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# Motivational orientation as a mediator in the relationship between personality and protean and boundaryless careers

Oshrit Kaspi-Baruch

Peres Academic Center, 10 Peres St., Rehovot 76102, Israel

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## ABSTRACT

This study examined the associations between personality and protean and boundaryless career orientation and the mediating role of motivation orientation. In total, 273 Israeli students engaged in full-time employment completed questionnaires, which were used to assess the variables of interest. Structural equation modelling path analysis supported most of the expected hypotheses. The associations between personality and protean and boundaryless career orientation were partially mediated by motivation orientation. Learning goal orientation mediated two aspects of protean career orientation (self-directed and value driven), and one aspect of boundaryless career orientation (boundaryless mindset). Performance goal orientation exerted a negative mediatory effect on a second aspect of boundaryless career orientation (mobility preference). Overall, the results suggested that the Big Five traits, Extraversion and Conscientiousness, were associated with protean and boundaryless career orientation via learning goal orientation, and Neuroticism was associated with preference for organizational stability via performance goal orientation. Interestingly, Openness and Agreeableness were associated with protean and boundaryless career orientation via learning orientation and to preference for organizational stability via performance goal orientation.

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## 1. Introduction

Protean and boundaryless career orientation (PCO and BCO, respectively) have become salient in some organizations (Arthur, 1994; Baruch, 2004; Briscoe, Hall, & Demuth, 2006; Creed, Macpherson, & Hood, 2011a, 2011b; Hall, 2004; Sullivan & Baruch, 2009), as Savickas et al. (2009) called for career theories that fit modern economies more closely. This involves expecting less stability and job security, identifying ways to learn and enhance skills, and broadening relationships outside the organization (Carbery & Garavan, 2005; Clarke & Patrickson, 2008; Creed et al., 2011; Trevor-Roberts, 2006). Some employees adapt to these dynamic conditions and adopt PCO and BCO easily. PCO and BCO are considered attitudes (Briscoe et al., 2006) and may not be stable; therefore, in predicting whether employees are likely to hold such attitudes, we cannot rely on direct measurement, as they could change. A robust measure is required to predict such attitudes. One predictor could be personality, which may offer inherent relative stability. Personality determines perceptions and reactions to the

environment, which could include organizational settings. Therefore, personality is a possible predictor of PCO and BCO. Some studies have found correlations between personality and PCO and BCO (Briscoe et al., 2006; Mintz, 2003). However, the reason for these associations is unclear. One possible explanation may involve motivational orientation, which refers to the way in which individuals direct their goals, either by approaching them as a way of learning during the process of developing new skills, as suggested by learning goal orientation (LGO), or by focussing on their final performance and striving to achieve the goals, as performance goal orientation (PGO) implies (Elliot & McGregor, 2001). Indeed, Briscoe et al. (2006) reported correlations between LGO and PCO and BCO. This study aimed to broaden understanding of the association between personality and PCO and BCO mediated by goal orientation.

This study was important, as an understanding of the association between personality characteristics and career orientation could assist organizational practitioners in selecting the best candidates in terms of PCO and BCO. Moreover, examining the mechanism underlying motivational mediation could elucidate this relationship.

E-mail address: [Oshritca@pac.ac.il](mailto:Oshritca@pac.ac.il).<http://dx.doi.org/10.1016/j.emj.2015.10.004>

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## 2. Conceptualization of PCO and BCO

PCO and BCO have received considerable attention in the literature, but some questions require further examination, as discussed in Culié, Khapova, and Arthur (2014). Current unstable and dynamic employment conditions, including advanced technology, frequent manpower reduction, global competition, and changes in social norms, increase employees' sense of ambiguity regarding what they desire and expect from organizations (Arthur, Khapova, & Wilderom, 2005; Blustein, 2006; Gubler, Arnold, & Coombs, 2014; Hall, 2002). In response, employees have developed modern- or new-economy career orientation including boundaryless careers and a protean view of career success (Baruch, 2004; Briscoe et al., 2006; Hall, 1976, 2002, 2004; Sullivan & Baruch, 2009).

Hall (1976) introduced the concept of a protean view of career success as opposed to the traditional view, which reflects the transfer of responsibility for self-development to the individual (Arnold & Cohen, 2008; Arthur et al., 2005; Gratton & Ghoshal, 2003). Employees play an independent role in their career management; therefore, they are self-directed. They also rely on their own, rather than organizational, values and are therefore value driven (Briscoe et al., 2006). Changes in organizational contexts, such as employers increasing efficiency by cutting employees off and threatening job stability, increase employees' proactive involvement in career management and responsibility for their own careers. Advances in technology and the need to learn and adjust to new situations increase employees' orientation towards developing their capabilities and skills. These individuals are flexible, self-motivated, and willing to adjust to every change (Niles, Herr, & Hartung, 2002). The protean career involves learning cycles (Hall & Mirvis, 1996) that recur every few years (Hall, 2002) and improve performance. Moreover, people with protean orientation are motivated to learn (Briscoe & Hall, 2006).

Gubler et al. (2014) recently distinguished between the protean career concept, which refers to Hall's (1976, 2002) theoretical concept, and PCO, which refers to individuals taking charge of their careers (DiRenzo & Greenhaus, 2011) and adapting to changing environments (Hall, 2002). This includes self-directed and value-driven orientation, as reflected in the Protean Career Mindset Scale (Briscoe et al., 2006) used in the present study.

Arthur's (1994) BCO is similar to the protean view, in that it reflects subjective perception of career success. However, it differs from the protean view, in that individuals with boundaryless views do not necessarily rely on one organization in developing their careers. For instance, globalization caused employees to work beyond the boundaries of a single organization, which created working relationships across organizational boundaries. PCO and BCO are related but independent factors (Briscoe et al., 2006). Individuals with BCO often establish relationships outside the organization, across organizational boundaries. Arthur and Rousseau (1996) described boundaryless careers as unfolding beyond a single employment setting; therefore, they are often believed to involve physical employment mobility (McCabe & Savery, 2007).

Some researchers recently raised the issue of mobility across organizational boundaries as a basic element in the boundaryless career. Sullivan and Arthur (2006) suggested that both physical (physically moving between jobs and organizations) and psychological mobility (psychologically moving between jobs and organizations) are components of a boundaryless career. This suggests that future research should consider differences between boundaryless career definitions, particularly the involvement of physical and psychological mobility. Some researchers (e.g. Briscoe et al., 2006) have viewed boundaryless careers as involving psychological or 'one's general attitude to working across organizational boundaries' and suggested that they do not necessarily lead to

employment instability. This suggests that employees can maintain contacts outside the organization and continue to value occupational stability (Briscoe & Finkelstein, 2009; Briscoe, Henagan, Burton, & Murphy, 2012; Verbrugge, 2012).

According to Okurame and Fabunmi (2014), BCO consists of two dimensions. The first is psychological mobility across organizations, which was examined by Briscoe et al. (2006) using the Boundaryless Career Scale and measures willingness to establish relationships outside the organization without physically leaving it. The second is physical mobility, examined using the Mobility Preference Scale, which measures willingness to physically leave the boundaries of the organization (Briscoe & Finkelstein, 2009; Okurame & Fabunmi, 2014). One possible solution to the argument concerning physical or psychological mobility's involvement in BCO involves motivational orientation. Therefore, one aim of the study was to examine these aspects of psychological and physical mobility.

## 3. Hypothesis development

### 3.1. Personality, motivational goal orientation, PCO, and BCO

Personality is related to various career factors, for instance, career perception (Seibert & Kraimer, 2001). The Big Five Personality Scale is considered one of the most reliable, valid, and widely used scales via which to measure personality. Tupes and Christal (1961, 1992) and Norman (1963) are credited with developing the Big Five Inventory, which includes five personality dimensions: Neuroticism, Extraversion, Openness to Experience (hereinafter Openness), Agreeableness, and Conscientiousness. In contrast to emotional stability, neuroticism represents poor emotional adjustment expressed as stress, anxiety, and depression. In contrast to introversion, extroversion represents the tendency to be sociable, dominant, and positive and seek stimulation (Watson & Clark, 1992). Individuals who score highly on Openness enjoy new experiences and ideas and are creative, flexible, curious, and unconventional (McCrae, 1996). Agreeableness refers to the tendency to be compassionate, kind, gentle, trusting, trustworthy, and warm. Therefore, agreeable people seek a cooperative, team-oriented, conflict-free workplace (Judge & Cable, 1997). Conscientious individuals are self-disciplined, achievement oriented, dependable (Barrick & Mount, 1991), orderly, and deliberate (Costa & McCrae, 1992). Therefore, they seek an organized, predictable, outcome-focused working environment (Judge & Cable, 1997).

The cybernetic personality model could explain the relationship between personality and career perception (Van Egeren, 2009). Functional personality theories claim that personality is adaptive (Borkenau, 1990; Hogan, 1983; Van Egeren, 2009). For instance, approaching rewarding stimuli, such as food, and avoiding dangers, such as predators, play a role in the organism's survival. Cybernetic personality theory suggests that Big Five personality traits play different roles in environmental adaptation: Extraversion: reaction to reward; Neuroticism: detecting errors in achieving goals and avoiding frustrating goal-related stimuli; Conscientiousness: approaching rewards and avoiding errors depending on the situation; Openness: sensitivity to environmental information to enhance adaptability and survival; and Agreeableness: achieving goals via cooperation (Van Egeren, 2009). Therefore, personality may have an adaptive role in modern organizational environments, in that certain personalities adapt to certain jobs, organizations, and career perceptions, such as PCO and BCO, more easily.

PCO and BCO have been positively associated with Openness (Briscoe et al., 2006; Mintz, 2003), Extraversion, Agreeableness, and Conscientiousness (Mintz, 2003). However, the reasons why correlations between personality and PCO and BCO exist have not been

examined. Cybernetic personality theory describes how personality traits operate but does not explain why. What are the specific mechanisms underlying the correlation between personality and human behaviour? The current study assumed that the reason for this correlation was motivational goal orientation, as personality is associated with how people value their work (Lindley & Borgen, 2000). Therefore, personality determines the ways in which people perceive their work and approach certain situations. In other words, personality determines basic motivation at work. The current study assumed that the reason that personality is associated with PCO and BCO is based on the cybernetic personality model (Van Egeren, 2009), in which personality is related to regulation mechanisms, which differ from motivation in reactions to the environment.

Motivation plays a key role in educational and organizational settings. Finding ways to motivate employees to pursue organizational goals is one of the main challenges faced by organizations (Bol, 2011; Greenberg, 2011). One motivational theory that could be useful in organizational settings was adapted from educational psychology (Ames & Archer, 1988; Dweck, 1989; Gegenfurtner, 2011). According to this theory, based on the social cognitive approach (Markus, 1977), motivation is connected to a certain goal, which can be pursued via PGO or LGO (Dweck, 1989). PGO directs individuals towards goal achievement, performance success, receiving positive feedback for success, and avoiding negative feedback for failure (Dweck, 1989). It is associated with avoiding situations that lead to failure that is attributed to lack of ability, and experiencing negative emotions due to failure, causing avoidance of the related activity. Such individuals believe that ability and skills are constant and unalterable (Button, Mathieu, & Zajac, 1996; Dweck, 1989; Harackiewicz & Elliot, 1993; Nicholls, 1984). In contrast, LGO directs individuals towards learning or enhancing their qualifications (Dweck, 1989). It is related to mastery, learning, seeking challenges, coping in difficult conditions, and viewing failure as useful feedback when accompanied by positive emotion. Such individuals believe that ability consists of a series of skills that can be improved through practice and learning (Button et al., 1996).

DeShon and Gillespie (2005) classified goal orientation into five categories. The first is goal orientation involving achievement of a specific goal (Barron & Harackiewicz, 2001; Elliot, 1999); within this classification, Elliot and McGregor (2001) refer to performance approach and avoidance, and learning approach and avoidance. The second is perceiving goal orientation as a *trait* (VandeWalle, Ganesan, Challagalla, & Brown, 2000). The third is a *quasi-trait*, which is relatively stable and can change according to situational characteristics (Button et al., 1996; Mangos & Steele-Johnson, 2001). The fourth is a *mental framework* including a broad range of beliefs, emotions, goals, and cognitions that vary according to achievement context (Strage, 1997). The fifth is *belief*, the belief that ability is fixed and unalterable, which focuses efforts and goals on performance, or that ability can be developed, which focuses on learning and developing skills (Dweck, 1989).

The present study was based on the quasi-trait approach and used two scales presented by Button et al. (1996), which evaluate PGO and LGO separately. LGO and PGO are considered part of one's character but can change according to the situation (Ames, Ames, & Felker, 1977; Butler, 1987; Button et al., 1996; Mangos & Steele-Johnson, 2001). Moreover, LGO and PGO are considered separate (Button et al., 1996).

To date, no studies have examined the relationships between personality and PCO and BCO via the mediation of motivation (Boudreau, Boswell, Judge, & Bretz, 2001). A few studies have explored the direct association between personality and motivation. For instance, Neuroticism has been negatively associated with PGO, while Conscientiousness has been positively associated with LGO

(Judge, Bono, Ilies, & Gerhardt, 2002). Therefore, an association between personality and motivational goal orientation was expected. The rationale for the study hypotheses was based on cybernetic personality theory (Van Egeren, 2009), according to which, Neuroticism is related to behaviour avoidance, and enhanced sensitivity is related to error detection in the pursuit of a goal. Neurotics focus on failure avoidance rather than expected performance, and Neuroticism is related to norepinephrine secretion, which is associated with stress and decreased creativity (Van Egeren, 2009). Neurotic individuals may worry about achieving results, 'getting the job done', and performance. Therefore, Neuroticism may be associated with PGO (H1). Extraverts approach rewarding stimuli, showing exploratory behaviour. Extraversion is related to dopamine secretion, which is associated with working memory, attention, and learning (Jang et al., 2001), and involves a tendency to be sociable, dominant, and positive and seek stimulation (Watson & Clark, 1992). Extraverts tend to be more active and skilled in seeking job opportunities (Judge et al., 2002; Watson & Clark, 1992). As learning is more likely to occur when one is positive (Mikael, Winberg, & Hellgren, 2014), and seeking stimulation can lead to learning, extroverted individuals may be more motivated to learn. Therefore, an association between extraversion and LGO was expected (H2). Openness plays a role in sensitivity to information, as it enhances adaptability and is associated with curiosity, creativity, and flexibility. It is also related to dopamine secretion, which is related to working memory, attention, and learning (Jang et al., 2001). An open person is motivated to learn from experience and approaches situations open-mindedly. Such individuals think and behave in a non-conventional manner and are more open to new experiences and learning. Therefore, a positive correlation between Openness and LGO was expected (H3). Agreeableness is related to using others to achieve goals. The agreeable individual's reward system is based on satisfying social needs and related to serotonin secretion, which is associated with emotional regulation (Jang et al., 2001). Agreeable people are kind and warm and tend to be sociable and open to other people; therefore, they may be open to learning from other people, demonstrating LGO (H4). Conscientiousness is associated with the ability to adapt to conflicting situations that may be both rewarding and punishing; for instance, the same person, such as a parent or manager, can be a source of both reward and punishment (Van Egeren, 2009). Conscientiousness is also related to serotonin secretion (Jang et al., 2001) and involves the ability to choose the appropriate response according to the changing situation. Therefore, it may be associated with both LGO and PGO as required. Conscientious individuals are achievement oriented and dependable and demonstrate a will to achieve and complete tasks (e.g. Barrick, Mount, & Strauss, 1993; McCrae & Costa, 1986; Robie & Ryan, 1999). Therefore, they were expected to be motivated to achieve goals, demonstrating PGO (H5). They also tend to have strong self-control and regulation and are therefore persistent (Barrick & Mount, 1991; Costa & McCrae, 1992; Jang et al., 2001). However Conscientiousness has been associated with LGO in several studies (e.g. Steinmayr, Bipp, & Spinath, 2011; Van Daal, Donche, & De Maeyer, 2014); as conscientious individuals may also seek to improve their skills to achieve their goals, they may exhibit LGO (H5).

- H1: Neuroticism will be positively associated with PGO.
- H2: Extraversion will be positively associated with LGO.
- H3: Openness will be positively associated with LGO.
- H4: Agreeableness will be positively associated with LGO.
- H5: Conscientiousness will be positively associated with LGO and PGO.

Correlations between the predictor (personality) and mediator

variables (motivation) have been explained; however, the reason why motivation would predict PCO and BCO has not. PCO and BCO are associated with skill acquisition and self-reliance in career management and development. LGO has been shown to enhance self-regulatory processes and self-efficacy (Kozlowski & Bell, 2006). LGO may have a positive effect on PCO, which is associated with self-regulatory processes. Moreover, people who are motivated to learn may enhance their skills, be more flexible in their career management, and demonstrate willingness to exceed organizational boundaries to learn. Such individuals are even willing to resign if the organization fails to provide learning opportunities (Lin & Chang, 2005). Employees with high LGO seek opportunities to enhance future knowledge and skills (VandeWalle, 2001); therefore, LGO may have a positive effect on BCO. As PCO and BCO are associated with learning new skills, people who exhibit LGO may also demonstrate PCO and BCO (H6).

In contrast, PGO has been associated with anxiety and achievement preservation rather than learning (Chen, Gully, Whiteman, & Kilcullen, 2000; Payne, Youngcourt, & Beaubien, 2007). As PCO and BCO are associated with skill acquisition and exceeding boundaries rather than achievement preservation, PGO could lower PCO and BCO. Moreover, those who are motivated to achieve goals measured according to performance may focus on 'getting the job done'. Performance goals are often defined by organizational goals (Latham & Marshall, 1982; Locke, 2001), and individuals may rely on organizational values, rather than personal values and self-fulfilment, to achieve their goals. As PCO involves reliance on personal values (value-driven protean orientation), self-reliant (self-directed protean orientation) PGO individuals may exhibit less PCO (H7). Moreover, they may believe that remaining within organizational boundaries will improve their performance through access to organizational resources or other means; therefore, they may show less BCO (H7). Some studies have supported this suggestion via correlations between motivation and PCO and BCO; for instance, PCO and BCO have been positively associated with LGO and negatively associated with PGO (Briscoe et al., 2006).

H6: LGO will be positively associated with PCO and BCO.

H7: PGO will be negatively associated with PCO and BCO.

Therefore, motivational orientation may be the reason that personality is associated with PCO and BCO, as shown in Fig. 1.

## 4. Method

### 4.1. Participants

In total, 320 questionnaires were distributed to BA students enrolled on a business administration program in Israel, who received extra course credit in return for their participation. All participants were engaged in full-time employment and of Jewish Israeli nationality. Of the 320 questionnaires distributed, 273 were returned (85% response rate). Although convenience sampling was used, the sample was heterogeneous with respect to sex, occupation, and organization type. Respondents' mean age was 30.5 years, 61% were women, 56% were single, 40% were married (for 10.8 years with 2.03 children on average), 4% were separated or divorced, 55% worked in the public sector, and 45% worked in the private sector including hi-tech organizations (5%). Classification of job types was as follows: service industry: 24.4%, technical: 1.8%, professional: 22.4%, junior management: 8.9%, middle management: 17.7%, senior management: 5.9%, self-employed: 4.1%, and other (e.g. army, bank): 14%, with 1% showing missing values. The average number of years in employment was 6.71.

### 4.2. Procedure

An invitation to participate in the study was sent via email, and the questionnaire was administered online using Qualtrics software. Once informed consent was provided, questionnaire completion took 15–20 min. The items were randomized, and participants' anonymity was ensured.

### 4.3. Instruments

Personality was examined using the Big Five Inventory (John, Donahue, & Kentle, 1991; John & Srivastava, 1999;  $\alpha = 0.83$ ), which was translated into Hebrew by Etzion and Laski (1998) and used with their permission. This test included 44 items: eight, eight, nine, nine, and ten concerning Extraversion ( $\alpha = 0.88$ ), Neuroticism ( $\alpha = 0.84$ ), Agreeableness ( $\alpha = 0.79$ ), Conscientiousness ( $\alpha = 0.82$ ), and Openness ( $\alpha = 0.81$ ), respectively.

Motivation was measured using the Performance and Learning Goal Motivation Scales (Button et al., 1996), translated into Hebrew by the author. This included eight items for LGO ( $\alpha = 0.79$ ; e.g. the opportunity to do challenging work is important to me) and eight for PGO ( $\alpha = 0.73$ ; e.g. I prefer to do things that I can do well rather than things that I do poorly).

PCO and BCO were measured using scales developed by Briscoe et al. (2006) and translated into Hebrew by the author, with permission. Back translation was performed, whereby the translated questionnaires were sent to the original author (Jon Briscoe) to ensure conceptual equivalence. The PCO questionnaire included 14 items: eight concerning self-directed characteristics ( $\alpha = 0.76$ ; e.g. When development opportunities have not been offered by my company, I've sought them out on my own) and six concerning value-driven characteristics ( $\alpha = 0.69$ ; e.g. I navigate my own career based on my personal priorities as opposed to my employer's priorities). The BCO questionnaire included 13 items: eight concerning boundaryless mindset (psychological mobility;  $\alpha = 0.87$ ; e.g., I would enjoy working on projects with people across many organizations) and five concerning organizational mobility preference (physical mobility;  $\alpha = 0.77$ ; e.g. I like the predictability that comes with working continuously for the same organization [reversed item]).

Background information and control variables, such as sex, occupational status, marital status, number of children and organization type (i.e. public vs. private), were measured and controlled for, as they could affect both PCO and BCO. Sex was the only variable correlated with the dependent variables (DVs; self-directed PCO and BCO); therefore, it was included as a control variable.

### 4.4. Data analysis

To establish associations between personality and PCO and BCO through the mediation of motivational orientation (LGO and PGO), correlations between the independent variable (IV; personality) and DVs (PCO and BCO) were examined initially, followed by correlations between the mediators (LGO and PGO) and the DVs (PCO and BCO).

Mediation models were tested using Baron and Kenny (1986) causal logic, whereby mediation is assessed in steps in regression analysis, which shows that adding the mediator decreases the correlation coefficient for the association between the IV and DV, with elimination in full mediation. Structural equation modelling (SEM) was performed, using AMOS 21 software, to assess several variables simultaneously. There are several recommended methods for testing mediation models using AMOS software. In one such method suggested by Holmbeck (1997), goodness of fit is assessed with the IV and DV then with the IV, Mediator, and DV. If the model

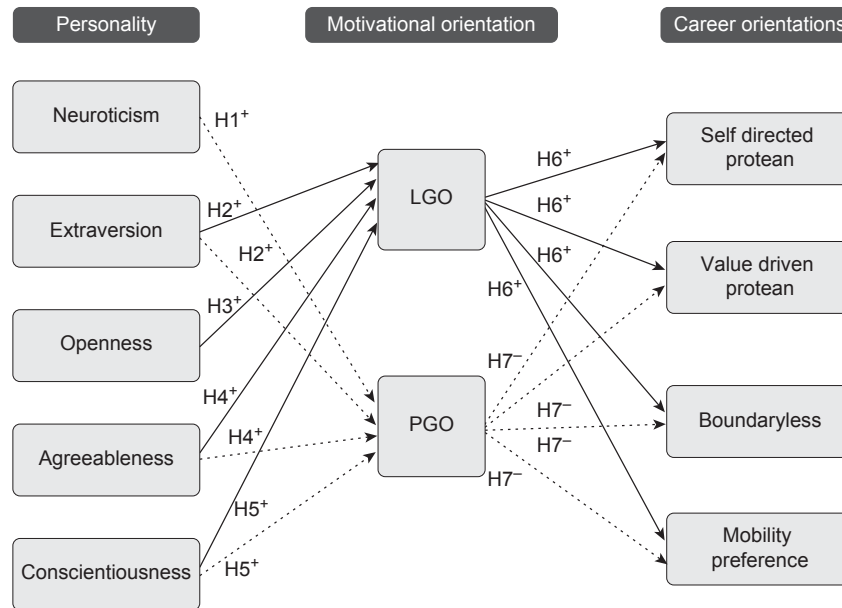


Fig. 1. Proposed model and summary of hypotheses.

fit improves with the mediator, mediation is assumed. Hoyle and Smith (1994) suggested a similar approach. AMOS software is based on this logic but tests both models simultaneously. If the fit indices for the model are good, a mediation model probably exists. After showing that a mediation model exists, the significance of the model's mediating paths is tested. The sample's distribution was assessed by examining the skewness of the DVs and shown to be normal. Values that fall between  $-2$  and  $+2$  for skewness and kurtosis indicate normal univariate distribution (George & Mallery, 2010); all values in the study sample fell within this range (self-directed:  $-1.13$ , value driven:  $-0.70$ , boundaryless:  $-0.85$ , mobility preference:  $0.13$ ). Moreover, the sample size ( $>200$ ) allowed the use of the Sobel Test (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Sobel, 1982), in which indirect effects are assessed by dividing the square root of the indirect paths' standardized variance, then treating the result as a Z test, in which ratios of  $>1.96$  are considered significant at a level of  $0.05$ .

In accordance with Holmbeck's (1997) recommendations for examining mediation models using SEM, path analysis was performed to examine the observed variables, and mediation was assessed to examine the proposed model using AMOS 21 software. Model fit was assessed using the following goodness-of-fit indices (see Hu & Bentler, 1999): chi-square (Tabachnik & Fidell, 2007), Comparative Fit Index (CFI; Rigdon, 1996), Tucker–Lewis Index (TLI; Bentler & Bonett, 1980), and Root-Mean-Square Error of Approximation (RMSEA; Browne & Cudeck, 1993). Non-significant chi-square, CFI, and TLI results of  $\geq 0.95$  and an RMSEA result of  $\leq 0.07$  (Hu & Bentler, 1999; Tabachnik & Fidell, 2007) indicated an acceptable fit.

## 5. Results

### 5.1. Correlations between personality, LGO, PGO and PCO (self-directed and value driven) and BCO (boundaryless and mobility preference)

As shown in Table 1, the correlations observed supported the basic model. Some of the personality factors were correlated with PCO, BCO, and motivation orientation; moreover, motivation

orientation was correlated with PCO and BCO. For example, Extraversion was positively correlated with PCO (self-directed;  $0.21$ ) and BCO ( $0.41$ ), and LGO was positively correlated with self-directed ( $0.58$ ) and value-driven ( $0.48$ ) PCO. These correlations implied a positive correlation in the mediating model, and a negative correlation between PGO and mobility preference ( $-0.55$ ) indicated that an increase in values for the mediating motivation variable predicted a decline in mobility preference.

### 5.2. Motivational orientation as a mediator in the associations between personality and PCO and BCO

Goodness-of-fit indices showed that the model was an excellent fit ( $\chi^2 = 23.85$ ,  $df = 19$ ,  $p = 0.20$ ; NFI:  $0.98$ , CFI:  $0.99$ , TLI:  $0.99$ , RMSEA:  $0.03$ ). Personality was associated with PCO and BCO, and this relationship was mediated by motivational orientation. Fig. 2 depicts the significant standardized path coefficients observed in SEM path analysis. To simplify presentation, direct paths between the IV and DV do not appear in the Figure and are specified later in the text.

Significant paths were observed after controlling for sex. Significant direct paths were observed from Extraversion to self-directed PCO ( $\beta = 0.1$ ,  $p < 0.001$ ), Openness to self-directed PCO ( $\beta = 0.12$ ,  $p < 0.001$ ), Openness to value-driven PCO ( $\beta = 0.13$ ,  $p < 0.001$ ), Extraversion to BCO ( $\beta = 0.30$ ,  $p < 0.001$ ), Openness to BCO ( $\beta = 0.11$ ,  $p < 0.001$ ), and Openness to mobility preference ( $\beta = 0.15$ ,  $p < 0.001$ ). As some direct paths remained between personality dimensions and career orientation, motivational orientation partially mediated the relationship between personality and career orientation.

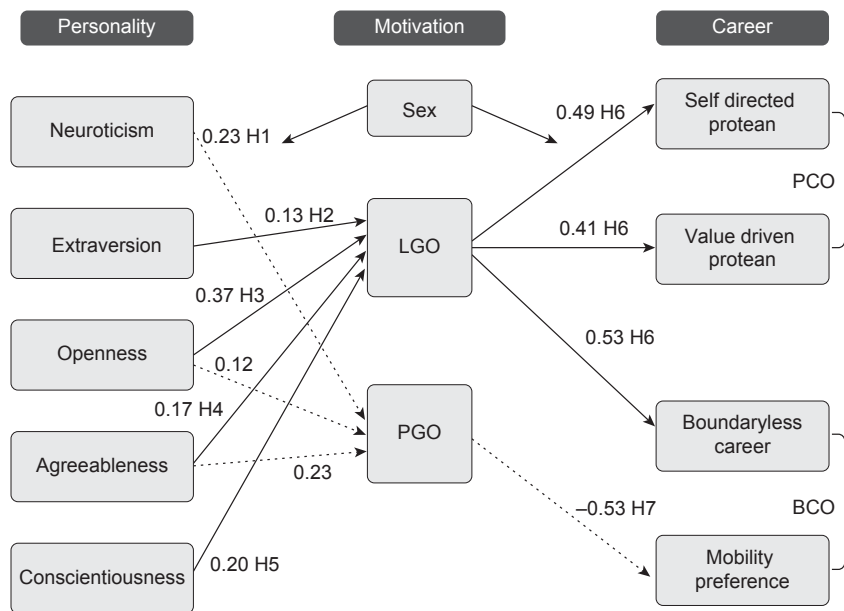
As shown in Fig. 2, significant direct paths were observed from Extraversion, Agreeableness, Conscientiousness, and Openness to LGO ( $\beta = 0.13$ ,  $0.17$ ,  $0.20$ , and  $0.37$ , respectively,  $p < 0.01$ ). Moreover, significant direct paths were observed from LGO to self-directed and value-driven PCO and BCO ( $\beta = 0.49$ ,  $0.41$ , and  $0.53$ , respectively,  $p < 0.01$ ). Therefore, these personality traits were indirectly associated with self-directed and value-driven PCO and BCO via LGO.

Significant direct paths were observed from Neuroticism,

**Table 1**  
Means, standard deviations, and inter correlations among all study variables.

	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Extraversion	2.70	0.38	1										
2. Agreeableness	3.90	0.54	0.00	1									
3. Neuroticism	2.50	0.62	-0.09	-0.34**	1								
4. Conscientiousness	4.00	0.54	0.10	0.60**	-0.40**	1							
5. Openness	3.40	0.56	0.21**	0.13*	-0.24**	0.30**	1						
6. Self-Directed Protean	3.70	0.68	0.21**	0.23**	-0.20**	0.40**	0.38**	1					
7. Value-Driven Protean	3.40	0.67	0.08	0.20**	-0.15*	0.28**	0.33**	0.66**	1				
8. Boundaryless	3.70	0.76	0.41**	0.18**	-0.07	0.26**	0.40**	0.60**	0.45**	1			
9. Mobility Preference	2.80	0.83	0.40**	-0.13*	-0.20**	-0.00	0.20	-0.13*	-0.15	-0.20**	1		
10. Performance Motivation	3.80	0.75	-0.04	0.17**	0.16**	0.12*	0.10	0.31**	0.23**	0.33**	-0.55**	1	
11. Learning Motivation	4.00	0.72	0.21**	0.34**	-0.17**	0.44**	0.50**	0.58**	0.48**	0.64**	-0.18**	0.50**	1

Notes n = 273, \*\*p < 0.001\*\*, \*p < 0.05.



**Fig. 2.** Motivational Orientations (LGO and PCO) as Mediators of the relationship between Big 5 Personality dimensions, and PCO (self-directed and value driven) and BCO (boundaryless and mobility preference), controlled for Sex.

Agreeableness, and Openness to PGO ( $\beta = 0.23, 0.23,$  and  $0.12,$  respectively  $p < 0.01$ ), and a significant negative direct path was observed from PGO to mobility preference ( $\beta = -0.53, p < 0.01$ ). Significant direct paths were observed from Extraversion and Openness to mobility preference ( $\beta = 0.32$  and  $0.15,$  respectively,  $p < 0.01$ ). Therefore, these personality traits were indirectly associated with mobility preference via the negative partial mediation of PGO. An increase in these personality traits reduced organizational mobility preference via the partial mediation of PGO.

A Sobel Test was performed to determine the significance of the indirect paths. All paths in the model were significant, as shown in Table 2.

In summary, Extraversion and Conscientiousness were associated with PCO and BCO via LGO. Neuroticism was associated with preference for organizational stability via PGO. Openness and Agreeableness were associated with PCO, BCO, and preference for organizational stability via LGO and PGO.

**6. Discussion**

Overall, these findings were consistent with the concept of relationships between personality and PCO and BCO, mediated by LGO and PGO. Therefore, personality predicted motivational

orientation, which predicted career orientation. That is, motivational orientation was the reason underlying the association between personality and career orientation. Specifically, Extraversion and Conscientiousness were positively associated with PCO and BCO via LGO, Neuroticism was negatively associated with mobility preference via PGO, and Openness and Agreeableness were positively associated with PCO and BCO and negatively associated with mobility preference via LGO and PGO.

Previous studies have reported correlations between personality and PCO and BCO (Briscoe et al., 2006; Mintz, 2003). The current findings explained why this correlation occurs, by identifying motivation orientation as the mediatory mechanism underlying this relationship, and provided partial support for cybernetic personality theory (Van Egeren, 2009). Different personality characteristics adapt to certain environmental situations. Personality influences individuals' perception of the world including the organizational sphere. This influences motivational orientation, which influences career orientation. Personality was associated with PCO and BCO when LGO was elevated. As LGO fosters solution-oriented reactions and challenge seeking (Elliott & Dweck, 1998), and PCO and BCO involve skill development, learning orientation helps individuals to maintain these career orientations. Therefore, some personality traits and types of motivational orientation may

**Table 2**

Z values of the indirect paths of the mediating model as examined in the Sobel Test.

Indirect path	Z value
Openness to learning orientation to self-directed protean	5.62***
Extraversion to learning orientation to self-directed protean	2.84***
Agreeableness to learning orientation to self-directed protean	2.75***
Conscientiousness to learning orientation to self-directed protean	3.44***
Openness to learning orientation to value driven protean	4.96***
Extraversion to learning orientation to value driven protean	2.74***
Agreeableness to learning orientation to value driven protean	2.66***
Conscientiousness to learning orientation to value driven protean	3.27***
Openness to learning orientation to boundaryless	6.07***
extraversion to learning orientation to boundaryless	2.89***
agreeableness learning orientation to boundaryless	2.80***
Conscientiousness to learning orientation to boundaryless	3.54***
Neuroticism to performance orientation to mobility preference	3.98***
Agreeableness to performance orientation to mobility preference	3.63**
Openness to performance orientation to mobility preference	1.98*

Z &gt; 1.96 is significant; P &lt; 0.05 \*, P &lt; 0.01 \*\*, p &lt; 0.0001 \*\*\*.

partially predict PCO and BCO. In contrast, some personality traits were negatively associated with organizational mobility preference when PGO was elevated. Why do individuals with PGO prefer organizational stability? It is possible that they wish to do a good job and perceive organizational stability as a means of achieving successful performance via maintenance of long-term involvement and effort. Moreover, PGO induces vulnerability to maladaptive behaviours and helpless response reactions (Diener & Dweck, 1978, 1980; Nicholls, 1984), which are characterized by challenge avoidance. Individuals with PGO who face failure attribute this to inability and may withdraw from the activity entirely. PGO is related to anxiety and achievement preservation, rather than learning (Chen et al., 2000; Payne et al., 2007), and anxiety may engender a desire to maintain stability and remain in familiar and secure employment (Raghunathan and Pham, 1999). Moreover, the desire to preserve achievements may be fulfilled in familiar organizations. Individuals with PGO may experience insecurity and seek organizational stability, because failure leads to insecurity or they believe that stability will improve their performance. Therefore, mobility preference is low with PGO involvement.

Some interesting paths were observed from personality to career orientation via motivational goal orientation, such as the positive paths from Extraversion and Conscientiousness to PCO and BCO via LGO, the negative path from Neuroticism to mobility preference via PGO, and from Openness and Agreeableness, the positive paths to PCO and BCO via LGO and the negative path to mobility preference via PGO. These paths are discussed below.

In the first path, extroverts exhibited high LGO, leading to PCO and BCO. One explanation for this is that Extraversion involves a tendency to be sociable, dominant, and positive and seek stimulation (Watson & Clark, 1992). Extroverts seek stimulation, learning, and skill enhancement, indicating high LGO. Moreover, conscientiousness, which is related to self-discipline and achievement orientation (Barrick & Mount, 1991), was associated with LGO. Conscientious individuals are dependable and reliable and want to do a better job, identifying improved means of doing so via learning and skill development, suggesting high LGO. Based on cybernetic personality theory (Van Egeren, 2009) Conscientiousness was expected to be associated with LGO and PGO, but was related to LGO alone. In the current study, the sample contained mainly young employees (mean age: 30 years) of the Y generation, who emphasized skill acquisition and ability development (Ng, Schweitzer, & Lyons, 2010), indicating high LGO. As LGO is related to learning and skill development, it is also associated with PCO; moreover, as learning can occur outside organizational boundaries, it is also associated with BCO.

In the second path, neurotic individuals exhibited higher PGO and preferred organizational stability. Neuroticism is associated with anxiety and stress, and job security provides peace of mind and stability (DiRenzo & Greenhaus, 2011). Therefore, neurotic people may prefer organizational stability to relieve anxiety. Moreover, neurotic individuals focus on failure avoidance rather than expected performance. Neuroticism is associated with norepinephrine secretion, which is related to stress and reduced creativity (Van Egeren, 2009). Neurotic individuals may worry about achieving results, 'getting the job done,' and performance, as they exhibited PGO, which is related to achievement preservation (Chen et al., 2000; Payne et al., 2007). Therefore, remaining in the same organization may be an effective means of sustaining achievements and providing organizational stability.

In the third path, Agreeableness and Openness were associated with both LGO and PGO. Theoretically, this supports Button et al.'s (1996) suggestion that LGO and PGO are separate factors, and one person could display high or low levels of both. Practically, open and agreeable individuals may be suitable for organizations that require employees who exhibit both PCO and BCO but would not physically look elsewhere for satisfaction, as they also prefer organizational stability. How can agreeable people be both learning and performance oriented? Agreeableness is associated with a need to seek a cooperative, team-oriented, conflict-free workplace (Judge & Cable, 1997). Agreeable people learn from others via social interaction, indicating LGO. However, pleasing others is also important to them; therefore, they endeavour to prove that they are dependable and doing well and complete their tasks, exhibiting PGO. Openness is associated with seeking stimulation. Open individuals are creative, flexible, curious, and unconventional and enjoy new experiences and ideas (McCrae, 1996), displaying LGO. Moreover, Openness is associated with dopamine secretion; this is related to working memory (Jang et al., 2001), which assists in performance improvement. This could be why open individuals display PGO and seek occupational stability. Job security provides peace of mind and stability (DiRenzo & Greenhaus, 2011), while occupational uncertainty is associated with a reduced sense of security (Hartley, Jacobson, Klandermans, & van Vuuren, 1991) and could increase anxiety, causing concern regarding supervisors' reactions (Qin, DiRenzo, Xu, & Duan, 2014). Even open-minded people may require stability in certain conditions; therefore, open-mindedness does not necessarily lead to physical mobility. Nevertheless, the strong correlation between Openness and LGO, relative to that of Openness and PGO, implies that open individuals are far more oriented toward learning, less to performance, and exhibit PCO and BCO. In summary, open-minded people generally display LGO and are willing to exceed organizational boundaries to learn, but they may prefer organizational stability to perform well. Therefore, both LGO and PGO are important; the association between LGO and PCO and BCO fulfils the need for learning and skill development, and the association between PGO and desire for organizational stability is required to maintain stable, reliable relationships between organizations and employees. This is particularly true of agreeable and open individuals.

The above discussion raises another issue that requires consideration, that of the negative association between organizational mobility preference and PGO. Previous studies have reported correlations between personality and PCO and BCO (Briscoe et al., 2006; Mintz, 2003), personality and motivation (Boudreau et al., 2001; Briscoe et al., 2006), and motivation and PCO and BCO (Briscoe et al., 2006; Hall & Chandler, 2005), but the mechanism underlying these correlations was unclear. The current findings suggest that this mechanism is motivational orientation. LGO and PGO are the key factors in PCO and BCO, and low mobility preference, respectively. This explains Briscoe et al.'s (2006) claim that

BCO does not necessarily involve physical mobility, as previously believed (e.g. Arthur & Rousseau, 1996), and may lead to psychological mobility (Briscoe & Finkelstein, 2009); therefore, individuals with PGO seek organizational stability. This was recently noted by Rodrigues and Guest (2010), who claimed that organizations that embrace the modern career model do not necessarily lack tenure opportunities. Previous studies have identified the factors associated with career mobility such as the labour market; occupational-, organization-, and group-level factors; personal life; and individual differences (DeFillippi & Arthur, 1996; Forrier, Sels, & Stynen, 2009; Ng, Sorensen, Eby, & Feldman, 2007), while others argue that career competence, sex, and cultural background are associated with physical and psychological mobility (Sullivan & Arthur, 2006). However, the mechanism underlying the difference between physical and psychological mobility has not been assessed sufficiently. The current study elucidated the theoretical gap, suggesting that this mechanism is motivational orientation. That is, it is not necessarily a question of physical vs. psychological mobility in BCO but involves motivational orientation. When PGO is associated with certain personality characteristics, mobility preference is low. Therefore, LGO is associated with physical mobility, whereas PGO is related to psychological mobility, indicating that individuals are not necessarily willing to leave the organization and may prefer stability, particularly when they display Agreeableness and Openness.

Moreover, PCO and BCO have attracted broad theoretical discussion, with little empirical support (Briscoe et al., 2006; Gubler et al., 2014). The results of this study support these theoretical concepts and that of boundaryless career and mobility preference as two separate BCO factors. The path analysis also verified the validity of the protean and boundaryless scales reported by Briscoe et al. (2006).

### 6.1. Limitations and future studies

The present study was subject to a number of limitations; therefore, the findings should be interpreted with caution. First, the sample was limited to students. Although they were all engaged in full-time employment, a student sample may not represent all employees in organizational and cultural contexts, which could affect external validity. Moreover, the study involved an Israeli sample, which undermined the external validity of the study. Cultural context may influence work orientation (Gandel, Roccas, Sagiv, & Wrzesniewski, 2005). Sagiv, Schwartz, and Arieli (2011) discussed personal, national, and cultural values and the application of Schwartz's personal value framework (Schwartz, 1992) and cultural value model (Schwartz, 1999). Schwartz's framework is considered the most advanced in cross-cultural psychology (Smith, Bond, & Kagitcibasi, 2006). His cultural value model (Schwartz, 1999) contains seven value orientations including Embeddedness vs Autonomy (Intellectual and affective), Hierarchy Vs Egalitarianism, and Mastery Vs Harmony. Contrary to autonomous cultures, embedded cultures emphasize status quo preservation and values such as social order, respect for tradition, family security, and wisdom. Contrary to egalitarian cultures, hierarchy cultures emphasize unequal power, role, and resource distribution and values such as social power and authority. In contrast to harmonious cultures, mastery-oriented cultures emphasize advancement through self-promotion and values such as ambition, success, and daring. Based on Schwartz's (2009) study, which mapped 77 national groups on seven cultural orientations, Sagiv et al. (2011) described the cultural values of Western Europe, Eastern Europe, English-speaking countries, Confucian cultures, South Africa, Africa, the Middle East, and Latin America. Although, Israel is in the Middle East, according to Sagiv et al. (2011), the Jewish Hebrew-speaking population is similar to those of English-speaking

countries (e.g., Australia, English Canada, Ireland, the UK, New Zealand, and the USA), with respect to most cultural values. Such values include high emotional autonomy and mastery and low harmony, emphasizing achievement orientation, hedonism, and stimulation seeking. However, relative to English-speaking countries, Israel places a higher emphasis on traditional values, which may affect PCO and BCO; therefore, further research conducted in various countries and cultures is required.

Another limitation was that the study used self-report measures referring to a single point in time, which may have created social desirability and common method biases (Organ & Ryan, 1995). Conway and Lance (2010) suggested that using valid, reliable measures; randomizing questionnaire items; and maintaining participants' anonymity limit the occurrence of common method bias. All of these suggestions were followed in this study. Another limitation involved the correlational nature of the study design. Although the path analysis findings were consistent with the causal predictions, stronger evidence should be obtained via experimental or longitudinal correlational designs. Moreover, examining the variables via objective measures, such as actual organizational mobility, would validate and enhance the findings and implications.

### 6.2. Practical contributions

These results have practical implications for organizations and practitioners. Personality traits were associated with PCO and BCO, which has important implications for employee selection. When organizations seek to select employees who are likely to exhibit PCO and BCO, they should recruit individuals with particular personality traits. Whilst measuring PCO and BCO directly when selecting candidates may seem preferable, as attitudes (Briscoe et al., 2006), they may not be stable predictors. Therefore, to determine which employees are most likely to develop these attitudes in the appropriate conditions, reliance on more stable personality characteristics as predictors is advisable. However, as personality traits are not exclusively PCO and BCO predictors, we should use them as partial predictors alongside others. Therefore, if organizations seek to employ individuals who are willing to learn and develop their abilities, they should recruit individuals who display high Extraversion, Conscientiousness, Agreeableness, and Openness. In contrast, if stability is important, and human resource practitioners wish to determine which employees are likely to remain in the organization, individuals who exhibit high Neuroticism should be recruited. Further, if organizations seek employees with both PCO and BCO who also require organizational stability and are therefore oriented towards learning, skill development, and performance and likely to remain in the organization, they should recruit individuals who demonstrate high Openness and Agreeableness, as these personality traits are associated with both LGO and PGO. LGO leads to PCO and BCO, involving career perception that enhances learning and skill development, whilst employees with PGO seek organizational stability; all of these factors could benefit the organization.

### 6.3. Conclusion

The results suggested that personality was associated with PCO and BCO, and the reason for this association was motivational orientation. Extroverted and conscientious individuals were oriented towards learning and exhibited PCO and BCO. Neurotic individuals were oriented towards performance, preferring organizational stability. Interestingly, open and agreeable individuals were oriented towards both learning and performance, which were associated with PCO and BCO and seeking



organizational stability. Based on the results, open and agreeable individuals may be suitable employees for organizations seeking individuals with PCO and BCO without risking organizational stability.

### Conflicts of interest

The author has no conflicts of interest to declare.

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