

Older job seekers' job search intensity: the interplay of proactive personality, age and occupational future time perspective

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ABSTRACT

Long-term unemployment of older people can have severe consequences for individuals, communities and ultimately economies, and is therefore a serious concern in countries with an ageing population. However, the interplay of chronological age and other individual difference characteristics in predicting older job seekers' job search is so far not well understood. This study investigated relationships among age, proactive personality, occupational future time perspective (FTP) and job search intensity of 182 job seekers between 43 and 77 years in Australia. Results were mostly consistent with expectations based on a combination of socio-emotional selectivity theory and the notion of compensatory psychological resources. Proactive personality was positively related to job search intensity and age was negatively related to job search intensity. Age moderated the relationship between proactive personality and job search intensity, such that the relationship was stronger at higher compared to lower ages. One dimension of occupational FTP (perceived remaining time left in the occupational context) mediated this moderating effect, but not the overall relationship between age and job search intensity. Implications for future research, including the interplay of occupational FTP and proactive personality, and some tentative practical implications are discussed.

KEY WORDS – future time perspective, proactive personality, job search, older job seekers.

Introduction

Long-term unemployment of older people can have severe financial and health consequences for these individuals (Frese and Mohr 1987; Klehe, Koen and De Pater 2012; Ranzijn *et al.* 2006; Warr 1987), and is associated with significant economic and social costs to communities and ultimately economies (Encel and Studencki 2004; Ranzijn, Carson and Winefield

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2004).¹ Thus, encouraging older people's job search and re-employment is an important issue in countries with an ageing population. In the context of continuous demographic changes affecting populations and workforces in both developed as well as developing countries (Cohen 2003), many governments are now attempting to change the institutional and economic contexts that influence job search and re-employment of older people.

For example, the governments of several European countries as well as Australia have recently reformed their pension systems based on projections of a significant increase in the proportion of older people in the population (Australian Government 2009; European Commission 2010b).² The introduction of these new pension policies in the context of population ageing requires a better understanding of and improved ways to support older people's job search, otherwise the so-called 'dependency ratio' (*i.e.* the number of those not in the labour force, including children and retirees, compared to those in the labour force) will continue to rapidly increase in the future (Commonwealth of Australia 2010).

Another example of recent government initiatives in response to population ageing is the introduction of anti-age discrimination legislation in the European Union and Australia (Australian Human Rights Commission 2011; European Commission 2010a). These laws to protect older people's rights are important, as workforce participation rates of older people have been steadily rising in Australia and other OECD countries in recent years (Commonwealth of Australia 2010; Organisation for Economic Co-operation and Development 2006).³ Despite these improvements, however, many older unemployed people still struggle to find a new job (Heidkamp, Corre and Van Horn 2010; Kossen and Pedersen 2008; Patrickson and Ranzijn 2004). The result of such negative employment prospects may be a withdrawal into early retirement with a relatively low retirement income (Wuebbeke 2011).

In this paper, an individual difference perspective is taken on the topic of older people's job search that is grounded in psychological theories of ageing and motivational resources. Based on previous empirical work (*e.g.* Dendinger, Adams and Jacobson 2005; Loi and Shultz 2007; Nakai *et al.* 2011; Niessen 2006; van Dam and Menting 2012), it is hypothesised that some of the causes for the differences in older people's job search behaviours are unique to each individual as compared to the broader institutional and economic contexts.⁴ The overarching aim of this study, therefore, is to investigate individual difference characteristics that may predict the intensity with which older job seekers engage in job search activities. *Job search intensity* is defined as the frequency and scope of different job search activities (Wanberg, Kanfer and Banas 2000).

The focus is on three individual difference characteristics that have so far not received much attention in the literature on older job seekers: proactive personality, occupational future time perspective (FTP), and chronological age as a continuous variable encompassing relatively younger to relatively older older job seekers. These three individual difference characteristics are investigated in relation to older job seekers' job search intensity because extant research on younger job seekers (Brown *et al.* 2006; Claes and De Witte 2002) and research on socio-emotional selectivity theory (Carstensen, Isaacowitz and Charles 1999) suggest that the interplay of these characteristics may help explain variation in older people's job search intensity. Both proactive personality and the age-related concept of occupational FTP have motivational properties (Bateman and Crant 1993; Zacher *et al.* 2010) and thus may motivate older job seekers to engage in job search behaviours. In addition, the study tests the possibility that a high level of one of these motivational characteristics may substitute for a low level of the other characteristic and vice versa (Hobfoll and Liberman 1987).

The first individual difference characteristic of interest in this study is proactive personality. *Proactive personality* refers to a relatively stable individual difference in people's tendency to show personal initiative, to detect and act on opportunities, and to persist until they affect meaningful change in the environment (Bateman and Crant 1993).⁵ While highly proactive people make things happen and actively identify and solve problems, less proactive people are passive and adjust to their environment rather than changing it. Although the relationship between proactive personality and job search intensity has been investigated among young college graduates (Brown *et al.* 2006; Claes and De Witte 2002), this is the first study to examine this relationship among older job seekers. This is important because organisational psychologists and ageing researchers have suggested that older people's work-related motivation may qualitatively differ from that of younger people (Kooij *et al.* 2007, 2011; Ng and Feldman 2010). In addition, the findings may have significant practical implications for advising and assisting older job seekers low in proactive personality as well as for adapting employers' recruitment efforts to different subgroups within the group of older job seekers (Lievens, Van Hove and Zacher 2012).

The second individual difference characteristic examined is chronological age. Previous studies have not differentiated between relatively younger (*e.g.* 45-year-olds) and relatively older (*e.g.* 60-year-olds) older job seekers, but instead have treated them as a rather homogeneous group with regard to age and age-related concepts. However, older job seekers' job search intensity may differ based on their age, as research on socio-emotional

selectivity theory suggests that older people's goal priorities change as they grow older and approach significant endings such as death or retirement (Carstensen *et al.* 1999). Thus, the job search intensity of a relatively younger older job seeker may differ from the job search intensity of a relatively older older job seeker. No research so far has investigated how age differences *within* the older job seeker group may be related to variation in job search intensity among them. In addition, it remains unknown how older job seekers' age may influence the strength of relationships between other relevant individual differences and their job search intensity.

The final individual difference characteristic of interest in this study is *occupational FTP*. Based on conceptualisations of general FTP in the lifespan psychology literature (Carstensen *et al.* 1999; Cate and John 2007), occupational FTP has been defined as individuals' perceptions of their future in the employment context (Zacher and Frese 2009). Previous research has identified three underlying dimensions of general and occupational FTP which were moderately inter-correlated yet shown to be statistically distinct. Cate and John (2007) distinguished between two dimensions, focus on opportunities and focus on limitations. *Focus on opportunities* describes individuals' perceptions of their remaining goals, opportunities and possibilities in the employment context. *Focus on limitations* involves individuals' perceptions of the constraints, limitations and restrictions in the employment context (Cate and John 2007). For example, older job seekers with a high focus on opportunities believe that they will have many employment opportunities in their remaining time in the workforce. In contrast, older job seekers with a high focus on limitations are less optimistic and perceive their employment opportunities in their remaining time in the workforce more negatively.⁶ In addition, Zacher and Frese (2009) distinguished between focus on opportunities and perceived remaining time in the employment context. *Perceived remaining time* involves how much time an individual believes he or she has left in the occupational and employment context before exiting the labour force.

In the current study, these three occupational FTP dimensions and how they may help explain the relationships between age and proactive personality, on the one hand, and job search intensity, on the other, are investigated. In addition, the question of whether these dimensions help explain the anticipated moderating effect of age on the relationship between proactive personality and job search intensity is examined. Previous research suggests that occupational FTP is a cognitive-motivational construct that may act as a mediator variable (*i.e.* an explanatory mechanism; Frazier, Tix and Barron 2004) between chronological age and work-related constructs (Zacher *et al.* 2010). While occupational FTP has recently been examined in heterogeneous samples of employees (Bal *et al.* 2010;

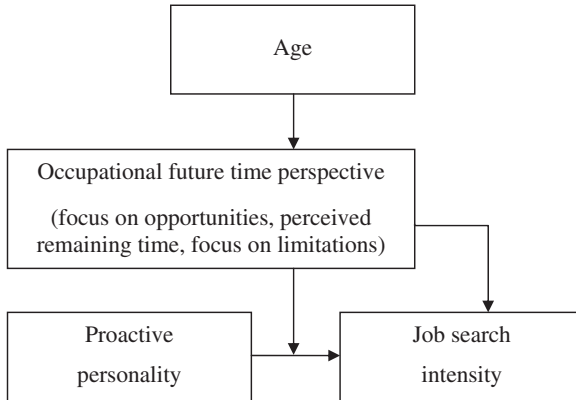


Figure 1. The proposed mediated moderation model.

Zacher and Frese 2011; Zacher *et al.* 2010) and small business owners (Gielnik, Zacher and Frese 2012), so far no research on older job seekers' occupational FTP exists. This research is desirable because it may help explain the effects of conceptually more distal demographic variables such as age on job search intensity. The central constructs and hypotheses of this study are summarised in a conceptual model in Figure 1. This conceptual model is a *mediated moderation model* that combines hypotheses on both mediated and moderated relationships (Muller, Judd and Yzerbyt 2005).

Proactive personality, age and job search intensity

The first proposition is that older job seekers' proactive personality is positively related to their job search intensity. People with a more proactive personality can be expected to show higher levels of job search behaviour because they are generally higher in personal initiative and persist in challenging tasks even when facing setbacks and barriers. In contrast, people with a less proactive personality should show less job search behaviour because they tend to be rather passive and more likely to adapt to the given circumstances of their unemployment. Previous research has shown that a proactive personality is positively related to engagement in volunteer activities (Bateman and Crant 1993), adjustment to new work environments (Kammeyer-Mueller and Wanberg 2003) and career planning activities (Frese *et al.* 1997).

In a recent meta-analysis, Fuller and Marler (2009) found that proactive personality is positively related to important antecedents of job search intensity, such as learning goal orientation (*i.e.* an interest in personal development) as well as career planning and job search self-efficacy (*i.e.* the

belief in one's capabilities to carry out career planning and job search activities successfully). Few studies have so far examined relationships between proactive personality and job search intensity. In one study of university students, proactive personality was positively related to preparatory job search behaviour (Claes and De Witte 2002). In another study with college graduates, proactive personality positively influenced job search self-efficacy, job search behaviour and job search success (Brown *et al.* 2006).

- Hypothesis 1: Proactive personality is positively related to job search intensity among older job seekers.

Based on socio-emotional selectivity theory (Carstensen *et al.* 1999), it is further expected that age is negatively related to job search intensity among older job seekers. Socio-emotional selectivity theory explains that younger people prioritise future-oriented goals (*e.g.* making new social contacts, gathering information about future jobs), whereas older people prioritise emotionally meaningful goals (*e.g.* investing in existing social relationships, enjoying meaningful personal encounters). The underlying reason for this shift in goal priorities is that people's perceptions of their future (*i.e.* their FTP) change with increasing age (Carstensen *et al.* 1999). Whereas younger people have a more expansive and open-ended FTP, older people start to experience their future time as increasingly limited. According to the theory, this change in FTP with increasing age leads to different goal priorities. Whereas younger adults show a preference for goals such as social acceptance, independence and knowledge gain, older adults prefer goals related to emotion regulation and helping others (Lang and Carstensen 2002). Numerous studies by Carstensen and colleagues provide support for the propositions of socioemotional selectivity theory (*e.g.* Carstensen 2006; Löckenhoff and Carstensen 2004).

Older job seekers at relatively higher compared to relatively lower ages should prioritise different goals which, in turn, should reduce their job search intensity. For example, whereas a 45-year-old job seeker is more likely to be interested in finding paid work to support him- or herself and family in the two decades left until retirement, a 60-year-old job seeker might be relatively more concerned with less future-oriented goals (*e.g.* leisure activities, maintaining close family networks). As older people are more concerned with emotion regulation, older job seekers should also be less likely to be interested in engaging in the uncertain and potentially disappointing activity of job search. One meta-analysis found a weak and negative relationship ($\rho = -0.06$) between age and job search behaviour (Kanfer, Wanberg and Kantrowitz 2001). However, this relationship is probably attenuated due to restriction in the range of ages sampled; Kanfer, Wanberg and Kantrowitz (2001) noted that only very few of the

studies included in their meta-analysis had collected data from older job seekers.

- Hypothesis 2: Age is negatively related to job search intensity among older job seekers.

In addition to proposing bivariate relationships between proactive personality, age and job search intensity, it is also hypothesised that age influences the *strength of the relationship* between proactive personality and job search intensity. Specifically, proactive personality is a more important predictor of job search intensity at relatively higher compared to relatively lower ages of older job seekers. As the relatively younger older job seekers can be expected to have a more expansive and unlimited occupational FTP (*i.e.* high focus on opportunities and perceived remaining time, and a low focus on limitations), they should be more motivated to engage in job search behaviours *independent* of their level of proactive personality. In other words, a more expansive occupational FTP among the relatively younger older job seekers should compensate for low levels of proactive personality in this age group.

This hypothesis is consistent with the notion of *compensatory psychological resources*, which is grounded in the substitution hypothesis proposed by researchers interested in motivational resources (Hobfoll and Liberman 1987). Psychological resources can be defined as objects, conditions, skills or personal characteristics (*e.g.* positive psychological characteristics such as a proactive personality or an expansive occupational FTP) that are valued by an individual or that serve as a means for obtaining what is valued (Hobfoll and Shirom 2001). According to the substitution hypothesis, 'when a given resource is absent, a second resource may substitute for it' (Hobfoll and Liberman 1987: 20). Thus, an expansive occupational FTP among the relatively younger older job seekers can substitute for low levels of proactive personality in this group.

By contrast, the relatively older older job seekers have a more restricted or less expansive occupational FTP (Cate and John 2007; Zacher and Frese 2009) and should be more likely to reduce their job search intensity. Among the relatively older older job seekers, a proactive personality can therefore be expected to matter to a greater extent, such that those with a more proactive personality should have higher levels of job search intensity than those with a less proactive personality. The reason for this expectation is that occupational FTP is less able to substitute for low levels of proactive personality among older older job seekers because this resource is limited in this group. Thus, consistent with the notion of compensatory psychological resources and the substitution hypothesis, it is proposed that proactive personality will matter to a greater extent among the relatively older older job seekers.

A recent study examined age as a moderator of the relationship between proactive personality and training motivation, perceived career development from training and training behavioural intentions among government employees (Bertolino, Truxillo and Fraccaroli 2011). The results showed that the relationships were more positive for younger than for older participants, which may seem contradictory to the hypothesis of the current study. However, the average age of employees in the study of Bertolino, Truxillo and Fraccaroli (2011) was 40 years (range 21–60 years), whereas the current study focuses on unemployed people exclusively over the age of 40 years.

- Hypothesis 3: Age moderates the relationship between proactive personality and job search intensity, such that the relationship becomes stronger positive with increasing age.

The role of occupational future time perspective

Based on propositions of socio-emotional selectivity theory, it is expected that the three dimensions of occupational FTP (how older job seekers perceive their time, opportunities and limitations before exit from the workforce) mediate the anticipated negative relationship between age and job search intensity. Specifically, it is expected that focus on opportunities and perceived remaining time are negatively related to age and positively related to job search intensity, and that focus on limitations is positively related to age and negatively related to job search intensity. Support for these assumptions comes from research showing that occupational FTP becomes less expansive and more limited with increasing age (Zacher and Frese 2009, 2011), and that an expansive occupational FTP has motivational effects (*e.g.* on job performance; Zacher *et al.* 2010).

- Hypothesis 4: The three occupational FTP dimensions (focus on opportunities, perceived remaining time and focus on limitations) mediate the relationship between age and job search intensity.

Finally, it is expected that the three occupational FTP dimensions explain the proposed moderation effect of age on the relationship between proactive personality and job search intensity (*see* Hypothesis 3). Specifically, proactive personality is a more important predictor of job search intensity among the relatively older compared to the relatively younger among the older job seekers because the relatively older job seekers perceive their occupational FTP as less expansive and more limited than the relatively younger job seekers. Whereas proactive personality is less likely to make a difference among the relatively younger job

seekers with an expansive, future-oriented occupational FTP in terms of job search intensity, it is probably more predictive among the relatively older older job seekers who perceive their occupational future as less expansive and more limited. This assumption is consistent with the notion of compensatory psychological resources (Hobfoll and Leiberhan 1987) as well as the suggestion of Kanfer, Wanberg and Kantrowitz (2001) that the relationship between age as a rather distal antecedent and job search intensity is mediated by proximal motivational processes.

- Hypothesis 5: The three occupational FTP dimensions (focus on opportunities, perceived remaining time and focus on limitations) mediate the moderating effect of age on the relationship between proactive personality and job search intensity.

Method

Participants and procedures

Data for this study came from 182 older job seekers in Australia. All of the participants were unemployed at the time of the study. Eighty-one (44.5%) of the job seekers were male and 101 (55.5%) were female. The age distribution ranged from 43 to 77 years and the average age was 57.66 years (standard deviation (SD)=5.71). Twenty-four participants (13.2%) indicated Year 10 of high school as their highest level of completed education, 118 (9.9%) Year 12, 32 (17.6%) held a Technical and Further Education (TAFE) degree, 36 (19.8%) had a diploma, 19 (10.4%) held an undergraduate university degree and 53 (29.1%) held a postgraduate university degree. The study was advertised by two websites specialising in job offers for older job seekers in Australia (www.olderworkers.com.au and www.adage.com.au), and participation was open from April to June 2011. In total, 266 people clicked on the online link in the study period, and 182 of them provided complete data. Thus, the rate of no missing data was 68.42 per cent.⁷

Measures

Job search intensity was measured with seven items; six items developed by Blau (1994) and one item added to this scale by Wanberg, Kanfer and Banas (2000) to assess computer-based job search activities (*i.e.* 'Used the Internet [www or Worldwide Web] or other computer services to locate job openings'). The items assessed how often job seekers engaged in a number of job search activities over the last six months (*e.g.* reading the help wanted/classified advertisements in a newspaper, preparing/revising resume, filling

TABLE 1. Occupational future time perspective: factor loadings of items (principle axis factoring, direct oblimin rotation)

Items	Rotated factor solution		
	(1)	(2)	(3)
1. Many opportunities await me in my occupational future.	0.733 ¹	-0.093	0.115
2. I expect that I will set many new goals in my occupational future.	0.870 ¹	0.056	-0.006
3. My occupational future is filled with possibilities.	0.964 ¹	0.053	0.031
4. I could do anything I want in my occupational future.	0.491 ¹	0.049	0.331
5. There are only limited possibilities in my occupational future.	-0.387 ¹	0.256	0.056
6. There is plenty of time left in my occupational life to make new plans.	0.021	-0.094	0.736 ¹
7. Most of my occupational life lies ahead of me.	-0.021	-0.046	0.750 ¹
8. My occupational future seems infinite to me.	0.081	0.031	0.779 ¹
9. I have the sense that my occupational time is running out.	-0.004	0.725 ¹	-0.221
10. As I get older, I begin to experience time in my occupational future as limited.	-0.008	0.901 ¹	0.006
Explained variance of factor (total: 75.3%)	53.2	12.1	10.0

Notes: N=182. 1. Highest loadings of items. Factor correlations: Factors 1 and 2, $r=-0.44$; Factors 1 and 3, $r=0.65$; Factors 2 and 3, $r=-0.46$. Items 1–3 were used to measure focus on opportunities (Factor 1), items 6–8 were used to measure perceived remaining time (Factor 2), and items 9 and 10 were used to measure focus on limitations (Factor 3).

out a job application, contacting an employment agency, executive search firm or state employment service).⁸ The items were answered on five-point scales ranging from 1 (never) to 5 (very frequently). Wanberg, Kanfer and Banas (2000) provided evidence for the unidimensionality of the scale. Cronbach's α for this scale was 0.77.

Proactive personality was measured with the ten-item proactive personality scale developed by Seibert, Crant and Kraimer (1999) based on Bateman and Crant's (1993) original 17-item scale. Three example items are 'I am constantly on the lookout for new ways to improve my life', 'No matter what the odds, if I believe in something I will make it happen' and 'I excel at identifying opportunities'. The items were answered on five-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). The scale has been shown to be highly reliable and valid (Seibert, Crant and Kraimer 1999). Cronbach's α for this scale in the current study was 0.89.

Occupational FTP was assessed with all of the ten items from the FTP scale developed by Carstensen and Lang (1996; Lang and Carstensen 2002) which were adapted to the employment context by adding the word 'occupational' (Zacher and Frese 2009). The items are shown in Table 1. The items were answered on five-point Likert scales ranging from 1

(strongly disagree) to 5 (strongly agree). To examine the number of dimensions captured by the scale, an exploratory factor analysis with direct oblimin rotation was undertaken, which allows the factors to be inter-correlated. The results of the analysis showed that the items had their highest factor loadings on three distinct factors with eigenvalues greater than 1 (Table 1). The first factor was labelled 'focus on opportunities' because it contained the three items that have been used by Zacher and Frese (2009) and Cate and John (2007) to measure focus on opportunities. These items emphasise opportunities, goals and possibilities in the future. Three items only with factor loadings greater than 0.70 were included in the focus on opportunities scale and the two items with factor loading lower than 0.50 were omitted.⁹ Cronbach's α for this scale was 0.92.

The second factor was labelled 'perceived remaining time' because the corresponding items emphasise remaining time in the employment context (e.g. 'Most of my occupational life lies ahead of me'). The perceived remaining time-scale had a Cronbach's α of 0.83. Finally, the third factor was labelled 'focus on limitations', because it contained two negatively worded items that emphasise limitations and have been used previously by Cate and John (2007) to measure focus on limitations. Cronbach's α of this two-item measure was 0.86.

Demographic and control variables. Job seekers reported their age in years, sex (0=male, 1=female) and education (1=Year 10, 2=Year 12, 3=TAFE certificate, 4=diploma, 5=undergraduate university degree, 6=postgraduate qualification). Sex and education were controlled for in the analyses because previous research showed that men and people with higher levels of education show more job search behaviour than women and individuals with lower levels of education (Kanfer, Wanberg and Kantrowitz 2001). In addition, job seekers reported how much money they had available for themselves per month (in Australian dollars, including money for their rent and living expenses) and for how long they had been searching for a new job (in months). Specifically, financial considerations have an important influence on job search behaviours (Ginn and Arber 1996). For example, relatively older job seekers may have lower job search intensity because they have fewer years left before retirement and this means having fewer years left to live from their savings. Length of job search in months was controlled for because job seekers who have searched for an extensive amount of time may be less motivated to engage in further job search behaviours than those who have searched for a shorter period of time (Encel and Studencki 2004). Note, however, that the results did not change substantially when these demographic variables were not controlled for.

Results

The descriptive statistics and intercorrelations of the study variables are shown in [Table 2](#). Providing preliminary support for Hypotheses 1 and 2, proactive personality was positively related to job search intensity ($r=0.27$, $p<0.01$) and age was negatively related to job search intensity ($r=-0.18$, $p<0.05$). [Table 2](#) further shows that focus on opportunities was positively related to job search intensity ($r=0.16$, $p<0.05$), proactive personality ($r=0.34$, $p<0.01$) and perceived remaining time ($r=0.62$, $p<0.01$), and negatively related to age ($r=-0.18$, $p<0.05$) and focus on limitations ($r=-0.45$, $p<0.01$). Perceived remaining time was also positively related to proactive personality ($r=0.25$, $p<0.01$), negatively related to age ($r=-0.32$, $p<0.01$) and focus on limitations ($r=-0.51$, $p<0.01$), and unrelated to job search intensity ($r=0.12$, not significant (ns)). Focus on limitations was unrelated to job search intensity ($r=0.05$, ns), proactive personality ($r=-0.14$, ns) and age ($r=0.04$, ns). Finally, age was unrelated to proactive personality ($r=0.08$, ns).

[Table 3](#) shows the results of three hierarchical moderated regression analyses with mean-centred predictor variables (Cohen *et al.* 2003). To avoid issues with multicollinearity the role of the three occupational FTP dimensions was examined in three separate regression analyses. For each analysis, the four control variables (sex, education, duration of unemployment and finances available) were entered in the first step, the independent and moderator variables (proactive personality and age) were entered in the second step, and the interaction between proactive personality and age was entered in the third step. The interaction term was calculated using the cross-product of the mean-centred independent and moderator variables.

According to Hypothesis 1, proactive personality is positively related to job search intensity among older job seekers. As shown in [Table 3](#), proactive personality positively predicted job search intensity ($\beta=0.27$, $p<0.01$; $f^2=0.08$). This supports Hypothesis 1. Hypothesis 2 was also supported by a negative and significant relationship between age and job search intensity ($\beta=-0.21$, $p<0.01$; $f^2=0.05$; see [Table 3](#)).

Hypothesis 3 states that age moderates the relationship between proactive personality and job search intensity, such that the relationship is stronger positive at higher compared to lower ages. As shown in [Table 3](#), the interaction between proactive personality and age significantly predicted job search intensity ($\beta=0.15$, $\Delta R^2=0.02$, $p<0.05$; $\Delta f^2=0.02$). To test whether this interaction effect was also consistent with the hypothesised pattern, a simple slope analysis was undertaken (Cohen *et al.* 2003) in which job search intensity was regressed on proactive personality at high (*i.e.* one SD above the

TABLE 2. Means, standard deviations (SD) and intercorrelations of study variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Job search intensity	3.69	0.70	(0.77)									
2. Proactive personality	3.50	0.65	0.27**	(0.89)								
3. Focus on opportunities	2.74	1.15	0.16*	0.34**	(0.92)							
4. Perceived remaining time	2.29	1.00	0.12	0.25**	0.62**	(0.83)						
5. Focus on limitations	3.86	1.01	0.05	-0.14	-0.45**	-0.51**	(0.86)					
6. Age	57.66	5.71	-0.18*	0.08	-0.18*	-0.32**	0.04	-				
7. Sex (0=male, 1=female)	0.56	0.50	0.04	-0.23**	0.05	0.02	-0.10	-0.28**	-			
8. Education	3.92	1.74	0.06	0.30**	0.09	0.03	0.01	0.17*	-0.11	-		
9. Duration of unemployment (in months)	14.09	12.43	-0.11	-0.22**	-0.05	-0.02	0.10	-0.11	0.01	-0.09	-	
10. Finances available (Aus \$ per month)	1,389.25	1,034.92	-0.06	0.06	-0.02	-0.08	0.01	-0.06	-0.19**	0.10	-0.02	-

Notes: N=182. Where applicable, reliability estimates (α) are shown in parentheses along the diagonal. Significance levels: * $p < 0.05$, ** $p < 0.01$.

TABLE 3. Results of hierarchical moderated regression analyses predicting job search intensity

Variable	B	SE	β	ΔR^2	R^2	f^2	F
<i>Model for focus on opportunities</i>							
Step 1: Controls					0.02	0.02	0.97
Sex	0.05	0.11	0.04				
Education	0.02	0.03	0.06				
Duration of unemployment	-0.01	0.00	-0.11				
Finances available	-0.00	0.00	-0.07				
Step 2: Main effects				0.11**	0.13	0.15	4.24**
Proactive personality	0.29	0.08	0.27**				
Age	-0.03	0.01	-0.21**				
Step 3: Interaction				0.02*	0.15	0.18	4.37**
Proactive personality \times Age	0.03	0.02	0.15*				
Step 4: Mediator				0.00	0.15	0.18	3.84**
Focus on opportunities	0.02	0.05	0.04				
Step 5: Mediated moderation				0.03*	0.18	0.22	4.08**
Proactive personality \times Focus on opportunities	-0.14	0.06	-0.17*				
<i>Model for perceived remaining time</i>							
Steps 1–3: Results are the same as in the model for focus on opportunities above							
Step 4: Mediator				0.00	0.15	0.18	3.81**
Perceived remaining time	-0.01	0.06	-0.02				
Step 5: Mediated moderation				0.03**	0.18	0.22	4.28**
Proactive personality \times Perceived remaining time	-0.20	0.08	-0.20**				
<i>Model for focus on limitations</i>							
Steps 1–3: Results are the same as in the model for focus on opportunities above							
Step 4: Mediator				0.01	0.16	0.19	4.26**
Focus on limitations	0.09	0.05	0.13				
Step 5: Mediated moderation				0.01	0.17	0.20	4.05**
Proactive personality \times Focus on limitations	0.09	0.06	0.11				

Note: N = 182.

Significance levels: * $p < 0.05$, ** $p < 0.01$.

mean) and low (*i.e.* one SD below the mean) values of age. The relationship between proactive personality and job search intensity was small and non-significant for younger participants ($B = 0.14$, standard error (SE) = 0.11, $\beta = 0.13$, $t = 1.27$, $p = 0.207$) and positive and significant for older participants ($B = 0.51$, SE = 0.12, $\beta = 0.47$, $t = 4.18$, $p < 0.01$). This interaction effect is shown in the left-hand panel of Figure 2. These findings support Hypothesis 3.

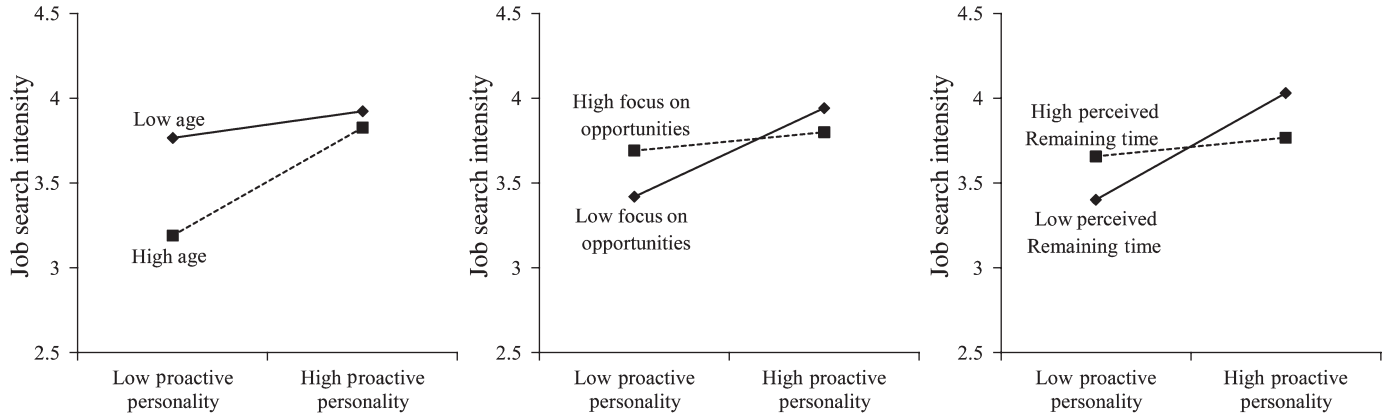


Figure 2. Age, focus on opportunities and perceived remaining time as moderators of the relationship between proactive personality and job search intensity.

According to Hypothesis 4, the three occupational FTP dimensions mediate the negative relationship between age and job search intensity. While age was negatively related to focus on opportunities and perceived remaining time (see Table 2), the results shown in Table 3 (Step 4) indicate that the three occupational FTP dimensions did not significantly predict job search intensity (β values were 0.04, -0.02 and 0.13 , for focus on opportunities, perceived remaining time and focus on limitations, respectively, ns). In addition, the negative relationship between age and job search intensity did not decrease when the occupational FTP dimensions were entered into the regression equations. Thus, Hypothesis 4 was generally not supported.

Hypothesis 5 states that the three occupational FTP dimensions mediate the moderating effect of age on the relationship between proactive personality and job search intensity. To test this hypothesis, the interaction terms between proactive personality and occupational FTP dimensions were entered in Step 5 into the regression equations. As shown in Table 3, the interaction between proactive personality and focus on opportunities significantly predicted job search intensity ($\beta = -0.17$, $\Delta R^2 = 0.03$, $p < 0.05$; $\Delta f^2 = 0.03$). A simple slope analysis indicated that the relationship between proactive personality and job search intensity was small and non-significant for participants with a high focus on opportunities ($B = 0.08$, $SE = 0.13$, $\beta = 0.08$, $t = 0.66$, $p = 0.509$) and positive and significant for participants with a low focus on opportunities ($B = 0.40$, $SE = 0.10$, $\beta = 0.37$, $t = 4.00$, $p < 0.01$). This interaction effect is shown in the middle panel of Figure 2. The interaction effect between proactive personality and age decreased and became non-significant when the interaction between proactive personality and focus on opportunities was entered into the regression equation ($\beta = 0.13$, ns).

Indirect effects (*i.e.* mediated moderation) were computed which indicate whether the interaction of proactive personality and age on job search intensity is mediated by the interactions between proactive personality and occupational FTP dimensions (Preacher, Rucker and Hayes 2007). Preacher and Hayes (2004) recommended using bias-corrected and accelerated bootstrap estimates of the indirect effect and its confidence interval to test for significance.¹⁰ The indirect effect for the interaction between proactive personality and focus on opportunities as a mediator of the interaction of proactive personality and age on job search intensity was not significant (indirect effect = 0.005 , $SE = 0.006$, lower 95% confidence interval (CI) = -0.002 , upper 95% CI = 0.023). Thus, focus on opportunities did not mediate the moderating effect of age on the relationship between proactive personality and job search intensity.

Table 3 shows that the interaction between proactive personality and perceived remaining time significantly predicted job search intensity ($\beta = -0.20$, $\Delta R^2 = 0.03$, $p < 0.01$; $\Delta f^2 = 0.03$). A simple slope analysis indicated that the relationship between proactive personality and job search intensity was small and non-significant for participants with high perceived remaining time ($B = 0.06$, $SE = 0.13$, $\beta = 0.05$, $t = 0.43$, $p = 0.665$) and positive and significant for participants with low perceived remaining time ($B = 0.51$, $SE = 0.11$, $\beta = 0.47$, $t = 4.48$, $p < 0.01$). This interaction effect is shown in the right-hand panel of Figure 2. The interaction effect between proactive personality and age decreased and became non-significant when the interaction between proactive personality and perceived remaining time was entered into the regression equation ($\beta = 0.08$, ns). Bootstrap analyses indicated that the indirect effect was significant for the interaction between proactive personality and perceived remaining time as a mediator of the moderating effect of age on the relationship between proactive personality and job search intensity (indirect effect = 0.016, $SE = 0.009$, lower 95% CI = 0.003, upper 95% CI = 0.038).

Finally, Table 3 shows that the interaction between proactive personality and focus on limitations did not significantly predict job search intensity ($\beta = 0.11$, $\Delta R^2 = 0.01$, ns; $\Delta f^2 = 0.01$). In addition, the interaction effect between proactive personality and age remained significant when the interaction between proactive personality and focus on limitations was entered into the regression equation ($\beta = 0.15$, $p < 0.05$). Thus, focus on limitations did not mediate the moderating effect of age on the relationship between proactive personality and job search intensity. Overall, these results provided only partial support for Hypothesis 5. Only the interaction between proactive personality and the occupational FTP dimension of perceived remaining time mediated the interactive effect of proactive personality and age on job search intensity.

Discussion

Long-term unemployment of older people is an important concern in countries facing an ageing population and workforce, not only because it may have severe financial and health ramifications for individuals, but also because it can negatively impact on their communities and even on national economies. Ranzijn *et al.* argued that, 'For their own quality of life, and in order to alleviate the financial burden on working tax-payers, it is essential to assist currently unemployed or under-employed mature-age job seekers to find meaningful, financially rewarding and secure work' (2006: 476). The

goal of this study was to gain a better understanding of the interplay among three individual difference characteristics – proactive personality, chronological age and occupational FTP – in predicting job search intensity in a sample of Australian job seekers aged 40 years and older.

Based on psychological theories of ageing and motivational resources, a mediated moderation model was postulated (*see* Figure 1), in which the strength of the positive relationship between proactive personality and job search intensity is indirectly influenced by age and directly influenced by three dimensions of occupational FTP (focus on opportunities, perceived remaining time and focus on limitations; Cate and John 2007; Zacher and Frese 2009). The first finding of this study replicated previous research with university students, showing that proactive personality was also positively related to job search intensity among older job seekers (Hypothesis 1). Thus, older job seekers with a stable tendency to show personal initiative and to ‘make things happen’ (Frese, Garst and Fay 2007) engage more often in job search behaviours.

Age was negatively related to both job search intensity (Hypothesis 2) and two dimensions of occupational FTP (focus on opportunities and perceived remaining time). A possible explanation for the age–job search relationship derived from socio-emotional selectivity theory is that the relatively older older job seekers prioritise goals related to emotion regulation, and thus engage less often in job search behaviours which may be perceived as stressful. Age could also have a direct effect on job search intensity because it is strongly related to the number of years one still has to work. The finding of negative relationships between age and the two dimensions of occupational FTP replicates previous research (Zacher and Frese 2009). The non-significant relationship between age and focus on limitations was unexpected, but it is consistent with research by Cate and John (2007) who showed that while focus on opportunities decreased across middle age (*i.e.* the time between 40 and 60 years), focus on limitations did not increase as people may engage in new and alternative meaningful activities.

In line with the hypothesis based on a combination of the notion of compensatory psychological resources (Hobfoll and Leiberhan 1987) and socio-emotional selectivity theory (Carstensen, Isaacowitz and Charles 1999), age influenced the strength of the relationship between proactive personality and job search intensity, such that proactive personality was a more important predictor of job search intensity at relatively higher compared to relatively lower ages (Hypothesis 3). In other words, relatively older older job seekers with a more proactive personality engaged to the same extent in job search behaviours as relatively younger older job seekers. In contrast, the difference between relatively younger and relatively older

older job seekers was greatest among those with a less proactive personality. Based on the notion of compensatory psychological resources (Hobfoll and Leiberhan 1987) it was hypothesised that low levels of proactive personality are less consequential for the job search of relatively younger older job seekers, presumably because they have a more expansive occupational FTP that may motivate job search behaviours even when their proactive personality is low. In other words, this finding suggests that the lack of a highly proactive personality may be compensated or substituted by an expansive occupational FTP which is typically present among younger older job seekers.

Contrary to predictions derived from socio-emotional selectivity theory, the three occupational FTP dimensions did not mediate the negative relationship between age and job search intensity (Hypothesis 4). While age was negatively related to focus on opportunities and perceived remaining time, all of the occupational FTP dimensions were virtually unrelated to job search intensity when controlling for age and proactive personality in the regression analyses. The reasons for these unexpected findings are uncertain, especially given that previous research has found occupational FTP to be positively related to active work-related behaviours such as job performance (Zacher *et al.* 2010). Future research could examine boundary conditions (*i.e.* moderator variables) of the relationships between occupational FTP dimensions and job search intensity. One possibility may be to investigate self-management strategies such as selection, optimisation and compensation (Zacher and Frese 2011). These strategies may influence the strength of the relationship between occupational FTP and job search intensity as they might channel or convert motivational resources such as FTP into actual job search behaviours.

The study further tested whether the interactions between proactive personality and occupational FTP dimensions indeed explained the interactive effect of proactive personality and age on job search intensity (Hypothesis 5). Support for this hypothesis was found only for perceived remaining time, but not for focus on opportunities and focus on limitations. Specifically, the results suggested that proactive personality is a more important predictor of job search intensity when perceived remaining time in the occupational context is low compared to when it is high. This finding may offer an extension to socio-emotional selectivity theory because it suggests that perceived remaining time can compensate for a low proactive personality. Importantly, it is not proposed that socio-emotional selectivity theory holds only for older job seekers with a less proactive personality; instead, perceived remaining time may provide a motivational resource for the relatively younger older job seekers that may compensate for low levels of proactive personality in this age group.

The findings also suggest that ageing researchers should consider the interaction between occupational FTP and individual difference characteristics such as proactive personality in predicting age-related changes and outcomes such as job search intensity. While the concept of proactivity has previously been discussed in the ageing literature to some extent (Kahana and Kahana 1996; Lang and Carstensen 1994), its interactive effects with age and FTP might inspire a new research agenda that provides a more differentiated account of the role of FTP in shaping behavioural outcomes. The findings suggest that future studies using socio-emotional selectivity theory as a framework could test more complex models that include additional individual difference characteristics besides chronological age and FTP. For example, subsequent research could focus on personality characteristics such as conscientiousness or extraversion, or work-related attitudes such as job satisfaction or feelings of connectedness with one's employing organisation (*i.e.* affective organisational commitment).

Limitations and future research

An important limitation of this study is its cross-sectional design which does not allow inferences about longitudinal, age-related changes and causality, and may introduce bias due to sample selectivity at different ages. For example, it may be possible that the older participants represented a selected group of 'survivors' who are more motivated to find employment at higher ages. Even though the findings regarding age were consistent with theory-based expectations, future research needs to employ longitudinal and cohort-sequential designs to establish causality. However, obtaining longitudinal data across several years and decades is very difficult in the field of ageing in the work context (Ng and Feldman 2008). The related issue of common method variance – that is, inflated empirical relationships due to measurement artefacts – is less pertinent to studies that focus on moderated relationships and mediated moderation as in the current study (Siemsen, Roth and Oliveira 2010). Specifically, Siemsen, Roth and Oliveira (2010) showed that common method variance actually makes it more difficult to detect statistically significant interactions, thus yielding more conservative tests of interaction models.

A second limitation is that job search intensity was self-reported retrospectively by participants; this may have introduced bias due to selective memory effects. Future research could obtain behavioural observations as well as objective data on job search (*e.g.* hours per week). Thirdly, due to the anonymous online recruitment method, the response rate was unknown in this study, and it is likely to be lower than in traditional mail surveys (Simsek and Veiga 2001; Van Selm and Jankowski 2006). These limitations make it

difficult to derive definite conclusions regarding the generalisability of the current findings to the population of older job seekers. Future research needs to ensure that the sample is representative of the population.

A final issue that deserves consideration is the relatively small effect sizes found in this study. Together, the control, main and interactive effects of the variables included in this study explained only 17 or 18 per cent of the variance (total R^2) in job search intensity. It is important to note that the small effect sizes of the interaction effects found in this study (*i.e.* f^2 values of 0.02 or 0.03, and ΔR^2 values of 2 or 3%) are quite typical for moderation effects in published field studies (Aguinis *et al.* 2005). However, the relatively small amount of overall variance explained suggests that there are likely to be several additional, potentially more important factors that influence older job seekers' behaviours. For example, the degree of economic need to find a job should receive more attention in future studies, as many older job seekers were forced out of their jobs and did not have the chance to accumulate enough financial resources to retire properly.

While basic demographic characteristics were controlled for (sex and education) as well as the current financial situation and the duration of job search in this study, future studies need to consider additional potentially confounding variables. For example, contextual factors that could be considered alongside individual differences in future research are broader economic factors such as regional unemployment rates and labour demand, attitudes and stereotypes toward older employees (Posthuma and Campion 2009), the occupation, industry and type of work considered by older job seekers (*e.g.* does a job involve new technology or more experience- or knowledge-intensive tasks), and organisational employment policies regarding older employees (*e.g.* part-time, flexible or casual work). Furthermore, more proximal factors that could be included in future studies are the job seekers' family situation (*e.g.* care-giving for young children or elderly parents; Zacher, Jimmieson and Winter 2012) and the employment status and financial situation of a partner. Thus, while the focus of this study was on the interplay of individual difference characteristics related to older job seekers' age, future research needs to examine more comprehensive models of job search behaviour that include factors of the family system as well as of the institutional and economic contexts.

In summary, the advantages and disadvantages of alternative research designs to investigate the role of age and age-related constructs among older job seekers need to be better balanced in the future. I recommend that researchers intending to conduct follow-up studies design short-term longitudinal studies (*e.g.* across one or two years) to assess the underlying causal direction of relationships, review and include a broader range of relevant control variables, measure additional outcome variables including

behavioural and objective criteria, and aim for a high response rate in a representative sample of older job seekers.

A final idea for future research is to examine the differences, similarities and relations between proactive personality and FTP in more detail as both concepts involve seeing and acting upon opportunities and anticipating future outcomes. Research suggests that proactive personality is a rather stable personality trait that is unrelated to age (Thomas, Whitman and Viswesvaran 2010), whereas occupational FTP is related to age and environmental characteristics (*e.g.* job complexity) and thus represents a more malleable construct (Zacher and Frese 2009). Thus, it is expected that longitudinal studies find an effect of proactive personality (which is probably formed in the early stages of individuals' development and remains relatively stable across the lifespan) on FTP as well as occupational FTP.

Practical implications

The practical implications of this study are necessarily tentative due to the study's methodological limitations and the preliminary nature of its findings. Nonetheless, the findings suggest some interesting implications for older job seekers as well as practitioners and policy makers interested in improving the situation of older job seekers. First, the findings imply that the relatively older older job seekers may have more difficulties finding a new job if they have a less proactive personality. Practitioners might consider supporting these job seekers by offering programmes to increase job seekers' proactive job search behaviour (*cf.* Frese *et al.* 2002).

Another possibility may be to implement interventions or governmental policies to increase older job seekers' perceived remaining time in the occupational context, as this study showed that this specific dimension of occupational FTP explained the moderating effect of age on the relationship between proactive personality and job search intensity. For example, training could help older job seekers to explore their 'future work selves', that is, their aspirations and hoped-for identities in the occupational context (Strauss, Griffin and Parker, 2012). Strauss, Griffin and Parker (2012) showed that the clarity and accessibility of these representations of oneself in the future were positively related to individuals' proactive career behaviour. A final possibility may be that employers interested in hiring older adults for jobs that do not require high levels of proactive behaviour could more vigorously approach older job seekers low in proactive personality (*e.g.* through targeted recruitment or job fairs). However, it is important to note that this strategy should only be used if proactive personality does not represent an important prerequisite for the jobs in question. Training older job seekers in proactive behaviours appears to be the most promising

approach as many employers are still reluctant to hire older adults in the first place (Australian Human Rights Commission 2011).

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NOTES

- 1 Consistent with the United States of America's Age Discrimination in Employment Act of 1967, older adults and older job seekers are defined as persons 40 years of age or older in this study. For more information, see <http://www.eeoc.gov/laws/statutes/adea.cfm>.
- 2 These reforms typically entail that the qualifying age for receiving a pension will increase gradually over the next decades. For instance, in Australia, the qualifying age will increase from 65 to 65½ years starting 1 July 2017, and subsequently rise by six months every two years, reaching 67 by 1 July 2023.
- 3 In Australia, the percentage of 55–59-year-olds in paid employment increased from 79.3 per cent in November 2001 to 83.2 per cent in November 2011, and the percentage of 60–64-year-olds in employment increased from 61.1 to 72.8 per cent over the same time period (Australian Bureau of Statistics 2010).
- 4 I acknowledge that broader institutional and economic factors may also have important influences on job search behaviour and re-employment success of older people (Wilson 2002; Wuebbeke 2011). For example, older job seekers in some countries may be more affected by the Global Financial Crisis and the following recession than older job seekers in other countries. In this study, however, I take an individual difference perspective to explain variation in the job search intensity of older job seekers in one specific context: Australia. Australia has an ageing population and workforce (Commonwealth of Australia 2010; Productivity Commission 2005). Compared to most European countries and the United States of America, the unemployment rate in Australia is relatively low. According to a recent study conducted by the Australian Bureau of Statistics (2010), there were 578,700 unemployed people in July 2010 in Australia (4.89% of the labour force). Most of the unemployed people were unemployed for less than one year (472,000; 81.6%), with a mean duration of 34.7 weeks (median = 14 weeks). Approximately 23 per cent of all job seekers were aged 45 years and older.
- 5 Research by Crant (1995) indicated that proactive personality is a unique individual difference construct that is distinct from other psychological constructs such as general mental ability (*i.e.* the ability to learn and reason) and established personality traits such as conscientiousness (which involves achievement orientation and dependability) and extraversion (which involves being talkative and sociable).
- 6 Importantly, focus on opportunities and focus on limitations are not two end points of the same continuum; they constitute separate dimensions of occupational FTP (Cate and John 2007). In other words, a low focus on opportunities is not equivalent to a high focus on limitations and vice versa.

- 7 Due to the anonymous recruitment method the response rate is unknown, but it is likely to be lower than in traditional mail surveys (Baruch and Holtom 2008; Simsek and Veiga 2001; Van Selm and Jankowski 2006). Unfortunately, I was not able to identify how many people visited the web pages in the study period (for further discussion of this issue, see the limitations in the discussion section). Van Selm and Jankowski (2006) suggested estimating the response rate by dividing the number of completed surveys by the number of times that a survey was accessed. However, this estimate is problematic, as the same people could have clicked on the link multiple times before completing or not completing the survey (Kay and Johnson 1999).
- 8 These items are consistent with a recent survey conducted by the Australian Bureau of Statistics (2010), which found that the most common steps taken by unemployed people in Australia to find work are 'writing, phoning or applying in person to an employer for work' (85%), 'looking at advertisements for jobs in a newspaper' (80%) and 'looking at advertisements on the Internet' (78%).
- 9 Note that including items 4 and 5 into the focus on opportunities scale led to equivalent results in subsequent analyses.
- 10 Bootstrapping is a statistical technique that conceptualises the sample as a pseudo-population and estimates the sampling distribution of a statistic (e.g. the indirect effect) through random re-sampling with replacement from the originally observed data (Efron and Tibshirani 1993). The bias-corrected and accelerated bootstrap by Efron (1987) adjusts for both bias and skewness in the bootstrap distribution, and is accurate in a wide variety of settings including tests for mediated moderation (MacKinnon, Lockwood and Williams 2004; Preacher and Hayes 2004).

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