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
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**Reassessing the Protean Career Concept:
Empirical Findings, Conceptual Components and Measurement**

Martin Gubler, Schwyz University of Teacher Education ^a / ETH Zurich ^b

John Arnold, Loughborough University ^c

Crispin Coombs, Loughborough University ^c

Author note:

^a Career Research Chair, Schwyz University of Teacher Education (Switzerland)

^b Organization, Work and Technology Group, ETH Zurich (Switzerland)

^c School of Business and Economics, Loughborough University (UK)

Correspondence concerning this article should be addressed to Martin Gubler, Schwyz University of Teacher Education, Zaystrasse 42, CH-6410 Goldau, Switzerland, Email: martin.gubler@phsz.ch

Abstract

The protean career concept (PCC) is a widely acknowledged contemporary career model, but conceptual and empirical analysis of the model is scarce. We provide an integrative literature review of empirical research and note that the research is hampered by inconsistent use of terminology and methodological limitations. First we show that the two protean metacompetencies—adaptability and identity—have been relatively neglected as the research has evolved. Second, we describe how preexisting protean measures are limited in covering the full range of the concept. Finally, we draw on career theory to suggest four conceptual components as a basis for future model development and offer suggestions for research that tests the utility of the PCC in relation to other similar constructs.

Keywords:

protean career, metacompetencies, literature review, career orientation, measurement

Reassessing the Protean Career Concept: Empirical Findings, Conceptual Components and Measurement

Over the last two decades, more than a dozen “new” or “contemporary” career concepts have been presented in the careers literature. In response to wider economic, societal, and technological developments, these concepts generally assume that individuals are, or should be, increasingly mobile and self-directed in their careers. They have mainly been construed as opposites of what is variously called the “old”, “traditional”, “bureaucratic” or “organizational” career, for which hierarchical advancement, organizational career management and low mobility are characteristic. However, despite the multitude of models seeking to explain contemporary careers, only the protean (Hall, 1996) and boundaryless (Arthur & Rousseau, 1996) career concepts have become widely acknowledged.

Arthur and Rousseau (1996) described six meanings that may characterize a boundaryless career, such as being sustained by external networks, but their concept has usually been reduced to a career involving inter-organizational mobility (Inkson, Gunz, Ganesh, & Roper, 2012). The protean and boundaryless career concepts overlap significantly, but the protean career concept (PCC) predominantly focuses on an individual’s motives to follow a particular career path whereas the boundaryless career concept mainly concerns different forms of mobility. Although both models are considered important and influential (e.g., Sullivan & Baruch, 2009), the boundaryless career concept has received considerably greater coverage (e.g., Arnold & Cohen, 2008; Greenhaus, Callanan, & DiRenzo, 2008; Inkson, 2008; Inkson et al., 2012; Sullivan, 1999). By contrast, thorough reviews and conceptual analyses of the PCC are lacking. Therefore, our paper focuses on the PCC. However, where appropriate, we include elements from the boundaryless career literature to contextualize our discussion.

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It is important to distinguish clearly between three key terms: protean career concept (PCC) and two subsidiary components thereof, namely protean career orientation (PCO) and protean career path (PCP). The PCC refers to the theoretical concept, as defined by Hall (1976, 2002), and is discussed in detail in the following section. The PCO refers to (1) an individual's attitude towards developing his/her own definition of what constitutes a successful career and taking action to achieve those success criteria (DiRenzo & Greenhaus, 2011) and (2) his/her motivation to adapt to a changing environment (Hall, 2002). Having a strong PCO may, but does not necessarily, translate into corresponding behavior. The PCP refers to an individual's career path that reflects elements postulated in the PCC. For example, a PCP is driven and managed by an individual, not an organization. It also builds on various distinguishable learning cycles and includes values-driven as well as self-directed career moves (Hall, 1976, 2002).

Many studies briefly mention the PCC although their focus is on other themes (e.g., Crowley-Henry, 2007). Surprisingly, only a few studies have been specifically devoted to examining the PCC. Few authors have studied PCP (e.g., Reitman & Schneer, 2003), whereas the majority have focused on PCO, for example, studying individuals' PCO as a predictor of career success (e.g., De Vos & Soens, 2008). Typically, this strand of literature applies, but does not conceptually question, existing measures of PCO. Lastly, some authors have attempted to build new career models based on the PCC (e.g., Grimland, Vigoda-Gadot, & Baruch, 2011). However, although such models often suggest helpful extensions of the concept, they usually do not critically examine it. To date, few papers have considered the conceptual shortcomings of the PCC (e.g., Arnold & Cohen, 2008). Also, despite some notable exceptions (e.g., Greenhaus et al., 2008), existing measures of PCO have not been critically and conceptually analyzed. We argue that these two gaps are problematic given the prevalence of the PCC. For example, the first gap may contribute to the widespread

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conceptually imprecise references to the PCC that we discovered in our literature review. The second gap potentially results in poor interpretations of research findings because the existing scales may not fully capture the concept. We contend that the PCC is a helpful and powerful concept and that it is too early to abandon it as is sometimes called for (e.g., Inkson et al., 2012). However, if the PCC is to play an important role in future career research, much of its credibility hinges on conceptually solid scales to measure it. Therefore, we argue, it is necessary to untangle different interpretations of the PCC and to offer a coherent and consistent basis for its further use and development.

Even academics who adopt a critical stance towards the notion of the PCC concede the conceptual (e.g., Arnold & Cohen, 2008) and the practical relevance (e.g., Inkson, 2006) of Hall's influential work. However, we argue that the full potential of the concept can be unlocked only if several current shortcomings are addressed. We make three important contributions towards that goal. First, in the following section we examine the PCC and provide an integrative review of the protean literature that can serve as a solid basis for future conceptual and empirical work. Second, we offer a detailed analysis of the two key weaknesses of the PCC: the lack of conceptual clarity and shortcomings regarding its operationalization and measurement, particularly the neglected role of the two protean metacompetencies. Third, we propose a refined conceptualization of the PCC with four components, all anchored in the original concept, reflecting the PCC in a more differentiated way than previous approaches have done. Finally, we discuss ways in which our suggestions may inform future career research.

The Protean Career Concept

Hall (1976) was one of the first academics to recognize and respond to potential shifts in the context of individual careers. Named after Proteus, the Greek god who was able to

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change his form at will, his protean career concept depicted a notion of career that was fundamentally different from traditional views. Hall (1976, p. 201) defined it as follows:

“The protean career is a process which the person, not the organization, is managing. [...] The protean career is not what happens to the person in any one organization. The protean person’s own personal career choices and search for self-fulfillment are the unifying or integrative elements in his or her life. [...] In short, the protean career is shaped more by the individual than by the organization and may be redirected from time to time to meet the needs of the person.”

Hall (1996, p. 10) claimed that “[the] path to the top has been replaced by the path with a heart”, thus assigning responsibility for a career to the individual rather than the employing organization. Hall further argued that career success, traditionally represented by growing salaries and hierarchical advancement, was increasingly defined by “psychological success”, that is “the feeling of pride and personal accomplishment that comes from knowing that one has done one’s ‘personal best’” (Hall & Mirvis, 1996, p. 26).

Notably, however, Hall still acknowledged the important role of organizations for individual careers. He suggested that a combination of high loyalty and PCO might be most effective for both parties (Hall, 2002). In contrast to traditional views of careers that assume predictable development over age and life stages, a PCP is said to evolve through a series of short learning cycles (Hall & Mirvis, 1996). In Hall’s (2002) view, these cycles are repeated every few years and lead to an increase in performance. Yet, despite such learning cycles, talking about an early, mid, and late career may still be appropriate (Hall, 2002). However, the inevitable periods of transition between learning cycles highlight that less predictability may be expected from a protean than a traditional career path and emphasize the importance of continuous learning throughout an individual’s life in order to cope with constant changes.

Hall (2002) argued that two so-called “metacompetencies” are required to pursue a protean career successfully: adaptability and identity. Hall defined a metacompetency as “a competency that is so powerful that it affects the person’s ability to acquire other

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competencies” (Hall, 2002, p. 160). According to the PCC (Hall & Mirvis, 1996), an individual must be able and willing to adapt to new situations to thrive in an environment where autonomy, self-direction, and proactive behavior are thought to be increasingly important. Yet, adaptability alone is not enough. The successful pursuit of a PCP requires a second metacompetency: identity. Hall (e.g., 2002, p. 172) predominantly used the term in the sense of “identity awareness”, synonymously with terms such as self-concept, self-image or self-awareness (Hall, 2004). Occasionally, however, he also referred to identity as “identity development” (2002, p. 32) and “identity learning”, that is “the ability to gather self-related feedback, to form accurate self-perceptions, and to change one’s self-concept as appropriate” (1996, 2002, p. 161). Hall (2002, 2004) has highlighted that both metacompetencies are required simultaneously. Interestingly, Lifton (1993) portrayed proteanism as a much broader psychological phenomenon, namely as “a sense of self appropriate to the restlessness and flux of our time” (p. 1), and described several surprising parallels to the PCC, even though he did not specifically refer to careers. For example, he alluded to the same balancing act between adaptability and identity as did Hall, highlighting that a dynamic environment may force individuals to rebalance the two metacompetencies constantly.

To date, only a few papers have critically and conceptually discussed elements of the PCC. Inkson (2006) focused on an in-depth examination of the term “protean” and its metaphorical meanings. Arnold and Cohen (2008) critically discussed the metaphorical implications of the term “protean” and the emphasis on individualism in the concept, but did not provide any justification as to why exactly these points were covered and others were not. Greenhaus et al. (2008) discussed the PCC only briefly; nevertheless they highlighted some important issues, such as the conceptual overlap between the protean and boundaryless career concepts. Sullivan and Baruch (2009) published a useful overview of career research between 1999 and 2009, but did not provide a critical analysis of the PCC. Some authors have

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attempted to build new career models, for example, using PCO as a predictor (e.g., Grimland et al., 2011) or moderator (e.g., DiRenzo & Greenhaus, 2011). However, although such papers provide potentially helpful extensions to the original concept, they usually do not critically examine the underlying PCC, which may diminish their conceptual relevance and practical applicability.

Therefore, more than three decades after Hall first depicted it, the core of the PCC has remained unchanged. The only conceptual refinement was made in 2006, in line with previous suggestions to portray the model along two dimensions (Hall, 2004) and based on the protean metacompetencies (Hall, 2002). Briscoe and Hall (2006) redefined a PCO along two dimensions that they called “values-driven” and “self-directed”, and presented them in a matrix with four potential career profiles. These two dimensions will be discussed in detail later in this paper.

Method

Our literature review has been undertaken between 2006 and 2013 with periodic searching in psychological and managerial electronic databases (e.g., PsycInfo, Business Source Complete) for peer reviewed academic articles published between 1976 (when the protean career was first mentioned) and August 2013. We searched for articles that had “career” and “protean”, “self-directed” or “values-driven” in their titles, abstracts, or keywords. The keywords “boundaryless” and “boundaries” were also used because publications on the boundaryless model often refer to the PCC as well. Further, we searched for articles referring to “traditional”, “new” or “contemporary” careers. Overall, this generated more than 300 articles. In addition, we also searched the reference lists of all sources collected, and performed citation searches that added several relevant texts including book chapters, dissertations and conference papers. After a first round of reading the collected articles, we selected both theoretical and empirical papers that specifically investigated either

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the protean or boundaryless concept. Papers that used either term in their abstract or title but were not fundamentally concerned with investigating them were excluded. Of the resulting 170 documents, we finally removed all texts that exclusively covered the boundaryless career or new careers in general, unless they made clear reference to the PCC, PCP or PCO. This resulted in 78 remaining texts that were selected for our analysis in the review¹.

An Integrative Literature Review

In this section, we provide an integrative review of the empirical protean career literature that builds on the theoretical work presented above. Empirical papers related to the PCC can broadly be differentiated regarding their focus on various aspects of the PCC, their research design and the specific variables and constructs they investigate.

Focus

Empirical research has almost exclusively focused on PCO, that is, on the subjective side of the PCC. Within this strand of research, three different perspectives can be found. The first and most prevalent perspective applies existing measures of PCO as predictors of career-related outcomes. Nevertheless, some researchers have studied it as a moderator (e.g., Colakoglu, 2005; Gasteiger, 2007) or as an outcome of preceding factors and processes (e.g., Jung & Takeuchi, 2011; Park, 2008). The second, less frequently adopted perspective tests and validates measures of PCO either by subjecting them to rigorous statistical analysis (e.g., De Bruin & Buchner, 2010) or by transferring them to new cultural contexts where they are validated (e.g., Enache, González, Castillo, & Lordan, 2012). Lastly, instead of focusing on existing PCO, a third perspective examines how a PCO develops in individuals, particularly in young people (e.g., Sargent & Domberger, 2007).

In contrast, we found only one study (Reitman & Schneer, 2003) that focused on PCP. This lack of attention to PCP is surprising. Much has been written about the assumed demise

¹ A structured overview of the documents included in our review is available upon request from the authors.

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of traditional careers (e.g., Cappelli, 1999), but there is substantial and solid evidence that such careers can still be found (e.g., Rodrigues & Guest, 2010). This is acknowledged even by authors of contemporary career concepts (e.g., Hall & Las Heras, 2009). However, to date, research on PCP, let alone their interplay with traditional career paths, is still scarce. Finally, some researchers have focused neither on PCO nor on PCP but on empirical examination of the two protean metacompetencies: adaptability (e.g., McArdle, Waters, Briscoe, & Hall, 2007) and identity (e.g., McArdle et al., 2007; Valcour & Ladge, 2008).

In summary, protean literature has mainly focused on PCO as a predictor of career outcomes, whereas alternative perspectives on the PCC (e.g., PCO as a moderator, analyses of PCP) have rarely been adopted. This reflects the agentic assumptions embedded in the PCC and also implies a privileging of its self-direction element over adaptability to labor market realities.

Research Design

Studies of PCO have mainly applied quantitative research designs, working with large samples and analyzing the responses with various statistical tools. Despite some notable exceptions (e.g., McArdle et al., 2007; Waters, Briscoe, & Hall, 2011), these studies have predominantly been cross-sectional. Only a few qualitative PCO studies have been reported (e.g., McDonald, Brown, & Bradley, 2005; Sargent & Domberger, 2007). Typically, these researchers interviewed a small sample of participants and used the data to try to assess the degree to which their participants had a PCO.

Most empirical papers have drawn upon Briscoe, Hall, and Frautschy DeMuth's (2006) operationalization of PCO and boundaryless career orientations and two scales for measuring them. The 14-item "protean career attitudes scale", developed from an earlier version by Hall (see Mintz, 2003), was tested in three studies (Briscoe et al., 2006) in which reasonable reliability and validity were found. Factor analysis showed that the protean scale can be split

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into two distinct subscales: self-directed PCO (eight items) and values-driven PCO (six items). In most papers using Briscoe et al.'s protean scale, both subscales have been applied. However, some researchers (e.g., De Vos & Soens, 2008; Jung & Takeuchi, 2011) have exclusively focused on self-directed PCO. Although Briscoe et al.'s scale has become dominant, several researchers have operationalized PCO in their own ways (e.g., Baruch & Quick, 2007; Segers, Inceoglu, Vloeberghs, Bartram, & Henderickx, 2008) and used these constructs to capture the extent to which individuals have a PCO. Surprisingly, a thorough examination of all these PCO measures is still lacking, as will be discussed later in this paper.

PCO studies have predominantly worked with samples from the USA, but since Briscoe et al.'s measure has become available, researchers have increasingly applied it outside its original cultural boundaries (e.g., Çakmak-Otluoğlu, 2012; Enache et al., 2012; Gasteiger, 2007). However, none of these studies has thoroughly discussed potential difficulties regarding the cultural transferability of that scale. Regarding the socio-demographic characteristics, most studies have worked with business and management students or professionals in managerial functions, as did, for example, Briscoe et al. (2006) when developing their scales. However, several researchers have studied non-managerial samples, such as Navy admirals (Baruch & Quick, 2007), artists (Bridgstock, 2007) and bus drivers (Baruch, Wordsworth, Wright, & Mills, 2012). They have shown that the PCC may well be a useful concept in a variety of contexts. Nevertheless, in conclusion, empirical literature on the PCC remains biased towards quantitative research applying Briscoe et al.'s (2006) scales with a focus on US-based, managerial (and thus predominantly male) samples.

Correlates of PCO

PCO and career success.

Arguably as a consequence of its centrality in the PCC, subjective career success is the most frequently studied construct in relation to PCO. Subjective career success is the extent to

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which an individual perceives his/her own career as successful (Heslin, 2005). Hall (e.g., Hall & Chandler, 2005, p. 158) also used this term as a synonym for psychological success. Studies have predominantly found a positive relationship between having a PCO and subjective career success, operationalized by variables such as career satisfaction (e.g., Gasteiger, 2007; Volmer & Spurk, 2010) and job satisfaction (e.g., Baruch & Quick, 2007; Jung & Takeuchi, 2011). Further, PCO has been found to moderate the relationship between perceived investment in employee development and career satisfaction (Jung & Takeuchi, 2011). Also, career insight mediated the positive relationship between PCO and career satisfaction as well as perceived employability (De Vos & Soens, 2008). Such findings are in line with Hall's (2002) assumptions regarding individuals with a high PCO. Most studies have reported positive relationships between PCO and subjective career success for both of Briscoe et al.'s (2006) PCO subscales, but some (Enache, Sallan, Simo, & Fernandez, 2011; Gasteiger, 2007) found that relationship only for self-directed but not for values-driven PCO. Potential reasons for such differences have not been discussed.

In addition, as subjective and objective career success are interdependent (e.g., Abele & Spurk, 2009; Hall & Chandler, 2005), several studies have covered the relationship between PCO and objective career success, that is success "directly observable, measurable, and verifiable by an impartial third party" (Heslin, 2005, p. 114). Regarding salary, the most common proxy for objective career success, mixed results have been reported. Some researchers found a positive relationship between PCO and salary (Volmer & Spurk, 2010), whereas others did not (e.g., Baruch et al., 2012; Gasteiger, 2007). Moreover, various positive relationships have been reported between PCO and proxies of objective career success, such as hierarchical position (Jung & Takeuchi, 2011), number of promotions, budget responsibility, and number of subordinates (Gasteiger, 2007, for values-driven PCO).

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Lastly, PCO has been found to be positively related to managing insecure job settings successfully (Briscoe, Henagan, Burton, & Murphy, 2012) and to job search and re-employment of unemployed individuals (McArdle et al., 2007; Waters et al., 2011). Such observations indicate that a high PCO may support individuals in dealing with career transitions, thereby providing empirical support for Hall's (2002) assumptions.

PCO and commitment.

Baruch and colleagues (Baruch et al., 2012; Grimland et al., 2011) found a significant positive relationship between PCO and organizational commitment. Also, organizational commitment was reported to mediate partially between PCO and career satisfaction (Grimland et al., 2011). Thus, in line with Hall's (2002) claims, but contrary to what could be expected based on the self-directed element of the PCC, having a high PCO may not affect organizational commitment negatively.

However, results have been inconclusive in studies that differentiated between continuance, normative and affective commitment. For example, PCO has been found to be positively related to affective commitment (Fernandez & Enache, 2008), but in other studies this was only the case for self-directed PCO (Çakmak-Otluoğlu, 2012) or no significant relationship at all was detected (Briscoe & Finkelstein, 2009). Regarding continuance commitment, Briscoe et al. (2009) did not find any significant relationship, whereas Çakmak-Otluoğlu (2012) reported a negative relationship for self-directed PCO. However, these studies were conducted in different cultural settings and used different analytical approaches, so direct comparison is difficult.

PCO and other constructs.

In research applying both the protean and the boundaryless scales by Briscoe et al. (2006), having a boundaryless mindset has been found to be positively related to PCO (e.g., Briscoe & Finkelstein, 2009), thus supporting claims that the two concepts are related

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(Briscoe et al., 2006). However, with the exception of Jung and Takeuchi (2011), several studies did not find any significant relationship between PCO and mobility preference (e.g., Briscoe & Finkelstein, 2009; Briscoe et al., 2006). This is notable because contemporary career concepts are often thought to be associated with high inter-organizational mobility (e.g., Inkson, 2006).

Various empirical studies have reported correlates that support the assumptions made in Hall's original concept. Regarding the two metacompetencies, for example, PCO was positively related to adaptability (Buchner, 2009), and self-directed PCO was positively related to identity awareness and career identity (Briscoe et al., 2012). Interestingly, proactivity, a concept that is arguably close to self-direction, has not been significantly related to PCO to date (e.g., Baruch & Quick, 2007). In line with the PCC, other reported correlates of PCO include continuous and team learning (Park, 2008, for self-directed PCO), learning performance, variety, innovation and altruism, cooperation, and openness to change (Gasteiger, 2007). Such findings support claims that having a high PCO is not equal to being selfish and self-centered (e.g., Granrose & Baccili, 2006; Hall, 1999) even though the PCC definition invites such assumptions (Sargent & Domberger, 2007). Further, in Gasteiger's (2007) study, managers with a high PCO tended to strive for personal growth, had a high need for autonomy and self-actualization, showed higher levels of frustration tolerance, and were more inclined to change employers if their personal values were not met. Also, managers with a high PCO are perceived as effective leaders in the eyes of their subordinates (Briscoe, Hoobler, & Byle, 2010). A positive relationship has been found between PCO and both instrumental and psychological support from networks (Gasteiger, 2007) and social capital (Grimland et al., 2011). Lastly, although the PCC is sometimes thought to be particularly useful to understand careers of women (e.g., Valcour & Ladge, 2008), some studies have found significant gender differences regarding PCO (higher scores for women on values-

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driven PCO, e.g., Çakmak-Otluoğlu, 2012; Segers et al., 2008), whereas others have not (e.g., Briscoe & Finkelstein, 2009; Grimland et al., 2011).

Overall these empirical studies provide valuable insights regarding the PCC and, in particular, the PCO. For example, they suggest that PCO is positively related to positive outcome variables, such as subjective career success. However, the lack of an overarching framework has meant that some possibly key elements, such as the protean metacompetencies, have received scant attention to date. Also, studies differ greatly in their conceptual precision and the way in which key terms are operationalized. For example, the four papers in our literature review that explicitly addressed proactivity (Baruch & Quick, 2007; Briscoe et al., 2006; McArdle et al., 2007; O'Sullivan, 2002) applied three different measures of PCO and three different definitions and measures of proactivity. This makes it difficult to compare findings across studies. It might also explain the inconsistent or even contradictory findings in empirical PCO research. Lastly, the predominantly cross-sectional research designs make it impossible to establish causal directions in findings.

In summary, although there is a growing body of empirical literature on PCO, it has some major limitations, such as an often imprecise usage of key terms of the concept, a neglect of the protean metacompetencies, a bias towards US-based, managerial samples, and a heavy reliance on Briscoe et al.'s (2006) scale for measuring PCO. Based on our literature review, we therefore identified two critical areas that require development: (1) the conceptual clarity of the PCC; and (2) the operationalization and measurement of the PCC. In our view, these two areas require revision, as discussed in the following section.

Refining the Protean Career Concept

Conceptual Clarity

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In terms of conceptual clarity, two themes need specific attention: unclear protean terminology and the often overly agentic, normative and universalistic claims in the protean literature.

Protean terminology.

Various authors (e.g., Arnold & Cohen, 2008; Gasteiger, 2007) have pointed out that it is far from clear what “being protean” actually means. Values, for example, are considered important in the PCC, but it is not clear which values are referred to in the concept, and hardly any study has addressed this research gap. Domberger (2005) concluded that work-life balance and work making a social contribution were the core values of individuals with a high PCO. However, her small qualitative research setting with young individuals makes it difficult to generalize that finding. From a conceptual point of view, Arnold and Cohen (2008) cautioned that being “values-driven” does not have to mean valuing self-expression and autonomy, as has often been implied in the protean literature (e.g., Hall & Richter, 1990). Instead, the term could mean valuing loyalty, conformity, service, security or lifestyle (Arnold & Cohen, 2008; Gerber, 2009).

Similarly, the distinction between subjective and psychological success, the notion of “balance” in the PCC, as well as the terms “identity” and “adaptability”, both of which are core to the PCC, require further clarification. For example, Greenhaus et al. (2008) pointed out that adaptability might well be a consequence rather than a precondition of PCO. Also, in support of Inkson (2006), they argued that adaptability as a metacompetency is more likely to be an enabler rather than a distinguishing feature of PCO. However, no empirical study has examined these arguments. Further, although Hall and colleagues provided two refined models of adaptability (Hall, Zhu, & Yan, 2002) and identity development (Hall & Chandler, 2005), both still await empirical testing. Lastly, despite some plausible conceptual arguments for the relevance of the two protean metacompetencies and the corresponding “values-driven”

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and “self-directed” dimensions (e.g., Briscoe & Hall, 2006; Hall, 2002), these elements have hardly been critically and empirically examined. Inkson (2006) argued that the metaphorical meaning of the term “protean” over-emphasizes adaptability, thereby ignoring the identity metacompetency. In contrast, as shown above, our literature review revealed that protean research has often privileged agency over adaptability. In short, the key terms of the PCC require further conceptual clarification and empirical validation.

Arguably as a result of such imprecision regarding the core terms of the PCC, we found many papers in which the PCC was narrowly interpreted or imprecisely referred to. For example, Park (2008) consistently used the term “protean career” even though he meant PCO. Other researchers used “protean career” as a synonym of boundaryless career (e.g., O'Sullivan, 2002; Reitman & Schneer, 2003). Neglecting the conceptual development of these two concepts for a long time may have contributed to their often imprecise usage. Both have been construed as opposites of “traditional” careers (Inkson, 2006). However, a precise definition of that term is also lacking (Clarke, 2012), and the dichotomy between “old” and “new” careers may be too simplistic (e.g., Arnold & Cohen, 2008). For example, regarding the PCC, a high emphasis on self-direction may well coexist with low levels of physical mobility—a typical aspect of “traditional” careers—, as has been repeatedly confirmed in empirical studies (e.g., Briscoe et al., 2006). Unless the PCC and related concepts are defined more precisely, it will be impossible to distinguish them clearly and, as a result, to measure them accordingly.

Individual agency, normative claims, and transferability.

The PCC, like most contemporary career concepts, emphasizes the role of individual agency. Roper et al. (2010) argued that such agentic views may be rooted in the neo-liberal ideology that was prevalent in the mid-1990s. According to Hall (2002), following a PCP offers much autonomy and freedom for individuals with high levels of identity and

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adaptability. However, it may be terrifying to people without protean metacompetencies (Hall, 1996) or to those in a traditional organizational career environment (Gasteiger, 2007). Agency, therefore, may not be equally relevant to all groups of employees (Inkson, Ganesh, Roper, & Gunz, 2010). In addition, we strongly question whether individuals can and should be made protean as Hall (2004) suggested. Arguably, “making” someone protean would contradict the very core of the concept that portrays an individual as being values-driven and self-directed.

In line with various authors (e.g., Guest & Mackenzie Davey, 1996) who have argued that contemporary career concepts tend to neglect potential negative aspects for individuals, Arnold and Cohen (2008) cautioned that heralds of the PCC have often adopted a normative view by implying that being protean is necessarily positive (e.g., Hall & Richter, 1990). In our literature review, however, despite some notable exceptions (e.g., Gasteiger, 2007), we found hardly any empirical papers that addressed this issue.

Further, building on various authors (e.g., Mayrhofer, Meyer, & Steyrer, 2007; Schein, 1984), we contend that there may well be cross-cultural differences in the extent to which people exhibit a PCO and/or pursue a PCP, and in relationships between PCO/PCP and other variables. For example, due to relatively strong structural forces people in more collectivist (e.g., Asian) cultures might have lower PCO scores and less connection between scores and career outcomes compared with individuals from more individualist (e.g., Western) cultures. As shown above, several studies (e.g., Çakmak-Otluoğlu, 2012; De Vos & Soens, 2008) have responded to calls for more empirical PCC research in non-US contexts, mainly by applying Briscoe et al.’s (2006) measure of PCO in various countries. However, we only identified two PCC studies (Gasteiger & Briscoe, 2007; Segers et al., 2008) that included direct cross-cultural comparisons. Therefore, we still have only a limited understanding of how cultural differences affect scores on PCC-related measures.

Operationalization and Measurement

The second key area in which the PCC requires revision is its operationalization and measurement. As shown above, a number of studies have used Briscoe et al.'s (2006) PCO scales, providing empirical support for various aspects of the PCC. However, Inkson et al. (2010, p. 13) cautioned that "such measures imply characterization not of the whole career, but of subjective career attitudes at a particular point in time". More broadly, Arnold and Cohen (2008) pointed to the contradiction between the vague description of the concepts and attempts to measure them precisely. Greenhaus et al. (2008) highlighted that it is conceptually not clear whether "being protean" is a dichotomous or continuous variable, although scales treat it as continuous. In the next sections, therefore, we critically examine Briscoe et al.'s (2006) approach as well as alternative attempts to operationalize and measure PCO.

Briscoe et al.'s (2006) PCO operationalization.

Briscoe et al.'s (2006) operationalization of PCO, including their corresponding scale, was a major step forward for PCC research. However, we have two main concerns regarding their operationalization. First, as shown above, Briscoe and Hall (2006) suggested that a PCO should be measured along the two dimensions "values-driven" and "self-directed". They (p. 8) defined the two terms as elements of a career in which the person is:

"(1) values-driven in the sense that the person's internal values provide the guidance and measure of success for the individual's career; and

(2) self-directed in personal career management—having the ability to be adaptive in terms of performance and learning demands."

We note that most items of the "values-driven" dimension (items 9-14, Briscoe et al., 2006, p. 45) imply that personal values and organizational values are opposites that cannot be reconciled. However, this conflict is not inherent in Briscoe and Hall's definition.

Furthermore, the "self-directed" dimension is rather marginally mirrored in this scale. Only the first item ("When development opportunities have not been offered by my company, I've

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sought them out on my own”) directly addresses self-directed aspects as mentioned in the definition above. The other items are much more in line with an earlier definition of “self-directed” as “the extent to which the person feels independent and in charge of his or her career” (Hall, 2004, p. 8).

Second, this operationalization does not make clear reference to the two protean metacompetencies. Yet, Hall has repeatedly argued that adaptability and identity are essential for individuals to navigate their careers actively because they allow “people to learn from their experience and develop any new competencies on their own” (Hall, 2004, p. 6). A new, broader operationalization of the PCO should thus include the two metacompetencies.

DeBruin and Buchner (2010) provided a thorough statistical examination of Briscoe et al.’s (2006) measure. Most importantly, they argued that the values-driven subscale splits into two different factors, one of them resembling aspects of self-direction. This finding was confirmed in a recent validation of the scales in a Spanish context (Enache et al., 2012). Surprisingly, to our knowledge no other study has critically examined these scales, particularly not their construct validity. As a result, research attempting to capture the extent of individuals’ PCO may currently be built on imprecise foundations. We argue that a thorough evaluation and, if necessary, a revision of the operationalization is key to any future research building on the PCC.

Other operationalizations of PCO and PCP.

Alternative operationalizations of PCO and PCP vary substantially in their complexity and content. Having a PCO has been interpreted as social networking and information seeking (O’Sullivan, 2002) or as having a high need for work-life balance (Granrose & Baccili, 2006). McDonald et al. (2005) used four criteria (e.g., attitude to learning) to identify individuals with a high PCO. Nevertheless, these early operationalizations did not discuss in detail why particular criteria were chosen and, arguably, did not cover all key aspects of the PCC. In a

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study of artists' career success in Australia, Bridgstock (2007) defined a PCO as consisting of “strong internal motivations; self-direction; proactivity; resilience and adaptability; openness to career opportunities; a positive self-image; and a positive interpersonal orientation” (p. 11). For each of the seven themes she developed one item and tested her scale on a sample of 528 individuals. After a thorough data analysis, Bridgstock's final scale comprised six items (the item for positive self-image was deleted). Even though the theoretical underpinning was unclear, Bridgstock made an innovative attempt to capture the PCO that deserves further consideration.

Baruch and Quick (2007) suggested an eight-item scale to measure PCO, but there was a strong normative tone in some items. For example, the item “I make my career choices based primarily on financial considerations” implied that valuing money cannot be a protean value. In addition, some items arguably focused on aspects of the boundaryless, rather than the protean career concept. Segers et al. (2008) operationalized protean and boundaryless career concepts by analyzing a large international sample based on scores on a motivational questionnaire. However, the authors used the two terms almost synonymously and did not attempt to examine the concepts critically.

Reitman and Schneer (2003) operationalized a PCP as working full time for several organizations over a given time period, which does not match well with Hall's (1976) original definition. However, to our knowledge, to date they have offered the only attempt to measure PCP empirically. In the future research section, we provide some suggestions on how this aspect of the PCC may be addressed.

A Refined Conceptualization of the Protean Career Concept

We do not regard the protean concept as an absolute truth. Rather, in line with Arnold and Cohen (2008), we view it as a useful tool that may help to explain some career phenomena. Based on this understanding, we propose a refined conceptualization of the PCC

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that is solidly anchored in the original concept, takes into account the dimensions presented by Briscoe and Hall (2006) but also encompasses components that have not been addressed previously. We build on Hall's (1976, p. 201) original definition of the protean career as "a process which the person, not the organization, is managing". As suggested by Briscoe and Hall (2006), the new conceptualization consists of two dimensions, called "values-driven" and "self-directed". Each dimension comprises two components, as shown in Table 1.

---- *Insert Table 1 here* ----

Component 1 ("Being clear on one's needs, motivation, abilities, values and interests") is based on the description of "identity" in the sense of "identity awareness" as a metacompetency for the protean career (Hall, 2002, 2004). Hall (2002, p. 172) put it as follows:

"A strong sense of identity is a prerequisite for pursuing a successful protean career. If the person is not clear on his or her needs and motivation, abilities, values, interests, and other important personal elements of self-definition, it would be very difficult to know where to head in life."

Briscoe and Hall (2006) did not explicitly integrate this aspect in their conceptual arguments. However, Hall's repeated references to the importance of this metacompetency make it a crucial element that needs to be included in a more complete conceptualization of the PCC. Also, as shown in Table 1 as well as in the literature review above, various authors (e.g., McArdle et al., 2007; Valcour & Ladge, 2008) have provided support for the relevance of this component.

Component 2 ("Having personal values that are both the guidance and the measure of success in one's career") is well covered by Briscoe and Hall (2006) and anchored in Hall's (1976) original definition of the protean concept. The relevance of this component has been repeatedly discussed in the PCC literature (e.g., Arnold & Cohen, 2008; Gerber, 2009). However, in support of Arnold and Cohen (2008), we contend that being "values-driven" does not mean that personal values have to contradict organizational values as implied by

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Briscoe et al. (2006). Therefore, the term is viewed here as following one's own inner guidance instead of someone else's, regardless of whether this is in line with or opposed to any organizational values.

Component 3 ("Being both competent and motivated to learn and to adapt to a changing environment") is mainly based on earlier work by Briscoe and Hall (1999) and their suggestions about the development of an individual's ability to learn. This primarily reflects the second protean career metacompetency of "adaptability" (Hall, 2002), which is core to the PCC, but also partly covers the notion of being "self-directed" (Briscoe & Hall, 2006). As shown above, despite the widely acknowledged conceptual relevance of this component in the PCC (e.g., Inkson, 2006), only a few researchers have addressed it empirically (e.g., Buchner, 2009).

Component 4 ("Having a feeling of independence and of being in charge of one's career") mirrors an original key aspect of the PCC (Hall, 1976, 2004). It clearly addresses the notion of being "self-directed" (Briscoe & Hall, 2006). Our literature review has further confirmed the conceptual relevance of this component to the PCC (e.g., Arnold & Cohen, 2008; Inkson, 2006). Interestingly, although this component was not explicitly covered by Briscoe and Hall (2006), it was included in their corresponding scale (Briscoe et al., 2006).

Overall, our refined conceptualization of the PCC includes the two hitherto missing metacompetencies ("identity", "adaptability") in addition to the two protean dimensions ("values-driven", "self-directed") suggested by Briscoe and Hall (2006). This allows us to address two crucial aspects of protean careers: the simultaneous existence of stabilizing forces ("identity") and the capability to adapt easily to changes in the environment ("adaptability"). Not only have these aspects been repeatedly highlighted in the protean literature (e.g., Briscoe & Hall, 1999; Hall, 2002) but they were also supported by Lifton (1993, p. 9), who labeled proteanism "a balancing act between responsive shapeshifting, on the one hand, and efforts to

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consolidate and cohere on the other”. As a result, our conceptualization captures the PCC more broadly and is conceptually more solidly rooted than previous ones.

Future Research

In support of various authors (e.g., Arnold & Cohen, 2008; Greenhaus et al., 2008), we argue that further development in two key areas is required in order to make the most of the PCC and its potential. First, we call for the development of conceptually more robust measures for PCO and PCP. Not only would this strengthen promising conceptual developments that build on existing scales (e.g., Briscoe & Hall, 2006; Grimland et al., 2011), but such scales could also serve as solid tools in future research to address several of the shortcomings encountered in our literature review. Second, although we have argued for the importance of the PCC, we acknowledge that its added value and distinctiveness remain to be conclusively demonstrated. To prove their worth, measures of PCO and PCP need to be differentiated from other career measures, connected to other variables in meaningful ways, and ideally (where used as predictors) explain variance that other constructs do not.

Developing New PCC Measures

Regarding PCO, as shown in our literature review, some research has already made helpful attempts towards measurement (e.g., Briscoe et al., 2012; Buchner, 2009, linking PCO and metacompetencies). Nevertheless, we believe that new items need to be developed that will overcome existing scale limitations. In particular, the items should stay close to the core concepts and avoid assuming a conflict between individual and organization. Further, we suggest that the identity and adaptability metacompetencies *per se* should not be measured as part of a future PCO scale. Conceptually, how competent a person is at something is not the same as his/her attitude, or orientation, to it. However, we argue that a PCO does include appreciating the need for and valuing the goals of achieving identity and adaptability. Thus,

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although a PCO does not comprise the metacompetencies themselves, it includes a valuing of them and a belief in their importance.

The literature presented in Table 1 could provide items for measures of PCO and/or PCP. For example, certain items from measures of career competencies (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2013; Francis-Smythe, Haase, Thomas, & Steele, 2013; Kuijpers & Scheerens, 2006), adapted so that they reflect orientations, could help with the measurement of components 1 and 3. Regarding component 2, Wrzesniewski et al.'s (1997) research on work orientations provides a scale that captures a "calling" orientation to career. However, with the notable exception of Park (2008), that concept has not yet been linked to the PCC. In Savickas and colleagues' (e.g., Porfeli & Savickas, 2012; Savickas & Porfeli, 2012) "career adapt-abilities" measure and underlying conceptualization, the curiosity subscale is most likely related to adaptability as defined in the PCC, and arguably also the confidence and control subscales relate to being self-directed. Existing measures from the career self-management literature (e.g., Sturges, Conway, Guest, & Liefoghe, 2005) may provide useful input to measure component 3. Similarly, for component 4, the self-directed dimension, we suggest that existing proactivity scales (e.g., Bateman & Crant, 1993) might be useful sources. Lastly, we contend that including some reverse-coded items, as suggested by Gasteiger (2007), may add methodological strength to future protean scales.

As highlighted, the measurement of the PCP has been widely neglected in the protean literature. Thus, developing tools that can capture the PCP would be beneficial. According to our PCP definition and the four PCC components in Table 1, a PCP can take many observable forms. For example, it may manifest itself either as a highly mobile or a highly stable career path, as long as an individual has pursued that particular path based on his/her identity, values, adaptability, and self-direction. In other words, an observable career path may or may not be a PCP, depending on an individual's underlying PCO, his/her metacompetencies and

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whether the PCO and metacompetencies are successfully mobilized in career behavior. One option to capture PCP could be to ask individuals retrospectively to consider the specific ways and occasions their career has and has not matched the elements in Table 1. Qualitative methods may be appropriate to capture the complexities, such as the likelihood that some components of the PCC may not be simultaneously in evidence. For example, deploying adaptability may be a response to being less in charge of one's career than one would like. Also, although a PCP might be most easily identified in the context of job moves, it is also necessary to take into account decisions not to move, and to try to craft one's present job.

In line with Lifton's (1993, p. 136) claim that "protean patterns best reveal themselves over the course of entire lives", we argue that sequence analysis, a technique initially developed to study patterns of DNA sequences in biology, has the potential to lead to a substantially better holistic understanding of career dynamics over time (e.g., Biemann, Zacher, & Feldman, 2012; Vinkenbug & Weber, 2012). As argued above, there is no obvious *a priori* basis on which to hypothesize that particular objective career patterns will be associated with PCO. Therefore, identifying empirical associations that may exist between PCO and career patterns might reveal highly valuable new insights. For example, it may help to establish whether the protean learning cycles (Hall & Mirvis, 1996) can be empirically confirmed and whether individual differences in PCO result in observably different career paths over time.

The Added Value of the PCC

It could be argued that the careers field is in danger of a surfeit of closely related constructs and measures, akin to the situation Morrow (1983) complained about regarding commitment. Our intention here is not to add to the congestion, or create redundancy. Instead, we want to specify the conceptual foundations for the development of a parsimonious but relatively wide-ranging measure that will reduce the need for some of the others. To achieve

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this, it will be necessary to demonstrate not only the intrinsic psychometric properties of a measure but also ideally its discriminant validity in relation to others. If items from some of those measures have been used or adapted in the PCO measure, care will obviously be needed to ensure that there is no item duplication in a test of discriminant validity.

One area in which the uniqueness of the PCC may be particularly open to examination concerns the “values-driven” dimension and its relationship with “career calling”. The secular notion of a calling focuses on career rewards that go well beyond traditional indicators of career success (Hall & Chandler, 2005), and is therefore conceptually related to the values-driven protean dimension. However, some analyses of calling in a career context, including by Hall himself (Hall & Chandler, 2005), include additional elements such as responding to some kind of summons, and benefiting others (e.g., Bunderson & Thompson, 2009; Duffy & Dik, 2013). We argue that the values-driven element of the PCC does not necessarily imply either of these elements. From an empirical point of view, an important question is therefore whether elements of calling not included in the values-driven dimension have significant correlates and consequences over and above values-driven.

Further, we suggest that career anchors (Schein, 1978)—a concept of values-driven career orientations (Rodrigues, Guest, & Budjanovcanin, 2013)—may offer a promising additional focus for research on the PCC. Some anchors can easily be related to elements of the PCC, such as “autonomy and independence” and “service and dedication” that seem conceptually close to Briscoe and Hall’s (2006) notion of the “self-directed” and “values-driven” dimensions. However, there may be a distinction between the values people bring to bear in managing their careers vs. those that govern the types of work they seek. This is akin to the distinction between values as means and as ends (Rokeach, 1973). Arguably, career anchors represent the latter, and the PCC the former. If this reasoning is correct, then all career anchors, including for example “security” or “lifestyle”, should be compatible with a

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PCO and PCP. Empirically, it would be valuable to examine this question because it would help to establish whether the PCC is the preserve of individualist go-getters only, as sometimes implied, or whether it is open to all-comers.

Once measures have been developed, the relationships between PCO, PCP, meta-competencies and potential antecedents and outcomes should be investigated. Longitudinal and possibly qualitative research will be required in order to examine whether PCO and PCP (and which elements of them) tend to go together, and whether the metacompetencies play an enabling role, as has been suggested. The associations here may be quite complex. For example, perhaps awareness of the need for adaptability and/or identity is negatively correlated with self-perceived competence in these areas, yet awareness and competence may both be positively associated with outcomes. It will be particularly important to examine the relationships between PCO and PCP on the one hand, and outcomes such as career satisfaction, well-being, and performance on the other, in competition with other career constructs that are demonstrably different from PCC. These competing constructs might include traditional career measures such as career planning (e.g., Rottinghaus, Day, & Borgen, 2005) and decidedness (e.g., Jones, 1989), and also socially-oriented measures such as networking behavior (Forret & Dougherty, 2001). On this last point, the PCC is notably intra-personal and although some dimensions of it might imply social behaviors, these are in the background. This leaves open the intriguing possibility of a test of the relative roles of individual vs. interpersonal elements of career management. The “intelligent career” competencies of knowing why, knowing how and knowing whom (Arthur, Claman, & DeFillippi, 1995) collectively bridge this gap and there is some suggestion that both the intrapersonal and interpersonal matter (Eby, Butts, & Lockwood, 2003). However, these constructs and measures are rather under-specified and the evidence is not plentiful.

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Another research opportunity arises from chance events in careers (e.g., Bright, Pryor, & Harpham, 2005), which have not been addressed in a protean context, except for Grimland et al.'s (2011) recent study. This is surprising, as the development of the PCC was substantially influenced by a major chance event, namely Tim Hall's father's narrow escape from a plane crash and his subsequent values-driven job change (Hall, 2004). Such events might be a strong test of the PCO because they tend to be unexpected, which likely prompts people to use ingrained ways of thinking and cognitive scripts (e.g., Mintz, 2003).

In conclusion, we argue that building on a broader and conceptually solidly rooted approach to the PCC, as outlined in this paper, will allow researchers to add many fresh perspectives to the current literature and, thereby, to respond to calls for a more holistic view of careers (e.g., Savickas et al., 2009).

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Table 1: Refined conceptualization of the protean career concept

Concept	Dimension	Component	Core aspect	Source of conceptualization	Relevant protean literature	Relevant measurement literature	
Protean career concept	Values-driven	1	Being clear on one's needs, motivation, abilities, values and interests	Identity	Hall (2002) Hall (2004)	Briscoe & Hall (1999) McArdle, S., Waters, L., Briscoe, J. P., & Hall, D. T. (2007) Briscoe, J. P., Henagan, S. C., Burton, J. P., & Murphy, W. M. (2012)	Career identity (e.g., Carson & Bedeian, 1994) Various career competencies (Akkermans et al., 2013; Francis-Smythe et al., 2013; Kuijpers & Scheerens, 2006)
		2	Having personal values that are both the guidance as well as the measure of success in one's career	Being values-driven	Briscoe & Hall (2006) Hall (1976)	Briscoe, Hall, & Frautschy DeMuth (2006) Baruch & Quick (2007) Hall & Chandler (2005)	Career anchors (Schein, 1978) Work orientations (Wrzesniewski et al., 1997)
	Self-directed	3	Being both competent and motivated to learn and to adapt to a changing environment	Adaptability	Briscoe & Hall (2006) Hall (2002)	Briscoe & Hall (1999) Briscoe & Hall (2006) Baruch & Quick (2007) Hall, Zhu, & Yan (2002)	Career adapt-abilities (e.g., Porfeli & Savickas, 2012; Savickas & Porfeli, 2012) Career self-management (e.g., Sturges et al., 2005) Various career competencies (Akkermans et al., 2013; Francis-Smythe et al., 2013; Kuijpers & Scheerens, 2006)
		4	Having a feeling of independence and of being in charge of one's career	Being self-directed	Hall (2004) Hall (1976)	Briscoe, Hall, & Frautschy DeMuth (2006) Baruch & Quick (2007)	Proactivity (e.g., Bateman & Crant, 1993)