Psychological Capital and Employee Loyalty: The Mediating Role of Protean Career Orientation

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Abstract

Evidence that positively disposed employees are inclined to experience greater loyalty to the organisation and fewer intentions to quit may be underestimated. The present study investigated the role that the individual’s career attitude plays in the relationship between positive psychological capital (a composite variable based on hope, self-efficacy, resilience, and optimism) and subsequent loyalty to the organisation. An online survey was administered to New Zealand employees across five distinct industries. Regression analyses on a sample of 518 confirmed that a self-directed and values-driven approach to career management mediates the relationship between psychological capital and affective commitment to the organisation and turnover intentions. Results are discussed in terms of their implications for individual and organisational activities and recommendations for future research are provided.
Introduction

As a result of the rapidly ageing global work population, organisations are increasingly facing a war for talent. The selection of capable employees is constrained by a lack of available human resources and thus requires organisations to focus on the conservation and performance enhancement of extant personnel (Luthans, Avolio, & Youssef, 2007). Research shows that individual differences in terms of dispositions are important for overall job and organisational performance; in particular, employee dispositions relate to work attitudes and behaviours (Borman & Motowidlo, 1997; Dalal, 2005; Podsakoff & MacKenzie, 1997) but they also provide incremental validity for task performance (Griffin, Neal, & Neale, 2000).

Nevertheless, the nature of employment relations between organisations and individuals has dramatically altered in the last few decades. Reorganisation strategies to cope with economic recessions, such as downsizing, have resulted in the reduction of long-term employment contracts (Feldman, 2000) and an increase in labour uncertainty (Nicholson, 1996; Sverke, Hellgren, & Näswall, 2006). The written and unwritten employment contract has morphed into a transient opportunistic alliance between organisations and employees (Parker & Inkson, 1999) where continuous learning is exchanged for performance (Sullivan, 1999). As a consequence of these employment changes employees experience less trust and commitment to an organisation (Cascio & Aguinis, 2011) and have a greater tendency to leave (Feldman, 2000).

Positive employees tend to exhibit desirable work attitudes that negatively relate to turnover, as they are disposed to interpret work experiences more favourably than negatively tempered employees (Staw, Bell, & Clausen, 1986). Specific research on malleable positive dispositional constructs, shows that the synergistic interaction of an abundance of hope, self-
efficacy, resilience, and optimism (collectively known as Psychological Capital, or PsyCap) positively relates to emotional attachment to the organisation and negatively relates to intentions to turnover (Avey, Reichard, Luthans, & Mhatre, 2011).

The present research aims to determine the generalizability of the relationships between PsyCap and organisational loyalty attitudes to a New Zealand employment context. Furthermore, because the nature of employment contract now requires a high degree of autonomy from the employee (Beugré, 2005; Hirschi, 2012; Quigley & Tymon, 2006), individuals who perceive themselves to be career self-agents and seek personal, rather than organisational, goal attainment may consequently, by their very nature, entertain less loyalty to the organisation and a tendency to turnover. Therefore, the present study will also investigate the effect an individual’s attitude towards career management has on these loyalty relationships.

**Changing Nature of Work**

Survival, not to mention success, necessitates higher-than-average performance from organisations in today’s rapidly changing marketplace (Luthans & Youssef, 2007). Whereas it was once believed that technology and organisational structures were the best sources of competitive advantage, it is now widely acknowledged that human resources constitute the most sustainable source in these turbulent times (Luthans & Youssef, 2004; Perryer, Jordan, Firns, & Travaglione, 2010; Pfeffer, 1998). Specifically, it is the complex social interactions and the ability of humans’ knowledge, skills, abilities, and other characteristics (KSAOs) to transfer across technologies, products, and markets that turns employees into assets; thereby affording organisations an extended period of competitive advantage (Kazlauskaitė & Bučiūnienė, 2008).
As the baby boomer generation move into retirement, talent shortages are occurring on a global scale. Australia notes skills shortages as a chief concern for its economy (Perryer et al., 2010). In Europe, low birth rates are cited as a major contributor to a forecasted 16 percent reduction in the working age population by 2050 (Commission of the European Communities, 2006). New Zealand also expects the growth rate of its entire working population to decline, and even become negative, by 2041 (Statistics New Zealand 2001; New Zealand Treasury, 2002). A shortage of talent is likely to become an ever-increasing global challenge and one which may be particularly salient for New Zealand.

**Importance of Individual Differences**

As fewer young people become available to replace the ageing workforce population, the applicant pool will diminish, severely limiting opportunities to selectively hire. Such talent scarcity has prompted researchers to investigate how organisations can use their extant personnel to gain competitive leverage. With the advent of work teams (Driskell, Goodwin, Salas, & O’Shea, 2006; Ilgen, 1999) and increasing numbers of service roles (Autor & Dorn, 2009, 2012; New Zealand Department of Labour, 2011), individual differences, in terms of personal dispositions, have been found to be crucial to high performance in both of these work domains (Driskell et al., 2006; Morgeson, Reider, & Campion, 2005; Neuman & Wright, 1999; and Bettencourt, Gwinner, & Meuter, 2001; Mayhew & Keep, 1999; Pugh, 2001; Thompson, Warhurst, & Callaghan, 2001, respectively). Dispositional variables contribute differentially to overall job and organisational efficiency, particularly through contextual performance – i.e., employee attitudes and behaviours that fall outside the rubric of task performance but which nonetheless shape and maintain the organisational and social context that support task activities (Borman & Motowidlo, 1997; Dalal, 2005; Podsakoff & MacKenzie, 1997). Because work tasks are ambiguous by nature they allow individuals to subjectively interpret them (Staw et al., 1986) and thus individual dispositions influence work
experience interpretations. In turn, work attitudes have been shown to be influenced by dispositional differences (Judge & Larsen, 2001; Penner, Midili, & Kegelmeyer, 1997), therefore it can be expected that employees’ work attitudes relate to differences in individual dispositions (Judge & Larsen, 2001; Konovsky & Organ, 1996; Staw et al., 1986; Nelson & Sutton, 1990).

Organisations desire employees who demonstrate behaviours and attitudes that enable them to work effectively with colleagues (Bennett, 2002; Robinson, 2000) or customers. However, measures taken to cope with dynamic and volatile marketplace changes, such as downsizing, mergers, and decentralised structures, have dramatically changed the nature of the implicit employment contract between individuals and organisations (Arthur & Rousseau, 1996; Larson & Luthans, 2006). Parsimonious reorganisation initiatives send a signal to employees that the employer is not committed to them (Cascio & Aguinis, 2011) and employees may even perceive the enactment of their career within one organisation to be a futile enterprise (Feldman, 2000). Regardless of the reorganisation strategy used, employees feel less identification (Larson & Luthans, 2006), trust, and commitment to the organisation (Goffee & Scase, 1992; Murrell, Frieze, & Olson, 1996; Rosenblatt, Talmud, & Ruvio, 1999; Sullivan, 1999), and express greater intentions to quit (Greenhalgh & Rosenblatt, 1984). These attitudes, coupled with increasing talent scarcity, mean organisations could be facing unprecedented challenges to maintain human resource leverage over their competitors. Indeed, one of the biggest employee-related costs to organisations is turnover, with recent New Zealand-based estimates ranging between 50 (Hale, 1998) and 150 per cent (Hoyle, 2008) of the lost employee’s annual salary, calculated in terms of administration, recruitment, training costs, and so forth.

Given the importance of individual differences for overall organisational performance and the development of attitudes which relate to turnover, the challenge then is to determine
how organisations can meet current and future economic demands with extant personnel, instead of expending precious resources to recruit talented employees who may have more employment options in the labour market potentially resulting in a tendency to leave and therefore lower loyalty. Positive dispositions are associated with more favourable employee work attitudes, such as higher levels of loyalty to the organisation, fewer intentions to leave (Chiu & Francesco, 2003), and actual turnover (Judge, 1993; Judge & Hulin, 1993; Thoresen, Kaplan, Barsky, Warren, & De Chermont, 2003). Personal dispositions share a modest correlation with attachment to the organisation which suggests variability among employees with regard to their propensity to be loyal to the organisation (Meyer & Allen, 1991). Specific research which has focused on malleable positive dispositional variables found that employees who possess high levels of hope, self-efficacy, resilience, and optimism demonstrate favourable attitudes towards the organisation, such as emotional commitment and fewer intentions to turnover (Luthans, Avolio, Avey, & Norman, 2007).

**Psychological Capital**

Building upon the work of positive psychology, where the focus is on recognising and building upon an individual’s strengths, rather than minimising what is wrong, Luthans and colleagues (2007a) examined positive psychological capacities which could contribute to both individual and organisational performance and satisfaction. In order for a construct to be considered for inclusion in their framework, it needed to be based on both theory and research and be capable of valid measurement. It was also required to be state-like and thus amenable to development (Luthans et al., 2007b). On the basis of meeting these criteria, the aforementioned constructs (i.e., hope, self-efficacy, resilience, and optimism) were identified as positive psychological resources.
People who are high in hope are distinguished by a heightened sense of willpower and the ability to generate multiple avenues to reach their goals (Snyder, 1995). Hope is considered a positive psychological resource as the willpower and multiple alternate pathways work together to enhance the probability of goal attainment (Luthans & Jensen, 2002). Individuals high in self-efficacy are persistent in their efforts to realise achievements. Their motivation to achieve stems from confidence in their own success (Avey, Luthans, & Jensen, 2009). High levels of resilience signify that individuals are not only able to bounce back from adversity in a positive manner but can even go beyond the starting point of the setback. Finally, individuals who possess elevated levels of realistic optimism expect a positive outcome regardless of personal ability (Avey, Wernsing, & Luthans, 2008). Collectively, these four constructs are termed positive psychological capital (PsyCap). Thus PsyCap is defined as:

an individual’s positive psychological state of development that is characterized by: (a) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans, et al., 2007a, p3).

The synergistic interaction of the four PsyCap constructs means that the individual should function optimally when one construct informs the remaining constructs (Luthans, Avey, Avolio, & Peterson, 2010). For example, a realistically optimistic individual who possesses similarly high levels of hope and efficacy should be more assured of his/her capability to pursue and inject the requisite effort to attain personal goals. Likewise, if this individual is also highly resilient, it is more likely that he/she will recover from setbacks and
do so in a quicker fashion. Thus, individuals who enjoy high levels of all four PsyCap constructs may be psychologically stronger than individuals who possess high levels of only hope, or efficacy, or resilience, or optimism in a given situation (Luthans et al., 2007b).

Hope, self-efficacy, resilience, and optimism demonstrate moderate-to-strong correlations with each other (ranging in size from .26 to .58; Luthans et al., 2007b) and it is this shared variance that supports the higher order nature of PsyCap. The interaction of these four constructs have been empirically demonstrated to be stronger than the sum total (Luthans, Avolio, Walumbwa, & Li, 2005; Larson & Luthans, 2006). This synergistic effect may be explained in light of other empirical studies (e.g., Fredrickson & Joiner, 2002; Tugade, Fredrickson, & Feldman Barrett, 2004) which show that positive emotions have reciprocal upward spiralling effects, in spite of negative events (Luthans et al., 2007b).

The four constructs which comprise PsyCap claim conceptual independence from each other (Luthans et al., 2007b). Self-efficacy bears a resemblance to resilience, with one enhancing the other (e.g., self-efficacy can influence resilience to an adverse situation); however, the former is proactive in nature while the latter is reactive and thus the two employ different cognitive mechanisms (Luthans, Vogelgesang, & Lester, 2006). Hope and optimism are similar in that both are concerned with positive expectancies. Whereas hope is proactive and concerns itself with creating pathways to goals and linking goal achievement to personal agency, optimism ascribes personal agency only in the face of positive events and involves distancings oneself from a negative outcome through event specific external attributions (Luthans & Jensen, 2002). In addition to being conceptually independent, the four PsyCap constructs have been demonstrated to possess empirical independence from each other (see Bryant & Cvengros, 2004; Carifio & Rhodes, 2002; Magaletta & Oliver, 1999).
With regard to the higher order construct itself, the operational definition provided differentiates psychological capital ("who I am and what I can become," Larson & Luthans, 2006, p. 86) from human capital (what you know) and social capital (whom you know; Avey et al., 2008). Furthermore, according to Luthans and colleagues (2007b), its state-like quality lends it conceptual distinction from higher order personality constructs, such as core-self-evaluations (self-esteem, generalised efficacy, locus of control, and emotional stability; Bono & Judge, 2003) and the Big Five traits (Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism; Barrick & Mount, 1991). Empirically based discriminant validation research has confirmed PsyCap’s distinction from these two similar higher order constructs (Luthans et al., 2007b).

To explicate the developmental nature of PsyCap, the state-trait continuum is briefly described. The state endpoint refers to momentary conditions such as feelings, while the trait endpoint refers to constructs which are very fixed and difficult to manipulate. In between these two spectrum endpoints are state-like and trait-like constructs. PsyCap is conceptualised as state-like which signifies that it is relatively adaptable; trait-like constructs, such as core self-evaluations, are quite stable and reasonably resistant to change (Luthans et al., 2007b). Training interventions aimed at increasing an individual’s PsyCap have found evidence for its development as a composite (Luthans, Avey, & Patera, 2008; Luthans et al., 2010). The first stage of the PsyCap intervention focuses on the development of each construct by first defining it and then explaining how it is applicable in the workplace. This is then supplemented with examples of the construct in action. Subsequent to the first stage, participants engage in self-reflection of work situations and complete written exercises. The second phase concludes with a review of the intervention’s content which serves to integrate each construct into PsyCap as a whole. As a consequence of the constructs’ integration,
participants should experience results superior to the development of each construct separately (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans et al., 2010).

**PsyCap and Employee Loyalty**

The development of positive psychological resources may help employees expect more positive work outcomes and have confidence in their own ability to achieve both work and personal goals, in addition to being able to cope with challenges faced in the workplace (Avey, Luthans, & Youssef, 2010). Therefore the combination of positive emotions inherent in high levels of PsyCap may mitigate the development of employee attitudes detrimental to organisational functioning, such as turnover intentions (Avey et al., 2009).

An individual’s will to continue employment with an organisation as a result of an emotional attachment is termed affective organisational commitment (Meyer & Allen, 1991). The desire to retain employment with the organisation occurs irrespective of necessity (continuance commitment) or a perceived obligation (normative commitment). Turnover intentions refer to an employee’s intent to remain with or leave the organisation. The less affectively committed to the organisation the employee is and the greater his/her intentions to turnover the more likely it is that he/she will leave (Perryer et al., 2010). Quantitative reviews have clearly established that affective organisational commitment and turnover intentions are the two variables most predictive of actual turnover (Griffeth, Hom, & Gaertner, 2000; Tett & Meyer, 1993).

A recent meta-analysis has confirmed that PsyCap is positively associated with affective organisational commitment and negatively associated with turnover intentions (Avey et al., 2011). These relationships have not yet been tested in New Zealand, the location of this research; hence the need to establish the validity of these relationships in a New Zealand employment context. The same results are expected, nevertheless, as the meta-
analysis included a variety of cultures and nations. Accordingly, the following hypotheses are postulated:

Hypothesis 1: Psychological capital will be a) positively related to affective organisational commitment and b) negatively related to turnover intentions.

The New Employment Contract

Although high levels of PsyCap have been associated with greater affective organisational commitment and fewer turnover intentions, it is also important to consider the role the changing nature of employment has on this relationship. While not obsolete, the traditional career, characterised by lifetime employment within an organisation, accompanied by a linear trend in promotions and salary, is no longer the dominant path (Sullivan, 1999). Instead, the evolution of an individual’s career may encompass multiple roles, occupations, and organisations (Granrose & Baccili, 2006; Quigley & Tymon, 2006). Furthermore, the current state of the psychological contract - i.e., expectations concerning reciprocal obligations between the organisation and employee (Rousseau, 1989) - implies that individuals must employ various career self-management actions to devise career opportunities that enable them to consummate personal career goals and guarantee their employability (De Vos & Soens, 2008; Hall & Moss, 1998; Larson & Luthans, 2006). Whereas the old psychological contract emphasised organisational loyalty for job security, the focus now is on the exchange of performance for continuous learning and marketability (Sullivan, 1999).

Protean career orientation. The Protean career orientation involves a self-directed approach to career management in accordance with the person’s own values (Hall, 2002). The self-directed dimension of the Protean career orientation refers to the individual who takes proactive responsibility for his/her career, while personally-meaningful values and
goals provide the impetus for values-driven career navigation. Career success for the Protean career oriented individual is not measured by traditional markers such as pay and promotion; instead the criteria are purely subjective and the ultimate goal is psychological achievement – i.e., the sense of pride and accomplishment that stems from successfully attaining important personal goals (Hall, 1996, 2004). In other words, external standards, such as pay and promotion status, do not guide vocational behaviour. The Protean career attitude is considered essential to having a successful career in the current unstable employment market (De Vos & Soens, 2008; Hall, 2004). The focus on continuous learning enhances future employability (Hall, 1996) which ensures the Protean career oriented person remains flexible and capable of adapting to new environments (Romaniuk & Snart, 2000).

Protean career oriented individuals are purported, and have been qualitatively found, to entertain a greater whole-life perspective and learning-orientation, placing value on work-life balance and developmental opportunities and/or continuous learning. They may also be characterised by greater mobility (Briscoe & Hall, 2006; Briscoe, Hall, & DeMuth, 2006; Hall, 2002; Sargent & Domberger, 2007). In a comparative study with France, New Zealanders showed evidence for more mobile and less traditional careers and exhibited more self-directed career management than French employees (Cadin, Bender, De Saint Giniez, & Pringle, 2001 cited in Hall, 2004). Another study found that New Zealand employees are more likely to personally control their careers (Arthur, Inkson, & Pringle, 1999), rather than concede responsibility to the organisation.

**PsyCap and Protean Career Orientation**

The autonomy associated with the enactment of a Protean career may be an intimidating concept for many people (Hall, 1996). It is conceivable that highly optimistic individuals who possess the confidence to realise career-related endeavours (self-efficacy and
hope) and who put in the requisite efforts and persist in spite of adversity (resilience) may find this less intimidating. Theoretical arguments and empirical relationships further support the notion that PsyCap positively influences a Protean career orientation. A key feature of the self-directed approach to career management and the attainment of subjective career success is proactivity (Briscoe et al., 2006; De Vos & Soens, 2008; Fuller Jr. & Marler, 2009; Seibert, Kraimer, & Crant, 2001). A proactive disposition has been suggested to be related to the degree to which individuals employ agentic behaviours, such as self-directed goal-setting (Bandura, 2001; Raub, 2010) which is a core feature of PsyCap hope.

Employees committed to their personal career goals require high levels of self-efficacy because of the challenges associated with setting and committing to goals (Ballout, 2009). This is especially true in new employment contexts, which is often the case in an uncertain labour market. Low self-efficacy has been found to be related to less successful actions directed at career goals (Ballout, 2009), whereas high self-efficacy has been shown as related to increased goal attainment efforts (Bandura & Cervone, 1986), especially when the goals are personal (Bandura & Cervone, 1983). Self-efficacy has also been found to moderately relate to subjective career success (Ballout, 2009; Day & Allen, 2004), and is thus of relevance to a Protean career orientation.

Individuals who have high levels of resilience in relation to their career are committed to the idea of continuous learning, another common feature of the Protean career orientation, and assume personal responsibility for career management (Waterman, Waterman, & Collard, 1994). Resilience provides the internal impetus to maintain personal goals, in spite of the adversity of changing circumstances (Arthur & Rousseau, 1996; Avey et al., 2009; Carless & Bernath, 2007; Ito & Brotheridge, 2005; Kidd & Smewing, 2001; London, 1993; Quigley & Tymon, 2006; Waterman, et al., 1994). Realistic optimism supports career resilience and gives employees the ability to welcome challenges with less fear, resistance, and self-doubt
(Luthans et al., 2007a; Smith, Caputi, & Crittenden, 2012). It is a goal-based cognitive process that functions in the presence of valuable objectives thus leading to positive emotions, motivation, and a commitment to goal achievement. In essence, optimistic thoughts are integral to subjective career success (Smith et al., 2012).

Consequently, individuals high in PsyCap may take a more personal and proactive stance to career goal setting. They may also be more determined and expend more effort to achieve career goals, even in uncertain labour markets. Likewise, they should be able to counter impediments to personal career goal achievement more effectively and recuperate from misfortune with less effort. Finally, an optimistic outlook may mean they expect more, and also experience, greater subjective career success.

To date, only one study has examined the relationship between PsyCap and the Protean career orientation (Di Renzo, 2010). The results of this research found a strong correlation (.64) between the two. The study also identified that high levels of PsyCap are related to subjective career success and to perceptions of work-life balance, the latter often being valued by individuals with a Protean career orientation (Sargent & Domberger, 2007). In conjunction with the aforementioned conceptual and empirical linkages, these results imply that high levels of PsyCap may play a role in the Protean career attitude. While PsyCap is considered to be the synergistic result of its four constituents, and thus a higher order construct, the Protean career orientation has not been described as a one-dimensional construct. Therefore, all hypotheses relating to these concepts will associate PsyCap as a whole with the two Protean career orientation dimensions: self-directed and values-driven.

Hypothesis 2: Psychological capital will be positively related to a) self-directed and b) values-driven career orientation.
Protean Career Orientation and Employee Loyalty

In light of the nature of the modern psychological contract between organisations and employee and the uncertainty that typifies the labour market, the self-directed and personal values-driven nature of Protean careerists logically leads one to question the extent to which employees who demonstrate this attitude will be loyal to their employing organisation. It has been proposed that the self-efficacious and proactive component of a Protean career orientation may result in a tendency to leave employment situations that do not support personal goal attainment (Briscoe & Finkelstein, 2009). Similarly, Murrell and colleagues (1996) suggested that individuals with more self-focused career attitudes (which could describe the Protean career orientation) may be more attentive to negative aspects of their job in an attempt to reduce discomfort associated with potential future behaviours which could be construed as disloyal, such as movement to another organisation. As an example, if downsizing meant that the same workload would be distributed across fewer employees, thus requiring the remaining staff to work more and for perhaps longer hours which may infringe on life outside work, then those with a Protean career attitude who value work-life balance could view the organisation in a less favourable light and seek work elsewhere that enables them to achieve a better balance between these domains. Indeed, empirical research has found that employees who are more focused on personal advancement, rather than the company’s best interests, and whose personal career goals are incongruent with the organisation’s goals have less affective organisational commitment (Feldman & Weitz, 1991).

Although there are compelling theoretical reasons for expecting a negative relationship between a Protean career orientation and affective organisational commitment and a positive relationship with turnover intentions, very few investigations have been conducted. A longitudinal review shows that job changes among New Zealand employees tend to occur across different organisations and workers are therefore more inclined to move
laterally (Arthur et al., 1999) rather than within the same organisation. Despite these findings, at the time of this research no literature was located which specifically examined the relationship between a Protean career orientation and turnover intentions. Very little research also currently exists on the relationship between this career attitude and affective organisational commitment. To date, only two studies have measured the relationship between these two: in the first, no relationship was found between the two Protean career dimensions and affective organisational commitment for MBA students (Briscoe & Finkelstein, 2009); the second study, based on Turkish employees, found a positive relationship between the self-directed dimension and affective organisational commitment (Çakmak-Örلوğlu, 2012). The scarcity of available research points to the need to investigate these relationships further and consequently the hypotheses tested in the present study concerning the relationship between a Protean career orientation and affective organisational commitment and turnover intentions are in accordance with theoretical arguments. Thus,

**Hypothesis 3:** A a) self-directed and b) values-driven career orientation will negatively relate to affective organisational commitment

**Hypothesis 4:** A a) self-directed and b) values-driven career orientation will positively relate to turnover intentions

**Proposed Model**

To summarise, PsyCap will positively relate to affective organisational commitment and negatively relate to turnover intentions as positively disposed employees are inclined to develop more favourable work attitudes. High levels of PsyCap may also relate to a Protean career orientation. However, by their self- rather than organisation-oriented nature, individuals who ascribe to this career attitude will demonstrate a negative relationship with affective organisational commitment and a positive relationship with turnover intentions. The
Protean career orientation therefore acts as an intermediary between PsyCap and affective organisational commitment and turnover intentions, transmitting some of the effects of PsyCap on its two dimensions onto these outcomes. The relationships described between the different variables in this study can be combined to propose a model of mediation, whereby a Protean career orientation mediates the link between PsyCap and affective organisational commitment and turnover intentions. This is depicted in Figure 1.

Figure 1. Model of the hypothesised study relationships.

Accordingly, the following hypotheses are postulated:

Hypothesis 5: A) self-directed and b) values-driven career orientation will mediate the relationship between psychological capital affective organisational commitment

Hypothesis 6: A) self-directed and b) values-driven career orientation will mediate the relationship between psychological capital and turnover intentions.
Control Variables

The outcomes measured in this study, i.e., affective organisational commitment and turnover intentions, are also predicted by aspects of an individual’s work experiences, such as work relationships and the amount or type of work to be performed. More specifically, the interaction of an individual’s personal dispositions with his/her work experiences tends to determine the individual’s subsequent level of affective organisational commitment and turnover intentions (Meyer, Irving, & Allen, 1998). Meta-analytic results demonstrate that the strongest work-experience antecedent of affective commitment is the support an organisation provides its employees (Meyer et al., 2002). Longitudinal research by Eisenberger, Stinglhamber, Vandenbroucke, Sucharski, and Rhoades (2002) indicates, nevertheless, that it is perceived supervisor support that leads to perceived organisational support (see also Kidd & Smewing, 2001; and Wayne, Shore, & Liden, 1997) and, as such, it is the support from an employee’s supervisor, and not the organisation, that plays the more crucial role in the this attitude. Furthermore, the strongest task-related work experience found to predict affective organisational commitment is role ambiguity (Meyer et al., 2002). Turnover intentions are similarly predicted by supervisor support, or lack thereof (Maertz, Griffeth, Campbell, & Allen, 2007), and role ambiguity (Igbaria & Greenhaus, 1992; Podsakoff, LePine, & LePine, 2007). Consequently, role ambiguity and perceived supervisor support may account for variance in these outcome variables and were included in this research as control variables.

Method

Recruitment

Participant recruitment was obtained via a phone call to the HR managers of six organisations across New Zealand. This conversation entailed explaining that the researcher
was a post graduate student from the University of Canterbury and then providing a brief outline of the study. A positive response from five of the HR Managers was followed up with an email which contained an executive summary (Appendix A). The summary included more detailed information about the nature of the study, what organisational participation would entail, and what organisations could expect from the researcher upon completion. After a review of the executive summary, all five HR managers agreed to their respective organisations’ participation. The industries in which these organisations are involved include: banking, financial advisory and audit, aviation, entertainment, and local governing body.

Subsequent to the organisation’s approval, each HR manager was emailed a unique link for their respective organisation to the online survey used in this research, which was created using Qualtrics Software. This email was accompanied by a brief explanation of the study from the researcher for the HR manager to use in communication with his/her organisation’s staff. This information summarised what employee participation involved in addition to the benefits of participation to the employee in order to encourage respondents (Appendix B). The major benefit cited to encourage employees to complete the survey was the opportunity to enter the draw to win one of six NZ$100 vouchers to a shopping centre in New Zealand. Respondents were also advised in this brief that participation in this survey was voluntary in addition to being completely anonymous and conducted independently from the organisation by the researcher. Furthermore, the personal details collected by the researcher for the shopping centre voucher draw would be obtained in a separate survey to maintain anonymity.

In three organisations, the explanation and survey link was distributed to employees via email, and in the remaining two they were distributed as an internal news item on the organisation’s intranet. Prior to commencing the questionnaire, employees were presented with an information and consent page (Appendix C). The information section detailed more
specifically the nature and purpose of the present research and was succeeded by a list of what participants would be consenting to if they agreed to undertake the survey. Respondents were required to tick a box to indicate their agreement before continuing on to the survey.

The use of the intranet by two of the organisations as a distribution method for the survey means it is unclear exactly how many employees were exposed to the invite. In total, 594 individuals across the five organisations voluntarily participated in this research. The maximum number of employees potentially exposed to the link was 3040 which would give a minimum response rate of 19.5 per cent. This percentage falls within one standard deviation of the average response rate (35.7 per cent) for data collection in organisations (Baruch & Holtom, 2008). A breakdown of minimum response rates per organisation shows varied results, partly according to how the invitation was published: for banking (direct email; n = 19) it was 90 per cent; for financial advisory and audit (direct email; n = 10) it was 91 per cent; for aviation (intranet; n = 141) it was 19 per cent; for entertainment, (direct email; n = 22) it was 16 per cent; and for the local governing body (intranet; n = 402) it was 20 per cent.

Responses were visually inspected for completeness: 42 contained partial demographic information only and/or had completed no more than one measure contained within the questionnaire. These were subsequently excluded from statistical analyses given the deficiency of information and this action culminated in a sample size of 552.

Sample

Participants ranged from 20 to 69 years of age with a mean of 42.3 (SD = 10.9) and had an average tenure of 8.9 years (SD = 9.6) with their current organisation. Females constituted the majority of respondents to this online survey at 57.2 per cent (n = 316). Similarly, full time employees were the most numerous (n = 479) comprising 86.8 per cent of the sample and nearly three quarters (74.1 per cent) of respondents had attained tertiary level
education (n = 409). A summary of the demographic characteristics of the sample used in this research are presented in Table 1.

Table 1

Demographic characteristics

<table>
<thead>
<tr>
<th>Categorical Variable</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
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</tr>
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<td>57.2</td>
</tr>
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<td>Male</td>
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<td>42.4</td>
</tr>
<tr>
<td>Other</td>
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<td>0.4</td>
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<tr>
<td>Employment Status</td>
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<td></td>
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<tr>
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<tr>
<td>Part time</td>
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</tr>
<tr>
<td>Casual</td>
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<td>1.1</td>
</tr>
<tr>
<td>Education Level</td>
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<td></td>
</tr>
<tr>
<td>Did not complete secondary</td>
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<td>1.8</td>
</tr>
<tr>
<td>Secondary</td>
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<td>24.1</td>
</tr>
<tr>
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</tr>
<tr>
<td>Master's degree</td>
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<td>13.6</td>
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<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Other tertiary</td>
<td>143</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Note. N = 552. Mean age = 42.3 years (SD = 10.9)
Mean years of organisational tenure = 8.9 (SD = 9.6)

Measures

Six separate scales, totalling 62 items, were used to measure the independent and dependent variables in this research in addition to five demographic questions (Appendix D). With the exception of the demographic questions, the presentation of the measures described below and the order in which their items appeared to respondents were randomised in Qualtrics to control for potential order effects.

Survey refinement. The questionnaire utilised in this survey was first piloted to a group of six individuals to identify potential errors or ambiguity associated with scale items. Any changes made to scales are explained in the subsequent measures section.
In order to maintain consistency throughout the survey, the researcher adapted the response scale range and anchors of the other six scales to match the one used with the PsyCap measure (Appendix D); all responses were recorded a six point Likert-type scale where 1 = strongly disagree and 6 = strongly agree. None of the scales required the wording of their items to be reformatted as a result of these changes. The lead in statement was also predominantly the same for all measures; slight variations, such as the word *organisation*, were introduced where appropriate. Alpha reliability estimates obtained for all of the measures used in this study are presented in Table 2 in the results section.

**Psychological capital.** The four PsyCap components (hope, self-efficacy, resilience, and optimism) were measured with six items each; the composite PsyCap was therefore a 24 item scale. The lead in statement for this measure also asked participants to describe how they thought about themselves at that moment to facilitate the state-like nature of these constructs (Luthans et al., 2007b). Because some of the questions contained within this measure may not be applicable to all employees as a consequence of role constraints, the researcher added a sentence which asked participants to imagine what they would do in such a situation. For example, an item in the self-efficacy subscale asks respondents to indicate their level of confidence in representing their “work area in meetings with management”. It may be that some employees are not required to do this in their role and therefore would not be able to answer this item.

A sample item for hope is “I can think of many ways to reach my current work goals”; self-efficacy “I feel confident presenting information to a group of colleagues”; resilience “I usually take stressful things at work in stride”; and optimism “I always look on the bright side of things regarding my job”. Due to copyright specifications only sample items of the PsyCap measure are presented in this dissertation; the scale in its entirety can be found in Luthans et al. (2007a).
Three items in this scale were negatively keyed; two from the optimism and one from the resilience subscales. Low scores for each subscale indicate that an individual has low levels of the corresponding PsyCap component and low scores for all subscales relate to low levels of PsyCap overall. Prior analyses have found alpha reliability estimates for the entire PsyCap scale to range from .68 to .99 (Avey et al., 2011). The subscales have demonstrated alpha values ranging from .72 to .87 for hope, from .75 to .87 for self-efficacy, from .72 to .80 for resilience, and from .74 to .85 for optimism (Avey, Luthans, Smith, & Palmer, 2010; Luthans et al., 2007b)

Previous research (Luthans et al., 2007b; Luthans et al., 2010) using confirmatory factor analysis found that each of the six items contained within each subscale loaded significantly on their respective latent factor and all four latent factors loaded on the one higher order factor. A correlation of .60 with the trait-like core self-evaluations identifies it as empirically distinct from this similar higher order construct (Luthans et al., 2007b).

**Protean career orientation.** The protean career attitude was measured using a 14 item scale (Briscoe et al., 2006). The two subscales contained with this measure, self-directed and values-driven, were measured with eight and six items, respectively. A sample item from the self-directed subscale is “I am responsible for my success or failure in my career” and from the values-driven subscale, “I navigate my own career, based on my personal priorities, as opposed to my employer’s priorities”.

Piloting the questionnaire items revealed some confusion about the meaning of item 13 (located in the values-driven subscale) and it was modified to enhance its comprehensibility. The “what is right” in the original item “What I think about what is right in my career is more important to me than what my company thinks” was considered
redundant and subsequently deleted from the sentence so that the item became “What I think about my career is more important to me than what my company thinks”.

High scores on both subscales indicate an individual who is highly driven in their career by personal values and who prefers a self-directed approach to career management i.e., possessed of a Protean career orientation. Briscoe et al. (2006) found alpha reliability estimates of .81 for the self-directed and .69 for the values-driven subscales. The entire scale has also demonstrated independence from another career orientation measure: the self-directed and values-driven subscales correlated .41 and .29, respectively, with the boundaryless career mindset scale which has often been linked to the Protean career orientation (see Briscoe & Finkelstein, 2009; Briscoe et al., 2006; Briscoe & Hall, 2006; Çakmak-Othuoğlu, 2012; Enache, Sallan, Simo, & Fernandez, 2011; Granrose & Baccili, 2006). The scale was also found to be moderately related to proactive personality (.40) demonstrating its convergent validity (Briscoe et al., 2006).

**Affective organisational commitment.** The scale used to measure an individual’s affective commitment to their organisation was an eight item instrument from Allen and Meyer (1990). Four items in this scale were negatively keyed. An example item is “This organisation has a great deal of personal meaning for me.” High scores indicate that an individual feels quite emotionally attached to their organisation. Allen and Meyer (1990) obtained an alpha value of .87 for this scale and during scale validation they found that affective organisational commitment loaded on separate orthogonal factors from the other two types of organisational commitment, continuance and normative, indicating that the affective construct is an independent type of organisational commitment.

**Turnover intentions.** Employees’ turnover intentions were assessed with a three item measure compiled by Vandenberghhe and Bentein (2009). The first two items used by
Vandenberghe and Bentein (2009) came from Hom and Griffeth (1991) and Jaros (1997), while the third was added by Vandenberghe and Bentein (2009). An example item is “I intend to quit my organization in the near future.” High scores signify that an individual desires to leave their current employer. Vandenberghe and Bentein (2009) conducted two studies with the three item scale; alpha reliabilities of .84 were obtained in their first study and .80 in the second. In the first and second samples, respectively, the turnover intentions scale correlated -.32 and -.36 with affective organisational commitment and -.26 and -.38 with affective commitment to one’s supervisor, demonstrating the turnover intentions scale’s discriminant validity from these other two measures.

**Control Variables.**

**Demographics.** The first page of the online survey, subsequent to the information and consent section, asked participants for their demographic information (year of birth, gender, highest education level, employment status, and organisational tenure).

**Perceived supervisor support.** Supervisor support was measured with the eight item Perceived Supervisor Support scale from Eisenberger et al., (2002). Two of the items contained in this scale were negatively geared. A sample item is “My supervisor really cares about my well-being”. Low scores signify that the employee feels a lack of support from their supervisor while high scores indicate the obverse. Research by Eisenberger et al., (2002) produced an alpha reliability range of .81 to .88 for this measure. Subsequent work by Patterson and colleagues (2005) also found convergent and discriminant validity with this scale.

**Role ambiguity.** Five items from the Stress Diagnostic Survey (Ivancevich & Matteson, 1980) comprise a scale which assesses the degree to which an employee feels tension as a result of role ambiguity. A sample item includes “My job duties and work
objectives are unclear to me”. High scores are indicative of an employee with high levels of role ambiguity. Research by Nelson and Sutton (1990) obtained an alpha reliability of .93 for this scale. The role ambiguity subscale has also been examined and evidence found for its convergent and discriminant validity (Rush, Schoel, & Barnard, 1995).

**Ethics Review**

On a final note, the information and consent pages, in addition to the measures and rewards, used in this research were approved by the Human Ethics Committee at the University of Canterbury prior to commencement.

**Data Analyses**

All statistical analyses were performed with SPSS, version 19.0, for Windows.

**Data transformation.** Before proceeding with data analyses, year of birth was transformed into age, and all negatively keyed items were reverse coded; these were then visually inspected at random to ensure that the transformations were valid. Indices were subsequently created for each measure by calculating the average of the items used in each scale. The Protean subscales, values-driven and self-directed, were maintained as separate scales; however, the PsyCap measure was kept as a higher order construct in accordance with the hypotheses of this research. Finally, gender, employment status, and highest level of education were dichotomised to allow correlational and regression analyses to be performed during hypothesis testing. Gender became female (1) and other (0); employment status was separated into fulltime (1) and all other (0); and education level was dichotomised into Bachelor degree (1) and all other (0).
Measurement and validity issues. Missing data from the 552 responses used during data analysis were handled using listwise exclusion. A further 34 were removed in analysis due to internal attrition, resulting in an effective sample of 518.

Given that the PsyCap and Protean constructs are relatively new, an exploratory factor analysis was performed on all measures to determine the adequacy of their measurement properties. The results of these analyses indicated that the underlying factor structure of each measure followed the expected pattern and was in accordance with previous research. Furthermore, all scales evidenced adequate internal reliability with Cronbach alphas ranging from .77 to .93 (Table 2).

Hypothesis testing. Multiple regression analyses were run using the MEDIATE macro (Hayes & Preacher, 2012) for SPSS to test the hypotheses postulated. This macro provides estimates of the total, direct, and indirect effects and allows for the testing of multiple predictors and mediators simultaneously. To test the total and direct effects, separate analyses were conducted for each of the dependent variables, affective organisational commitment and turnover intentions. PsyCap was entered as the independent variable and the two Protean career orientation dimensions, self-directed and values-driven, were tested as mediators. Demographic variables, perceived supervisor support, and role ambiguity were entered as covariates.

The MEDIATE macro also provides confidence intervals (CI) around the indirect effects which can be used to determine their significance. Simulation research has demonstrated that bootstrapping is among the most accurate and powerful procedures for testing mediating variable effects (Hayes, 2009; MacKinnon, Lockwood, & Williams, 2004; Williams & MacKinnon, 2008). In this research, the procedure utilised 10,000 bootstrap samples to arrive at the bias corrected 95 per cent confidence intervals. If the 95 per cent
bootstrap CIs do not include zero then the indirect effects are significant (Hayes, 2009) and this is taken as an indication that the Protean career orientation mediates the relationship between PsyCap and organisational commitment and turnover intentions.

The conceptual model proposed in the current study is presented again below to facilitate comprehension of the subsequent results section. The total effect of PsyCap on the outcomes (affective organisational commitment and turnover intentions; \( C \)) is equal to the direct effect of PsyCap on these two variables \( (c') \) plus the indirect effects through the Protean career orientation dimensions \( (ab) \). These relationships are represented by the general equation \( C = c' + ab \). Figure 2 presents the specific paths.

![Diagram](image)

*Figure 2.* The proposed mediation model including the paths tested
Results

Descriptives

Table 2 shows the means, standard deviations, coefficient alphas (where relevant), and bivariate correlations for the variables used in this research. Most of the key variables in the present research were significantly correlated with each other. To understand the strength of the association between variables, the following guidelines offered by Cohen (1988) are presented in order to interpret these relationships: correlations between .10 and .30 and between .30 and .50 are considered small (slight) and medium (moderate), respectively, while correlations larger than .50 are considered strong.

High levels of PsyCap were moderately positively related to affective organisational commitment \((r = .38, p < .001)\) and moderately negatively related to turnover intentions \((r = -.37, p < .001)\). PsyCap was also slightly correlated with a values-driven career attitude \((r = .14, p < .001)\) but bordered on being strongly correlated with a self-directed career attitude \((r = .47, p < .001)\). The values-driven dimension was moderately negatively correlated with respondents’ affective organisational commitment \((r = -.23, p < .001)\) and slightly positively correlated to their turnover intentions \((r = .13, p < .01)\); the self-directed dimension was not, however, correlated with either outcome (affective organisational commitment, \(r = .02, p = .63\), and turnover intentions, \(r = .01, p = .88\)). The two Protean career orientation dimensions were moderately correlated with each other \((r = .33, p < .001)\) and finally, affective organisational commitment demonstrated a strong negative correlation with turnover intentions \((r = -.55, p < .001)\).
Table 2
*Means, Standard Deviations, and Pearson’s Correlations between Variables*

<table>
<thead>
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<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7a</th>
<th>7b</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<tr>
<td>3. Education Level (Bachelor)</td>
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<td>-13</td>
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<td>.02</td>
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<td>5. Tenure</td>
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<td>-.21</td>
<td>.02</td>
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<td>6. PsyCap</td>
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<td>-.08</td>
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<td>.00</td>
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<td>(.78)</td>
<td>(.91)</td>
<td>(.93)</td>
<td>(.85)</td>
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<td>7a. Protean - Values-Driven</td>
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<td>.01</td>
<td>.00</td>
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<td>(.93)</td>
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<td>(.85)</td>
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<td>7b. Protean - Self-Directed</td>
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<td>.33</td>
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<td>(.83)</td>
<td>(.91)</td>
<td>(.93)</td>
<td>(.85)</td>
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<td>8. Organisational Commitment</td>
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<td>.09</td>
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<td>-.06</td>
<td>.04</td>
<td>.13</td>
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<td>-.23</td>
<td>.02</td>
<td>(.78)</td>
<td>(.91)</td>
<td>(.93)</td>
<td>(.85)</td>
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<tr>
<td>9. Turnover Intentions</td>
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<td>.06</td>
<td>.12</td>
<td>-.03</td>
<td>-.08</td>
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<td>.13</td>
<td>.01</td>
<td>-.55</td>
<td>(.91)</td>
<td>(.93)</td>
<td>(.85)</td>
</tr>
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<td>10. Perceived Supervisor Support</td>
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<td>-.04</td>
<td>-.02</td>
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<td>(.85)</td>
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<tr>
<td>11. Role Ambiguity</td>
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<td>.12</td>
<td>.04</td>
<td>-.05</td>
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<td>.04</td>
<td>-.17</td>
<td>-.36</td>
<td>.41</td>
<td>-.47</td>
<td>(.85)</td>
</tr>
</tbody>
</table>

Note. Significant correlations are indicated by bold text.
Correlations above (+/-) .08 were significant at \( p<.05 \) (2 tailed);
Correlations above (+/-) .13 were significant at \( p<.001 \) (2 tailed)
Alpha values in brackets on the diagonal
A dash (-) signifies n/a
Listwise N =518
Appendix E contains a table which demonstrates the correlations between the four PsyCap components and all the variables measured in the present research.
Hypothesis Testing

The total variance explained in both affective organisational commitment and turnover intentions was 26 per cent each. The inclusion of self-directed and values-driven as mediators increased the variance explained to 32 and 30 per cent, respectively.

Hypotheses 1a and 1b. Hypothesis 1a proposed that PsyCap would be positively associated with affective organisational commitment while hypothesis 1b postulated a negative association between PsyCap and turnover intentions. Significant coefficients supported these two hypotheses (Tables 3 and 4): the total effect of PsyCap on affective organisational commitment was $c_1 = .32 (p < .001)$ and its total effect on turnover intentions was $c_2 = .41 (p < .001)$.

Hypotheses 2a and 2b. Utilising the same statistical procedure as the first hypotheses, the direct effect of PsyCap on the two Protean career dimensions was tested. Both hypotheses 2a and 2b stated that PsyCap would positively relate to the self-directed and values-driven dimensions, respectively, and thus the Protean career orientation as a whole. Significant results (Tables 3 and 4) reveal that PsyCap was positively related to both the self-directed ($a_1 = .60, p < .001$) and values-driven ($a_2 = .31, p < .001$) dimensions. Hence support is provided for the two hypotheses which conjointly indicate that PsyCap was associated with a Protean career orientation.

Hypotheses 3a and 3b. Hypotheses 3a and 3b predicted that both the self-directed and values-driven dimensions would be associated with less affective commitment to the organisation. Results (Table 3) show that self-directed did not have a significant direct effect on affective organisational commitment ($b_1 = -.09, p = .09$). Values-driven did, however, have a direct effect on this outcome ($b_2 = -.25, p < .001$) and this was significant. Support is
Table 3
Summary of Multiple Mediator Model Analysis of Psychological Capital on Affective Organisational Commitment Through Protean Career Orientation Dimensions (values-driven and self-directed)

<table>
<thead>
<tr>
<th></th>
<th>Mediator Values-Driven</th>
<th>Mediator Self-Directed</th>
<th>Affective Organisational Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Effect (a path)</td>
<td>Direct Effect (a path)</td>
<td>Total Effect (c path)</td>
</tr>
<tr>
<td></td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.98 (.45)</td>
<td>1.75 (.34)</td>
<td>1.21 (.42)</td>
</tr>
<tr>
<td>PsyCap</td>
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<td>.60 (.05)</td>
<td>.32 (.07)</td>
</tr>
<tr>
<td>Age</td>
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<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Gender (Female)</td>
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<td>.18 (.05)</td>
<td>-.04 (.06)</td>
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<tr>
<td>Tenure</td>
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<td>.01 (.00)</td>
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<td>.04 (.04)</td>
<td>.00 (.07)</td>
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<td>Employment Status (Full Time)</td>
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<td>.03 (.04)</td>
<td>.04 (.07)</td>
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<tr>
<td>Supervisor Support</td>
<td>-.07 (.04)</td>
<td>-.04 (.03)</td>
<td>.27 (.04)</td>
</tr>
<tr>
<td></td>
<td>Adj R²</td>
<td>Mediator - Values-Driven</td>
<td>Mediator – Self-Directed</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>--------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Role Ambiguity</td>
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<td>(.04)</td>
<td>(.03)</td>
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<tr>
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<td></td>
<td>.32</td>
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</table>

Note. All significant coefficients are indicated by bold text.
Coefficients above (+/-) .01 were significant at p < .001 (2 tailed)

bias corrected and accelerated confidence intervals; 10,000 bootstrap samples.
therefore found for hypothesis 3b, but not for 3a. In other words, being driven by personal values in the career negatively related to affective commitment to the organisation.

**Hypotheses 4a and 4b.** The self-directed (4a) and values-driven (4b) dimensions of the Protean career orientation were predicted to be negatively related to turnover intentions. Table 4 demonstrates that both hypotheses were substantiated: self-directed had a direct effect of $b_3 = .33 \ (p < .001)$ and values-driven had a direct effect of $b_4 = .17 \ (p < .01)$ on this outcome. Both of these effects were significant and thus a Protean career orientation was positively associated with turnover intentions.

**Hypotheses 5a and 5b.** Hypotheses 5a and 5b predicted that the two Protean career orientation dimensions would mediate the relationship between PsyCap and affective organisational commitment. Once both Protean career orientation dimensions were controlled for, the direct effect of PsyCap on affective organisational commitment was still significant ($c' = .46, \ p < .001$). Through values-driven, PsyCap had a negative indirect effect on affective organisational commitment ($B = -.08, \ 95\% \ CI [-.13, -.04]$) and this was significant (Table 3). Through self-directed, PsyCap also had a negative indirect effect this outcome ($B = -.06, \ 95\% \ CI [-.13, .01]$); however, this was not significant. The significant indirect effect obtained through values-driven therefore supports hypothesis 5b only. In summary, PsyCap was positively related to affective organisational commitment and the strength of this association increased when the values-driven dimension was taken into account. Thus the relationship between PsyCap and affective organisational commitment was different depending whether the effect was direct or transmitted through the Protean career orientation.

**Hypotheses 6a and 6b.** With regards to hypotheses 6a and 6b, which predicted that both the self-directed and values-driven dimensions of the Protean career orientation would mediate the relationship between PsyCap and turnover intentions, respectively, results
Table 4
Summary of Multiple Mediator Model Analysis of Psychological Capital on Turnover Intentions Through Protean Career Orientation Dimensions (values-driven and self-directed)

<table>
<thead>
<tr>
<th></th>
<th>Mediator Values-Driven</th>
<th>Mediator Self-Directed</th>
<th>Turnover Intentions</th>
<th></th>
<th>Mediator Values-Driven</th>
<th>Mediator Self-Directed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Effects (a path)</td>
<td>Direct Effects (a path)</td>
<td>Total Effect (c path)</td>
<td>Direct Effect (c’ path)</td>
<td>Indirect Effect ab</td>
<td>95% CI</td>
</tr>
<tr>
<td></td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
<td>Estimate (se)</td>
<td>LLC</td>
</tr>
<tr>
<td>Constant</td>
<td>2.98 (.45)</td>
<td>1.75 (.34)</td>
<td>5.72 (.70)</td>
<td>4.62 (.71)</td>
<td>.05 (.02)</td>
<td>.02</td>
</tr>
<tr>
<td>PsyCap</td>
<td>.31 (.07)</td>
<td>.60 (.05)</td>
<td>-.41 (.11)</td>
<td>-.67 (.12)</td>
<td>.03 (.01)</td>
<td>.00</td>
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<tr>
<td>Age</td>
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<td>.00 (.00)</td>
<td>-.00 (.01)</td>
<td>-.00 (.01)</td>
<td>-.02 (.01)</td>
<td>-.02</td>
</tr>
<tr>
<td>Gender (female)</td>
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<td>.18 (.05)</td>
<td>.05 (.10)</td>
<td>-.02 (.10)</td>
<td>.04 (.01)</td>
<td>.04</td>
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<tr>
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<td>.01 (.01)</td>
<td>-.00 (.01)</td>
<td>-.08 (.01)</td>
<td>-.08</td>
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<tr>
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<td>-.08 (.15)</td>
<td>-.08 (.01)</td>
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<td>-.04 (.03)</td>
<td>-.40 (.06)</td>
<td>-.38 (.06)</td>
<td>-.07 (.01)</td>
<td>-.07</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>95% CI</td>
<td>p</td>
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<tr>
<td>Role Ambiguity</td>
<td>.08</td>
<td>.04</td>
<td>(.04)</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.00</td>
<td>.03</td>
<td>(.03)</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.30</td>
<td>.07</td>
<td>(.07)</td>
<td>.00</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>.29</td>
<td>.07</td>
<td>(.07)</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediator - Values-Driven (b path)</td>
<td>.17**</td>
<td>.07</td>
<td>(.07)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediator - Self-Directed (b path)</td>
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<td>.09</td>
<td>(.09)</td>
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</tr>
<tr>
<td>Adj R²</td>
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<td>.26</td>
<td>.26</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. All significant regression coefficients are indicated by bold text. Coefficients above (+/-) .01 were significant at p<.001 (2 tailed).

bias corrected and accelerated confidence intervals; 10,000 bootstrap samples.
indicate support for both (Table 4). Akin to affective organisational commitment, the direct effect of PsyCap on turnover intentions was still significant once both Protean career orientation dimensions were controlled for \((c' = -.67, p < .001)\). Through self-directed, PsyCap had a positive indirect effect on turnover intentions \((B = .20, 95\% CI [.10, .32])\) and through values-driven a positive indirect effect was also found \((B = .05, 95\% CI [.02, .11])\); both of these were significant. These results indicate that PsyCap is negatively related to turnover intentions and the size of this association is increased when both the self-directed and values-driven dimensions are controlled for. In essence, as with affective organisational commitment, PsyCap differentially relates to turnover intentions depending whether the effect is direct or transmitted through the Protean career orientation. Figure 3 illustrates the results of the aforementioned hypotheses.

**Figure 3.** Model of the hypothesised study relationships (with unstandardized coefficients).

*Note:* All results significant at \(p < .01\) are denoted by bold text.
Additional Findings

The control variable, perceived supervisor support, was positively related to affective organisational commitment ($B = .25, p < .001$) and negatively related to turnover intentions ($B = -.38, p < .001$). Role ambiguity also had a positive relationship with turnover intentions ($B = .29, p < .001$). Taken together, these results suggest that subordinates’ perceptions of supervisor support are positively associated with their affective commitment to the organisation and negatively related to their turnover intentions. Likewise, perceptions of low role ambiguity are associated with less intention to turnover. The demographic variable Gender (female) was positively related to the self-directed dimension of the Protean career orientation ($B = .18, p < .001$). This suggests that females are more likely than males to have a self-directed attitude towards career management.

Discussion

The present research was conducted to investigate the role employees’ career attitudes play in the relationship between his/her positive psychological dispositions and organisational loyalty attitudes. Specifically, it was predicted that individuals who have high levels of Psychological Capital (synergistic construct of hope, self-efficacy, resilience, and optimism, termed PsyCap for short) would feel more emotionally attached to their organisation (affective organisational commitment) in addition to having fewer intentions to quit (turnover intentions). It was also predicted that these relationships would be mediated by the individual’s preference for self-directed career management in accordance with his/her personal values (i.e., a Protean career orientation). Demographic (year of birth, organisational tenure, gender, education level, and employment status) and work experience variables (perceived supervisor support and role ambiguity) were included as control variables.
Summary of Main Findings

Results showed that PsyCap positively relates to affective commitment to the organisation and negatively relates to turnover intentions, which confirms hypotheses 1a and 1b. These findings corroborate meta-analytic results found by Avey and colleagues (2011), where high levels of PsyCap are associated with greater psychological attachment to an organisation and fewer intentions to leave, and indicate that the results found in this New Zealand sample correspond to those in other countries.

Similarly, hypotheses 2a and 2b were substantiated as PsyCap was found to positively relate to both dimensions of the Protean career orientation. This finding implies that individuals with concurrently high levels of hope, self-efficacy, resilience, and optimism may also hold a career attitude that is self-directed and concerned with the achievement of personally meaningful goals. Although a high correlation was obtained between these two variables in previous research (see Di Renzo, 2010), thus providing support for the idea that PsyCap and a Protean career orientation are related, the study referred to tested the effect of the Protean career orientation on PsyCap in a similar sample (full time employees, n = 695) and found evidence for a direct relationship. These prior findings contrast with those of the present study and indicate that the direction of the relationship varies and needs further investigation.

The present study also found that being driven by personal values in one’s career related to less affective organisational commitment (hypothesis 3b); however, a self-directed approach to career management was not related to this outcome (hypothesis 3a). Both Protean career orientation dimensions were positively related to an employee’s turnover intentions (hypotheses 4a and 4b). With the exception of hypothesis 3a, these results support theoretical arguments that individuals with a self-oriented, rather than organisation-oriented, career
attitude may demonstrate less loyalty to the organisation (e.g., Feldman & Weitz, 1991; Murrell et al., 1996).

These results suggest that a focus on personal responsibility for the career does not appear to relate to the individual’s emotional attachment to the organisation; however, it does appear to relate to turnover intentions. Moreover, if the individual places more worth on personal values, rather than organisational values, then this may also relate to less attachment to the organisation and more turnover intentions. The finding that the self-directed dimension had no relationship with affective organisational commitment is consistent with previous empirical research (Briscoe and Finkelstein, 2009) which found no relationship between the two. However, the finding of the present study that the values-driven dimension was negatively related to an individual’s affective organisational commitment runs contrary to the research by Briscoe and Finkelstein (2009) which did not find evidence for a relationship between these two variables. Likewise, the present finding concerning the direction of the relationship between the values-driven dimension and organisational commitment is in direct contrast to another study (Çakmak-Otluoğlu, 2012) which found a positive relationship between the two. This indicates that more research is needed to further explore the nature of this relationship.

Finally, this research confirmed three of the four mediation hypotheses proposed. In line with hypothesis 5b, the relationship between PsyCap and affective organisational commitment was mediated by the individual’s personal values-driven attitude to his/her career; however, this was not found to be the case for a self-directed career attitude (hypothesis 5a). Accordingly, when measuring the relationship between PsyCap and affective organisational commitment, if values-driven is not controlled for, the strength of the association between the two is underestimated. The self-directed dimension of the Protean career orientation did, however, mediate the negative relationship between PsyCap and
turnover intentions (hypothesis 6a) as did the values-driven dimension (hypothesis 6b). Thus PsyCap negatively relates to turnover intentions but this relationship is underestimated if the individual’s Protean career orientation is not taken into account. In other words, the Protean career orientation as a mediator transmits some of the effect of PsyCap onto turnover intentions. The values-driven dimension of this career orientation also mediates the relationship between PsyCap and affective organisational commitment by conveys some of the effect of PsyCap onto this outcome. These results indicate that a Protean career orientation plays an important role in the relationship between PsyCap and the work attitudes measured in this study. Such findings support the idea that the development of PsyCap may relate to less employee turnover through greater affective organisational commitment and fewer turnover intentions but also highlight the importance of taking into consideration the nature of the individual’s career as this plays an important role in the relationship between PsyCap and these two outcomes.

**Additional findings.** The two control variables, perceived supervisor support and role ambiguity, negatively related to an individual’s intentions to turnover. The former was also positively associated with affective organisational commitment. In essence, the perception that a supervisor or manager is supportive is important for employees’ loyalty to the organisation. Additionally, low perceptions of role ambiguity may be associated with fewer intentions to quit from employees. These results are consistent with the general findings in previous research (e.g., Meyer et al., 2002) and justify the inclusion of role and support perceptions as control variables.

The present study also yielded an interesting finding that women indicated higher levels of self-directed career management. As women often take time off to care for children to a greater extent and for a longer period of time than men (Becker & Moen, 1999), the addition of non-work responsibilities and need for more flexible scheduling may require them
to take a more self-directed approach to career management upon re-entering the workforce (Enache et al., 2011). Empirical research on gender differences with regard to the self-directed dimension is mixed: some studies found that women indicate higher levels of career self-agency (Ng, Burke, & Fiksenbaum, 2008; Shapiro, Ingols, & Blake-Beard, 2008; Segers, Inceoglu, Vloeberghs, Bartram, & Henderickx, 2009) while others have found no gender differences (Agarwala, 2008; Briscoe et al., 2006; Grimland, Vigoda-Gadot, & Baruch, 2012). Exploration of career orientation differences between genders may be an interesting avenue for future research.

**Practical and Theoretical Implications**

In light of uncertain labour market conditions, which demand autonomous career management, these research results have positive implications for employees. High levels of PsyCap may promote a Protean career orientation — i.e., a self-directed career in accordance with one’s personal values and concerned with psychological success. PsyCap development interventions could therefore enhance a Protean career attitude, and by extension the probability of attaining subjective career success, through the individual’s greater capacity to define and conceive of multiple ways to reach personal goals, in addition to heightened levels of optimism about the probability of achieving said goals. Moreover, the individual’s confidence in his/her abilities, the application of effort and resources as required, and the capacity to positively bounce back from adversity may further add to success in goal endeavours. The development of PsyCap could likewise contribute to enhanced employability (Luthans et al., 2006), which is only growing in importance as a career goal during the twenty first century (Hall, 1996). Finally, interventions aimed at enhancing employees’ PsyCap may relate to more positive appraisals of their work circumstances and enhance their likelihood of success on the job as a result of the greater sense of agency and
capacity for perseverance (Luthans et al., 2007b). An overview of strategies to develop PsyCap is provided in the subsequent section.

The findings from the present research also have important implications for organisations and inform a number of activities, such as selection, training and development, and performance management.

Training, learning, and development. The development of PsyCap in employees may be the most interesting practical application of the present study’s findings to organisations. PsyCap is positively associated with an individual’s affective commitment to the organisation and fewer intentions to leave, even among individuals who possess a Protean career orientation. The subsequent paragraph, which is based on empirical research, shows how PsyCap can be developed and also provides examples as to how organisations can design PsyCap interventions to mitigate the negative impact of the Protean career attitude on employee loyalty.

Hope has been found to be amenable to development through a focus on the goal achievement process; this includes determining realistically challenging goals that are personally meaningful in addition to setting sub-goals with concrete end points (Berg, Snyder, & Hamilton, 2008; Snyder, 1995, 2002). Organisations can help employees identify personal goals using the aforementioned technique and then provide ways to (and show how) these goals can be achieved within the organisation.

Self-efficacy has been shown to be positively influenced by the use of mastery experiences, vicarious experiences through social models, and social persuasion (cf. Allison & Keller, 2004; Bandura, 1994; Gist, Stevens, & Bavetta, 1991; McNatt & Judge, 2008). By affording their employees’ opportunities to practice tasks in order to achieve mastery, in addition to using examples of current employees who have successfully mastered the tasks to
be realised, organisations may be able to facilitate higher levels of self-efficacy in their employees without augmenting a Protean career orientation.

Resilience has been demonstrated to be effectively enhanced by requiring participants to identify what resources are available to them to aid goal achievement, and by then seeking input from colleagues regarding additional resources (Luthans et al., 2008). Organisations could therefore make salient the resources and support they provide employees, where these can be located, and how they can be used. Optimism may be enhanced through creation of positive expectations as a result of the development of the other constructs (Luthans et al., 2008; Luthans et al., 2010).

In addition to offering PsyCap development, organisations can provide career development activities to staff thereby potentially attracting individuals who recognise the importance of employability (Clarke, 2008; Stevens, 1996; Van Buren, 2003). The very act of providing development opportunities (Rousseau, Ho, & Greenberg, 2006) or opportunities for career advancement (Ahmad & Bakar, 2003; Sturges, Conway, Guest, & Liefooghe, 2005; Wallace, 1995) may engender greater loyalty as individuals perceive more commitment from the organisation regarding personal development and support. However, as this present research demonstrated, it is necessary to consider the individual’s attitude towards their career. Given the infinite number of ways to achieve psychological success (Hall, 1996), it is important to work with employees to determine what is salient to them when implementing developmental initiatives.

The continuous states of flux in which factors such as technology and the economy appear to reside make it seem likely that the forces which govern the marketplace will preclude dominance of the traditional career model. It could therefore be considered a proactive stance from organisations to support their employees through the development of
PsyCap and thus potentially generate greater loyalty, even from Protean career oriented individuals (Briscoe & Finkelstein, 2009). Regardless of whether Protean career oriented employees settle with the organisation for longer than intended, at the very least an abundance of PsyCap means they may be more likely to positively appraise their time with the organisation which could serve to enhance its image.

**Recruitment and selection.** The developmental nature of PsyCap renders unnecessary the need to selectively hire for this positive psychological resource. However, with regard to Protean career oriented individuals, meta-analytic and longitudinal research shows that compatibility between an individual and the organisation in terms of needs and organisational culture (Person-Organisation fit) also plays a role in employees’ affective organisational commitment and turnover intentions (Kristof, 1996; Meyer, Hecht, Gill, & Toplonytsky, 2010). Accordingly, organisations could direct efforts towards attracting and selecting individuals who share similar values to ensure maximum fit and as a consequence enjoy staff who may demonstrate greater loyalty.

**Performance management.** Employers may further contribute to their staff’s PsyCap by incorporating this positive psychological resource into the performance management system. Specifically, communicating that PsyCap is desirable and establishing it as part of an employee development plan should convey the organisation’s concern for its employees’ growth and wellbeing at work.

Furthermore, the nature of the managerial position grants the manager the potential and legitimate ability to influence the behaviours and attitudes of his subordinates and peers (Bass, 1990). As the findings of this present study indicate, management which is supportive of employees and ensures their roles are not ambiguous may positively relate to employees’ loyalty to the organisation; rewarding managers for these behaviours may therefore positively
contribute to lower turnover through loyalty attitudes. Given their influential role on work attitudes and behaviours, it is particularly important that managers are encouraged and rewarded for high levels of PsyCap, especially if the intention is to foster higher levels of contextual performance which research has found to be directly related to high levels of positive disposition in employees (Crede, Chernyshenko, Stark, Dalal, & Bashshur, 2007).

Work design. Finally, as noted in the introduction, individuals with a Protean career orientation typically desire flexible working conditions that allow them to achieve balance between work and life domains. These individuals also often prefer to contribute to meaningful work (Sargent & Domberger, 2007). By allowing greater control over and autonomy in work projects Protean career oriented individuals may experience an increased sense of psychological ownership which could induce more attachment (Mayhew, Ashkanasy, Bramble, & Gardner, 2007) if not to the organisation then at least to their work.

Methodological Considerations

Measurement error. Given that all of the variables measured in this study were obtained using the same source, i.e., a self-report survey, the following systematic procedures were employed to counteract potentially inflated relationships associated with common method variance as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). The presentation of each scale in the online survey, and the items within each scale, were randomised to control for potential order effects. Furthermore, before seeking respondents, the survey was piloted as this afforded an opportunity to improve ambiguous scale items. While this research did not include measures of social desirability or negative affectivity, which may bias results, all respondents were guaranteed anonymity and asked to indicate how accurately the survey items described how the person felt about his/herself at the time of participation in order to control for potential error (cf. Podsakoff et al., 2003). Unfortunately,
ensuring anonymity precluded the introduction of temporal or proximal separation as a procedural remedy for common method variance, as it would not be possible to track individuals over time. Also, the cross-sectional design of this research was necessitated by the organisations only agreeing to participate in one round of measurement. On the other hand, data collection at one point in time under the same conditions did preclude the introduction of contaminating factors which may have intervened between the variables measured in the present study. Finally, it was not feasible to obtain measures of each scale from different sources given that all were attitudinal variables and therefore only known to the respondent.

It is worth noting that, despite the fact not all sources of common method variance could be controlled for procedurally, it has been empirically shown that the exaggerated correlations observed through self-report measures may be smaller than what is feared (Lance, Dawson, Birkelbach, & Hoffman, 2010). In fact, the study by Lance and colleagues (2010) indicated that measurement error attenuated this inflation to the extent that the observed relationship was not so different from its true score. Therefore it is with reasonable confidence that the findings observed in this study are not (at least partly) statistical artefacts and do indeed represent the true nature of the relationships between the variables. Moreover, the inclusion of control variables which have demonstrated effects on the loyalty outcomes measured lends additional confidence to the interpretations of the statistical analyses in the present research. However, this does not rule out the possibility of other variables influencing or confounding the results; such variables would need to be measured and taken into account in future research.

**Generalizability.** Although the results of the present research have some interesting implications for individual and organisational activities, there are a few limits to their generalizability. The expression and development of self-efficacy (Oettingen, 1995),
resilience (Grotberg, 1997; Gunnestad, 2006), and optimism (Chang, 1996; Mezulis, Abramson, Hyde, & Hankin, 2004) vary according to culture. For example, Japanese people have been found to associate feelings of pride with shame and guilt (Kitayama and Markus, 1990), therefore collectivist cultures that encourage interpersonal harmony may be less inclined to approve of public expressions of self-efficacy (Oettingen, 1995). Additional differences concerning the nature of goals are observed between individualistic cultures (such as New Zealand) and collectivist cultures; the latter tend to accede personal goals to shared group goals (Noordin, Williams, & Zimmer, 2002) whereas the former tend to encourage autonomy and personal goal achievements (Hofstede, 2001).

Levels of the Protean career orientation have also been found to vary between cultures. For example, Gerber, Wittekind, Grote, Conway, and Guest, (2009) found differences between Swiss-German, Swiss-French, and British employees. Research by Segers, Inceoglu, Vloeberghs, Bartram, and Henderickx (2008) found that employees in Scandanavian countries were high on both Protean dimensions, whereas employees in Italy indicated low levels of the values-driven dimension. Consequently, the same pattern of results observed in this study may not be present in other cultures, particularly collectivist ones, and the recommendations included in this dissertation concerning individual and organisational initiatives are constrained to the present study’s sample.

Finally, there is also evidence that career attitude differences exist among industry sectors. Health and social work, consulting, science and research, marketing, and government sectors tend to attract more Protean career oriented employees, while sales, telecommunication, and finance industries, on the other hand, contain less values-driven individuals (Segers et al., 2008).
Causality. Although the cross-sectional nature of this research offered significant time and cost benefits, it precludes conclusions being drawn about the direction of causality. The present study therefore offers a point of departure for future longitudinal research. By testing the relationships over time, the direction of the relationship between PsyCap and the Protean career orientation could be further tested and might also be used to investigate the plausibility that the two comprise a psychological success cycle (see Hall & Foster, 1977) – i.e., PsyCap begets a Protean career orientation and is in turn the outcome variable (or vice versa).

Future Research Directions

Future research could also consider the degree of value alignment between the Protean career oriented individual and the organisation. Meta-analytic research has found that a negative relationship exists for high levels of fit between the organisation and employee (termed person-organisation fit, or P-O fit) and the employee’s intention to turnover (Verquer, Beehr, & Wagner, 2003). Likewise, the quantitative analysis by Verquer and colleagues (2003) provided evidence for a positive relationship between P-O fit and affective organisational commitment. As such, if employees’ values are met through the organisation it is plausible that they will express more attachment to the organisation and be less inclined to leave.

Another avenue for future research pertains to occupational commitment. To cope with employment uncertainty, employees have become more attached to their line of work (Noordin et al., 2002). This type of commitment is characterised by the individual’s belief in, and assent to, his/her chosen occupation’s values in addition to a desire to retain employment in that occupation (Vandenberg & Scarpello, 1994). Consequently, future research could measure the extent to which PsyCap and a Protean career orientation relate to occupational...
commitment, the results of which may further inform individual and organisational practices such as career planning.

**Concluding Remarks**

The present study aimed to investigate the relationships between PsyCap and employees’ attitudes regarding organisational loyalty (affective organisational commitment and turnover intentions) and their career (Protean career orientation). It also sought to examine whether a Protean career orientation – i.e., being self-directed and driven by one’s personal values in the career – mediated the relationships between PsyCap and affective organisational commitment and turnover intentions. The results of this research suggest that while it appears to be to the advantage of employers to develop the PsyCap of its employees with regards to these loyalty outcomes it is also important to take into consideration the person’s career attitude. Employees who are driven in their career by personal values may indicate less emotional attachment to the organisation. Likewise, employees who hold this attitude coupled with a desire to self-direct their career may have more intentions to turnover.

For the individual, high levels of PsyCap may facilitate autonomous career management, a requirement borne of global job uncertainty and transactional employment contracts. It may also positively relate to experiences of subjective success when independently pursuing a career congruent with personal values. PsyCap may consequently be positive for both organisations and employees, especially in turbulent employment conditions, as both parties appear to benefit from its development.
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Appendices

Appendix A: Executive Summary for Organisations

Executive Summary

Essence
The purpose of this research is to determine whether employees’ desire to continue working for their organisation is determined by their career attitude and whether career attitudes are related to their levels of hope, self-efficacy, resilience, and optimism.

Why research this?
Organisations are increasingly turning to employee development as a source of competitive advantage in the dynamic, rapidly changing environment that currently characterises the global business market. Research has demonstrated that employees who have high levels of confidence in their work-related abilities (efficacy), are resilient in the face of adversity, and are realistically optimistic and hopeful tend to perform better at work. Positive Psychological Capital (PsyCap) is a composite factor of hope, self-efficacy, resilience, and optimism. The four factors which comprise PsyCap are not as stable as personality traits, such as extraversion, nor are they as transient as moods. Their intermediate quality renders them open to development signifying that the practice of obtaining a high performing workforce is not limited to recruitment and selection and/or performance management. Indeed individuals possessing these psychological resources also tend to get along better with colleagues and are more adept at facilitating and coping with organisational change.

Nevertheless, with the development or selection of individuals high in PsyCap come unintended outcomes. Elevated levels of self-efficacy, resilience, optimism and hope have been implicated in a self-directed and personal values based approach to career management;
a career attitude of this nature logically calls into question the extent to which these employees desire continued employment with their current organisation. Investigating the link between PsyCap and organisational and career attitudes will be important in understanding how such attitudes arise, and provide valuable information for organisations in the future.

What do you have to do?

Very little time is required by your organisation to participate in this research and there will be no cost accrued to you. A link to an online questionnaire will be provided by myself, Kate Rowe, which you may then distribute via email or through the company’s intranet, for example.

The questionnaire will measure an individual’s career attitude and his/her level of PsyCap, organisational and turnover intentions. Work characteristics also play a part in commitment and turnover and will therefore be included as control variables. These are supervisor support and the amount of ambiguity an employee feels about their work. Demographics will also be collected as control variables.

The questionnaire takes approximately 10 to 15 minutes to complete and, at the end, participants will be given the opportunity to enter into a raffle to win one of six NZ$100 vouchers. Responses are anonymous and the personal information collected for the raffle is saved into a separate database to guarantee this anonymity. Information concerning the purpose of this research, for what the data will be used, and response anonymity is provided to all participants via the link and prior to commencing the questionnaire.

What do you get out of it?

Participation in this research will help clarify the relationship between employees’ PsyCap
and career and organisational attitudes. The link that you receive is specific to your organisation and, provided more than ten people from your organisation participate (in the interest of anonymity), a bespoke summary can therefore be formulated. The report will provide unique information that may be used to inform your employment practices. The findings can also be presented in slide format.
Appendix B: Research Overview with Survey Invite Link

Complete a short survey to enter the draw to win one of six NZ$100 Westfield vouchers.

What is the survey about?

The survey investigates the relationship between organisational and career attitudes.

It is completely anonymous and forms part of the research being undertaken by Kate Rowe for her Master of Science thesis (University of Canterbury).

What do I have to do?

The survey is completed online and only takes 10 to 15 minutes. All you need to do is click on the link provided in this message (at the end of “Why should I Participate”). More specific information about the research (e.g., purpose, benefits, and anonymity) can be found on the first page of survey.

Why should I participate?

Participating in this survey will give you the opportunity to go into the draw to win one of six NZ$100 Westfield vouchers. At the end of the survey you will be taken to a new page to enter your details so that your responses will remain anonymous.

Your responses will also help contribute to a better understanding of the relationship between organisational and career attitudes. These findings can then provide valuable information for management practices.

Click the link below to complete the survey (or copy and paste it into your web browser)

http://canterbury.qualtrics.com/SE/?SID=SV_aXItfWlVsMhZzZb

If you require additional information about the survey, you can contact Kate at kate.rowe@pg.canterbury.ac.nz
Information and Consent to Participate in a Research Project

"Careers, work characteristics, perspectives, and attitudes"

You are invited to participate in a research which is being carried out as a requirement for a Master of Science by Kate Rowe under the supervision of Katharina Näswall, PhD. We will be pleased to discuss any concerns you may have about participation in the project (phone: 64 3 364 2552; email: kate.rowe@pg.canterbury.ac.nz or katharina.naswall@canterbury.ac.nz).

Purpose

The aim of the project is to investigate the relationship between careers and work characteristics, perspectives, and attitudes. This research project has been reviewed and approved by the University of Canterbury’s Human Ethics Committee.

Participation

Participation requires the completion of an online questionnaire which will take between 10 and 15 minutes to complete. The results of this project will be published; however, anonymity will be preserved (see next section).

Confidentiality

The questionnaire is anonymous, and you will not be identified as a participant without your consent.

You may withdraw your participation, including withdrawal of any information you have provided, until you submit your questionnaire and it has been added to the others collected.
Because it is anonymous, it cannot be retrieved after that. There is no penalty for withdrawing your responses.

Questionnaire information will be collected and stored in a password protected computer in locked and secure facilities at the University of Canterbury. The data will be kept for a period of five years before being destroyed.

The results of this research will be presented in my Master's dissertation which is available to the public and may be published in academic journals; however, results are only based on groups and there will be no way to identify your response in the report.

**Benefits**

You may request a report of the findings by providing your details at the end of the questionnaire and indicating that you desire a copy.

Additionally, by providing details at the end of the questionnaire, you will be eligible to enter a raffle to win one of six NZ$100 vouchers. (NOTE: the contact information provided is collected separately from the questionnaire to preserve anonymity and only if you wish to enter the raffle. It will not be distributed to anyone and will be destroyed immediately after the raffle is completed or, in the case you would like a copy, after being sent a report of the findings).

**Consent**

- I understand that the questionnaire is anonymous and I will not be identified as a participant without my consent.
• I understand that I may withdraw my participation, including withdrawal of any information I have provided, until I have completed the questionnaire and it has been added to the others collected.

• I understand that the withdrawal of my participation is without penalty.

• I understand that the questionnaire information will be collected and stored in a password protected computer in locked and secure facilities at the University of Canterbury and that the data will be kept for a period of five years.

• I understand that this project has been reviewed and approved by The Human Ethics Committee at the University of Canterbury

• I understand that I may request a report of the findings by providing my details at the end of the questionnaire and indicating that I desire a copy.

• I also understand that by providing contact details at the end of the questionnaire, I will be eligible to enter a raffle to win one of six NZ$100 vouchers.

• I understand that if I choose to participate in the raffle the only people who will have access to this information are the researchers (Kate Rowe and Katharina Naswall) and it will be destroyed as soon as the raffle is over or, in the case that I indicate that I would like a copy, after being sent the report of the findings.

• I understand that the results of this project will be published; however, my anonymity will be preserved.

☐ I Accept
Appendix D: Surveys

Demographics

Please enter your year of birth (e.g., 1960)
Please select your gender – male, female, other
Please select which is the highest level of education you have completed – Did not complete Secondary, Secondary, Bachelor’s degree, Master’s degree, Doctorate, Other tertiary
Please select your current employment status - casual, part time, full-time
How long have you been working for your current organisation? (in years e.g., 5)

Below are statements that describe how you may think about yourself right now. Please indicate the extent to which the following statements are true for your situation using the following response scale.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>2</td>
<td>6</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Psychological Capital

If one of the questions below does not apply to your specific work situation, imagine what you would do.

I feel confident analysing a long-term problem to find a solution (Self-Efficacy)
If I should find myself in a jam at work, I could think of many ways to get out of it (Hope)
When I have a set-back at work, I have trouble recovering from it, moving on (Resilience)
When things are uncertain for me at work, I usually expect the best (Optimism)

Affective Organisational Commitment

I would be very happy to spend the rest of my career with this organisation
I enjoy discussing my organisation with people outside it
I really feel as if this organisation’s problems are my own
I think that I could easily become as attached to another organisation as I am to this one
I do not feel like “part of the family” at my organisation
I do not feel “emotionally attached” to this organisation
This organisation has a great deal of personal meaning for me
I do not feel a strong sense of belonging to my organisation

**Turnover Intentions**

I often think about quitting this organisation
I intend to search for a position with another employer within the next year
I intend to quit my organization in the near future

**Protean Career Orientation**

*Self-Directed*

When development opportunities have not been offered by my company, I’ve sought them out on my own.
I am responsible for my success or failure in my career.
Overall, I have a very independent, self-directed career.
Freedom to choose my own career path is one of my most important values.
I am in charge of my own career.
Ultimately, I depend upon myself to move my career forward.
Where my career is concerned, I am very much “my own person.”
In the past I have relied more on myself than others to find a new job when necessary.

*Values-Driven*

I navigate my own career, based on my personal priorities, as opposed to my employer’s priorities.
It doesn’t matter much to me how other people evaluate the choices I make in my career.
What’s most important to me is how I feel about my career success, not how other people feel about it.
I’ll follow my own conscience if my company asks me to do something that goes against my values.
What I think about my career is more important to me than what my company thinks.
In the past I have sided with my own values when the company has asked me to do something I don’t agree with.
**Perceived Supervisor Support**

My supervisor really cares about my well-being  
My supervisor strongly considers my goals and values  
My supervisor shows little concern for me  
My supervisor cares about my opinions  
My supervisor is willing to help if I need a special favour  
Help is available from my supervisor when I have a problem  
My supervisor would forgive an honest mistake on my part  
If given the opportunity, my supervisor would take advantage of me

**Role Ambiguity**

My job duties and work objectives are unclear to me  
I am unclear about who I report to and/or who reports to me  
I lack the authority to carry out my job responsibilities  
I do not fully understand what is expected of me  
I do not understand the part my job plays in meeting overall organizational objectives
### Table 1

*Means, Standard Deviations, Cronbach Alphas, and Correlations of PsyCap Constructs (Hope, Self-efficacy, Resilience, and Optimism) with the Variables Measured in The Present Research*

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<td>6c. Resilience</td>
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<td>6d. Optimism</td>
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*Note.* Significant correlations are indicated by bold text. Correlations above (+/-) .08 were significant at *p*<.05 (2 tailed); Correlations above (+/-) .13 were significant at *p*<.001 (2 tailed)

Listwise N = 518