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**RELATIONSHIP BETWEEN PROTEAN CAREER ORIENTATION AND WORK-LIFE
BALANCE: A RESOURCE PERSPECTIVE**

MARCO S. DIRENZO

Department of Management
Naval Postgraduate School
555 Dyer Road
Monterey, CA 93943
Telephone: (831) 656-2966
Fax: (831) 656-3407
Email: msdirenz@nps.edu

JEFFREY H. GREENHAUS

Department of Management
Drexel University
3141 Chestnut Street
Philadelphia, PA 19104
Telephone: (215) 895-2139
Fax: (215) 895-2891
Email: greenhaus@drexel.edu

CHRISTY H. WEER

Department of Management and Marketing
Salisbury University
1101 Camden Avenue
Salisbury, MD 21801
Telephone: (410) 543-6316
Fax: (410) 546-6208
Email: chweer@salisbury.edu

**Relationship between Protean Career Orientation and Work-Life Balance:
A Resource Perspective**

Keywords: Protean Career Orientation, Work-Life Balance, Employability, Resources, Whole-Life Perspective

Abstract

Despite the commonly held belief that a protean career orientation (PCO) enables employees to achieve more balance in their lives, little is known about the relationship between PCO and work-life balance. Using two waves of data collection separated by 2.5 years, this study examined the relationship between PCO and work-life balance among a sample of 367 college-educated employees in the United States. Analysis was conducted to empirically distinguish PCO from conceptually related constructs and structural equation modeling was used to examine the process that explains the linkage between PCO and balance. We found that PCO was positively related to work-life balance. We also found support for the role of several resources (social capital, psychological capital, and perceived employability) that explain the relationship between PCO and balance. In particular, PCO was associated with extensive career planning activities that were related to the accumulation of three forms of career capital—human capital, social capital, and psychological capital. In turn, social capital and psychological capital were associated with high employability, which was related to greater work-life balance for individuals who take a whole-life perspective on their careers. We discuss the theoretical and practical implications of the findings and provide suggestions for future research.

Relationship between Protean Career Orientation and Work-Life Balance: A Resource Perspective

Protean career orientation (PCO) (Briscoe & Hall, 2006), a promising concept in understanding the careers and lives of contemporary employees, reflects a revived emphasis on individuals as “agents of their own career destinies” (Inkson & Baruch, 2008: 217). Derived from Hall’s (1976) protean career concept, PCO refers to an individual’s proclivity to enact a career focused on achieving subjective success through autonomous career management. Two critical dimensions underlie PCO: (1) a *self-directed* approach to career management in which the individual exerts personal control over career development by taking the initiative to explore career options and make career decisions; and (2) a *values-driven* orientation whereby the individual pursues personally meaningful (as opposed to socially imposed) values and goals that provide the motivation behind career decisions and create the standards for experiencing psychological career success.

PCO has become increasingly salient in a volatile global economy ([Bansak & Raphael, 2006](#); [Comin & Mulani, 2006](#); [Comin & Philippon, 2005](#); [Farber, 2005](#); [Stewart, 2002](#)) in which widespread career uncertainty forces workers to take greater control over career management to remain employable in a highly competitive labor market ([DiRenzo & Greenhaus, 2011](#)). Moreover, a short-term transactional psychological contract ([Herriot, Manning, & Kidd, 1997](#); [Rousseau, 1995](#); [Smithson & Lewis, 2000](#)) that is characteristic of many contemporary organizations requires employees to engage in proactive career management to develop in their careers and achieve personal goals ([De Vos & Soens, 2008](#); [Hall & Moss, 1998](#)). Not surprisingly, a strong PCO has been associated with several important career outcomes, such as attaining a greater sense of career authenticity ([Briscoe, Hall, & DeMuth, 2006](#)) and higher

levels of perceived employability and career success ([Baruch & Quick, 2007](#); [De Vos & Soens, 2008](#)).

However, we know little about the relationship between PCO and work-life balance despite a literature that repeatedly suggests that protean careers should promote greater balance in life ([Briscoe & Hall, 2006](#); [Briscoe et al., 2006](#); [Hall, 2004](#); [Hall & Richter, 1990](#)). Most conceptions of a protean career allude to the pursuit of balance in some way, such as shifting focus from the “work self” to that of the “whole self” ([Hall & Chandler, 2005](#)), serving the whole person, family, and life purpose ([Hall, 2004](#)), taking a whole-life perspective ([Briscoe et al., 2006](#)), and seeking a balanced, autonomous work life ([Hall & Richter, 1990](#)). Despite suggestions that PCO should facilitate one’s ability to function effectively across the whole life space ([Briscoe & Hall, 2006](#)), the relationship between PCO and work-life balance remains unexplored. Because work-life balance is increasingly important to many employees ([Newman, 2011](#)), relates to important outcomes at work and at home ([Carlson, Grzywacz, & Zivnuska, 2009](#)), and can play a prominent role in employees’ subjective assessment of their career success ([Greenhaus & Kossek, 2014](#)), understanding the connection between PCO and work-life balance is particularly timely.

Unlike work-family conflict and work-family enrichment, which are linking mechanisms between work and family roles ([Edwards & Rothbard, 2000](#)) that explain how experiences in one role negatively (conflict) or positively (enrichment) affect experiences and outcomes in the other role, balance refers to an individual’s overall appraisal of his or her functioning in multiple life roles ([Valcour, 2007](#)). After reviewing a variety of perspectives on balance reflected in the literature, [Greenhaus and Allen \(2011\)](#) concluded that balance is an employee’s overall or holistic feeling that results from being effective and satisfied in highly valued roles, a definition

we adopt in this study. Because balance is contingent upon effectiveness and satisfaction in multiple roles and because resources are essential to effective functioning in different life domains (ten [Brummelhuis & Bakker, 2012](#)), a Conservation of Resources (COR) perspective ([Hobfoll, 1989](#)) provides a useful conceptual lens with which to examine the relationship between PCO and work-life balance.

Therefore, the aim of this study was to assess the relationship between PCO and work-life balance and examine a resource-based process that links these two concepts. The present study contributes to the literature in several respects. From a careers perspective, PCO is presumably more than an orientation toward work but rather involves an approach to managing one's overall life. Therefore, examining the relationship between PCO and work-life balance should help us understand whether the implications of this career orientation extend beyond work to include other domains in an individual's life. To our knowledge, despite enduring conceptual speculation, this is the first study to empirically examine the relationship between PCO and balance. From a work-family perspective, Grzywacz and Carlson (2007) have rightfully called for additional research on the factors that enable employees to experience greater balance in life. The present study answers that call and highlights the important role of work-related resources in employees' appraisals of their work-life balance. In sum, we hope to simultaneously provide insights into the consequences of PCO and the factors that contribute to work-life balance, thereby integrating research streams from the careers and work-family literatures.

Theory and Development of Hypotheses

A Resource Perspective on Work-Life Balance

As noted above, feelings of balance are derived from a sense of effectiveness and satisfaction in multiple life roles ([Greenhaus & Allen, 2011](#)). Based on a demands-resources fit perspective, [Voydanoff \(2005\)](#) has proposed that resources are essential to achieving balance because they enable employees to meet the demands of the work and family domains and participate effectively in both domains. Research regarding the antecedents of work-family conflict and work-family enrichment has been consistent with [Voydanoff's](#) assertion. Resources from work (e.g., supervisor support, flexibility) and from home (e.g., spousal support) are associated with reduced work-family conflict ([Byron, 2005](#); [Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011](#)) and enhanced work-family enrichment ([Carlson, Kacmar, Wayne, & Grzywacz, 2006](#)). Because conflict detracts from feelings of balance and enrichment enhances feelings of balance ([Greenhaus, Ziegert, & Allen, 2014](#)), it is likely that resources play a dominant role in promoting balance ([Voydanoff, 2005](#)).

The COR perspective defines resources as objects, states, personal characteristics, and energies that people value ([Hobfoll, 1988](#); [ten Brummelhuis & Bakker, 2012](#)) because the resources enable them to achieve personal goals ([Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014](#)). Resources may be contextual (outside the self) or personal (within the self) and may be durable or volatile ([Hobfoll, 2002](#); [ten Brummelhuis & Bakker, 2012](#)). As suggested by [ten Brummelhuis and Bakker's \(2012\) Work-Home Resources Model \(WHRM\)](#), the acquisition of personal resources such as skills, knowledge, self-efficacy, and positive mood enable individuals to achieve positive outcomes (such as high performance and positive attitudes) at work and at home.

COR assumes that individuals who acquire resources are better able to obtain other resources in the future; that is, resources generate additional resources, thereby creating a

resource “gain spiral” ([Hobfoll, 2002](#)). In the present study, we apply the notion of the resource gain spiral to explain why PCO leads to WLB and propose the model depicted in Figure 1. By way of an overview of the model, we suggest that because of the importance they place on accomplishing personally meaningful goals, employees with a strong PCO are motivated to engage in extensive career planning to acquire career capital resources (human capital, social capital, and psychological capital). Then, consistent with the notion that resources generate other resources ([Hobfoll, 2002](#)) we further propose that the acquisition of the three career capital resources enables employees to achieve another resource - greater employability. Because employability provides additional resources of greater control and more employment options ([DiRenzo & Greenhaus, 2011](#)), it affords the autonomy and security that individuals need to meet the demands of multiple life domains and achieve greater balance. In addition, we propose that individuals with a strong PCO adopt a whole-life perspective ([Briscoe et al., 2006](#)) in which they view their career broadly within the context of their entire life and are therefore particularly likely to leverage their employability to achieve a greater feeling of balance between work and other life roles.

Because of the predicted positive linkages among PCO, career planning, career capital, employability, and work-life balance, we offer the following hypothesis and then elaborate more fully on each linkage in the model.

Hypothesis 1: PCO is positively related to work-life balance.

Insert Figure 1 about here

PCO and Balance: The Role of Career Development Factors

As Figure 1 indicates, we propose that the positive relation between PCO and work-life balance can be explained by three career development factors that have been viewed as contributors to the successful growth of a career: career planning, career capital, and employability ([DeFillippi & Arthur, 1994](#); [Fugate, Kinicki, & Ashforth, 2004](#); [Greenhaus, Callanan, & Godshalk, 2010](#)). We next discuss the linkages among these variables.

Because protean-oriented employees prefer to control the direction and development of their careers to achieve their own independently derived values and goals, they are unlikely to “borrow” external standards ([Briscoe et al., 2006](#)) and passively allow their organization or superiors to manage their careers. As a result, a strong PCO is manifested through personal agency and the proactive planning of one’s career that can result in the acquisition of resources to help an employee meet his or her goals ([Halbesleben et al., 2014](#)). Therefore, we expect highly protean individuals to engage in extensive career planning behaviors.

[Gould \(1979\)](#) describes career planning as deliberate efforts to outline future career development through the establishment of clear career goals and the strategies designed to accomplish these goals. The development of career goals and the specification of career strategies are two of the three components of career self-management (the third being career exploration) identified in the literature ([Noe, 1996](#); [Weng & McElroy, 2010](#)). Because individuals with a strong PCO are both self-directed and driven to achieve personally defined values ([Briscoe, Henaga, Burton, & Murphy, 2012](#)), they are likely to take the initiative to establish specific goals aimed at the fulfillment of their distinct values and objectives. Moreover, consistent with research linking PCO ([De Vos & Soens, 2008](#)) and proactivity ([Fuller & Marler, 2009](#); [Morrison & Phelps, 1999](#); [Seibert, Kraimer, & Liden, 2001](#); [Thompson, 2005](#)) with a

variety of career strategies, we expect highly protean individuals to strategize for the realization of these personally meaningful goals as well.

Hypothesis 2: PCO is positively related to career planning.

The establishment of career goals and strategies is geared toward the development of resources that can be drawn upon for career growth and satisfaction. Setting career goals enhances motivation and implementing career strategies increases the likelihood of achieving those goals ([Weng & McElroy, 2010](#)). Career capital entails the resources and relationships that can promote career-related outcomes ([Inkson & Arthur, 2001](#)). We adopt a career capital framework to illustrate three resources (human, social, and psychological capital) that employees can accumulate as a result of their career planning behaviors. First, individuals' career planning activities often involve investments in human capital with the anticipation of returns or rewards in the future ([Dess & Shaw, 2001](#); [Jackson & Shuler, 1995](#)). As such, the establishment of career goals and strategies can help individuals develop human capital through the acquisition of greater experience, education, certifications, skills, and/or knowledge ([Gould, 1979](#); [Gould & Penley, 1984](#); [King, 2004](#); [Kossek, Roberts, Fisher, & DeMarr, 1998](#); [Noe, 1996](#); [Weng & McElroy, 2010](#)).

Second, career strategies can enhance an individual's social capital, that is, resources derived from one's network of personal and professional relationships ([Inkpen & Tsang, 2005](#)) that often serve as a primary means to acquire job opportunities ([Forret & Sullivan, 2002](#)) and can be drawn upon for career guidance and personal growth ([King, 2004](#); [Parker & Arthur, 2000](#)). Because individuals engaged in career planning actively identify and clarify goals, thereby elevating motivation and determination ([Locke & Latham, 1990](#)), they are likely to take proactive measures to foster ties with contacts who can help them realize their goals ([Jokisaari &](#)

Nurmi, 2005) and generate new contacts that can provide access to desired job leads and/or develop career options. In support of this notion, planning and enacting networking strategies have been shown to pay dividends in the development of social capital ([Gould & Penley, 1984](#); [Noe, 1996](#); [Wolff & Moser, 2006, 2009](#)).

Third, we propose that career planning behavior can foster the development of psychological capital (PsyCap), cognitive resources that relate to the pursuit of valued goals ([Gooty, Gavin, Johnson, Frazier, & Snow, 2009](#)) and correspond to an individual's positive psychological states of hope, optimism, self-efficacy, and resilience ([Luthans, Avolio, Avey, & Norman, 2007](#)). *Hope* is based on "an interactively derived sense of a) agency (goal directed behavior) and b) pathways (planning to meet goals)" ([Snyder, Irving, & Anderson, 1991: 287](#)). *Optimism* is associated with a positive, yet realistic, outlook and attribution of events ([Luthans, 2002](#)) and entails the realization of both what one can and cannot accomplish ([Luthans et al., 2007](#)). *Self-efficacy* represents an individual's confidence in his or her ability to be successful at specific tasks or within a given context ([Stajkovic & Luthans, 1998](#)). Finally, *resilience* reflects the ability to rebound in the face of setbacks, failures, or change ([Avey, Luthans, Smith, & Palmer, 2010](#)) and enables individuals to overcome times of adversity and ambiguity ([Gooty et al., 2009](#); [Luthans, Avolio, Avey, Norman, & Combs, 2006](#)).

Because career strategies facilitate career success ([De Vos & Soens, 2008](#); [Gould, 1979](#); [Gould & Penley, 1984](#); [Greenhaus, Parasuraman, & Wormley, 1990](#); [Noe, 1996](#); [Sturges, Guest, Conway, & Mackenzie Davey, 2002](#); [Wolff & Moser, 2009](#)), individuals enacting specific strategies are likely to be hopeful and optimistic in anticipation of future accomplishments. Moreover, evidence suggests that setting career-related goals is positively related to self-efficacy ([Rogers, Creed, & Glendon, 2008](#)) perhaps because the establishment of attainable goals fosters

optimism, motivation, and confidence ([Locke & Latham, 1990](#)). Finally, because developing and implementing career strategies provide direction for individuals during times of stress, career planning should help individuals deal resiliently with ambiguous and uncertain careers ([Gould & Penley, 1984](#); [King, 2004](#); [Saks & Ashforth, 2002](#); [Zikic & Klehe, 2006](#)). Therefore, we expect career planning to provide a means through which all three forms of career capital can develop.

Hypothesis 3: Career planning is positively related to human capital (3a), social capital (3b), and psychological capital (3c).

Employability represents the capacity to control one's employment options through the creation, identification, and realization of career opportunities ([DiRenzo & Greenhaus, 2011](#)). It corresponds to an individual's ability to maintain employment appropriate with one's qualification level ([Rothwell, Herbert, & Rothwell, 2008](#); [Wittekind, Raeder, & Grote, 2010](#)) and to maximize potential through sustainable employment ([Hillage & Pollard, 1998](#)). As a result, highly employable individuals are less likely to experience periods of either unemployment or under-employment ([McArdle, Waters, Briscoe, & Hall, 2007](#); [Smith, 2010](#)).

Our conceptualization of employability is based on [Fugate et al.'s \(2004\)](#) pioneering work but departs from their conceptualization in an important respect. Fugate and colleagues ([Fugate et al., 2004](#); [Fugate & Kinicki, 2008](#)) view employability as a multidimensional construct that "enables" and "predisposes" individuals to identify and realize career opportunities. Therefore, [Fugate et al.'s \(2004\)](#) three dimensions of employability (career identity, personal adaptability, and social and human capital) that "enable" the realization of opportunities are part of their employability construct. We, on the other hand, view employability as the resultant capacity to create, identify, and realize career opportunities and consider such factors as identity, adaptability, and human or social capital to be potential

antecedents of employability rather than employability per se. Furthermore, our view of social and human capital as antecedents of employability is conceptually akin to what Fugate et al. (2004) consider to be one dimension of employability, and our antecedent of psychological capital incorporates elements of [Fugate et al.'s \(2004\)](#) dimensions of identity and adaptability. In the following paragraphs, we establish the conceptual rationales underpinning the connections between each career capital variable in our model (human, social, and psychological) and employability.

Because extensive human capital provides employees with greater job proficiency, knowledge, and portable skills ([Anderson, 2001](#); [Lubit, 2001](#)) and can increase their ability to meet the performance expectations of various occupations ([Burt, 1997](#); [Portes, 1998](#)), it acts as a labor market signal drawing the attention of external employers and increasing the ease with which one can acquire new jobs ([Allen & Griffeth, 2001](#); [Bretz, Boudreau, & Judge, 1994](#); [Trevor, 2001](#)). Furthermore, in addition to consistent depictions of employability as a function of work-related skills and abilities ([Baruch, 2001](#); [Benson, 2006](#); [DiRenzo & Greenhaus, 2011](#); [Smith, 2010](#)), investing in human capital has been shown to have a strong influence on continued career progression ([Judge, Cable, Boudreau, & Bretz, 1995](#); [Kirchmeyer, 1998](#); [Tharenou, Latimer, & Conroy, 1994](#)) thereby enhancing one's ability to identify and attain opportunities for career growth.

Social capital is also thought to be vital to employability ([Fugate et al., 2004](#); [McArdle et al., 2007](#)) because it provides individuals with greater access to career-related information ([Higgins & Kram, 2001](#); [Seibert et al., 2001](#)) and offers a competitive advantage via heightened exposure to job opportunities, promotions, business leads, and venture capital ([Forret & Sullivan, 2002](#)). In fact, managers typically find jobs through informal networks as opposed to traditional

job search methods ([Boxman, de Graaf, & Flap, 1991](#)). Additionally, because expanding one's social capital can create career communities that foster personal development and provide career support, social capital is likely to increase an individual's capacity to create, identify, and realize career opportunities across organizations and industries throughout an entire career ([Dess & Shaw, 2001](#); [Fugate et al., 2004](#); [Higgins & Kram, 2001](#)).

We expect that psychological capital can also enhance employability. Because contemporary organizations place value on individuals who can transition between job roles and duties ([Fugate, 2006](#); [Fugate & Kinicki, 2008](#); [Van Der Heijde & Van Der Heijden, 2006](#)), employability requires the ability to successfully enact intra- and inter-firm job transitions. Optimistic workers tend to perceive transitions as challenges and opportunities to learn ([Carver & Scheier, 1994](#)), which can both help them achieve at work and possibly drive them to develop job alternatives in the pursuit of personal career goals ([Fugate & Kinicki, 2008](#)). Further, because hope involves the motivation and the will to pursue personally valued goals ([Gooty et al., 2009](#); [Luthans et al., 2007](#)), hopeful individuals are likely to put forth greater effort toward the development of new job opportunities, which has been shown to predict employment status and job search success ([Saks & Cote, 2006](#)). Career self-efficacy is associated with successful job search and re-employment ([McArdle et al., 2007](#)) and can give individuals the confidence to seek more extensive or better employment opportunities ([Rothwell et al., 2008](#)) thereby enhancing their employability. Finally, resilience can foster employability because identifying and realizing career opportunities requires dealing with ambiguity, uncertainty, and change ([Fugate et al., 2004](#)), and an individual's strength to bounce back quickly in the face of setbacks is essential to maintaining and/or finding new, equally fulfilling work ([DiRenzo & Greenhaus, 2011](#); [Fugate & Kinicki, 2008](#)).

In sum, we propose that each form of career capital serves as a resource that can enhance an employee's level of employability.

Hypothesis 4: Human capital (4a), social capital (4b), and psychological capital (4c) are positively related to employability.

PCO and Whole-Life Perspective

In addition to enhancing employability through fostering career planning and the accumulation of career capital, we propose that PCO also relates to the adoption of a whole-life perspective toward one's career. References to a whole-life perspective (Briscoe et al., 2006) have been fairly consistent within the protean career literature, but conceptualizations of whole-life perspective have been intermingled with definitions of PCO, despite the fact that a whole-life perspective is not explicitly incorporated as a dimension (self-directed and values-driven) of PCO. Therefore, we distinguish PCO from whole-life perspective and define the latter as the extent to which an individual (1) seeks effectiveness and satisfaction in *multiple* life roles rather than solely in the work role and (2) makes career decisions with an awareness of their impact on other aspects of one's life. According to this view, an individual who adopts a whole-life perspective desires balance among different parts of life and understands the consequences of career decision making for achieving balance.

We believe that PCO and whole-life perspective are different but related constructs. They are conceptually distinct because PCO is a broad disposition toward proactive engagement in one's career to achieve psychological success, whereas a whole-life perspective is a more specific belief about the contribution of work *and* other life roles to one's feeling of psychological success. Nevertheless, we believe that individuals who hold a strong PCO are likely to adopt a whole-life perspective on their careers. Because protean-oriented individuals are

driven to fulfill values that serve the “whole person, family, and ‘life purpose’” (Hall, 2004: 2), they are likely to develop a personal definition of success that includes commitments and accomplishments that extend beyond the work domain. As a result, individuals with a strong PCO are motivated to attain effectiveness and positive feelings in a variety of life roles as a way to achieve their life purpose, direct their careers toward the fulfillment of work *and* non-work goals, and base their career decisions, at least in part, on how these decisions can enhance or diminish their functioning in a variety of life domains.

Hypothesis 5: PCO is positively related to whole-life perspective.

The Interaction of Employability and Whole-Life Perspective on Work-life Balance

As discussed previously, individuals experience a heightened level of work-life balance when they are effective and satisfied in a variety of life roles. There are two reasons to believe that a high level of employability provides individuals with options that enable them to become effective and satisfied in different parts of their lives. First, highly employable individuals can take advantage of their labor market value to negotiate for conditions and resources ([Bretz et al., 1994](#); [Lazear, 1986](#); [Pinkley, Neale, & Bennett, 1994](#)) in their current job such as social support, autonomy, and flexibility, all of which can enable them to reduce work-family conflict ([Michel et al., 2011](#)) and experience more work-life balance ([Greenhaus & Allen, 2011](#)). In other words, because “the market values their contributions at a level that justifies better employment arrangements” (Bretz et al., 1994: 276), highly employable workers should have the power to acquire resources in an organization that enable them to meet goals and responsibilities at work and beyond the work domain. Second, in the event that an employer fails to provide such conducive work arrangements and resources, individuals empowered by a sense of “employability security” (Kanter, 1993) may be more willing to leave jobs that detract from a

balanced life and seek a more suitable position because job alternatives are more accessible to individuals with competencies in high demand ([Griffeth, Steel, Allen, & Bryan, 2005](#)).

Although employability can provide individuals with the resources to achieve more balance in their current job or to leave a job that interferes with balance, individuals need to be motivated to utilize the resources to achieve more balance. For example, some highly employable individuals may not negotiate for more family-supportive work conditions or may not leave a family-intrusive job because achieving a more balanced life is not central to their identity or their definition of success. Therefore, individuals who possess the resources derived from employability may not always use these resources to achieve more work-life balance. We believe that the motivation to use or leverage employability-based resources to enhance balance is more characteristic of individuals who adopt a whole-life perspective.

A whole-life perspective entails a career outlook that emphasizes achievement and fulfillment in multiple life domains, not solely at work. Because feelings of balance result from effectiveness and satisfaction in different parts of life, individuals with a strong whole-life perspective consider the achievement of work-life balance to be an essential component of their career success (Briscoe et al., 2006; Friedman & Greenhaus, 2000; [Sargent & Domberger, 2007](#)). For that reason, we believe that such individuals are particularly motivated and likely to leverage the resources derived from their employability to help them achieve a high level of work-life balance.

Hypothesis 6: Whole-life perspective moderates the positive relationship between employability and work-life balance such that the relationship is stronger for individuals with a strong whole-life perspective than for those with a weak whole-life perspective.

Method

Sample and Procedure

The sample for the present study was recruited using Project StudyResponse.com. Data collected through Project StudyResponse.com has been utilized by researchers in a number of studies in the organizational behavior literature (e.g. Baltes & Heydens-Gahr, 2003; [Inness, LeBlanc, & Barling, 2008](#); [Piccolo & Colquitt, 2006](#); Resick, Whitman, Weingarden, & Hiller, 2009). Eligible respondents were required to be U.S. residents, currently working full-time, with a minimum education level of a bachelor's degree. StudyResponse.com sent an email to 1400 potential respondents to invite them to participate in the study. Each respondent had a unique StudyResponse.com ID that was submitted with his/her completed survey, yet was unknown to the researchers. Participants were paid \$5 upon completion of the initial Time 1 survey. Survey responses were collected from 695 respondents at this time. Thirty months later, StudyResponse.com sent another email to 511 Time 1 respondents who were still active in their database inviting them to respond to a follow-up survey. Respondents were paid \$10 upon completion of the Time 2 survey. Surveys from participants no longer employed full-time were discarded, resulting in a final sample of 367.

Comparison of Time 2 respondents and non-respondents indicated no significant differences in their scores across any of the Time 1 measures and no significant differences across demographic variables, with the exception of marital status/living with partner and having children living at home which dropped from 83% to 72% and 66% to 57% of the sample from Time 1 to Time 2 respectively. The final sample was 53.4% male and 80.4% Caucasian. The average age of respondents was 36.75 years with 14.24 years of full-time work experience and an average annual income of \$81,797. As mentioned, all participants had at least an

undergraduate college degree. Of those, 37% had completed graduate degrees with 25.3% holding Master's degrees, 6.3% professional degrees (e.g., J.D., M.D.), and 5.4% PhDs. Respondents represented a wide range of industries including manufacturing (25.6%), education (13.9%), financial services (9.5%), health care and pharmaceuticals (7.4%), law (4.1%), accounting (3.8%), government agencies (3.5%), real estate (2.2%), and other industries (30%).

Measures

All variables were measured at Time 1 and employability, whole-life perspective, and work-life balance were also assessed again 2.5 years later at Time 2. We followed this strategy for two reasons. First, we wanted to introduce temporal separation to allay concern about common method variance by testing at least some of the relationships in our model with variables measured at different times ([Podsakoff, MacKenzie, & Podsakoff, 2012](#)). Second, because career capital signals employee value to the labor market and employees derive employability perceptions through market comparisons and response ([DiRenzo & Greenhaus, 2011](#)) we were particularly interested in allowing sufficient time for the accumulation of career capital to adequately inform respondents' perceptions of their employability. Therefore, the structural models that were examined in this study included PCO, career planning, and career capital all measured at Time 1 and perceived employability, whole-life perspective (which was predicted to interact with employability), and work-life balance all measured 2.5 years later at Time 2.

Protean career orientation. Twelve items were developed to measure PCO as conceptualized in the current study and collected at Time 1. Sample items include self-directed: "It is up to me to find and create opportunities for career progression" and values-driven: "It is important that my career helps me fulfill my life values." The full scale is represented in

Appendix A. Items were rated on a Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree ($\alpha = .87$). In order to examine the dimensionality of the construct, we conducted confirmatory factor analysis (CFA). We first examined a one-factor model in which all 12 items were loaded onto one latent PCO construct. Results indicated that the one-factor model fit the data well ($\chi^2(51) = 268.95, p < .001, CFI = .92, RMSEA = .08$). We then examined a two-factor model in which the six items corresponding to each dimension were loaded onto separate latent constructs. Although the two-factor structure provided better fit ($\Delta\chi^2(1) = 38.72, p < .001$), the two factors were highly correlated ($r = .83$). Therefore, the more parsimonious one-factor, 12-item PCO construct was retained to remain consistent with previous theory and the study's hypotheses.

Career planning. Career planning was assessed at Time 1 and measured with six items developed by Gould (1979: 543) that address “1) the extent to which career plans exist, 2) how frequently career plans are changed, 3) how clear the plans are, and 4) whether or not a strategy exists for achieving career goals.” Participants responded on a 6-point scale (1 = strongly disagree to 6 = strongly agree). Sample items include “I have a strategy for achieving my career goals” and “My career objectives are not clear” (reverse scored) ($\alpha = .80$).

Career capital. This study assessed three forms of career capital at Time 1: human, social, and psychological capital. Human capital was measured using four items developed by Eby, Butts, and Lockwood (2003) and a fifth item added by Colakoglu (2006). Respondents indicated their level of agreement (1 = strongly disagree to 5 = strongly agree) with items including “I have a diversified set of job-related skills,” and “My job-related knowledge and skills are easily transferable/applied to other employment settings” ($\alpha = .77$).

Social capital was measured with 10 items developed by [Eby et al. \(2003\)](#) and [Colakoglu \(2006\)](#). Respondents indicated their level of agreement (1 = strongly disagree to 5 = strongly agree) with items including “I am well connected within the organization,” “I have extensive contacts within the industry I work,” and “I have close ties with my extended family and friends” ($\alpha = .89$).

Psychological capital was assessed using the Psychological Capacity Questionnaire (Luthans et al., 2007). This measure assesses the four distinct dimensions of PsyCap: hope, optimism, self-efficacy, and resilience with six items corresponding to each dimension. Sample items include “There are lots of ways around any problem” (hope), “I feel confident helping to set targets/goals in my work area” (self-efficacy), “I usually manage difficulties one way or another at work” (resilience), and “I always look on the bright side of things regarding my job” (optimism). Responses to the 24 PsyCap items were made on a 6-point scale (1 = strongly disagree to 6 = strongly agree) ($\alpha = .93$).

Employability. Employability refers to one’s capacity to create, identify, and realize career opportunities both within and outside the organization. To assess perceptions of employability we adapted six items from [De Vos and Soens \(2008\)](#) and [Eby et al. \(2003\)](#). Respondents indicated their level of agreement on a 5-point scale (1 = strongly disagree to 5 = strongly agree) to such items as “There are many opportunities available for me in my company” and “I believe I could easily obtain a comparable job with another employer” (Time 1: $\alpha = .79$; Time 2: $\alpha = .86$).

Work-life balance. This study utilized an eight-item measure of work-life balance, using a 5-point scale (1 = strongly disagree to 5 = strongly agree). Six items were adapted from [Greenhaus, Allen, and Foley \(2004\)](#), with sample items including “I can balance my work and

personal responsibilities so that one does not upset the other” and “I am satisfied with the balance I have achieved between my work and personal life.” Two additional items were written expressly for this study: “I feel that I live a harmonious life” and “My work and personal lives are in harmony with one another.” One item did not load properly onto the single factor and was dropped from further analysis (Time 1: $\alpha = .86$; Time 2: $\alpha = .89$).

Whole-life perspective. Whole-life perspective reflects the search for effectiveness and satisfaction in multiple life roles (rather than only the work role) and the tendency to make career decisions with an awareness of their impact on other aspects of one’s life. Although the literature has often alluded to a whole-life perspective, we have presented a formal definition here and created a six-item scale for this study (Time 1: $\alpha = .80$; Time 2: $\alpha = .83$), with items reflecting each of the two underlying dimensions. Sample items include “I strive to be successful in many different parts of my life” and “I make work-related decisions based on the effects the decisions have on many other parts of my life.” The full scale is provided in Appendix B. Because this measure was newly created, we conducted CFAs that suggested adequate fit for the one-factor model (Time 1: $\chi^2(9) = 110.89, p < .001, CFI = .91, RMSEA = .10$; Time 2: $\chi^2(9) = 58.72, p < .001, CFI = .94, RMSEA = .10$).

Controls. Time 1 scores for employability, whole-life perspective, and work-life balance were controlled during the analyses, as were current job tenure at Time 2 and the number of job transitions made between Time 1 and Time 2. Prior research has suggested that gender may be related to PCO (Briscoe et al., 2006; [Segers, Inceoglu, Vloeberghs, Bertram, & Hendrickx 2008](#)) while marital status and responsibility for children may influence work-life balance ([Carlson et al., 2009](#)). Therefore we controlled for these variables in addition to age and the proclivity to respond to items in a socially desirable way ([Crowne & Marlowe, 1960](#)). All controls were

represented as observed variables in the analyses to make the ratio of observations to parameters more favorable ([Bentler & Chou, 1987](#)).

Tests for Discriminant Validity

As noted earlier, although previously theorized as elemental to a protean career, a whole-life perspective has not been incorporated in prevailing conceptualizations and empirical research concerning PCO. Nevertheless, conceptual overlap between whole-life perspective and PCO, particularly the values-driven dimension, continues to persist. To provide needed clarity to the literature, we conducted CFAs to test for an empirical distinction between PCO and whole-life perspective at Time 1. Results indicated that the two-factor model ($\chi^2 (134) = 423.63, p < .001, CFI = .91, RMSEA = .07$), in which the items for PCO and whole-life perspective were loaded onto their respective latent constructs, fit the data well and significantly better than the one-factor model ($\chi^2 (135) = 659.52, p < .001, CFI = .79, RMSEA = .10$) ($\Delta\chi^2 (1) = 235.89, p < .001$). Moreover, because researchers often mistakenly impose notions of a whole-life perspective as the foundation of a values-driven career, we conducted CFAs to distinguish whole-life perspective from each of PCOs two underlying dimensions. Again, a two-factor model loading the six values-driven items on one latent construct and the six whole-life perspective items on another fit the data well and significantly better than did the one-factor model ($\Delta\chi^2 (1) = 205.39, p < .001$). Similar results were found regarding the self-directed dimension ($\Delta\chi^2 (1) = 207.61, p < .001$). Finally, additional CFAs were performed to test for the distinction between whole-life perspective and work-life balance separately for the Time 1 data and the Time 2 data. The two-factor models that distinguished between whole-life perspective and work-life balance fit the data well (Time 1: $\chi^2 (64) = 213.30, p < .001, CFI = .93, RMSEA = .08$; Time 2: $\chi^2 (64) = 279.27, p < .001, CFI = .92, RMSEA = .09$) and significantly better than

the respective one-factor models (Time 1: $\Delta\chi^2(1) = 412.83, p < .001$; Time 2: $\Delta\chi^2(1) = 630.68, p < .001$).

Analyses

We used structural equation modeling with Amos 18. The fit statistics examined included (a) chi-square goodness-of-fit, (b) RMSEA ([Browne & Cudeck, 1993](#)), and (c) CFI (Bentler, 1990).

Parcels. Each of the latent variables (PCO, career planning, human, social, and psychological capital, T2 employability, T2 whole-life perspective, and T2 work-life balance) was represented by composite parcels of items. We followed the procedure suggested by Landis, Beal, and Tesluk (2000) to create item parcels. After a single-factor maximum-likelihood analysis of the items had been conducted, items with the highest and lowest loadings were assigned to the first parcel, items with the second-highest and second-lowest items were assigned to the second parcel, and so forth.

To create the whole-life perspective X employability interaction variable, we followed the unconstrained, mean centered, matched-pair product approach suggested by Marsh, Wen, and Hau (2004). We first mean centered all parcel indicators for the independent and moderator variables and used the product of the mean centered parcel indicators as indicators loading onto a new whole-life perspective X employability interaction latent variable. The parcels were matched such that the highest loading parcel from each of the two variables were multiplied together with the product forming the first indicator of the latent interaction variable, the next highest matched together and the product forming the second indicator, and the lowest loading matched together and the product forming the third indicator. Then, the latent interaction construct and the latent moderator construct were added to the structural

being indicated by a significant effect of the latent interaction construct on the outcome variable. Extensive comparative analysis with alternative methods has repeatedly shown that this method performs as well or better across multiple studies than all other methods ([Algina & Moulder, 2001](#); [Jaccard & Wan, 1995](#); [Jöreskog & Yang, 1996](#); [Kenny & Judd, 1984](#); [Mathieu, Tannenbaum, & Salas, 1992](#); [Wall & Amemiya 2001](#)), while also eliminating the need for complex linear constraints ([Little, Bovaird, & Widaman, 2006](#); [Marsh et al., 2004](#); [Marsh, Wen, Hau, Little, Bovaird, & Widaman, 2007](#)).

Results

Table 1 shows the means, standard deviations, and correlations (partialing out the effects of the control variables) for the study variables.

 Insert Table 1 about here

Measurement Model

We conducted a CFA to assess the structure of the measures for PCO, career planning, human, social, and psychological capital, employability, whole-life perspective, and work-life balance at Time 1. We examined the fit of the data of an eight-factor model in which each of these latent variables was assessed by indicators reflecting their respective measurement items. The eight-factor model fit the data well ($\chi^2(224) = 508.68, p < .001, CFI = .96, RMSEA = .06$) and each indicator's loading on the appropriate latent construct was significant ($p < .001$). The eight-factor model was also shown to provide significantly better fit when compared against four seven-factor models in which the indicators for PCO and balance ($\Delta\chi^2(7) = 884.46, p < .001$), PCO and whole-life perspective ($\Delta\chi^2(7) = 335.50, p < .001$), PCO and career planning ($\Delta\chi^2(7)$

= 595.48, $p < .001$), and balance and whole-life perspective ($\Delta\chi^2 (7) = 446.35, p < .001$) were loaded onto one latent construct respectively. A CFA of the Time 2 measures for employability, whole-life perspective, and balance also indicated good fit with the data ($\chi^2 (24) = 73.56, p < .001, CFI = .97, RMSEA = .07$)

Additionally, although 2.5 years separated collection of the Time 1 and Time 2 data, we followed the procedures and recommendations of previous researchers ([Diefendorff & Mehta, 2007](#); [Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008](#); [Podsakoff and colleagues, 2003, 2012](#); [Williams, Cote, & Buckley, 1989](#)) and conducted supplementary analysis to estimate the effects of adding a latent common methods factor to the model. We specified the model so that the methods factor was not correlated with the eight hypothesized factors. This model also fit the data well ($\chi^2 = 379.55 (201), p < .001, CFI = .97, RMSEA = .05$) and better than the previous model without the methods factor, ($\Delta\chi^2 (23) = 129.13, p < .001$). Nevertheless, the variance extracted by the common methods factor was only .03, which falls well below the suggested .50 cutoff that might indicate the existence of a latent factor representing the manifest indicators ([Hair, Anderson, Tatham, & Black, 1998](#)).

Structural Equation Models

We conducted tests for comparisons of nested structural equation models. We began by intercorrelating each of the control variables and the independent variable (PCO). Then, in accord with prior research and following the conservative approach employed by [Powell and Greenhaus \(2010\)](#) we created a model that contained only paths from the control variables to the model variables. Specifically, paths were created from gender, marital status, children living at home, social desirability, age, tenure, and job transitions to all mediators and the dependent variable (career planning, human capital, social capital, psychological capital, employability

Time 2, whole-life perspective Time 2, and work-life balance Time 2), along with three additional paths from employability Time 1 to employability Time 2, whole-life perspective Time 1 to whole-life perspective Time 2, and work-life balance Time 1 to work-life balance Time 2 ($\chi^2 = 1818.64$ (525), $p < .001$, CFI = .84, RMSEA = .08). Then, to create a more parsimonious model, all non-significant paths were deleted to create Model 1 which served as a baseline for comparison ($\chi^2 = 1671.28$ (566), $p < .001$, CFI = .86, RMSEA = .08).

Hypothesis 1 predicted a positive relationship between PCO and work-life balance. Therefore, we added a path from PCO to work-life balance Time 2 to create Model 2 ($\chi^2 = 1656.44$ (565), $p < .001$, CFI = .87, RMSEA = .07). Consistent with Hypothesis 1, the addition of this path significantly improved the fit to the data ($\Delta\chi^2 = 14.84$ (1), $p < .001$) and PCO was positively related to work-life balance ($\beta = .18$, $p < .01$).

Next, we compared the hypothesized structural equation model (Figure 1) with the previous two models. The direct path from PCO to work-life balance was removed and paths were added to test each of the remaining hypothesized relationships. The hypothesized model (Model 3) ($\chi^2 = 1331.66$ (553), $p < .001$, CFI = .91, RMSEA = .06) provided good fit with the data and had a significantly lower chi-square than Model 1 ($\Delta\chi^2$ (13) = 339.62, $p < .001$) and Model 2 ($\Delta\chi^2$ (12) = 324.78, $p < .001$), suggesting that it fared best in these comparisons.

According to Model 3 and in support of Hypothesis 2, PCO was positively related to career planning ($\beta = .35$, $p < .01$). Consistent with Hypotheses 3a, b, and c, career planning was positively related to human, social, and psychological capital respectively (human: $\beta = .61$, $p < .01$; social: $\beta = .40$, $p < .01$; psychological: $\beta = .59$, $p < .01$). Partial support was found for Hypothesis 4 in that both social (4b) and psychological (4c) capital were positively related to perceived employability (social: $\beta = .12$, $p < .05$; psychological: $\beta = .11$, $p < .05$); however,

human capital (4a) was not ($\beta = .01, ns$). Hypothesis 5, which predicted that PCO would be positively related to whole-life perspective, was supported ($\beta = .23, p < .01$), suggesting that individuals with a strong PCO tend to adopt a more holistic perspective toward their careers. Hypothesis 6, which predicted that the positive relationship between perceived employability and work-life balance would be stronger for individuals with a strong whole-life perspective, was also supported ($\beta = .22, p < .01$). Given discrepancies in interaction methodologies within the SEM literature, we followed previous researchers ([DiRenzo, Weer, & Linnehan, 2013](#); [Peng, Riolli, Schaubroeck, & Spain, 2012](#)) and ran supplementary analyses of the moderating effects using hierarchical regression. These tests complement the SEM analysis and the findings were consistent across analyses. The shape of the interaction is represented in Figure 3, and simple-slope tests (Cohen et al., 2003) indicated that although there was a positive relationship between employability perceptions and work-life balance for individuals who hold a strong whole-life perspective (simple slope $B = 2.54, t = 4.11, p < .01$), there was no relationship between employability perceptions and balance for individuals who hold a weak whole-life perspective (simple slope $B = -.07, t = -.91, ns$).

We also employed bootstrap analysis in Amos using 2000 bootstrap samples to examine direct and indirect effects. The analysis indicated significant specific indirect effects of PCO on each of the three career capital variables through career planning (human: 95% CI = .03 to .11, $p < .01$; social: 95% CI = .02 to .09, $p < .05$, psychological: 90% CI = .02 to .11, $p < .01$). The total indirect effect of career planning on employability through social and psychological capital was also significant (95% CI = .01 to .12, $p < .05$). In addition, although there was an indirect effect of social capital on work-life balance through employability (95% CI = .01 to .07, $p < .05$), the indirect effect of psychological capital on work-life balance through employability was not

significant (95% CI = -.02 to .06, *ns*) and psychological capital did not have a direct effect on balance as well. Additionally, there was a significant total indirect effect of PCO on work-life balance through the model variables (95% CI = .03 to .12, $p < .01$) with the direct effect of PCO on balance no longer significant when including all of the mediating variables in the model.

Insert Figures 2 & 3 about here

Discussion

The aim of this study was to assess the relationship between PCO and work-life balance and examine the mechanism that explained this relationship. We found that PCO was positively related to work-life balance through heightened career planning, the accumulation of social and psychological capital, and enhanced perceptions of employability. Moreover, PCO was positively related to the adoption of a whole-life perspective, which strengthened the relationship between employability and work-life balance. These findings confirm the theoretical speculation that individuals pursuing a protean career experience greater balance in their lives (Briscoe & Hall, 2006; Briscoe et al., 2006; [Hall, 2004](#); [Hall & Richter, 1990](#)) and shed light on the resources derived from PCO that may enhance balance.

Theoretical Implications

Our findings provide theoretical insights into three related areas: (1) the career and life consequences of PCO; (2) the interconnections among three career-related concepts: career planning, career capital, and employability; and (3) the role of resources in achieving work-life balance. First, the positive relationship between PCO and career planning extends the earlier research of De [Vos and Soens \(2008\)](#) who found that the self-directed dimension of PCO related

to career self-management. Our use of a more inclusive composite measure of PCO demonstrates the relevance of self-directed *and* values-driven perspectives to the career planning process. Individuals with a strong PCO, that is, who take a proactive approach to achieve personally meaningful values, apparently see the virtue of setting career goals and developing plans and strategies that can provide resources to enable them to achieve their goals. It is also possible that their openness to experience and their learning goal orientation (Briscoe et al., 2006) encourage individuals with a strong PCO to engage in career planning activities because these activities provide opportunities to assess themselves and their work environment (Greenhaus, Callanan, & Godshalk, 2010).

Our results also indicate that the effect of a strong PCO extends beyond the work domain. Consistent with previous speculation in the literature, PCO was related to both work-life balance and whole-life perspective. Protean-oriented individuals are strongly motivated to fulfill their life purpose (Hall, 2004), and take self-directed action to acquire the resources (e.g., employability) necessary to actualize their goals. Moreover, individuals with a strong PCO adopt a whole-life perspective and tend to view their careers in the broader context of a constellation of life roles. Hence, for individuals high in PCO, fulfilling one's life purpose requires actualizing goals in multiple elements of their lives (e.g., work, family, community). As a result, individuals high in PCO have both the capacity and the desire to be successful in multiple roles, and leverage their employability so as to achieve greater work-life balance.

Second, this study demonstrated relationships among career planning, career capital, and employability. As predicted, career planning was positively related to all three forms of career capital: human, social, and psychological. Whereas prior research had established that elements of career planning (career goals and/or strategies) facilitate the acquisition of human and social

capital ([Gould & Penley, 1984](#); [Noe, 1996](#); [Wolff & Moser, 2006, 2009](#)), the present study extended these beneficial effects of career planning to the development of psychological resources. It is not clear whether enhanced hope, optimism, self-efficacy, and resilience are derived from the very act of setting a goal or enacting a strategy or whether they arise from recollections that prior career planning had resulted in career success that buoys positive thoughts about the future. Additional research is required to understand the mechanism by which career planning promotes psychological capital.

The positive relationships of social capital and psychological capital with perceived employability are consistent with an important assumption of COR ([Hobfoll, 1988](#); [Halbesleben et al., 2014](#)), namely that individuals with extensive resources are better able to create additional resources. Specifically, our findings illustrate the power of interpersonal resources (social capital) to sustain careers by providing employees with access to information and opportunities ([Forret & Sullivan, 2002](#); [Seibert et al., 2001](#)) both of which can enable them to identify, create, and realize career prospects. Our results also point to the important role of PsyCap in the development of employability, thereby reinforcing the significance of psychological factors in employability ([Fugate et al., 2004](#)) and linking employability to the growing positive organizational behavior (POB) literature ([Luthans, 2002](#)).

Human capital was unrelated to perceived employability in the present study, counter to prevailing theory and substantial evidence linking human capital investment to career success ([Ng et al., 2005](#)). It is unlikely that the nonsignificant relationship is due to psychometric problems with our measure of human capital, which has been used in prior research ([Colakoglu, 2006](#); [Eby et al., 2003](#)), had satisfactory internal consistency ($\alpha = .77$), and was predictably related to other variables in the present study such as PCO, career planning, and social and

psychological capital (Table 1). An alternative explanation is that workers today may accept a requisite level of know-how (human capital) as a necessary condition simply to compete for jobs, but anticipate that success and survival in a progressively more competitive economy ultimately depend on the value of their networks (social capital) and their optimism and resolve (psychological capital) to create and capitalize on opportunities. Should this be confirmed in future research, when it comes to enhancing perceptions of employability, the old adage might be updated to “it’s not what you know, but whom you know... and what you’re made of.”

Third, the present study provides insights into the role of resources in promoting work-life balance ([Voydanoff, 2005](#)). We found that a dispositional characteristic, a strong PCO, enables individuals to acquire social capital (a contextual resource) and psychological capital (a personal resource). In turn, social capital and psychological capital relate to heightened employability (a personal resource) that may provide employees with enhanced feelings of security (a personal resource) as well as sufficient influence (a personal resource) to receive greater organizational flexibility and support (a contextual resource) all of which culminate in greater work-life balance. Some of these connections between resources were empirically observed in this study (relationships of social capital and psychological capital with employability) and other connections were proposed to explain why employability potentially enhances work-life balance (relationships of employability with organizational support and feelings of security). Taken together, these findings are consistent with the notion of a resource gain spiral ([Hobfoll, 2002](#); [ten Brummelhuis & Bakker, 2012](#)) that can contribute to heightened feelings of work-life balance.

However, our findings also suggest that resources can only go so far in fostering work-life balance. We found that perceived employability related positively to balance only for

individuals who adopt a strong whole-life perspective. We had reasoned that a strong whole-life perspective provides the motivation to use resources that arise from employability (e.g., flexibility, support, autonomy, security) to attain balance. In other words, the availability of resources proximal to balance does not guarantee that these resources will be used to support balance, just as the availability of an organization's flexible work arrangements does not guarantee that employees will actually use the arrangements ([Allen, Johnson, Kiburz, & Shockley, 2013](#)). Individuals are more likely to see employability as a resource when it is perceived as instrumental in achieving an important goal ([Halbesleben et al., 2014](#)), such as achieving greater work-life balance, which is presumably a central value for individuals who adopt a strong whole-life perspective.

Viewing work-life balance as derived from a combination of resources and motivation can be a useful perspective with which to conduct future research. For example, the impact of employability on access to flexible work arrangements may depend on the culture of the organization, and the effect of a whole-life perspective on leveraging resources may be dependent on the self-confidence of the employee. Moreover, a variety of job-related resources (e.g., autonomy, social support) may interact with a number of different motivational factors (e.g., felt responsibility for dependents) to predict work-life balance. Clearly, further research is required to identify the resources and the motivational factors that are most relevant to the achievement of work-life balance.

Practical Implications

The findings of the present study have several practical implications for individuals and their employers regarding the development of a strong PCO and the achievement of enhanced work-life balance. First, because PCO is associated with the acquisition of resources such as

career capital and employability, it is important for employees to appreciate the virtue of adopting a self-directed, values-driven approach to managing their careers. Although PCO can be cultivated through self-reflection throughout one's career ([Sargent & Domberger, 2007](#)), it is likely that developmental relationships can also contribute to the development of a strong PCO. For example, mentors can assist protégés to become more values-driven by encouraging them to craft their own personal definitions of career success ([Greenhaus & Singh, 2007](#)) as well as to become more self-directed in developing proactive strategies to help them achieve their idiosyncratic goals. In addition, it is plausible that employees can achieve a strong PCO by modeling the attitudes and behaviors displayed by their mentors and supervisors. Just as leadership styles (e.g., ethical leadership, abusive supervision) trickle down through role modeling from a higher level to a lower level in an organization ([Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012](#); [Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009](#)), so too can self-directed and values-driven orientations and actions by mentors and managers be observed and modeled by protégés and subordinates.

Whereas a strong PCO can be developed through self-reflection and role modeling, organizations need to provide resources and outlets to retain these highly employable individuals. Given high PCO employees' predilection to engage in proactive career planning to accumulate career capital, organizations should provide a variety of practices to assist employees in more effectively planning their careers by receiving feedback about their job performance and career potential, obtaining guidance from managers, mentors, and human resources counselors, and gaining information regarding—and access to—career opportunities within the organization ([Baruch, 2006](#)). Moreover, career opportunities must be sufficiently customized to enable high PCO employees to achieve their idiosyncratically developed conception of career success.

Therefore, it is essential that employers understand (for example, through individual career discussions and broader audits of employee attitudes) the wide range of job attributes and career experiences that are consistent with different employees' notion of what contributes to a successful career.

Regarding the achievement of work-life balance, employees should recognize that attaining balance requires not only resources and options but also a whole-life perspective that places a priority on balance and considers the impact of career decisions on life outside of work. Factoring family considerations into work-related decisions requires employees to frame such decision situations (e.g., relocation, a new work assignment) broadly enough to recognize that the decisions that they make at work can have an effect (either positive or negative) on their family lives ([Powell & Greenhaus, 2012](#)). We believe that employees can appreciate the virtue of a whole-life perspective and learn how to factor family-related issues into career decisions by observing and modeling mentors and managers in a family-supportive organizational culture ([Thompson, Beauvais, & Lyness, 1999](#)) who themselves have adopted a whole-life perspective.

It is also important for organizations to recognize the increasing importance of balance in their employees' lives (Newman, 2011) and provide sufficient resources to retain high-PCO employees who adopt a strong whole-life perspective and also have sufficient employability to leave a job that excessively intrudes into other parts of their lives. A variety of formal (e.g., flexibility policies) and informal (e.g., family-supportive supervision and organizational cultures) sources of organizational support are associated with low work-family conflict and high work-family enrichment, both of which contribute to greater balance in life (Greenhaus et al., 2014).

Finally, business schools should recognize that they play a potentially significant role in helping their students to navigate their careers in a self-directed and values-driven (i.e., protean)

manner to achieve their career goals and, if important to them, a high level of work-life balance. Educational institutions can assist students in this task by providing them with opportunities to understand their values, develop a proactive or self-directed approach to their careers, and learn what it is like to work in an organizational setting. These opportunities can be provided through a combination of career management coursework, small group workshops, individual career counseling, and realistic organizational experiences via internships and cooperative education work assignments.

Limitations and Future Research

Because the present study relied on self-reported measures of the model variables, some concern over common method bias may exist. Therefore, we employed procedures recommended by [Podsakoff et al. \(2012\)](#) to both minimize common method variance and estimate its effect and found that common method bias did not appear to be an issue inhibiting the adequate testing of our hypotheses. Additionally, the incorporation of interaction effects minimizes the effect of a common method (Evans, 1985) and utilizing the same source in examining interactive effects should in fact deflate results ([Siemsen, Roth, & Oliveira, 2010](#)). Nevertheless, we encourage future research to collect second source data to assess variables such as employability (e.g., objective indicators of market value) and work-life balance (e.g., family, friends, and co-worker perceptions of the focal individual's effectiveness in different roles) when feasible.

Additionally, although data were collected at two points in time spread over a 30-month interval, the inclusion of additional waves of data would have been helpful to provide stronger evidence regarding the causal relationships between model variables. For example, although we positioned PCO as an antecedent to the accumulation of career capital through career planning, it

is possible that enhanced human, social, and psychological capital can provide employees with the self-confidence to become more self-directed and values-driven and to engage in extensive career planning activities. Similarly, it is possible that the achievement of a high level of work-life balance encourages employees to adopt a stronger whole-life perspective when facing future career decisions.

Lastly, although our sample consisted of employees in a variety of industries and occupations, the respondents were self-selected college-educated employees holding full-time jobs, all of which may limit the generalizability of our findings. Therefore, future research should examine the prevalence and influence of PCO, career planning, career capital, and employability in the careers of a broader range of employees that includes less highly educated workers as well as part-time employees.

This study presents a number of other interesting avenues for future research as well. Although our study focused on the relationship between PCO and career capital through enacting proactive career planning, it is likely that PCO may relate to a number of other career-related behaviors and outcomes as well. Future research should address PCO's link with a variety of work- and career-related outcomes, such as P-O fit, job engagement, and objective and subjective career success, as well as the different career planning behaviors that may explain these relationships.

Additionally, research to date has only addressed the positive outcomes associated with PCO, leading scholars to speculate about the possible shortcomings of enacting protean-type careers ([Sullivan & Baruch, 2009](#)). What happens when highly values-driven individuals do not achieve their goals? Might the ardent pursuit of one's values create rigidity in adherence to these values that is dysfunctional as individuals and circumstances change over a lifetime? These and

other plausible negative effects wait to be tested. Moreover, although we have portrayed (and continue to view) self-directed, values-driven career management as a reflection of personal agency, one might also view PCO as a reaction to circumstances of the labor market (e.g., economic turbulence, transactional psychological contracts) that reflects a dependency on rather than independence from market demands.

Furthermore, additional research is required to explore the stability of PCO over time and to examine whether specific individual actions and career experiences can affect an employee's protean orientation. Just as certain types of shocks or tragic events may cause individuals to reassess work and life priorities and trigger a strong protean orientation ([Hall, 2004](#); [Sargent & Domberger, 2007](#)), other types of shocks may have contrasting effects that cause people to shy away from self-direction and/or values-driven behaviors. In a similar vein, research should determine whether an organization's culture may encourage or discourage employees from adopting a self-directed, values-driven approach to their careers and, importantly, whether organizations can provide sufficient career opportunities to retain these individuals. Encouraging proactive behavior has the seemingly positive consequence of yielding a more highly skilled and competent workforce that can potentially offer competitive advantage. However, doing so can also empower individual employees with greater employability and leverage, making it problematic for those organizations that struggle to provide sufficient career opportunities to retain increasingly skilled workers. As such, patterns of organizational settings should be systematically studied with respect to the sources of employers' and employees' respective bargaining power.

References

- Abele, A. E., & Spurk, D. (2009). The longitudinal impact of self-efficacy and career goals on objective and subjective career success. *Journal of Vocational Behavior*, 74: 53-62.
- Algina, J., & Moulder, B. C. (2001). A note on estimating the Joreskog-Yang model for latent variable interaction using LISREL 8.3. *Structural Equation Modeling*, 8: 40-52.
- Allen, D. G., & Griffeth, R. W. (2001). Test of a mediated performance-turnover relationship highlighting the moderating roles of visibility and reward contingency. *Journal of Applied Psychology*, 86: 1014–1021.
- Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58: 414–435.
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. (2013). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66: 345-376.
- Anderson, C. (2001). Survey: The young know the future. *The Economist*, 357(8202), 6-10.
- Arthur, M. B., & Rousseau D. M. (1996). Introduction: The boundaryless career as a new employment principle. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career*: 3-20. New York: Oxford University Press.
- Avey, J., Luthans, F., Smith, R., & Palmer, N. (2010). Impact of positive psychological capital on employee well-being time. *Journal of Occupational Health Psychology*, 15: 17-28.
- Baltes, B. B., & Heydens-Gahir, H. A. (2003). Reduction of work-family conflict through the use of selection, optimization, and compensation behaviors. *Journal of Applied Psychology*, 88: 1005-1018.
- Bansak, C., & Raphael, S. (2006). Have employment relationships in the United States become

- less stable? *International Advances in Economic Research*, 12: 342-357.
- Baruch, Y. (2001). Employability: A substitute for loyalty? *Human Resource Development International*, 4: 543-566.
- Baruch, Y. (2006). Career development in organizations and beyond: Balancing traditional and contemporary viewpoints. *Human Resource Management Review*, 16: 125-138.
- Baruch, Y., & Quick, J. C. (2007). Understanding second careers: Lessons from a study of U.S. navy admirals. *Human Resource Management*, 46: 471-491.
- Benson, G. S. (2006). Employee development, commitment and intention to turnover: A test of 'employability' policies in action. *Human Resource Management Journal*, 16: 173-192.
- Bentler, P. M. (1980). Multivariate analysis with latent variables: Causal modeling. *Annual Review of Psychology*, 31:419-456.
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods Research*, 16: 78-117.
- Boxman, E. A., de Graaf, P. M., & Flap, H. D. (1991). The impact of social and human capital on the income attainment of Dutch managers. *Social Networks*, 13: 51-73.
- Bretz, R. D., Boudreau J.W., & Judge, T.A. (1994). Job search behavior of employed managers. *Personnel Psychology*, 47: 275-301.
- Briscoe, J. P., Henagen, S. C., Burton, J. P., Murphy, W. M. (2012). Coping with an insecure employment environment: The differing roles of protean and boundaryless career orientations. *Journal of Vocational Behavior*, 80: 308-316.
- Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior*, 69: 4-18.
- Briscoe, J. P., Hall, D. T., & DeMuth, R. L. (2006). Protean and boundaryless careers: An

- empirical exploration. *Journal of Vocational Behavior*, 69: 30-47.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models*: 136-162. Beverly Hills: Sage.
- Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42: 339–365.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67: 169-198.
- Çakmak-Otluoğlu, K. Ö. (2012). Protean and boundaryless career attitudes and organizational commitment: The effects of perceived supervisor support. *Journal of Vocational Behavior*, 80: 638-646.
- Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work-family balance more than conflict and enrichment? *Human Relations*, 62: 1459-1486.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68: 131-164.
- Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology*, 66: 184-195.
- Colakoglu, S. N. (2006). *The relationship between career boundarylessness and well-being: A contingency approach*. Unpublished doctoral dissertation, Drexel University.
- Comin, D., & Mulani, S. (2006). Diverging trends in aggregate and firm volatility. *Review of Economics & Statistics*, 88: 374-383.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24: 349-354.

- DeFillippi, R. J., & Arthur, M. B. (1994) The boundaryless career: a competency-based perspective. *Journal of Organizational Behavior*, 15: 307-324.
- Dess, G. G., & Shaw, J. D. (2001). Voluntary turnover, social capital, and organizational performance. *Academy of Management Review*, 26: 446–456.
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior*, 73: 449-456.
- Diefendorff, J. M., & Mehta, K. (2007). The relations of motivational traits with workplace deviance. *Journal of Applied Psychology*, 92: 967-977.
- DiRenzo, M. S., Weer, C. H., & Linnehan, F. (2013). Protégé career aspirations: The influence of formal E-mentor networks and family-based role models. *Journal of Vocational Behavior*, 83: 41-50.
- DiRenzo, M. S., & Greenhaus, J. H. (2011). Job search and voluntary turnover in a boundaryless world: A control theory perspective. *Academy of Management Review*, 36: 567-589.
- Dulac, T., Coyle-Shapiro, J. A., Henderson, D. J., & Wayne, S. J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal*, 51: 1079-1098.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24: 689-708.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, 66: 124-197.

- Edwards, J. R. & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25: 178-199.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36: 305-323.
- Farber, H. S. (2005). What do we know about job loss in the United States? Evidence from the displaced workers survey, 1984-2004. *Economic Perspectives, Federal Reserve Bank of Chicago*, QII: 13-28.
- Forret, M. L., & Sullivan, S. E. (2002). A balanced scorecard approach to networking: A guide to successfully navigating career changes. *Organizational Dynamics*, 31: 245-258.
- Friedman, S. D., & Greenhaus, J. H. (2000). *Allies or Enemies? How choices about work and family affect the quality of men's and women's lives*. New York: Oxford University Press.
- Friedman, S. D., & Lobel, S. A. (2003). The happy workaholic: A role model for employees. *Academy of Management Executive*, 17(3): 87-98.
- Fugate, M. (2006). Employability. In J. H. Greenhaus & G. A. Callanan (Eds.), *Encyclopedia of career development*: 267-271. Thousand Oaks, CA: Sage.
- Fugate, M., & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and tests of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology*, 81: 503-527.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65: 14-38.
- Fuller, B., & Marler, L. (2009). Change driven by nature: A meta-analytic review of the

- proactive personality literature. *Journal of Vocational Behavior*, 75: 329-345.
- Gooty, J., Gavin, M., Johnson, P. D., Frazier, M. L., & Snow, D. B. (2009). In the eyes of the beholder: Transformational leadership, positive psychological capital, and performance. *Journal of Leadership & Organizational Studies*, 15: 353-367.
- Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal*, 22: 539-550.
- Gould, S., & Penley, L. E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organizational Behavior and Human Performance*, 34: 244-265.
- Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick, & L. E. Tetrick. (Eds.), *Handbook of occupational health psychology*, 2nd edition. Washington, DC: American Psychological Association.
- Greenhaus, J. H., Allen, T. D., & Foley, S. (2004). Does a balanced life promote work-family enrichment? In S. Foley (chair) “*The positive side of the work-family interface: its meaning and measurement*” symposium presented at the Annual Meeting of the Academy of Management, New Orleans, LA.
- Greenhaus, J. H., Callanan, G. A., & DiRenzo, M. S. (2008). A boundaryless perspective on careers. In C. L. Cooper, & J. Barling (Eds.), *Handbook of organizational behavior: 277-299*. Thousand Oaks, CA: Sage.
- Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M. (2010) *Career Management* (4th edition). Thousand Oaks, CA: Sage.
- Greenhaus, J. H., & Kossek, E. E. (2014). The contemporary career: A work-home perspective. *Annual Review of Organizational Psychology and Organizational Behavior*, 1: 361-388.

- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33: 64-86.
- Greenhaus J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31: 72-92.
- Greenhaus, J. H., & Singh, R. (2007). Mentoring and the work-family interface. In Ragins, B. R., & Kram, K. E. (Eds.), *Handbook of mentoring at work*: 519-544. Thousand Oaks, CA: Sage.
- Greenhaus, J. H., Ziegert, J. C., & Allen, T. D. (2014). Relationships of work-family conflict and enrichment with work-family balance. Contribution to the Symposium “What is Balance? Gaining Consistent Definition, Assessment, and Prediction” (Casper, W. J., & Odle-Dusseau, H. N., Chairs) presented at Annual Meeting of the Society of Industrial and Organizational Psychology, May 14-17, Honolulu, HI.
- Griffeth, R., Steel, R., Allen, D., & Bryan, N. (2005). The development of a multidimensional measure of job market cognitions: the employment opportunity index (EOI). *Journal of Applied Psychology*, 90: 335–349.
- Grzywacz, J.G. & Bass, B.L. (2003). Work, family, and mental health: Testing different models of work–family fit. *Journal of Marriage and Family*, 65: 248–62.
- Grzywacz, J. G., & Carlson, D. S. (2007). Conceptualizing work–family balance: Implications for practice and research. *Advances in Developing Human Resources*, 9: 455–71.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

- Halbesleben, J. R. B., Neveu, J., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR”: Understanding the role of resources in conservation of resources theory. *Journal of Management, 40*: 1334-1364.
- Hall, D. T. (1976). *Careers in organizations*. Glenview, IL: Scott Foresman.
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior, 65*: 1-13.
- Hall, D. T., & Chandler, D. E. (2005). Psychological success: When the career is a calling. *Journal of Organizational Behavior, 26*: 155-176.
- Hall, D. T., & Moss, J. E. (1998). The new protean career contract: Helping organizations and employees adapt. *Organizational Dynamics, 26*: 22-37.
- Hall, D. T., & Richter, J. (1990). Career gridlock: Baby boomers hit the wall. *Academy of Management Executive, 4* (3):7-22.
- Hammer, L., Neal, M., Newson, J.T., Brockwood, K.J. & Colton, C.L. (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Journal of Applied Psychology, 90*: 799–810.
- Herriot, P., Manning, W. E. G., & Kidd, J. M. (1997). The content of the psychological contract. *British Journal of management, 8*: 151-162.
- Heslin, P.A., VandeWalle, D., Latham, G.P. (2006). Keen to help? Managers' implicit person theories and their subsequent employee coaching. *Personnel Psychology, 59*: 871–902.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review, 26*: 264-288.
- Hillage, J., & Pollard, E. (1998). *Employability: Developing a framework for policy analysis*, DfEE Research Report No.85. Institute for Employment Studies.

- Hobfoll, S. E. (1988). *The ecology of stress*. New York: Hemisphere.
- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress.
American Psychologist, 44: 513-524.
- Hobfoll, S.E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6*: 307-324.
- Inkpen, A., & Tsang, E. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review, 30*:146-165.
- Inkson, K. & Arthur, M., B. (2001). How to be a successful career capitalist. *Organizational Dynamics, 30*: 48.
- Inkson, K. & Baruch, Y. (2008). Organizational careers. In S. Clegg & C. L. Cooper (Eds.), *Handbook of macro-organizational behavior*: 209-223. Thousand Oaks: Sage.
- Inness, M., LeBlanc, M., & Barling, J. (2008). Psychosocial predictors of supervisor-, peer-, subordinate-, and service-provider-targeted aggression. *Journal of Applied Psychology, 93*: 1401.
- Jaccard, J., & Wan, C. K. (1995). Measurement error in the analysis of interaction effects between continuous predictors using multiple regression: Multiple indicator and structural equation approaches. *Psychological Bulletin, 117*: 348-357.
- Jackson, S. E., & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. In J. T. Spence, J. M. Darley, & D. J. Foss (Eds.), *Annual Review of Psychology*: 237–264. Stanford, CA: Annual Reviews
- Jokisaari, M., & Nurmi, J. (2005). Company matters: Goal-related social capital in the transition to working life. *Journal of Vocational Behavior, 67*: 413-428.
- Jöreskog, K. G., & Yang, F. (1996). Nonlinear structural equation models: The Kenny-Judd

- model with interaction effects. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques*: 57-89. Mahwah, NJ: Lawrence Erlbaum Associates.
- Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology*, 78: 939-948.
- Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. (1995). An empirical investigation of the predictors of career success, *Personnel Psychology*, 48: 485-519.
- Kanter, R. M. (1993). Employability security. In R. B. Reich & M. Moskowitz (Eds.), *Is the Good Corporation Dead*, special issue of *Business and Society Review*, 87: 9-17.
- Kenny, D. A., & Judd, C. M. (1994). Estimating the nonlinear and interactive effects of latent variables. *Psychological Bulletin*, 96: 201-210.
- King, Z. (2004). Career self-management: its nature, causes and consequences. *Journal of Vocational Behavior*, 65: 112-133.
- Kirchmeyer, C. (1998). Determinants of managerial career success: Evidence and explanation of male/female differences. *Journal of Management*, 24: 673-693.
- Kossek, E. E., Roberts, K., Fisher, S. & DeMarr, B. (1998). Career self-management: A quasi-experimental assessment of the effects of a training intervention. *Personnel Psychology*, 51: 935-962.
- Landis, R. S., Beal, D., & Tesluk, P. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3: 186-207.
- Latham, G.P., Almost, J., Mann, S, Moore, C. (2005). New developments in performance management. *Organizational Dynamics*, 34: 77-87.
- Lazear, E. P. (1986). Salaries and piece rates. *The Journal of Business*, 59: 405-431.

- Little, T. D., Bovaird, J. A., & Widaman, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling latent variable interactions. *Structural Equation Modeling, 13*: 479-519.
- Liu, X. & Batt, R. (2010). How supervisors influence performance: A multilevel study of coaching and group management in technology-mediated services. *Personnel Psychology, 63*: 265-298.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs: Prentice Hall.
- Lubit, R. (2001). Tacit knowledge and knowledge management: The keys to sustainable competitive advantage. *Organizational Dynamics, 29*: 164–178.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior, 23*: 695-706.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*: 541-572.
- Luthans, F., Avolio, B. J., Avey, J. B., Norman, S. M., Combs, G. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior, 27*: 387-393.
- Marsh, H. W., Wen, Z., Hau, K. T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods, 9*: 275-300.

- Marsh, H. W., Wen, Z., Hau, K. T., Little, T. D., Bovaird, J. A., & Widaman, K. F. (2007). Unconstrained structural equation models of latent interactions: Contrasting residual- and mean-centered approaches. *Structural Equation Modeling, 14*: 570-580.
- Mathieu, J. E., Tannenbaum, S. I., & Salas, E. (1992). Influences of individual and situational characteristics on measures of training effectiveness. *Academy of Management Journal, 35*: 828–847.
- Matthews, R. A., & Barnes-Farrell, J. L. (2010). Development and initial evaluation of an enhanced measure of boundary flexibility for the work and family domains. *Journal of Occupational Health Psychology, 15*: 330-346.
- Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology, 65*: 325-357.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R.(B.). (2009). How long does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes, 108*: 1-13.
- McArdle, S., Waters, L., Briscoe, J. P., & Hall D.T. (2007). Employability during unemployment: Adaptability, career identity and human and social capital. *Journal of Vocational Behavior, 71*: 247-264.
- McGovern, F., Gratton, L., Hope-Hailey, V., Stiles, P., Truss. C. (1997). Human resource management on the line? *Human Resource Management Journal, 7*: 12–29.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A. & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior, 32*: 689-725.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate

- workplace change. *Academy of Management Journal*, 42: 403-419.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81: 400-410.
- Newman, K. L. (2011). Sustainable careers: Lifecycle engagement in work. *Organizational Dynamics*, 40: 136-143.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58: 367-408.
- Noe, R. A. (1996). Is career management related to employee development and performance? *Journal of Organizational Behavior*, 17: 119-133.
- Odle-Dusseau, H. N., Wayne, J. H., & Matthews, R. A. (2014). *Predicting work-family balance: Authenticity in work and family roles*. Paper presented as part of the symposium “What is Balance? Gaining Consistent Definition, Assessment, and Prediction?” (W. J. Casper & H. N. Odle-Dusseau, Chairs) at the annual meeting of the Society for Industrial and Organizational Psychology, Honolulu, Hawaii, May 15-17, 2014.
- Parasuraman, S., Purohit, Y. S., Godshalk, V. M., & Beutell, N. J. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior*, 48: 275–300.
- Parker, H., & Arthur, M. B. (2000). Careers, organizing, and community. In M. A. Peiperl, M. B. Arthur, R. Goffee, & T. Morris (Eds.), *Career frontiers: New conceptions of working Lives*: 99-121. Oxford: Oxford University Press.
- Peng, A. C., Riolli, L. T., Schaubroeck, J. and Spain, E. S. P. (2012). A moderated mediation test

- of personality, coping, and health among deployed soldiers. *Journal of Organizational Behavior*, 33: 512–530.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49: 327-340.
- Pinkley, R. L., Neale, M. A., & Bennett, R. J. (1994). The impact of alternatives to settlement in dyadic negotiation. *Organizational Behavior and Human Decision Processes*, 57: 97-116.
- Podsakoff, P. M., MacKenzie, S. B., Lee J. Y., Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88: 879–903.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it, *Annual Review of Psychology*, 63: 539-569.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. In J. Hagan & K. S. Cook (Eds.), *Annual Review of Sociology*: 1-24. Palo Alto, CA: Annual Reviews.
- Powell, G. N., & Greenhaus, J. H. (2010). Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies. *Academy of Management Journal*, 53: 513-534.
- Powell, G. N., & Greenhaus, J. H. (2012). When family considerations influence work decisions: Decision-making processes. *Journal of Vocational Behavior*, 81: 322-329.
- Resick, C. J., Whitman, D. S., Weingarden, S. M., & Hiller, N. J. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism,

- transformational leadership, and strategic influence. *Journal of Applied Psychology*, *94*: 1365-1381.
- Rogers, M. E., Creed, P. A., & Glendon, A. I. (2008). The role of personality in adolescent career planning and exploration: A social cognitive perspective. *Journal of Vocational Behavior*, *73*: 132-142.
- Rothwell, A. Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and validation of a scale for university students. *Journal of Vocational Behavior*, *73*: 1-12.
- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Newbury Park, CA: Sage.
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on fit. *Journal of Applied Psychology*, *87*: 646-654.
- Saks, A. M., & Cote, S. (2006). Job Search. In J. H. Greenhaus & G. A. Callanan (Eds.), *Encyclopedia of career development*: 1: 440-442. Thousand Oaks, CA: Sage.
- Sargent, L. D., & Domberger, S. R. (2007). Exploring the development of a protean career orientation: values and image violations. *Career Development International*, *12*: 545-564.
- Segers, J., Inceoglu, I., Vloeberghs, D., Bertram, D., & Hendrickx, E. (2008). Protean and boundaryless careers: A study of potential motivators. *Journal of Vocational Behavior*, *73*: 212-230.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, *44*: 219-237.
- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, *13*: 456-476.

- Smith, V. (2010). Review article: Enhancing employability: Human, cultural, and social capital in an era of turbulent unpredictability. *Human Relations*, 63: 279-303.
- Smithson, J., & Lewis, S. (2000). Is job insecurity changing the psychological contract? *Personnel Review*, 29: 680-702.
- Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). Hope and health. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective*: 285-305. Elmsford, NY: Pergamum Press.
- Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26: 62-74.
- Stewart, J. (2002). Recent trends in job stability and job security: Evidence from the March CPS. *U.S. Bureau of Labor Statistics*, working paper # 356.
- Sturges, J., Guest, D., Conway, N., & Mackenzie Davey, K. (2002). A longitudinal study of the relationship between career management and organizational commitment among graduates in the first ten years of work. *Journal of Organizational Behavior*, 23: 731-748.
- Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35: 1542-1571.
- Sumer, H. C., & Knight, P. A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work-family linkage. *Journal of Applied Psychology*, 86: 653-663.
- Tait, M., Padgett, M. Y., & Baldwin, T. T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology*, 74: 502-507.

- ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, 67: 545-556.
- Tharenou, P., Latimer, S., & Conroy, D. K. (1994). How do you make it to the top? An examination of influences on women's and men's managerial advancement. *Academy of Management Journal*, 37: 899-931.
- Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (1999). When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of Vocational Behavior*, 54: 392-415.
- Thompson, J. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology*, 90: 1011-1017.
- Trevor, C. O. (2001). Interactions among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management Journal*, 44: 621-638.
- Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology*, 92: 1512-1523.
- Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, 45: 449-476.
- Voydanoff, P. (2005). Toward a conceptualization of perceived work-family fit and balance: A demands and resources approach. *Journal of Marriage and Family*, 67: 822-836.
- Wall, M. M., & Amemiya, Y. (2001). Generalized appended product indicator procedure for

- nonlinear structural equation analysis. *Journal of Educational and Behavioral Statistics*, 26: 1-30.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17: 63-76.
- Weng, Q., & McElroy, J. C. (2010). Vocational self-concept crystallization as a mediator of the relationship between career self-management and job decision effectiveness. *Journal of Vocational Behavior*, 76: 234-243.
- Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of method variance in self-reported affect and perceptions at work: reality or artifact? *Journal of Applied Psychology*, 74: 462-468.
- Wittekind, A., Raeder, S., & Grote, G. (2010). A longitudinal study of the determinants of perceived employability. *Journal of Organizational Behavior*, 31: 566-586.
- Wolff, H., & Moser, K. (2009). Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology*, 94: 196-206.
- Zikic, J., & Klehe, U. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, 69: 391-409.