

Protean Careers at Work: Self-Direction and Values Orientation in Psychological Success

Douglas T. (Tim) Hall,^{1,*} Jeffrey Yip,^{2,*}
and Kathryn Doiron²

¹Questrom School of Business, Boston University, Boston, Massachusetts 02215, USA;
email: dthall@bu.edu

²School of Social Science, Policy & Evaluation, Claremont Graduate University, Claremont,
California 91711, USA; email: jeffrey.yip@cgu.edu, kathryn.doiron@cgu.edu

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*These authors contributed equally to this article

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Abstract

How do self-direction and personal values influence career outcomes? Such questions have been central in research on the protean career—a career process characterized by the exercise of self-direction and an intrinsic values orientation in the pursuit of psychological success. This article provides an integrative review, with a focus on three empirically supported protean processes—identity awareness, adaptability, and agency. In addition, we discuss the role of protean careers in the contemporary work environment, clarify definitional and measurement issues, recommend research directions, and provide practical implications for organizations. Our underlying assumption throughout this discussion is that the elements of a protean career orientation (PCO) are basic elements of human needs for growth and meaning. In addition, we discuss how protean careers can be beneficial for organizations. In particular, we identify the “Protean Paradox” as a phenomenon that merits further investigation. More specifically, the protean paradox is a process by which greater levels of individual self-direction and values orientation, thus serving the purpose and interests of the individual, can also have a positive influence on the groups and organizations in which they work. Our recommendations for future research and practice promote these qualities in the contemporary world of work.



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The future is not someplace we are going to, but one we are creating. The paths to it are not found but created, and the activity of creating them changes both the maker and the destination.

—John Homer Schaar (1989)

INTRODUCTION

Change is one of the great constants in careers and organizational life. As Peter Drucker (1973) notes, “the only thing we know about the future is that it is going to be different” (p. 44). Across the globe, the rapid pace of change, accelerated by technology and globalization, has given rise to a so-called gig economy, characterized by more frequent career transitions as well as virtual and contingent work (Barley et al. 2017). Traditional employment relationships are in decline and are giving way to the rise of alternative work arrangements (Katz & Krueger 2017). This requires greater levels of self-direction and adaptability on the part of job seekers and employers. From a psychological perspective, what are the career orientations and processes that enable people to thrive and adapt to these changes? How might people come to exercise more self-direction and enact their values in the course of a career? Questions such as these have been central in research on organizational careers, particularly in research on the protean career (Hall 1976, 2004).

Protean careers are characterized by the exercise of self-direction and a focus on intrinsic values in the pursuit of psychological success. This is an agentic orientation toward one’s career, in which the person aspires to be self-directed in his or her career choices and guided by intrinsic values (Hall 2002). This view is in contrast with the traditional view of careers, guided by the organization and other external factors instead of the individual and driven by the pursuit of extrinsic success (e.g., salary, advancement; Hall 2004). More specifically, the protean career orientation (PCO) is an attitude toward careers that involves self-direction (the desire to be agentic, in charge of one’s career) and a values orientation (a desire to make career decisions that are driven by intrinsic values; Briscoe et al. 2006). It is an orientation in which the person is in charge—not an organization or other people.

Research on protean careers differs from other career perspectives that focus on the role of the environment and socialization in shaping a person’s occupational choices, e.g., Holland’s (1997) model of person-occupation fit and Super’s (1957) focus on the synthesizing of self-image with the occupational role. The protean concept suggests a very agentic role for the individual. The other unique aspect of the protean concept is the internal motivation that is provided by the person’s intrinsic values that drive the person’s agentic sources. This is the “engine” or motivation for the person’s career decisions.

Being self-directed and values driven is not a given and is particularly difficult in today’s work environment, which is characterized by volatility, uncertainty, complexity, and ambiguity (VUCA) (Bennett & Lemoine 2014). The critical forces causing global economic inequality are not operating at a level that an individual can control directly. These are macroeconomic and institutional forces, which include globalization, technology, and environmental changes, which are happening at an accelerating rate. Thomas Friedman likened these swirling forces to a hurricane:

These accelerations in technology, globalization and Mother Nature are like a hurricane in which we’re all being asked to dance. Trump and the Brexiters sensed the anxiety of many and promised to build a wall against these howling winds of change. I disagree. I think the challenge is to find the eye. (Friedman 2016a)

In our review, we found multiple studies with evidence on the relationship between the protean career orientation and adaptability in the face of uncertainty and change (Briscoe et al. 2012, Waters

et al. 2014). A cyclone can indeed provide incredible energy for the person or system that can be strong and adaptable enough to harness it. The PCO is not just something that may be “nice to have” in this environment—we would argue that it is necessary, a key to psychological success in a changing world.

In this integrative review, we (a) situate the phenomenon and relevance of protean careers in the contemporary work environment; (b) review existing studies to develop an integrative framework for understanding how self-direction, a values orientation, and psychological success are central to the enactment of a protean career; (c) describe future research topics and methods based on our review; and (d) provide practical recommendations for career management and organizational behavior.

PROTEAN CAREERS IN TIMES OF DISCONTENT

As Warren Bennis (personal communication) observed, the future is not what it used to be. Much of the social, economic, and political upheaval in the world today is related to the discontent with which many people regard their career identity and sense of control and meaning in their lives. Much of this turbulence has to do with the desire of people to have more say in the events that affect their lives and to lead lifestyles that fit with their deeply held values (Friedman 2016b, Hochschild 2016). Many people aspire to have successful jobs and careers, and they see some of the elites (the top 1%) in their societies enjoying privileged, self-directed protean careers, while they are frustrated and blocked from realizing their own dreams. Many people feel left behind, as they see others in their societies moving far ahead of them (for more details, see Vance 2016, Cramer 2016). Many people thus feel that their careers in recent years have been anything but protean; in fact, for them the opposite is true, and their careers feel out of control and devoid of meaning and purpose (Baruch & Vardi 2016).

There is evidence of class conflict, working class discontent, hypernationalism on the right, and anger at gender and income inequality on the left (Frank 2016, Hacker & Pierson 2011, Milanovic 2016, Piketty 2014, Stiglitz 2012). Although these forces manifest themselves in dramatic events such as shocking electoral upsets (e.g., in the United States and the United Kingdom), the underlying issues are fundamental and timeless.

There is a common element: people’s aspirations to express themselves and their values in their lives and in their work. People everywhere aspire to be able to have control over their destinies. However, they are blocked and frustrated, with a system seemingly rigged against them. These “strangers in their own land,” to use Hochschild’s (2016) term, are protean in their orientation—meaning they want to control their own destinies and live lives based on their values—but they are left with nowhere to go.

These issues, however, are not recent phenomena. Hall (2004) reflected on the changes in the world in the 25 years since he first wrote about the protean career in 1976. He characterized the protean career (versus the traditional career) 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) versus objective (position, salary)” (Hall 2004, p. 4.)

THE PROTEAN CAREER: A REVIEW IN CONTEXT

The evolution and growth in research on the protean career was covered by Hall (2004) and subsequently by Gubler et al. (2014), who points out that what is often referred to as the protean career in fact can be one of three quite different things. There is the protean career concept (PCC), which is the basic protean career theory as originally defined by Hall (1976). Then there is the

PCO, which is the attitude or mindset of the person with agentic, protean inclinations (i.e., self-directed and values driven). Finally, there is the protean career path (PCP), which is an objective sequence of job moves for a person with high PCO. We find that the empirical research has focused primarily on PCC and PCO. To understand the evolution of these concepts, we provide here a brief chronological overview on protean career theory.

Hall (1976) first described the protean career as an orientation that enables people to adapt to social, political, technological, and economic changes across multiple career life cycles. Robert J. Lifton's (1993) *The Protean Self*, describing survivors' adaptations to the aftermath of the atomic bombings in Japan that ended World War II, inspired this view of careers. This was a context, like today's volatile political and economic climate, in which the basic order of the world seemed to be torn apart at its core. As Lifton (1993) saw it, a critical issue was that what constitutes the authentic self as a person's identity was undergoing massive changes in response to a drastically altered environment (e.g., Hiroshima and Nagasaki after the World War).

With the arrival of global competition in the 1980s, companies, starting in the auto and other manufacturing industries, began downsizing and delayering, and the big career issue became career plateaus. Companies were concerned with retaining employees in the absence of promotion. By the 1990s it became clear that the people who had plateaued were the fortunate ones, as increasing numbers of employees were now being laid off. The big career issue of the 1990s was the demise of the psychological contract at work (Rousseau 1995), and the new reality was the boundaryless career (Arthur & Rousseau 1996). In the 2000s, there is more writing about the internal career, with a focus on issues such as subjective success, the quest for meaning or calling, and personal strategies for self-management, surrounding both career issues and work-life matters (Hall et al. 2013). Relatedly, there has been strong interest in ways that individuals can assert more control over their lives and careers, and thus more interest in the protean career. These issues become even more pressing when one considers that many people born today are facing the prospect of what Gratton & Scott (2016) term the "100-year life." Our review reveals a steep increase in research on protean careers in the past three decades (see **Figure 1**). Research on the protean career has been conducted globally and across six continents, with a predominance of studies conducted in Europe and North America, followed by Asia and Oceania (see **Figure 2**). From **Figure 1**, we note the exponential increase in research on protean careers from 2006. This may be due to Briscoe et al.'s (2006) publication of the first validated measure of protean career attitudes, a measure

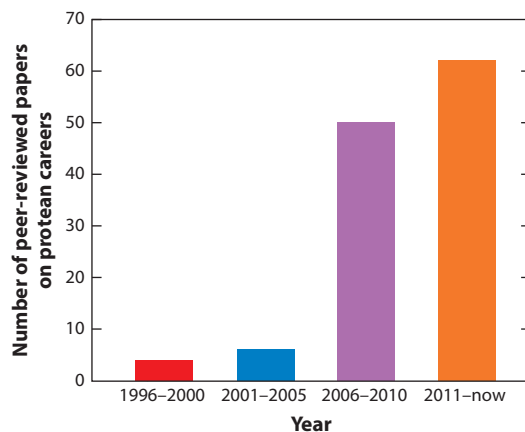


Figure 1

Peer-reviewed papers on protean careers through May 2017 (by year).

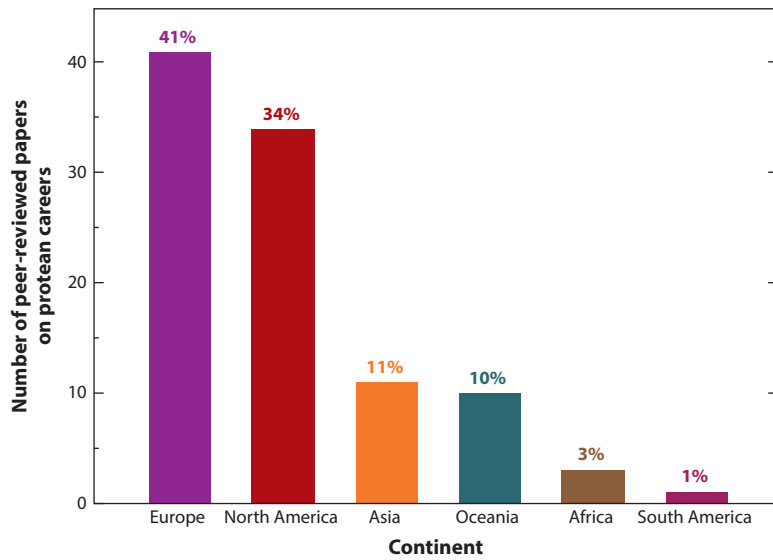


Figure 2

Peer-reviewed papers on protean careers (by continent).

that is still widely used in recent studies. As per **Figure 2**, much of the published research on protean careers is in Europe, followed by North America and Asia. This is a promising finding, given the general critique of management scholarship as being North American centric. More recently, in the past five years, advances have been made in the understanding of protean career processes in achieving career success (Herrmann et al. 2015), managing work-life balance (Direnzio et al. 2015), coping with unemployment (Waters et al. 2014), making the transition to retirement (Kim & Hall 2013), and helping to understand organizational cultures and climates (Hall & Yip 2016).

Despite the extensive influence of conceptual and empirical research on protean careers, existing reviews have focused primarily on construct definition and measurement (Gubler et al. 2014). Here, we develop a more inclusive and integrative review. Our review process included a comprehensive search of articles published in both management and organizational psychology journals, including the *Academy of Management Journal*, *Academy of Management Review*, *Career Development International*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Organizational Behavior*, *Journal of Vocational Behavior*, and *Personnel Psychology*. In addition, our review discusses methodological advances and future directions for research on protean careers.

To arrive at a comprehensive collection of peer-reviewed articles, we retrieved articles from keyword searches of social science and business databases (i.e., EBSCO, Web of Science, and Google Scholar) using the term “protean career.” As this search generated 373 publications, several exclusion criteria were used to find the articles relevant to the purposes of this review. First, unpublished work and articles not in English were excluded. Second, articles that were not situated in the career context were removed. Finally, articles that mentioned the protean career briefly but were focused on other career constructs, such as boundaryless careers or career callings, were removed. This resulted in a total of 122 peer-reviewed articles published between 1996 and mid-2017 (see **Figure 1**).

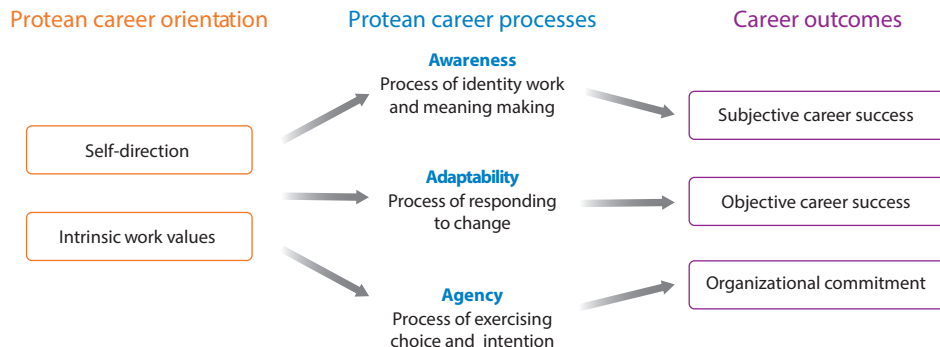


Figure 3
Key mechanisms in the protean career process.

PROTEAN CAREER THEORY: THEORETICAL MECHANISMS

The protean career, as conceptualized by Hall (1976), describes “a process which the person, not the organization, is managing” (p. 201). Central to this process is the role of self-direction and the centrality of intrinsic values. Consistent with Hall’s (1976) early theorizing, empirical research on the protean career has converged on explaining the roles of self-direction and a values orientation in three domains: (a) as meaningful individual differences (antecedent factors), (b) as influences on career processes, and (c) as predictors of career and organizational outcomes.

While research in these domains has advanced substantially, early studies have focused primarily on developing a measure of the PCO and establishing its predictive validity as an individual difference variable (Gubler et al. 2014). More recent studies have started to examine distinct social psychological mechanisms and outcomes.

As an organizing frame for our review, we have developed an integrative model that illustrates key mechanisms in the protean career process. **Figure 3** presents a summary of this model, and the sections that follow provide the details of each component—the PCO, protean career mechanisms, and career outcomes.

RESEARCH ON THE PROTEAN CAREER

In this section, we discuss our review of the empirical literature. We begin by examining research on protean careers and measures of the PCO.

Protean Career Orientation

The PCO is an individual difference variable and predictor of protean career processes and outcomes. This orientation can be understood as a career attitude with two important dimensions, a focus on self-direction and an orientation toward intrinsic values. These two dimensions are central to Hall’s (2004) definition of a PCO, as “one in which the person, not the organization, is in charge” (self-direction) and where “the core values are freedom and growth” (p. 4; see, more generally, the discussion on intrinsic values orientation).

In general, self-direction refers to a person’s independence from external control or influence. More specifically, in the context of the PCO, self-direction represents the degree to which people assume responsibility for their career (Briscoe et al. 2006, Mirvis & Hall 1994). It is an attitude that represents a person’s taking responsibility and personal agency for their career decisions and

actions (Briscoe et al. 2006, Segers et al. 2008). Self-direction is a critical component of the protean career and represents the agentic aspects of volition and control over one's career.

In addition to self-direction, the PCO is defined as one where the intrinsic values of a person serve as a guide for career decisions (Briscoe & Hall 2006). As Hall (1976) notes, "the criterion of success is internal (psychological success), not external" (p. 201). The values associated with a PCO are intrinsic and oriented toward autonomy, meaning, and growth. Where self-direction represents agency and volition in the pursuit of one's career goals, intrinsic values provide meaning to the pursuit.

An interesting intrapersonal dynamic in the PCO is the interaction between self-direction and intrinsic values. Intrinsic values, with a protean orientation, can guide people in actively making meaning through career decisions and transitions, as opposed to a reliance on externally defined sources of meaning. However, a focus on intrinsic values alone, without self-direction, may be maladaptive. As Briscoe & Hall (2006) note, being values oriented but not self-directed can result in a rigid career orientation and may even inhibit career proactivity. More importantly, studies that have included both self-direction and values orientation in assessing the PCO have found that the combination of both components predicts greater variance in positive responses to change than either component alone (Briscoe et al. 2010, Judge et al. 1999).

Not only have self-direction and intrinsic values been continued foci in research on protean careers, they have also been examined in psychological research on motivation, more specifically in self-determination theory (SDT; Deci et al. 2017). SDT focuses on the fulfillment of three basic psychological needs (autonomy, competence, and relatedness) as conditions for optimal well-being and motivation. Studies on protean careers and self-determination share a similar foundation in their positive views of human motivation and needs for meaning, competence, and personal causation (White 1959, de Charms 1968). However, the two theories address different issues. Most simply, protean theory addresses the career and the person's lifelong work-related experiences. SDT is a theory of motivation and applies to more immediate job-related issues, such as engagement, performance, commitment, and job attitudes. Also, SDT relates to a shorter time frame, namely, experiences and motivation in a particular situation, whereas protean career theory refers to a longer time frame, namely, the person's work-related experiences over time in the career. As we discuss in our concluding section, although these two theories are distinct and are employed for different purposes, it appears that each can be usefully applied to the domain of the other, to provide new perspectives and novel research hypotheses.

Measures of the Protean Career Orientation

Briscoe et al. (2006) published the validation study for the first PCO scale, the Protean Career Attitudes Scale (PCAS), which sparked an increase in empirical research on the construct. Of the 91 empirical articles included in this review, only six were published before this first measure was developed. Briscoe et al.'s scale includes two dimensions: self-directed career management attitude and values-driven career attitude. Continuing the work of developing and validating measures of the PCO, Liberato Borges et al. (2015) adapted the PCAS for use by university students who have not yet had a career, and Porter et al. (2016) created a short-form version of the scale. In addition, Baruch (2014) developed and validated a unidimensional scale for the PCO that focuses mainly on self-direction and career success (see **Table 1** for an overview of PCO measures).

Briscoe et al.'s (2006) scale is the most widely used protean career measure. The PCAS has several strengths, including that it was tested for structural and convergent validity across three studies with separate samples in the original publication (Briscoe et al. 2006), has been used across many different organizational contexts and cultures (see **Table 1**), and includes both theoretical

Table 1 Protean career orientation measures

Measure	Citation	Dimensions	Total items	Average α	Number of articles
Protean Career Attitudes Scale (PCAS)	Briscoe et al. (2006)	2	14	Self-direction: $\alpha = 0.764$ Values-driven: $\alpha = 0.713$ Total: $\alpha = .816^a$	26
PCAS; only self-direction ^b	Briscoe et al. (2006)	1	8 ^b	$\alpha = 0.804^b$	10 ^b
Protean Career Scale	Baruch (2014)	1	5–7	$\alpha = 0.751$	3
Protean Career Management Scale for University Students	Liberato Borges et al. (2015)	2	20	Self-direction: $\alpha = 0.790$ Values-driven: $\alpha = 0.745$	1
Protean Career Attitudes–Short Form	Porter et al. (2016)	2	7	Self-direction: $\alpha = 0.740$ Values-driven: $\alpha = 0.670$	1

^aCronbach's Alpha was reported for the full scale.

^bStudies that used only the self-direction dimension are included separately; the total number of studies that used any part of the PCAS measure is 35.

dimensions of the PCO. However, there are also some potential psychometric issues with the scale. For example, some researchers in non-Western cultures have found that the values-orientation dimension did not emerge cleanly (Chan et al. 2012), and two additional scale validation articles found that the values-orientation dimension fit best when split into two further factors: moral behavior and pursuit of personal values-driven goals (de Bruin & Buchner 2010, Enache et al. 2012).

In addition, in the process of validating new and adapted versions of the PCAS, Baruch (2014) and Porter et al. (2016) critiqued the length of the scale and aimed to create a more concise measure for the construct; Liberato Borges et al. (2015) pointed to the difficulty of answering some of the questions for youths who had not yet begun their careers and thus had little to no work experience. Although Baruch (2014) also criticized the multidimensional nature of the PCAS, Porter et al. (2016) kept the multidimensional structure intact. These new measures are promising and should be tested for predictive validity, as well as for their applicability in different cultures. In summary, we recommend measures that consider the two-dimensional structure of the PCO but also recognize that more research is needed on existing measures to validate this factor structure.

Antecedents to the Protean Career Orientation

Research on the protean career has focused primarily on the PCO as a predictor of career behaviors and outcomes. Fewer studies have examined the antecedents and psychological correlates to the PCO. Additionally, we found that in some studies, the PCO is confounded with a boundaryless orientation. In this section, we review antecedents to the PCO and clarify its relationship with a boundaryless orientation.

Demographic and Developmental Antecedents

Segers et al. (2008) examined individual differences in the PCO from a large data set of 13,000 respondents. They found that both education and managerial experience had positive relationships with the dimension of career self-direction in the protean orientation. This suggests that socialization in the form of further education and on-the-job experience might facilitate a shift

toward greater levels of self-direction. Segers et al. also found a negative relationship between two cultural variables (masculinity and power distance) on a person's reported levels of career self-direction.

Sargent & Domberger's (2007) study is the only one conducted in the area of age and developmental antecedents to the protean orientation. The authors conducted a qualitative study of young adults with a focus on developmental antecedents to the PCO. Their findings suggest that the PCO is shaped at a young age and influenced by two developmental antecedents, interaction with role models who exemplified a protean orientation and experiences of "value violations" (events during which externally espoused values were inconsistent with personal values). Although the authors did not establish specific age variations in the protean career, research by developmental psychologists suggests that shifts toward self-direction occur during the phases between adolescence and early adulthood (Marcia 1966, Kegan 1994). The developmental transitions toward a PCO make up a promising avenue for further research.

Researchers have also uncovered gender differences in both the PCO and PCPs. In a study within the United States, Reitman & Schneer (2003) discovered that protean-oriented women are better able to combine both work and family responsibilities as compared to women who follow traditional career paths. Sullivan (1999) proposed that women are increasingly embracing self-directed careers, which in turn reflects protean career adoption. It is not surprising then that women were found to have higher PCO in several studies (e.g., Hofstetter & Rosenblatt 2016, Segers et al. 2008).

Dispositional antecedents. To date, research on dispositional antecedents has been limited to research on the PCO. The antecedent most commonly associated with protean careers is proactive personality. Proactive personality has been found to predict the PCO among respondents in the United States (Briscoe et al. 2006), Germany (Gasteiger et al. 2008), and Singapore (Uy et al. 2015). Although proactive personality has been found to correlate with protean orientation, evidence suggests that they are distinct constructs by way of predictive validity. More specifically, Herrmann et al. (2015) found that the PCO predicted proactive career behavior and career satisfaction, even after controlling for trait proactivity.

Only two studies to date have examined the relationship between dimensions of the five-factor personality model and the PCO. Briscoe et al. (2006) found a positive association between a person's openness to experience and protean orientation. Rastgar et al. (2014) found similar results. In addition, Rastgar et al. (2014) found a negative association between agreeableness and PCO and a positive association between extroversion and PCO. Neuroticism and conscientiousness were not significant predictors of the protean orientation.

Self-regulation is another potential dispositional antecedent to the protean orientation. Hofstetter & Rosenblatt (2016) found that the PCO could be differentially predicted by two different kinds of self-regulation focus. Hofstetter & Rosenblatt (2016) found that a PCO was positively associated with a promotion focus (e.g., a person's focus on potential gains to be achieved by the individual) and negatively associated with a prevention focus (a person's focus on potential loss).

Protean and boundaryless career attitudes. The PCO is often associated with boundaryless career attitudes, as they are both "new career" orientations representing individual agency in career development (Gubler et al. 2014). An important distinction between the two is that boundaryless career attitude is focused on mobility and the PCO is focused on values orientation and self-direction. Although the PCO has been found to correlate with an openness to change (Gasteiger 2007), it is not associated with preferences for mobility (Briscoe & Finkelstein 2009). Accordingly, Briscoe et al. (2006) found that the protean and boundaryless career orientations are related but

independent constructs. A person could be self-directed and values oriented—a PCO—with a low need for organizational or geographical mobility—a boundaryless orientation.

Overall, there has been a lack of research on antecedents to the PCO, which could be due to an assumption that it is a stable individual trait—an assumption that has been challenged with recent evidence on the malleability of the protean orientation (Supeli & Creed 2016, Waters et al. 2014). Examination of the possible antecedents and changes in the protean orientation is an important area for future research, and we discuss this notion further in our concluding sections.

Protean Career Mechanisms

In this section, we focus on protean career mechanisms, that is, processes that explain the relationship between a PCO and individual and organizational outcomes. In Hall's writings on the protean career, he proposed two competencies that enable the person to express his or her protean orientation—identity awareness (a clear sense of one's personal identity and values) and adaptability (the capacity to change in response to turbulent conditions) (Hall 1996a, 2002). As we looked at the studies in this review, the processes they covered seemed to fall into these two areas (i.e., identity awareness, adaptability) as well as a third process—career agency—the person's sense of mastery or control over the career. Each of these areas represents a pathway through which the PCO can motivate and enable the person to translate career attitudes into career actions.

Identity awareness. The mechanism of identity awareness is grounded in the role of personal values in career decision making (Hall 2004). This awareness of one's vocational identity can be seen as a meta-competency for developing a protean career because in times of frequent change and decreasing organizational guidelines for career development, people need a strong internal compass to guide and develop their careers (Hall 1996b).

Because managing a career is essentially a process of implementing a self-concept, or expressing it, through one's work (Hall 2002, Super 1957), it seems reasonable that people with a strong PCO and/or who have a clear set of personal values to guide their career choices (Briscoe & Hall 2006) would have a high level of self-awareness. One of the ways this would manifest itself would be through the clarity and strength of the person's identity. Herrmann et al. (2015) found evidence of this relationship in their study of German students, whose core self-evaluations were related to their protean orientation. The authors argued that the PCO might be acting as a motivating factor to strengthen the impact of these self-attitudes upon career outcomes, such as success and satisfactions.

Hall (2004) and Hall & Chandler (2005) suggested that the protean career was a way for an individual to pursue a “path with a heart,” or a career that represented a personal calling, a consuming, meaningful passion people can experience toward a domain (Dobrow & Tosti-Kharas 2011). Several studies have found support for this idea (Park 2009a,b; Park & Rothwell 2009). It appears that a sense of calling provides an additional source of motivation that serves to channel the self-direction and values-oriented energies of the individual with a strong PCO.

The sense of calling, however, goes deeper than motivation. It is a self-reflexive quality that is part of how the person defines him- or herself (Elangovan et al. 2010). That is, it is part of one's personal identity. And being clear on one's identity, or to put it another way, to have a high level of self-awareness, has been identified as a key meta-competency related to the PCO (Hall 2002, Briscoe & Hall 2006).

Existing empirical research has not directly investigated vocational identity awareness in relation to PCO, but it has confirmed that factors closely related to identity, such as career insight (De Vos & Soens 2008), self-awareness (Verbruggen & Sels 2008), career decidedness (Creed

et al. 2011), and behaviors related to identity awareness in terms of self-exploration (Briscoe et al. 2012), were positively related to PCO.

In addition, several studies have investigated the PCO and related constructs as potential antecedents of identity clarity and awareness. In a longitudinal study of college students, Hope et al. (2014) found that students who focused on intrinsic values were more likely to experience identity development and greater levels of well-being over time. Although this study focused on the effects of intrinsic values, it suggested that the value-orientation dimension of PCO could be an important condition for identity awareness and development. Furthermore, in a cross-lagged empirical study, Hirschi et al. (2017) found that PCO predicted identity clarity and self-efficacy. They found that identity and self-efficacy mediate the effects of PCO on important career outcomes. Their findings suggest that the PCO is “more likely an enabler than a consequence of career meta-competencies” (Hirschi et al. 2017, p. 216).

Adaptability. A meta-competency that is often found in protean careerists is adaptability, which is the ability to take the actions necessary to change effectively in response to a disruption in the environment and to cope with the related obstacles (Hall 2002, Savickas 1997). In their review of work transitions, Fouad & Brynner (2008) explain the role that these meta-competencies play in equipping a person to deal with the VUCA environment: “Clearly, self-awareness and adaptability in the face of change are critical meta-competencies for individuals to learn because the changing nature of occupations and of the labor market requires that individuals constantly review and reevaluate their capabilities” (p. 244). Taking a whole-life perspective, Gratton & Scott (2016) have analyzed the value or purpose of a PCO in helping people adapt and cope with change over the span of a long career. Gratton & Scott use the metaphor of future generations having 100-year lives, which will require the ability to cope with many changes and career transitions over longer careers.

Career adaptability is a multidimensional construct that has been conceptualized in different ways (Morrison & Hall 2002, Rottinghaus et al. 2012, Savickas & Porfeli 2012). Super & Knasel (1981) define career adaptability as a person’s readiness to cope with changing work and working conditions. Building on this, Savickas (1997) defines career adaptability as “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” (p. 254).

The PCP is one characterized by adaptability in responding to changing circumstances (Hall 2004, Pulakos et al. 2000). Hall & Mirvis (1995) proposed that a PCO is associated with self-learning, a facet of adaptability that is critical for making career transitions. The relationship between PCO and adaptability is complex. Empirically, studies have found that the PCO predicts active coping with change (Briscoe et al. 2012) and perceptions of employability (De Vos & Soens 2008). The protean dimension of self-directedness was positively correlated with a preference to change jobs frequently in a student sample (Briscoe et al. 2006), but other studies have failed to find a link between the PCO and mobility (e.g., Andresen et al. 2015). In a sample of unemployed adults, PCO was linked to more active job searching (Waters et al. 2014).

Briscoe & Hall (2006) suggested the use of typological approaches and career profiles (combining protean and other career orientations) to better represent the whole person in careers research. To date, only a few studies have used this typological approach, but the results have been promising. Kuron et al. (2016) have operationalized several of the profiles Briscoe & Hall (2006) identified theoretically, and they identified differences and similarities for the Protean Career Architects, the Solid Citizens, and the Trapped/Lost group. The Protean Career Architects had high internal locus of control, self-efficacy, and organizational commitment. Interestingly, however, the Protean Career Architects were not generally higher than the Solid Citizens (who

had high protean scores but low interemployer mobility) in these variables. In relation to career adaptability and mobility, Harrington & Hall (2007) suggest that it is possible for a person to have a high protean orientation and still be committed to staying with a single organization, so long as that organization fits the person's values.

Agency. To be successful in a career, it is not enough for a person to have the protean-related capabilities of identity awareness and adaptability. These qualities have to be employed in the service of something, some activity or quality that leads to a career purpose or goal. That is, a person needs to have personal agency and to be able to employ his or her PCO as a resource for action to pursue his or her most prized values. Agency is the capacity of human beings to make choices and to impose those choices on the world. As Bandura (2001) notes, agency is the ability "to intentionally make things happen by one's actions" (p. 2).

The agentic pathway of the PCO is represented by proactive career behaviors and greater levels of work engagement. And, in fact, there have been many studies that showed positive links between PCO and positive career experiences, such as career self-management behaviors (De Vos & Soens 2008), career growth (Waters et al. 2014), job satisfaction and organization commitment (Supeli & Creed 2016), as well as subjective career success (De Vos & Soens 2008).

More specifically, De Vos & Soens (2008) argued that the person must be able to develop a capacity for understanding and managing the self in order to translate a protean career attitude into career success. And, in a sample of employees that had recently received career counseling, De Vos & Soens found that the PCO was related to career success outcomes (e.g., employability and career satisfaction) but that this relationship was fully mediated by career insight. That is, the person had to be able to employ the PCO in the service of achieving greater insights into the opportunities that were available and how those related to the person's own interests and motivations.

Empirically, the PCO has been found to predict proactive behavior (Creed et al. 2011, Herrmann et al. 2015), career self-management (De Vos & Soens 2008), and career planning (DiRenzo et al. 2015). In addition, PCO has been shown to predict engagement in networking and visibility strategies (De Vos & Soens 2008). Moreover, given the correlation between PCO and proactive personality (Briscoe et al. 2006), the proposed link between PCO and strategies is theoretically consistent with research indicating a relation between proactive personality and a variety of career strategies and career planning as well (Fuller & Marler 2009, Morrison & Phelps 1999, Seibert et al. 2001, Van Dyne & LePine 1998).

People with high PCO (i.e., high protean individuals) are likely to be less susceptible than low protean individuals to external influences such as organizational and peer pressure when making career decisions. This could reflect the operation of some self-monitoring influence at play. High protean individuals may be more likely to be low self-monitors (e.g., "to thine own self be true") and not social chameleons.¹ This raises a point that may sound counterintuitive to the casual observer. Some people might think that being protean means being able to read (monitor) the environment, but in fact it is about being clear on one's own inner sense of direction. Accordingly, several studies have found that the PCO predicts career self-management behaviors such as self-regulation, self-efficacy, goal setting, perseverance, and optimism (De Vos & Soens 2008, DiRenzo et al. 2015).

One of the understudied issues in research on the protean career and the career experience (or process) is how it relates to organizationally valued outcomes, such as proactive work behavior.

¹We are grateful to David Day for this observation.

Hall (2004) suggests that a person with a strong PCO might be a stronger performer because of his or her proactive behavior, intrinsic motivation, and desire for psychological success, which can derive from high performance. Gulyani & Bhatnagar (2017) found a positive link between PCO and proactive work behavior. Similarly, in a cross-lagged study, Hirschi et al. (2017) found that PCO predicted proactive career behaviors. Thus, it does appear that the PCO provides a positive pathway for action.

Protean Career Outcomes

Following the protean career process model (see **Figure 3**), we next turned our attention to frequently studied outcomes of the PCO. Although there is a wide array of individual and organizational outcomes that have been considered over the past 20 years of research on the protean career, most of the outcomes fall under two broad categories: subjective and objective career success and organizational commitment.

Similar to proactive work behavior, other individually and organizationally valued outcomes, such as citizenship behavior and task performance, have been relatively understudied. Rodrigues et al. (2015) tested these ideas and found that PCO was related to high performance, higher levels of organizational citizenship behavior, as well as high organizational commitment and employee well-being. Thus, the authors concluded that high PCO represented a win-win for outcomes valued by both the employee (e.g., career, job, and life satisfaction) and the organization (e.g., performance, commitment).

Subjective and objective career success. Career success in general can be understood as “the positive psychological and work-related outcomes accumulated as a result of one’s work experiences” (Seibert & Kraimer 2001, p. 2). People experience career success in both subjective and objective ways. Subjective career success refers to a person’s psychological experience of success, relative to his or her own goals and expectations (Seibert & Kraimer 2001). This includes psychological well-being, career and job satisfaction, work engagement, and perceived employability. Subjective career success has been predicted by the PCO (e.g., Herrmann et al. 2015), although several articles have found that the self-directed dimension was significantly related to subjective career success, but not the values-oriented dimension (Cerdin & Pargneux 2014, Enache et al. 2011, Kuron et al. 2016).

In contrast, objective career success refers to observable, measurable, and verifiable accomplishments such as salary, promotion, and job level (Dries et al. 2008, Heslin 2005, Judge & Kammeyer-Mueller 2007). Compared to subjective career success, there is a relative lack of attention to objective career success as an outcome in studies of the PCO. However, Volmer & Spurk (2011) found that the self-direction PCO was related to salary and Briscoe et al. (2010) found that PCO was linked to perceived leader effectiveness by followers.

Another important aspect of success in the contemporary work world is the way an employee views his or her work and family roles and work-life balance. Valcour & Ladge (2008) reasoned that the protean career model, with its emphasis on living one’s values and following one’s own path, would be especially relevant for women’s careers. In fact, Valcour & Ladge’s (2008) study of 916 employed mothers at 11 major employers across a variety of sectors was one of the first to combine psychological career variables and family variables (e.g., years since birth of first child). They found that the effects of family and career path timing on career success outcomes depend on how career success is defined. For example, it appears that achieving psychological success is less dependent on having a traditional pattern of early career progress than on the strength of one’s career identity and career self-efficacy. In addition, objective career success was found to be undermined by many of the family variables measured. This result was supported by Direnzo

et al. (2015), who found that PCO led to increased work-life balance through the mechanisms of whole-life perspective and perceived employability.

Organizational commitment. The organizational outcomes associated with a protean career are primarily in the areas of organizational commitment. Studies have found the PCO to predict affective commitment (Fernandez & Enache 2008), turnover intentions (Supeli & Creed 2016), as well as task performance (Baruch 2014). Although the self-directed and values-driven nature of a PCO may be perceived as self-focused and not oriented toward the organization, a PCO is not necessarily counter to organizational goals. Thus, we end up with a phenomenon referred to as the Protean Paradox; that is, employees who are self-directed, with a focus on intrinsic values, may make better organizational citizens.

However, the relationship between PCO and organizational outcomes also seems to have several boundary conditions. First, although affective commitment has a consistent positive relationship with the protean career, the other types of organizational commitment tend to have differing results (e.g., Baruch 2014, Çakmak-Otluoğlu 2012). Second, this relationship may depend on the type of organization or cultural context. For example, Baruch (2014) found nonsignificant relationships between the protean career and turnover intention in two samples (i.e., university alumni and bus drivers from New Zealand), but a significant negative relationship in employees from white-collar firms in Vietnam.

Finally, the relationship between PCO and organizational commitment may be dependent on the organizational culture and whether there is support for the self-directed, values-driven attitude. In one of the few longitudinal studies of the PCO construct, Supeli & Creed (2016) found that PCO was related to a decrease in job satisfaction and organizational commitment over time, and an increase in intention to quit. This was explained by the cultural and organizational values of the Malaysian sample, which may not have supported the needs of the employees to develop and grow using their self-direction and values orientation (Supeli & Creed 2016). Similarly, Granrose & Baccili (2006) found that violations of the protean career psychological contract were linked to higher intentions to quit. Furthermore, Baruch (2014) hypothesized that according to the person-values fit theory, employees with high PCO should be more satisfied in a protean environment. Although articles included in this review support the Protean Paradox, these potential boundary conditions should be studied further.

RECOMMENDATIONS FOR FUTURE RESEARCH

To date, research on the protean career has focused on individual correlates and career outcomes. The empirical evidence on the benefits of the PCO is strong; however, we know less about the psychological and organizational processes that enable or hinder the protean career. Accordingly, we suggest five recommendations for future research, ones that we believe could deepen a psychological understanding of protean career mechanisms as well as advance an understanding of protean career processes in organizations (see **Table 2** for a summary of our recommendations).

These recommendations cover both methodological and theoretical suggestions. We view methods and theory as interdependent in the advancement of knowledge and have combined them as such in our recommendations.

Recommendation 1: Examine Whether and How the Protean Career Orientation Might Change Over Time

To date, research on the PCO has treated the construct as a stable (and static) individual difference measure. However, conceptually, researchers describe the orientation as dynamic—one that

Table 2 Summary of recommendations for future research

	Recommendation	Specific examples
1	Examine whether and how the protean orientation might change over time.	Use longitudinal methods to examine changes in the protean career orientation. Examine how career events and transitions can trigger a change in the protean career orientation. Examine differences in the malleability of both self-direction and the centrality of intrinsic values. Consider the dynamic interaction between self-direction and intrinsic values overtime. Employ the use of experience sampling methods to examine momentary fluctuations in the protean career orientation.
2	Examine the protean career as a developmental process.	Examine the effects of critical career transitions on protean careers. Identify characteristics of developmental experiences that might activate or enable greater levels of a protean career orientation. Examine how the protean career might develop and shift over the lifespan.
3	Identify high-impact causal mechanisms through career interventions.	Use randomized assignments in career programs to examine the effects of different career interventions. Contrast interventions focused on protean dimensions (self-direction and intrinsic values) with traditional career interventions. Examine how protean-focused interventions could address maladaptive career behavior.
4	Examine relational and cultural influences on the protean career.	Examine possible contagion effects with the protean career orientation, using social network analysis. Examine how the protean career orientation might influence interpersonal behavior. Identify and examine relational functions that could activate and enable the protean career orientation. Examine the role of autonomy-supportive relationships and attachment dynamics in protean careers.
5	Consider the influence of organizational career culture on careers.	Examine how the protean orientation could be present at a collective level in groups and organizations. Develop measures to examine the construct of protean career cultures.
6	Examine the nomological network and construct validity of the protean career orientation.	Examine the relationship between the protean career orientation and measures of self-determination. Conduct measurement studies to examine distinctions between the self-direction and values orientation component of the protean career orientation.

can be developed and subjected to change over time (Hall 2004, Sargent & Domberger 2007). Furthermore, in longitudinal and repeated measures studies of the PCO, researchers have found that it does change over durations as short as six months (Supeli & Creed 2016) and after a career transition (Waters et al. 2014). Waters et al.'s (2014) findings are particularly noteworthy in understanding the dynamic nature of the PCO. In a one-year longitudinal study of unemployed job seekers, Waters et al. (2014) found that the respondents reported different levels of a protean orientation across three data collection time points. Respondents who experience an increase in the protean orientation were more likely to be re-employed. In addition, they found that participants experienced a decrease in the protean orientation after re-employment. This finding suggests that the protean orientation can change as a result of a career transition (re-employment) but also in the process of a career event. Further research is needed to examine how the PCO might change over time and also in response to trigger events. More empirical work in this direction is needed as well.

A distinct characteristic of the PCO is the dual components of self-direction and a values orientation (more specifically, an orientation toward intrinsic work values; Gubler et al. 2014, Hall 2004). However, current research on the protean orientation has focused primarily on the role of self-direction, with limited attention to the role of intrinsic values. Further research on the role of intrinsic values could provide insight regarding how the two dimensions of self-direction and values relate. As Super (1953) notes, people decide on careers that are consistent with their work values and with their overall view of themselves, with the belief that vocations offer a way to achieve their desired end state and to implement their self-concept.

The dynamic interaction and influence of self-direction and values on protean careers could be conducted through longitudinal research, with the use of repeated measures assessing the PCO, and the use of experience sampling methods. Such methods enable research on momentary fluctuations in the PCO and investigations into predictors of these changes in state. This would yield a more precise understanding of protean career processes and antecedents, an area of research that we found lacking in our review.

Recommendation 2: Examine the Protean Career As a Developmental Process

To date, research on the protean orientation has taken a variance-based approach, with cross-sectional studies that examine differences between individuals. This is reflected in the use of cross-sectional studies that examine how differences in the protean orientation between individuals might explain variance in career outcomes. Although important, we suggest that a further understanding of protean careers could be advanced through research on intraindividual processes and predictors. This research would require a within-subjects approach to research and the use of longitudinal cross-lagged designs.

In contrast to a variance approach, research on the protean career as a developmental process could address how and why people develop a PCO over time and in response to major career events. This is important as research has shown that life and career transitions can cause shifts and fluctuations in levels of self-direction and values (e.g., Bardi & Goodwin 2011, Rokeach 1973). Similarly, research on adult development has shown that development is a dynamic process that involves both gains and loss in identities and meaning-making structures over time (Baltes 1987, Day & Sin 2011). Critical career transitions such as school-to-work transitions, retirement, and unemployment would make up a fitting and important context to examine development processes in protean careers. In addition, researchers could also consider research on salient developmental events (Morgeson et al. 2015) and the characteristics of such events that might activate or enable greater levels of a protean orientation.

Looking closely at constructs related to the two components of PCO, prior research has shown that both the determination to exercise greater self-direction and values clarification can shift as a result of developmental changes throughout the lifespan (Bardi & Goodwin 2011, Rokeach 1973). However, there has been little theory development or research regarding how PCO might develop over the lifespan. Considering developmental processes and events could result in a more psychologically precise understanding of the protean career and its mechanisms, which could assist in the development of PCO interventions through the use of high-impact leverage points at critical time points in the lifespan.

Recommendation 3: Identify High-Impact Causal Mechanisms Through Career Interventions

To date, research on protean careers has been primarily cross-sectional, with limited ability to account for causal mechanisms. In contrast, researchers could consider experimental or

quasi-experimental studies, which are appropriate for testing casual relationships. Additionally, researchers could employ the use of randomized assignments in career development programs to examine the effects on career interventions on the PCO. For example, in social psychology, researchers have found that brief self-affirmation interventions, focused on personal values, can result in sustained increases in self-efficacy and buffer negative reactions to stress (Cohen & Sherman 2014, Creswell et al. 2005). This is particularly relevant to the value component of a protean orientation.

In contrast to a traditional career management design, a controlled intervention design could involve randomly assigning people with high and low PCO's to jobs that seem compatible with strong protean qualities (e.g., a highly unstructured job that forces a person to exercise a high level of self-direction). Another fruitful avenue for research is to consider how interventions focused on the PCO (affirming self-direction and intrinsic values) could address maladaptive career behavior. For example, researchers could also examine the protean career interventions to address maladaptive careerism—a behavior defined as “the propensity to pursue career advancement through non-performance-based means” (Feldman & Weitz 1991, p. 237).

Furthermore, although we are studying high-impact factors, it would also be useful to consider whether there are some key constraining factors at the organization, industry, and societal level that work to suppress a PCO. Also, what prevents individuals who do have a high PCO from acting on this orientation and achieving high levels of subjective and career success is also an intriguing and interesting question.²

Recommendation 4: Examine Relational and Cultural Influences on the Protean Career

Although the influence of mentoring and leadership has been associated with the protean career, empirical research on the role of interpersonal processes in protean careers is noticeably absent in the literature. This is surprising in light of findings on how relationships are central to career decision making and outcomes (Cotton et al. 2011, Kram & Isabella 1985). One noteworthy study in this respect is Sargent & Domberger's (2007) in-depth and qualitative study on the development of a protean orientation. The authors found that relationships were critical in shaping the possible selves of respondents and were associated with the formation of a protean orientation.

The study of relational influence and the interpersonal dynamics of protean careers is a ripe area for research. In particular, through the use of network analysis, researchers could examine both interpersonal and structural dynamics associated with how a protean orientation influences and is influenced across a range of relationships. The following are some unanswered questions that merit further investigation: Is the protean orientation contagious? More specifically, can the experience of being protean cascade through a social network over time? And at the dyadic level, are there differences in how people with a strong PCO relate to others with lower PCO's?

In addition to network approaches to research on protean careers, researchers could build on existing findings on attachment dynamics (Wu & Parker 2017, Yip et al. 2017) and the role of autonomy-supportive relationships (Pesch et al. 2016) to examine relational functions that support greater levels of self-direction and values orientation in careers. For example, Yip et al. (2017) note that supportive work relationships and relational psychological contracts can have a positive influence on the autonomous motivation of employees. More research is needed to examine how work relationships can influence people's experiences with and orientation toward protean careers.

²We are grateful to Yan Shen for suggestions related to Recommendations 3 and 5.

Research in this direction could also build on the work of Drigotas et al. (1999), who found that a relationship partner can influence their partner's movement toward their ideal self through affirmative behavior. This has been validated across several studies (Drigotas et al. 1999, Righetti et al. 2010, Rusbult et al. 2009). Research on relational influences can extend beyond dyadic relationships to include research on developmental networks (Higgins & Kram 2001, Yip & Kram 2017), career reference groups (Grote & Hall 2013), and career communities (Parker et al. 2004).

Finally, there is a need for more research on national culture and protean careers. In our review, we found some cross-cultural studies, but they tended to be scale validation articles, articles about expatriates or repatriation, or articles using a cross-cultural convenience sample. None looks explicitly at how PCO works across countries. There are articles from different countries (see **Figure 2**), but any differences in the results and apparent functioning might be because of the culture or any number of other factors. We do encourage more cross-cultural research to see if there really are differences in how PCO develops, functions, and impacts outcomes in different cultures. At this point, however, based on the current research, it does appear that the protean concept is a robust one that can be measured with good reliability and validity across a variety of national contexts.

Recommendation 5: Consider the Influence of Organizational Career Culture on Careers

Careers and career decisions are inevitably shaped by the organizational environment. However, there has been limited attention to the role of organizational influence on the protean career. This offers a generative area for multilevel research on protean careers. First, researchers could examine the role of organizational practices and policies and their influence on protean careers. For example, in a study of employees in multinational companies in Malaysia, Wong et al. (2017) found that the employability culture and mentoring practices of an organization predicted greater levels of PCO among employees. As a cross-sectional study, the directionality of the relationship cannot be ascertained but findings such as this suggest that an organization's culture can be influential in attracting or developing a PCO.

Second, research could examine how the protean orientation could be present at a collective level in groups and organizations. For example, Hall & Yip (2016) identified a typology of organizational career cultures, with the protean career culture identified as one that values and supports differentiation and intrinsic motivation. The authors integrate perspectives from optimal distinctiveness theory (Brewer 1991) and explained how protean career cultures can fulfill people's fundamental needs for maintaining a distinct identity while having a sense of belonging to a collective. Further research is necessary in creating a measure of the protean career culture as well as research on the moderating role of a protean career culture on career interventions. For example, a job crafting intervention might have a stronger and positive influence on work engagement in protean career cultures compared with top-down career cultures.

Third, research on protean career cultures could inform a broader set of organizational outcomes related to the protean career. By considering the interaction between protean career cultures and individual career orientation, the concept of protean cultures allows the possibility of research into how organizational influences on careers might be received and experienced differently across individuals and groups.

Recommendation 6: Examine the Nomological Network and Construct Validity of the Protean Career Orientation

Building on **Figure 3**, which summarizes the variables (antecedents, mediators, and outcomes) related to the PCO on the basis of our literature review, enough research has now been done so

that it would be feasible and useful to have a complete measurement and validation study that tests **Figure 3** as a model of antecedents and outcomes related to the PCO. The result could be a nomological network that would show how these variables function together, providing greater precision in understanding the similarities and differences between the protean variables and related concepts, as well as showing the practical utility of the concept in terms of predicting important career outcomes. An early study of this sort was conducted by Briscoe et al. (2006), and a similar study with an expanded set of variables would be a straightforward and valuable contribution.

One key variable to include in this measurement study would be the central concepts of SDT, in view of the similarities and differences discussed earlier (Deci et al. 2017). SDT provides a lens to understand self-direction through the fulfillment of basic psychological needs (autonomy, competence, and relatedness). This could inform research on the antecedents to protean careers. Additionally, SDT provides a typology and measure of autonomous motivation, which could be useful in understanding the role of self-direction in protean careers.

Variables such as motivators (autonomy, competence, and relatedness) and values (intrinsic and extrinsic) would be included, to cover SDT, as well as some key outcomes (e.g., performance, well-being, vitality, and ill-being). Thus, this would provide coverage of both job and career experiences. In this way, SDT would potentially contribute to protean career theory, by, for example, providing a deeper understanding of the individual differences that contribute to the PCO, and protean theory might contribute to SDT by revealing some of the long-term career benefits of autonomy and intrinsic motivation—perhaps even including an increase in a person’s PCO. The overall sum of such a study could be a richer theoretical understanding of what contributes to agentic and growth-inducing job and career experiences. This inclusive study would also have the benefit of integrating career theory with more mainstream organizational psychology and behavior. This linking of careers research to mainstream organizational psychology and behavior could help reverse a recent trend in which careers researchers have become more specialized and seem to be in dialogue primarily with themselves.

Another aspect of this study, a more modest contribution perhaps, would be to separate the two PCO dimensions and do more development work on the values-orientation scale. This scale is often the weaker of the two and may be the reason why some factor analytic studies have yielded only one factor. We recommend adding more items that explicitly address the person’s history of making and their determination to make choices, positive and negative, on the basis of deeply held intrinsic values. Measures of the PCO should make clear distinctions between self-direction (a focus on agency and volition) and an intrinsic values orientation (the centrality of intrinsic values in making career decisions).

RECOMMENDATIONS FOR PRACTICE

Research on the protean career has informed and widened the scope for organizational practice, primarily in the domain of career development but also in organizational change and development (Lips-Wiersma & Hall 2007), leadership (Briscoe et al. 2010), performance management (Silverman et al. 2005), human resource management (Hofstetter & Rosenblatt 2016), and talent management (De Vos & Dries 2013). In this section, we build on prior sections to recommend practical implications as well as an action research agenda for practitioners (see **Table 3** for a summary of our recommendations). More specifically, here are our recommendations for practice:

Recommendation 1: Support Protean Careers As a Developmental Process

The protean career, as we identify in this review, is a process that can yield beneficial outcomes for both individuals and the organization they work in. Accordingly, organizations should consider

Table 3 Summary of recommendations for practice

	Recommendation	Specific examples
1	Support protean careers as a developmental process.	Training on action regulation and career self-management Interventions that affirm intrinsic values, such as narrative writing and self-assessments of personal values Mentoring and peer coaching
2	Integrate career learning cycles in organizational planning and design.	Use experience-based models of development—practices that customize developmental experiences to an employee’s stage in their learning cycle. Provide lateral moves for employees interested in career change. Use internal job boards to support employees who are seeking new learning opportunities. Use After Action Reviews to facilitate learning from career experiences.
3	Develop high-impact career interventions.	Self-assessment of interests and strengths Reflection on future work selves Job crafting
4	Apply protean career theory in performance management.	Provide employees greater control over the performance appraisal process. Recognize and support intrinsic orientations to career planning. Examine the influence of employee recognition and rewards on the protean orientation.
5	Design protean organizations.	Design and develop an organization’s culture with elements that support and reward protean-oriented behaviors. Consider that a protean approach to careers may not be feasible in all organizations (e.g., high-reliability organizations).

how they can support this process. Some approaches include career interventions that attempt to increase a person’s self-direction by providing training on action regulation and career self-management (Raabe et al. 2007). Other interventions could target specific components of the PCO, such as the affirmation of intrinsic values through narrative writing and self-assessments of personal values. There are several career courses or workshops that do these activities, but they are rarely followed up as action research. One example of a public workshop would be the “Next Phase” program offered by the Gestalt International Study Center on Cape Cod.

Additionally, we have known for decades that relational influences have major impacts on career outcomes (Hall 1996b). As the research we cited earlier shows, strong relational bonds and developmental networks contribute to career success in major ways. Parker and colleagues have identified many specific action steps by which peer coaching can promote career development (Parker et al. 2018). Organizations already use many activities, such as mentoring and developmental networks, to help employees advance their careers.

Recommendation 2: Integrate Career Learning Cycles in Organizational Planning and Design

Protean careers unfold in short learning cycles with phases including exploration, trial, establishment, mastery, and disengagement (Mirvis & Hall 1994). A consideration of these learning cycles is often absent in organizational planning and design. In most cases, organizations assume that employees would follow a linear and sequential career track. An example of this is the career progression from individual contributor, to supervisor, then to middle manager, and finally to senior manager. In contrast, organizations need to consider shorter, more rapid career cycles

(which could include lateral moves) for learning different capabilities.³ Examples of this approach include models of experience-based development (Yip & Wilson 2010)—practices that provide differentiated developmental experiences (e.g., a stretch assignment or an overseas posting) to employees based on their career stage and needs. More specific examples of these practices include lateral moves, downward moves for specific development goals (Hall & Isabella 1985), internal job/bulletin boards, and the use of After Action Reviews (AARs) to facilitate learning after an experience.

We see a strong agentic theme in the profile of the person with a high PCO. One of the strongest correlates is a proactive personality, which means that the person likes to be active rather than reactive, scans the environment, and anticipates what needs to be done, rather than letting events dictate his or her choices (Uy et al. 2015). Another important motivational correlate of the PCO is the learning goal orientation, which is a drive toward understanding novel situations and tasks and mastering them for the intrinsic joy of mastery. Again, the motivational and values components of SDT would be relevant here, as well. All of these variables would be important in designing jobs and roles suitable to employees with a PCO.

Recommendation 3: Develop High-Impact Career Interventions

We have already identified several experimental interventions that could test the relative impact of different career development interventions (e.g., promoting self-affirmation and self-efficacy). This approach could entail taking activities that are already being done in career workshops and courses and studying them comparatively to identify which have the greatest impact. Accordingly, practitioners can develop career initiatives around the most potent interventions. Examples of evidence-based interventions include use of interest assessments, job crafting (Akkermans & Tims 2017, Berg et al. 2010), and reflection/journaling activities exploring one's future work self (Taber & Blankemeyer 2015)—interventions that have been found to predict protean career outcomes of agency, adaptability, and identity awareness. The development of protean career interventions should not be limited to just organizations. We would argue that these interventions could be applied in early educational settings. Why intervene? Career readiness and employability is a critical concern for education policy. In the case of the United States for example, a nationally representative survey of the population in 2010 revealed that only 27% of college graduates pursue a career related to their majors (Abel & Deitz 2015). We suggest that interventions to support and enable a PCO could help young adults make more self-directed educational decisions and craft careers aligned with these decisions. These protean outcomes could go a long way in improving labor market inefficiencies and individual well-being.

Recommendation 4: Apply Protean Career Theory in Performance Management

Organizations have realized the limitations of standardized performance management and are increasingly turning to individualized approaches to both performance management and career development. This has been singled out in industry reports on global human capital trends (e.g., Schwartz et al. 2017). Similarly, several leading organizations have embraced the concept of mass career customization (Benko & Weisberg 2007), promoting individualized paths for career development. The assumption in this shift is that employees would be more fulfilled and engaged if given more control and autonomy in charting their careers and how they are managed. However,

³We are grateful to Polly Parker for suggesting this idea.

this approach could backfire for employees or organizational cultures that have a low protean orientation.

As a practical step, organizations could consider the extent to which their culture values a protean approach to careers and performance management. Instead of a cookie cutter approach to performance management, we recommend that organizations adopt individualized performance management systems only to the extent that they and their employees value a protean approach to careers. A protean approach to performance management could involve self-directed appraisal systems where employees have greater say in how they are evaluated and rewarded.

Organizations should also recognize and support intrinsic orientations in career planning. More specifically, research on employee recognition and rewards reveals that transactional rewards could undermine a person's intrinsic motivation toward work (Frey & Oberholzer-Gee 1997). In contrast, verbal affirmation and coworking arrangements have been found to predict increases in intrinsic motivation (Carr & Walton 2014, Hewett & Conway 2016). Such findings suggest that attention to protean characteristics, of self-direction and intrinsic values, is important in improving initiatives around employee recognition and rewards.

Recommendation 5: Design Protean Organizations

From a job-design perspective, there are several ways that organizations could create enabling conditions to support and facilitate protean orientation among their members. For example, helping employees identify the task significance of their work, through activities such as job crafting, could be a way of increasing the self-direction component of a protean orientation (Hall & Las Heras 2010, Kopelman et al. 2012). A more systematic approach would be to design and develop an organization's culture with elements that support and reward protean-oriented behaviors (Hall & Yip 2014). Hall & Yip (2016) provide specific steps organizations can take to evaluate their current career culture and toward creating a protean organization.

How would this be in an organization's best interest? Organizations want employees who are engaged and self-directed, as well as people who are intrinsically motivated. Hall & Yip (2016) provide more detail on the organizational benefits of career-enhancing cultures. That said, we recognize here that not all organizations would benefit from a protean approach to careers. Organizations must first recognize the types of career cultures they want to develop, then identify career practices and policies consistent with these cultures. For example, a protean culture might be optimal in organizations where self-direction and an intrinsic values orientation are aligned with the occupational interests of its members (e.g., in professional service firms). A protean culture may be less optimal in high-reliability organizations where the occupational values are focused on technical mastery and workplace safety (e.g., in engineering organizations). As Morgeson et al. (2010) note, the link between occupational and organizational contexts in work design is often neglected and needs to be given more attention in both research and practice.

CONCLUSION

Several important conclusions have emerged from our review of the protean careers literature. First, the PCO is an important psychological resource in predicting how people adapt successfully to career transitions and contribute as organizational citizens. In particular, we identified the Protean Paradox as a phenomenon that merits further investigation for organizations; namely, early evidence suggests that individuals who are self-directed and values oriented make better organizational citizens and can be more likely to commit to the organization. Second, there is no such thing as an objective protean career—the protean career is anchored in a psychological

orientation and shaped by processes that are internal to the individual. A person may enact a protean career while being a lifelong member of one organization. Third, if the PCO is the “engine” that energizes the person’s career, this engine will not lead to concrete results without the operation of several intervening variables that represent the career process experiences that motivate the person to achieve important career outcomes. We identified three important protean processes that merit further investigation, with implications for practice, namely, agency, adaptability, and awareness of one’s identity and values.

In writing about the protean career, Hall (1996a) predicted that the responsibility for careers and career moves was shifting from the organization to the employee. Two decades of research and evidence suggest that the direction is unlikely to go the other way.⁴ A PCO is a necessary condition for sustainable and resilient careers in and out of organizations.

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⁴The same point might be made about the person’s role in a closely related process, leadership development (Day et al. 2014).

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Errata

An online log of corrections to *Annual Review of Organizational Psychology and Organizational Behavior* articles may be found at <http://www.annualreviews.org/errata/orgpsych>