also receive more organizational support in managing their careers as shown by Sturges et al. (2002). We expect that as long as they believe that they are receiving career development opportunities that enhance or at least maintain their employability, those with a high PCO are likely to reciprocate organizational investment by remaining with their current employer. We therefore propose a pattern of moderated moderated mediation and the following hypotheses:

H4a: The mediated effect between PEE at time 1 and intention to quit at time 2 (with PEE at time 2 as the mediator) will be firstly moderated by CDPs and secondly moderated by the PCO such that the conditional effect will be more negative when more practices are experienced and individuals have a high protean orientation than when fewer practices are experienced and individuals have a low protean orientation.

H4b: The mediated effect between PEE at time 1 and organizational commitment at time 2 (with PEE at time 2 as the mediator) will be firstly moderated by CDPs and secondly moderated by the PCO such that the conditional effect will be more positive when more practices are experienced and individuals have a high protean orientation than when fewer practices are experienced and individuals have a low protean orientation.

Insert Figure 1 here

Methods

Sample and procedure

We investigated the relationship between PEE, CDPs, PCO, and intention to quit and organizational commitment using data from a longitudinal study on the careers of graduates. The study was initiated in 2015 and three waves of data have been collected. We used data from the first wave, when participants were near the end of their final year at university, and the third wave, collected two years later. Data from the second wave was not used as more than 50% of participants were either unemployed or pursuing further education. While it is usually advisable to collect information on mediating and moderating variables at an intermediate time period between the independent and the dependent variables, we argue that the model still maintains its theoretical and methodological validity.

In March 2015, close to the end of their studies, 3398 final year undergraduate students across a London-based university received survey invitations by email (Time 1). Seven hundred and ninety six students (23.4%) across a wide range of programmes in healthcare, arts and humanities, social sciences, business and management studies and engineering responded to our survey. The mean age was 24.4 years. 542 (68.1%) were white and 410 (51.5%) were male. A follow-up survey was issued using the same procedure in June 2017 around two years after graduation (Time 2). 429 participants responded on this occasion (54% of participants in the first wave), of which 77.4% were white and 62.9% were male. The mean age was 27.4. Participants dropping out of the study were predominantly women and non-white.

To avoid the potential of common method bias inflating or deflating the relationship between the constructs in the model we have taken preventative measures as recommended by Podsakoff, MacKenzie, Lee and Podsakoff (2003). In addition to

collecting the dependent and the independent variables at different points in time, we have randomized the presentation of items to respondents and ensured confidentiality to all participants.

Measures

We used previously validated measures for all variables. A five-point Likert scale ranging from “1= strongly disagree” to “5 = strongly agree” was used throughout.

Perceived external employability was measured at time 1 and time 2 with 4 items adapted from De Witte (1992) perceived external employability measure. A sample item is “It would not be very difficult for me to get a job in a good organization.”

Career development practices were measured at time 2 using 7 items. We focused on a bundle of practices identified in previous research as particularly important at an early career stage (Sturges et al, 2002; King, 2004). These included skill and competency development, performance management, feedback, and support for career development. A sample item is “I receive mentoring and support to develop my career”. Factor analysis confirmed that these items form a single factor.

PCO was measured in time 2 with four items from Briscoe et al.’s (2006) self-directed career management scale. A sample item is “I am in charge of my own career”.

Intention to quit was measured at time 2 with 3 items from Price (1997). A sample item is “If I could, I would quit today.”

Organizational commitment was measured at time 2 with 3 items from Meyer and Allen’s (1997) affective commitment scale. A sample item is “I do not feel emotionally attached to my organization (R).”

Control variables. Information was collected about participants’ age in years, gender (0 = men; 1 = women) and degree type (healthcare, arts and humanities, social sciences, business and management studies, and engineering). Information was also

collected about employment contract (0 = Temporary; 1 = Permanent). All these variables may affect employability perceptions before and after entering the labour market.

Analyses and results

Analyses

All hypotheses were tested using structural equation models. We used Mplus, version 7, to analyse the data. All latent variables in the model were regressed onto gender and age. In addition, type of degree and employment contract were regressed on to PEE at time 1 and PEE at time 2 respectively as controls. To test for indirect effects, we have calculated confidence intervals at 95% (Preacher, Zyphur & Zhang, 2010).

Means, standard deviations and zero-order correlations

The means, standard deviations, reliabilities and correlations of the study variables are presented in Table 1. Overall, participants report relatively low levels of PEE. We also observed a decline between time 1 (Mean = 3.20; SD = .80) and time 2 (Mean = 2.71; SD = 1.02). This can be explained by an adjustment of graduate expectations to the labour market. As expected, PEE at time 2 is positively correlated with the protean career orientation ($r = .78$; $p < .01$) and negatively correlated with organizational commitment ($r = -.28$; $p < .01$). No significant association was found with intention to quit the organization ($r = -.05$; n.s.). A similar pattern of associations was found for PEE measured at time 1 although the associations are not as strong. As expected, career development practices are positively associated with PEE at time 2 ($r = .76$; $p < .01$).

Insert Table 1 here

Results

Model Fit

Before testing the model, we conducted a series of confirmatory factor analyses (CFA) to estimate the distinctiveness of the assessed variables. The results show that the six-factor hypothesised model fits the data well ($\chi^2 = 481.13$; $df = 260$; $CFI = .95$; $TLI = .94$; $RMSEA = .05$ [90% CI: .04 - .05]; $SRMR = .06$) and significantly better than a four-factor model where the mediator and both moderators were combined into a factor ($\chi^2 = 720.13$; $df = 269$; $CFI = .90$; $TLI = .89$; $RMSEA = .07$ [90% CI: .06 - .07]; $SRMR = .07$), a three factor-model where both the mediator and the moderators were combined into a factor and the two outcomes were also combined into a factor ($\chi^2 = 802.34$; $df = 272$; $CFI = .88$; $TLI = .87$; $RMSEA = .07$ [90% CI: .06 - .08]; $SRMR = .07$), and a one-factor model ($\chi^2 = 1799.3$; $df = 275$; $CFI = .67$; $TLI = .64$; $RMSEA = .12$ [90% CI: .11 - .13]; $SRMR = .12$).

We tested our model using the Mplus code developed by Stride, Garner, Catley and Thomas (2015). Mplus does not produce the typical fit indices reported in studies using structural equation models when interactions with latent variables are introduced in the analysis. To estimate model fit we followed the procedure recommended by Sardeshmukh and Vandenberg (2017). We started by creating a baseline model against which the hypothesised model was compared. The baseline model considered all the hypothesised pathways between constructs except for the latent interactions. The moderators were included but only their direct effects were specified. This allowed us to use maximum likelihood estimation and obtain all traditional fit indices. While in cases of disordinal interactions the fit of the baseline model may be affected, it should nevertheless meet the minimum criteria for model fit (Sardeshmukh and Vandenberg, 2017). Our baseline model fits the data adequately ($\chi^2 = 890.72$; $df = 422$; $CFI = .91$; $TLI = .90$; $RMSEA = .05$; $SRMR = .08$). We then compared it against the hypothesised model and assessed

whether adding the latent interactions reduced information loss. The values for the information criteria in the baseline model were $AIC = 20650.120$ which were higher than those obtained in the hypothesised model ($AIC = 20447.569$). This suggests that introducing the latent interactions reduces information loss and, as a result, improves model fit ($\Delta AIC = 202.551$). We therefore retained the hypothesized model. The structural pathways between the variables in our model are depicted in Figure 2 and in tables 2 and 3.

Hypotheses testing

Hypothesis 1 investigates the extent to which PEE measured at time 1 is associated with intention to quit and organizational commitment two years later. Results in table 2 show that PEE at time 1 is positively associated with intention to quit at time 2 ($b = .31$, $LLCI = .08$, $ULCI = .54$) supporting hypothesis 1a. Results also indicate that PEE at time 1 is negatively associated with organizational commitment at time 2 ($b = -.31$, $LLCI = -.08$, $ULCI = -.54$) supporting for hypotheses 1b.

Hypothesis 2 proposes that experience of more CDPs strengthens the positive association between PEE at time 1 and PEE at time 2. Results in table 2 confirm the existence of a significant interaction ($b = .16$, $LLCI = .05$, $ULCI = .26$). The interaction, plotted in Figure 3, suggests that all individuals seem to benefit from organizational investment in career development and that the effect is stronger among those who already feel highly employable. Hypothesis 2 is supported.

Insert Figure 2 here

Insert Table 2 here

Hypothesis 3 explores the extent to which the indirect effect of PEE measured at time 1 on employee attachment to the organization two years later is influenced by experience of CDPs. Results in table 3 show that, contrary to expectations, higher experience of CDPs does not influence the association between PEE at time 1 and organizational commitment (hypothesis 3a) and intention to quit (hypothesis 3b) via PEE at time 2. Hypothesis 3 is therefore unsupported.

Before exploring the role of both moderators in shaping the association between PEE and organizational attachment as proposed by our final set of hypotheses, we analysed the role of the protean orientation in shaping the association between PEE, organizational commitment and intention to quit the organization. Findings in table 2 show a significant interaction of the PCO in the link between PEE and both organizational commitment ($b = .69$, LLCI = .55, ULCI = .83) and intention to quit ($b = -.60$, LLCI = -.77, ULCI = -.44). We have plotted these interactions in figures 4 and 5 to facilitate interpretation. Figure 4 suggests that PEE is associated with lower intention to quit among individuals with a high protean orientation. By the same token, figure 5 indicates that those with a high PEE and high PCO report higher levels of organizational commitment.

Insert Figures 3,4,5 here

Finally, we explored hypothesis 4 proposing that the indirect effect between PEE at time 1 and attachment to the organization at time 2 via PEE at time 2 is influenced by both organizational investment in career development practices and individuals' protean career orientation. Findings in table 3 indicate that experienced CDPs only support organizational attachment when the recipients of such practices report a high protean orientation. Results in Table 3 show that the indirect effect of PEE at time 1 on organizational commitment via PEE at time 2 is negative at a combination of low levels of the PCO with both medium ($b = -.18$, LLCI = -.33, ULCI = -.04) and high ($b = -.33$,

LLCI = -.56, ULCI = -.11) levels of CDPs. In contrast, the association is positive at high levels of both moderators ($b = .15$, LLCI = .01, ULCI = .29). In other words, PEE is positively associated with higher organizational commitment only when there is extensive experience of career development practices among individuals with a high protean orientation. Hypothesis 4a is supported. Results in table 3 further indicate that the indirect effect of PEE at time 1 on intention to quit the organization at time 2 via PEE at time 2 is negative at a combination of high levels of the protean career orientation with medium ($b = -.17$, LLCI = -.30, ULCI = -.03) or high ($b = -.30$, LLCI = -.52, ULCI = -.09) levels of experienced career development practices. Hypothesis 4 b is also supported.

Insert Table 3 here

Discussion and conclusion

The aim of this study was to explore what has been described as the employability paradox which notes that while organizational investment in CDPs is necessary to obtain high performance, it also enhances external employability leading to the risk that employees may leave an organization for advancement elsewhere before the organization has obtained a positive return on its investment. We used social exchange theory and signalling theory to challenge the assumptions underpinning the employability paradox. We noted that social exchange theory argues that there will be informal and implicit exchanges in the employment relationship. We proposed that investment by organizations via provision of CDPs in the careers of employees should enhance PEE and also tap into the norm of reciprocity leading to enhanced attachment to the organization. Signalling theory was used firstly to suggest that a bundle of CDPs sends a clear signal of organizational commitment to the development of employees' career competences; and secondly to argue that this message will have a stronger resonance with 'receivers' who have a high PCO, reflecting their sensitivity to the importance of employability and to

gaining the resources to manage their careers. We tested these theoretical propositions with a longitudinal sample of recent university graduates.

Our initial findings showed a negative association between higher perceptions of external employability just prior to graduation and organizational attachment two years later. These results are in line with evidence reported in the literature (De Cuyper et al., 2011) and could denote support for the employability paradox. However, this association ceases to be significant when considering PEE at Time 2; and when including the role of experienced career development practices and the role of agency in the form of the protean career orientation, a rather different picture emerges casting doubt on the employability paradox.

Three sets of findings and contributions emerged from our study and reinforce the case against the employability paradox. First, drawing on social exchange theory, we analysed the role of context, in the form of provision of CDPs, in shaping the outcomes of PEE. Our results indicate that investment in career development is not associated with a decline in organizational commitment or a rise in intention to quit. Instead, they give credence to the idea that employees reciprocate organizational investment with retention and commitment despite increased opportunities to move employers and therefore provide no support for the propositions underpinning the employability paradox. The significance of the contribution is elevated if we take into account our sample of young and low tenured individuals who are still in the exploration stage of their careers and are therefore more likely to switch employers to progress their careers.

Second, we focused on the importance of agency in shaping the association between perceived employability and organizational attachment. Reflecting the importance of ‘receivers’ in signalling theory, we proposed that those with a strong PCO value employability since it facilitates their ability to take control of their careers. Our findings

indicate that a high PCO strengthens the positive association between PEE and organizational attachment. This suggests that highly proactive and employable individuals at this early stage of their career mainly seek to progress their career within their current organization. Our findings are in line with evidence suggesting that the PCO results in positive outcomes for individuals and organizations (Rodrigues et al., 2015).

Finally, informed by signalling and social exchange theory, we examined the interaction between context and agency. In understanding the circumstances under which organizational investment in career development benefits employees and organizations alike we need to consider the type and quality of the signals emitted by management as well as the extent to which ‘receivers’ value and interpret them as intended. Our findings show that organizations benefit from having highly employable individuals only when they invest significantly in career development and employees proactively utilise these practices to manage their own careers. It should be noted that it is predominantly at higher levels of career development experience and PCO that the positive impact of PEE affects attachment. This is in line with the findings of White and Bryson (2013), who reported that a modest application of HRM had little impact; it was only when a certain level was reached, at which point the HR practices gained a critical mass, that there was a marked impact on employee attitudes and behaviour. Our study further contributes to HRM and employability literatures by highlighting that signals from management are likely have a differential impact depending on the receivers. High investment in career development was associated with lower commitment among individuals with low levels of PCO who may not be sensitive to signals that the organization was committed to developing their skills and their employability. Our findings therefore highlight the need to consider the interaction between context and agency to more fully understand when staff employability is positive for organizations.

In summary, our findings offer further confirmation that investment in human resources pays off and the underpinning process can be explained with reference to social exchange theory and signalling theory and literature on the new career. Recent graduates value career development and those with a strong protean career orientation particularly value it. They may want to take charge of their careers, but they value and respond positively to help from their employer to facilitate this process. Organizational investment in career development pays off in helping to sustain employability over time among those who are proactive and engage in career self-management. They in turn will repay this investment by displaying stronger attachment to the organization in the form of higher organizational commitment and lower intention to quit.

Our study has practical implications for both providers of higher education and employers. First, our findings highlight that perceptions of employability while at university are important in shaping employability perceptions two years later. Since perceived employability is largely a personal resource (De Cuyper et al., 2012) that can start to be developed prior to entering the labour market it is important that universities embed employability activities in the curricula (e.g. through internships). Second, findings also show significant differences in employability perceptions between students from different disciplines and subject areas. Business and social sciences students felt less employable and engineering students felt more employable when compared with arts and humanities students. While it is not possible to generalise from these findings as they may reflect employability practices at the faculty/course level, they may nonetheless indicate that students have unrealistic expectations about their own employability as indicated by the more optimistic views of arts and humanities students who traditionally experience more difficulties in accessing the graduate labour market when compared with business students. It is therefore important that educational institutions help students develop

realistic expectations about their own employability by further assisting in the transition to the labour market. Finally, an important practical implication for organizations is that they can be more confident that offering support for career development, particularly to core employees is unlikely to result in a loss of investment.

Our study has three important limitations. First, we started following participants at university where people lack knowledge of the labour market and have little information to assess their own employability. It is therefore important to conduct follow-up studies using samples of more mature workers to explore whether our findings will be replicated. Second, given that participants had not entered the labour market at the start of the study we focused only on external employability. Further longitudinal research should explore how CDPs shape both internal and external employability and how perceptions of attractive career opportunities within but also outside the organization influence people's attachment to the organization. Finally, while the two-year time lag between our two points of data collection allows for an adequate exploration of the association between initial perceived employability and organizational attachment, a more rigorous empirical exploration of the employability paradox requires independent, indirect effects, and dependent variables be collected at different times.

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Table 1 – Means, standard deviations, correlations and reliability of study variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	25.60	4.41													
2. Gender (1 = Women)	0.38	0.49	-.01												
3. Arts & Humanities	0.22	0.42	-.14*	-.24**											
4. Social Sciences	0.29	0.45	.20**	.03	-.34**										
5. Business & Management	0.26	0.44	.06	.18**	-.31**	-.37**									
6. Engineering	0.19	0.39	-.25**	-.04	-.25**	-.30**	-.28**								
7. Health Sciences	0.05	0.21	.16**	.11*	-.11*	-.13**	-.12*	-.10*							
8. Employment Contract (1= Permanent)	0.53	0.50	-.12	.17**	-.08	.03	.04	-.02	.04						
9. Perceived External Employability T1	3.20	0.80	-.30**	-.12*	.27**	-.33**	-.10*	.19**	.03	-.07	(.84)				
10. Perceived External Employability T2	2.71	1.02	-.44**	-.01	.01	-.24**	-.05	.31**	.05	.02	.49**	(.91)			
11. Career Development Practices T2	3.06	0.69	-.33**	-.06	.01	-.23**	-.07	.33**	.02	.09	.44**	.76**	(.86)		
12. Protean Career Orientation T2	3.04	0.99	-.45**	.02	.04	-.27**	-.02	.29**	.01	.05	.44**	.78**	.75**	(.92)	
13. Intention to Quit T2	2.83	0.69	-.05	-.12*	.13*	-.01	-.05	-.03	-.10	-.18**	-.02	-.06	-.15**	-.09	(.80)
14. Organizational Commitment T2	3.24	0.86	.18**	.09	-.22**	.17**	.03	-.08	.12	.20**	-.15*	-.28**	-.15**	-.21**	-.55** (.86)

Note: **p < .01 *p < .05; Cronbach alpha shown in parenthesis.

Table 2 – Direct effects of perceived employability, career development practices and protean and career orientations on organizational commitment and intention to quit the organization

Model Pathways	Estimated effect	95% confidence interval	
		Lower bonds	Upper bonds
Direct effects			
PEE T1 → Org. commitment T2	-.285 ^a	-.491	-.079
PEE T1 → ITQ T2	.315 ^a	.088	.543
CDP T2 → PEE T2	.849 ^a	.759	.938
PEE T1 → PEE T2	.200 ^a	.052	.347
PEE T1*CDP T2 → PEE T2	.159 ^a	.055	.262
PEE T2 → Org. commitment T2	-.249	-.504	.006
PEE T2 → ITQ T2	.211	-.067	.490
PCO → Org. commitment T2	.268 ^a	.030	.507
PCO → ITQ T2	-.185	-.450	.081
PEE T2*PCO → Org. commitment T2	.689 ^a	.548	.831
PEE T2*PCO → ITQ T2	-.605 ^a	-.769	-.442
Social Sciences → PEE T1	-.231 ^a	-.290	-.173
Business → PEE T1	-.069 ^a	-.126	-.013
Engineering → PEE T1	.124 ^a	.072	.175
Health Sciences → PEE T1	.009	-.016	.033
Emp. contract (1 = Permanent) → PEE T2	.012	-.040	.064
Age → PEE T1	-.503	-1.504	.498
Age → PEE T2	-1.927 ^a	-3.591	-.262
Age → CDP T2	-2.116 ^a	-3.243	-.988
Age → PCO T2	2.157 ^a	.038	4.277
Age → Org. Commitment T2	.299	-.631	1.228
Age → ITQ T2	-1.187 ^a	-2.054	-.320
Gender (1 = women) → PEE T1	-.102 ^a	-.182	-.022
Gender (1 = women) → PEE T2	-.017	-.198	.164
Gender (1 = women) → CDP T2	.145 ^a	.002	.288
Gender (1 = women) → PCO T2	-.093	-.322	.136
Gender (1 = women) → Org. Commitment T2	-.082	-.179	.014
Gender (1 = women) → ITQ T2	-.068	-.178	.041

^a Significant coefficients

Table 3 - Conditional indirect effects of perceived employability, career development practices and protean and career orientations on organizational commitment and intention to quit the organization

Model Pathways		Estimated effect	95% confidence interval	
			Lower bonds	Upper bonds
Conditional Indirect effects at the values of the first moderator^b				
CDP (L)	PEE T1 → PEE T2 → Org. Commitment T2	-.010	-.044	.023
CDP (M)	PEE T1 → PEE T2 → Org. Commitment T2	-.050	-.110	.010
CDP (H)	PEE T1 → PEE T2 → Org. Commitment T2	-.089	-.196	.017
CDP (L)	PEE T1 → PEE T2 → ITQ T2	.009	-.020	.037
CDP (M)	PEE T1 → PEE T2 → ITQ T2	.042	-.018	.102
CDP (H)	PEE T1 → PEE T2 → ITQ T2	.076	-.032	.184
Conditional Indirect effects at the values of both moderators^b				
<i>Outcome: Organizational Commitment at time 2</i>				
CDP (L); PCO (L)	PEE T1 → PEE T2 → Org. Commitment T2	-.039	-.166	.088
CDP (M); PCO (L)	PEE T1 → PEE T2 → Org. Commitment T2	-.188 ^a	-.331	-.044
CDP (H); PCO (L)	PEE T1 → PEE T2 → Org. Commitment T2	-.336 ^a	-.563	-.110
CDP (L); PCO (M)	PEE T1 → PEE T2 → Org. Commitment T2	-.010	-.044	.023
CDP (M); PCO (M)	PEE T1 → PEE T2 → Org. Commitment T2	-.050	-.110	.010
CDP (H); PCO (M)	PEE T1 → PEE T2 → Org. Commitment T2	-.089	-.196	.017
CDP (L); PCO (H)	PEE T1 → PEE T2 → Org. Commitment T2	.018	-.046	.082
CDP (M); PCO (H)	PEE T1 → PEE T2 → Org. Commitment T2	.088	-.003	.179
CDP (H); PCO (H)	PEE T1 → PEE T2 → Org. Commitment T2	.158 ^a	.017	.299
<i>Outcome: Intention to quit the organization at time 2</i>				
CDP (L); PCO (L)	PEE T1 → PEE T2 → ITQ T2	.015	-.039	.068
CDP (M); PCO (L)	PEE T1 → PEE T2 → ITQ T2	.071	-.014	.157
CDP (H); PCO (L)	PEE T1 → PEE T2 → ITQ T2	.128	-.008	.263
CDP (L); PCO (M)	PEE T1 → PEE T2 → ITQ T2	-.010	-.044	.023
CDP (M); PCO (M)	PEE T1 → PEE T2 → ITQ T2	-.050	-.110	.010
CDP (H); PCO (M)	PEE T1 → PEE T2 → ITQ T2	-.089	-.196	.017
CDP (L); PCO (H)	PEE T1 → PEE T2 → ITQ T2	-.035	-.152	.081
CDP (M); PCO (H)	PEE T1 → PEE T2 → ITQ T2	-.171 ^a	-.308	-.034
CDP (H); PCO (H)	PEE T1 → PEE T2 → ITQ T2	-.306 ^a	-.523	-.090

^a Significant coefficients; ^b Moderators were standardized. Medium values (M) represent the mean and low (L) and high (H) values represent 1SD below and above the mean respectively.

Figure 1: Model

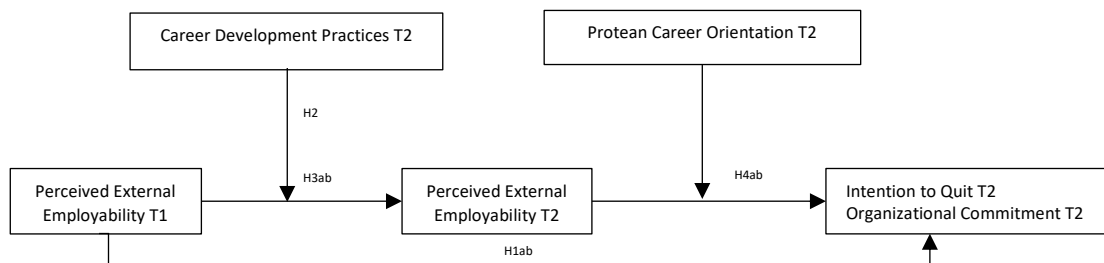


Figure 2: Structural model coefficients

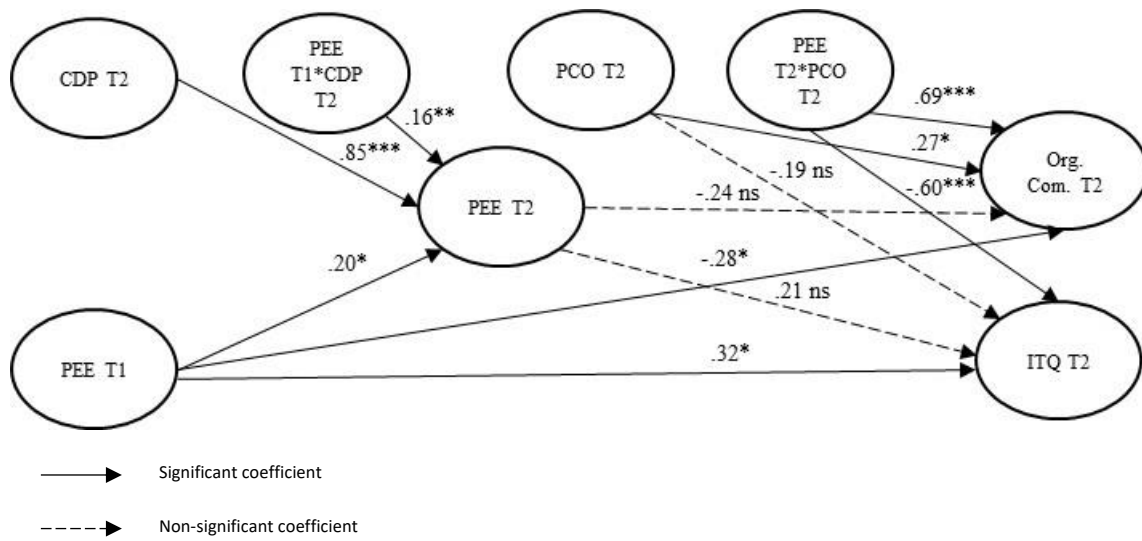


Figure 3: Interaction effect of PPE at time 1 and career development practices at time 2 on PEE at time 2

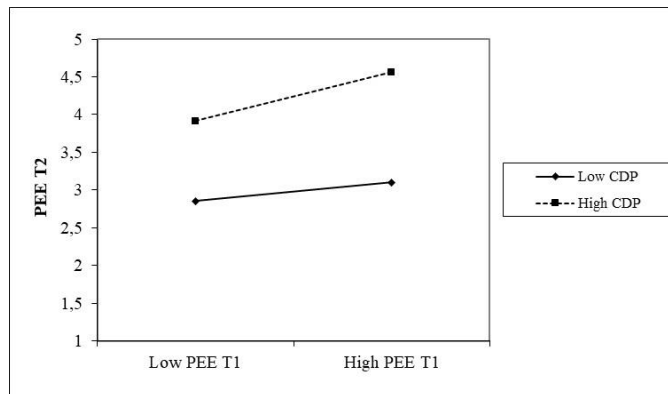


Figure 4: Interaction effect of PPE at time 2 and the PCO at time 2 on Intention to Quit at time 2

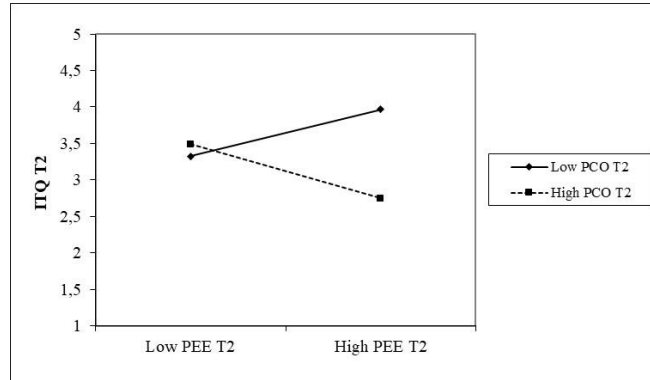


Figure 5: Interaction effect of PPE at time 2 and the PCO at time 2 on Organizational Commitment at time 2

