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What is This?

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Patrick Raymund James M. Garcia¹, Michael Milkovits¹, and Prashant Bordia¹

Abstract

Drawing from the social cognitive career theory, we examined the relationship between workfamily conflict (WFC) and late-career workers' intentions to continue paid employment. We test the mediating roles of self-efficacy, outcome expectations, and preferences to continue paid employment as well as the moderating role of financial satisfaction at the age of 60. Data were collected from 373 working Australians aged 40–60. Results revealed that self-efficacy and outcome expectations partially mediated the negative relationship between WFC and preferences. Family–work conflict (FWC) had a negative indirect effect on preferences via self-efficacy, while outcome expectations did not mediate this relationship. Preferences also partially mediated the positive relationship between self-efficacy, outcome expectations, and intentions. Moreover, financial satisfaction moderated the positive relationship between preferences and intentions. Theoretical and practical implications are discussed.

Keywords

late-career workers, social cognitive career theory, self-efficacy, intentions to continue paid employment

There is a growing recognition of the importance of studying factors influencing individuals' intentions to continue working beyond retirement (Feldman & Kim, 2000). This attention is not surprising, given the practical and economic advantages of retaining older workers in the workforce.

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First, continued work past retirement age may help address labor shortages brought about by an aging population (Jackson, Walter, Felmingham, & Spinaze, 2006). Indeed, most developed countries such as Australia and the United States experience high early retirement rates but do not have sufficient supply of younger workers to replace vacated positions (Bloom, Börsch-Supan, McGee, & Seike, 2011). Second, engaging in continued employment might help older workers transition into retirement smoothly, without feeling a sudden loss of structure from a labor-intensive career (Adams & Beehr, 1998; Atchley, 1989). Finally, continued paid employment may also provide an additional source of income for older workers to counteract lower wages or supplement aged pensions (Herz, 1995).

Despite the benefits mentioned previously, there are still several gaps in the postretirement work literature that need to be addressed. First, although previous research has implicated the role of family-related variables, it mostly examined objective family status (e.g., marital or dependent status; Kim & Feldman, 2000; Wang, Zhan, Liu, & Schultz, 2008). Research is still lacking with regard to how expectations of future family and work life promote or interfere with intentions to continue working. This oversight is relevant, given late-career workers' caregiving responsibilities (e.g., caring for their aged parents or relatives) that may interfere with work and vice versa (Grundy & Henretta, 2006). Second, the existing literature heavily focused on main effect relationships between personal and contextual factors and intentions to engage in postretirement work (Kim & Feldman, 2000; Wang et al., 2008). Thus, little is known about the cognitive mechanisms that influence the decision to continue working. This is the case despite theoretical work favoring a decision-making approach toward retirement or continued participation in the workforce (Feldman & Beehr, 2011). Finally, little is known about the conditions that facilitate or hinder the translation of preferences to actual intentions to engage in continued paid employment. Indeed, certain contextual factors may become more salient depending on the specific phase of career decision making (i.e., late-career phase; Lent, Brown, & Hackett, 1994).

The present research aims to address the gaps mentioned by examining antecedent factors that influence late-career workers' intentions to continue paid employment beyond retirement age. The age of 60 was chosen as the retirement reference point since the average retirement age in Australia was found to be 59 years (Australian Bureau of Statistics, 2009). Indeed, this operationalization is consistent with previous research on retirement (Farley & Kramer, 2008; Mein, Martikainen, Hemingway, Stansfeld, & Marmot, 2003).

Drawing upon the social cognitive career theory (SCCT; Lent et al., 1994) choice model, we argue that work–family conflict (WFC) and family–work conflict (FWC; i.e., work and family demands interfere with each other) will act as a contextual barrier that decreases the likelihood of intentions to continue paid employment. We further posit that the negative influence of WFC and FWC on intentions to continue paid employment is mediated by self-efficacy, outcome expectations, and preferences to continue paid employment beyond the age of 60. That is, older workers evaluate the future impact of WFC and FWC through sociocognitive mechanisms that influence their preference toward continued employment. Furthermore, we argue that financial satisfaction at the age of 60 will act as a proximal contextual barrier hindering the translation of preferences to intentions to continue barrier hindering the translation of preferences to intentions to continue barrier hindering the translation of preferences to intentions to continue barrier hindering the translation of preferences to intentions to continue barrier hindering the translation of preferences to intentions to continue paid employment. Our proposed model is summarized in Figure 1.

This article makes several contributions to the postretirement work literature. First, it addresses calls to consider how the interaction between work and family domains influences late-career decision making (Gobeski & Beehr, 2009; Raymo & Sweeney, 2006). We propose that an enhanced understanding of retirement decision making can be achieved by accounting for late-career workers' future perceptions of work and family life. Second, this study examines the sociocognitive mechanisms (i.e., self-efficacy and outcome expectations) that underlie the relationship between WFC and intentions to continue paid employment. Knowledge about these mediating mechanisms is important, as it can potentially inform the development of policies and interventions that would increase

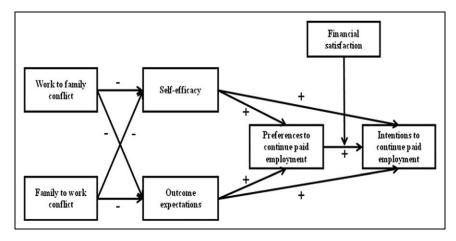


Figure 1. Proposed theoretical model of the influence of work-family conflict on late-career workers' intentions to continue paid employment.

late-career workers' continued workforce participation. Finally, we provide a test of the applicability of the SCCT's choice model in the context of late-career decision making. Indeed, evidence suggests that the SCCT is a suitable theoretical framework for understanding postretirement career planning (Wöhrmann, Deller, & Wang, 2013). We extend this research by testing a more complete model, which includes predictors of self-efficacy and outcome expectations as well as the inclusion of a nonwork-related contextual factor (i.e., financial satisfaction). The following sections elaborate on the theoretical linkages between the study variables and conclude with specific hypotheses.

WFC and Continued Paid Employment

WFC is defined as "a form of inter-role conflict in which the role pressures from the work and family domain are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). WFC comprises two separate forms of conflict-WFC, where work demands interfere with one's family life and FWC, where family demands interfere with one's work life (Carlson, Kacmar, & Williams, 2000). WFC and FWC are particularly relevant family-related variables for late-career workers since most of them are members of the sandwiched generation (Beutell & Wittig-Berman, 2008). Members of this cohort are defined as midlife adults that simultaneously raise dependent children and care for frail, elderly family members (Grundy & Henretta, 2006). This makes late-career workers' especially vulnerable to role strain due to simultaneous work demands and caregiving demands from their children and aging parents (Dilworth & Kingsbury, 2005). While two studies (Kubicek, Korunka, Hoonakker, & Raymo, 2010; Raymo & Sweeney, 2006) have demonstrated a link between WFC and retirement decision making, research is yet to examine the impact of WFC on the intention to continue paid employment. Additionally, Raymo and Sweeney (2006) note that the processes by which these background contextual variables exert their influence on late-career employment decisions remains unknown. To address this gap, we draw from the SCCT (Lent et al., 1994), which we elaborate in the next section.

The SCCT Choice Model

The SCCT's model of career choice (Lent et al., 1994) postulates that distal and proximal contextual variables may either act as supports or barriers to career decisions. That is, environmental conditions

may facilitate or hinder exposure to relevant and important learning experiences needed for career decision making (Lent, Brown, & Hackett, 2000). However, the SCCT recognizes that individuals are not mere conduits of environmental influences. Instead, the theory highlights the role of sociocognitive factors such as self-efficacy and outcome expectations, which allow individuals to exercise personal control over career outcomes. Contextual factors help shape self-efficacy and outcome expectations, which in turn influences the type of activities individuals will pursue manifested in the formation of interests for certain careers. The SCCT further proposes that the translation of interests into career goals (i.e., intentions to engage or pursue career-related actions) will depend on the presence or absence of contextual barriers active during actual decision making.

The SCCT choice model has generally received empirical support mainly in relation to students' career goals and choices in science, technology, engineering, and mathematics professions (Byars-Winston & Fouad, 2008; Lent et al., 2005; Patrick, Care, & Ainley, 2011). These results were also replicated in non-Western samples providing evidence of the SCCT's generalizability (Huang & Hsieh, 2011; Restubog, Florentino, & Garcia, 2010). Furthermore, recent evidence suggests that the SCCT is also applicable in explaining late-career workers' postretirement work intentions and career planning (Wöhrmann et al., 2013). Thus, the SCCT is a useful framework that has proven to be generalizable across contexts and career stages.

The Mediating Role of Self-efficacy

Bandura (1977, p. 3) described self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments." That is, self-efficacy concerns individuals' thoughts about the degree to which they are capable of succeeding in a particular endeavor. In this study, we focus on late-career workers' self-efficacy with respect to continuing to work beyond the age of 60. According to the SCCT, contextual factors influence the formation of selfefficacy. Cognitive appraisals of self-efficacy involve the consideration of whether the environment is able to provide or constrain access to needed resources resulting in successful completion of tasks (Gist & Mitchell, 1992). For instance, Lent et al. (2003) found that barriers such as lack of social support to pursue engineering as a major were negatively correlated with engineering selfefficacy. In the context of the current study, we argue that expected WFC and FWC act as barriers toward the development of self-efficacy to engage in continued employment past retirement. Specifically, WFC and FWC will negatively influence self-efficacy due to future considerations of conflicting demands between work and family resulting in work (family) strain. WFC and FWC may also reduce late-career workers' access to time sufficient for successful performance of work and family commitments (Erdwins, Buffardi, Caspter, & O'Brien, 2001; Netemeyer, Boles, & McMurrian, 1996). For instance, Erdwins et al. (2001) found significant, negative associations between WFC and both parental and job self-efficacy.

The SCCT also posits that self-efficacy influences an individual's intention or goal to engage in particular activities. That is, people will generally choose tasks or goals congruent with their self-efficacy beliefs. For example, Lent, Brown, and Larkin (1986) found that self-efficacy for technical/scientific fields is positively related to perceived career options in technical/scientific fields and this relationship remained significant after controlling for interest. Thus, self-efficacy beliefs tend to orient individuals toward vocational choices that will let them express their preferences over particular tasks. Furthermore, the preference to engage in continued paid employment also depends in part on environmental influences such as perceived supports and barriers (Lent, 2005). Given this, we argue that the negative relationship between work and family conflict and preferences to continue paid employment is mediated by self-efficacy. That is, WFC and FWC exert their influence on preferences through their negative relationship with self-efficacy. Thus, we propose the following hypotheses:

Hypothesis 1a: Self-efficacy will mediate the relationship between WFC and preference to continue paid employment.

Hypothesis 1b: Self-efficacy will mediate the relationship between FWC and preference to continue paid employment.

The Mediating Role of Outcome Expectations

Background contextual factors such as WFC and FWC may also impact preferences to continue paid employment through their effect on outcome expectations. Outcome expectations refer to beliefs about the consequences or outcomes of performing particular behaviors (Lent, 2005). The impact of WFC and FWC on outcome expectations has not been established. However, the expected negative relationship can be inferred from known consequences of experiencing WFC or FWC. Several studies have shown that WFC relates negatively to health and well-being outcomes (Frone, 2000; Frone, Russell, & Cooper, 1997). For example, WFC was found to be positively related to high levels of depression and physical health complaints while FWC was positively related to substance abuse (Frone, Russell, & Cooper, 1997). WFC and FWC have also been associated with negative self-evaluative outcomes such as work distress (Frone, Yardley, & Markel, 1997) and lower perceived career success (Peluchette, 1993). Finally, WFC also negatively impacts on social outcomes such as family satisfaction, organizational commitment, and marital functioning (Bedeian, Burke, & Moffett, 1988; Carlson et al., 2000). Given these, we expect WFC and FWC to negatively influence outcome expectations given that assessments of outcome expectancies typically involve consideration of physical, self-evaluative, and social consequences.

As with self-efficacy, we also expect outcome expectations to influence the formation of preferences to continue paid employment. According to the SCCT, outcome expectations may act as a mediator between contextual barriers and career interests and choices. That is, people will more generally prefer to engage in activities if they expect them to result in positive consequences. In the context of the present study, we expect that the negative influence of WFC and FWC on preferences to continue paid employment is mediated by late-career workers' outcome expectations. Expectations of WFC and FWC would lower preferences to continue paid employment due to the expected negative outcomes brought by conflicting work and family demands. Given these, we hypothesize that:

Hypothesis 2a: Outcome expectations will mediate the relationship between WFC and preferences to continue paid employment.

Hypothesis 2b: Outcome expectations will mediate the relationship between FWC and preferences to continue paid employment.

Linking Self-Efficacy and Outcome Expectations to Preferences and Intentions

Preferences are generally accepted to be a direct antecedent of intentions (Ajzen, 1991; Beehr, 1986; Lent et al., 1994). Lent et al. (1994) distinguish between preferences and intentions noting that the decision-making process often involves a compromise between one's primary choice (preferences) and what one actually chooses to do (intentions). Thus, we expect a positive relationship between preferences and intentions to continue paid employment. In addition, the SCCT posits that self-efficacy and outcome expectations may influence intentions both directly and indirectly through their relationship with preferences. This partially mediated model explains circumstances in which people feel that they are largely able to freely pursue their career preferences (i.e., what they would like to do; Lent, 2005). By contrast, the direct relationship between self-efficacy/outcome

expectations and intentions could explain career decision making that involves a compromise between what people would like to do and what they intend to do (Lent, 2005). That is, when people perceive the need to make occupational choices that compromise their preferences or for reasons other than their preferences, they rely on their self-efficacy and outcome expectations assessments. Indeed, several studies support both the direct and indirect (via preferences) influence of self-efficacy and outcome expectations on career intentions (Flores & O'Brien, 2002; Fouad & Smith, 1996; Lent et al., 2005). Based on these, we propose that:

Hypothesis 3a: Preference to continue paid employment will partially mediate the relationship between self-efficacy and intention to continue paid employment.

Hypothesis 3b: Preference to continue paid employment will partially mediate the relationship between outcome expectations and intention to continue paid employment.

The Moderating Role of Financial Satisfaction at the Age of 60

The SCCT posits that contextual barriers influence the career choice process not only distally through their impact on self-efficacy and outcome expectations but also proximally during the more active phase of career decision making (Lent et al., 2000). Specifically, contextual barriers may moderate the preferences to intentions link. That is, people are less likely to translate their preferences to intentions when they perceive that their efforts will be impeded by unfavorable circumstances (Lent et al., 2000). In this study, we expect financial satisfaction to act as a proximal contextual factor that will moderate the preferences to intentions relationship. Low financial satisfaction will act as a proximal barrier, weakening the positive relationship between preferences and intentions. That is, when preferences are low, intentions to work may remain high due to financial necessity. Conversely, high financial satisfaction may act as a proximal affordance to late-career employees, strengthening the positive relationship between preferences and intentions. Indeed, studies have shown that late-career employees will continue to work until they have accumulated financial resources that will allow them to satisfactorily support their consumption needs (Kim & Feldman, 2000; Wang & Shultz, 2010). Furthermore, financial comfort has been found to be negatively related with preferences to continue working (Davies & Cartwright, 2011). In line with these studies, we predict that:

Hypothesis 4: Financial satisfaction at the age of 60 will moderate the relationship between preferences to continue paid employment and intention to continue paid employment such that there will be a stronger positive relationship between preferences and intentions when financial satisfaction is high as opposed to when it is low.

Method

Participants and Procedure

Data were collected from 373 late-career employees from various business sectors in Australia via an online survey. In line with prior work, we operationalized late-career employees as those engaged in full-time or part-time work at the age of 40 and above (Cohen, 1991; Geller & Simpson, 1999). The 373 participants that formed the final sample were a combination of 80 participants from the authors' personal contacts and 293 participants from a commissioned sample. A snowball sampling technique was used to acquire participants from the authors' informal contacts. For the commissioned sample, a total of 2,400 online survey forms were sent out via e-mail, which yielded a total

of 442 responses. Of these responses, 149 were excluded due to (a) a large number of missing responses (n = 142) and (b) the employee not meeting the age criterion (i.e., 40 years old and above; n = 7). This resulted in a final sample of 293 usable responses, yielding a response rate of 12.21%.

The participants had an average age of 51.72 with an even distribution of gender (50.93% were females). The majority of the participants worked full time (38 hr of work a week or more; 65.95%) and were predominantly employed in the private sector (61.39%). The participants also came from a variety of occupational backgrounds namely clerical or administrative (23.06%), professionals (19.30%), managers (17.96%), technicians or trade workers (10.72%), community or personal services workers (9.12%), laborers (8.58%), sales workers (6.70%), and machinery operators or drivers (4.56%).

Measures

Established scales were used to measure the study variables. Unless otherwise specified, a 7-point Likert-type scale was used to assess the substantive variables (1 = strongly disagree; 7 = strongly agree). WFC and FWC items were prefaced by the phrase "If I continue work beyond the age of 60 ..." to reflect future perceptions of conflict. Items were coded such that a higher score represented a greater amount of the focal construct, with the exception of reverse coded items.

Work to Family Conflict. WFC at age 60 and beyond (WFC) was measured using an adapted version of Netemeyer et al.'s (1996) 5-item measure of WFC. Sample items from the scale are "I anticipate that the demands of my work will interfere with my home and family life" and "I anticipate that the amount of time my job will take up will make it difficult to fulfill family responsibilities." In this study, Cronbach's α was .96.

Family to Work Conflict. Similar to WFC, we used a modified version of the Netemeyer et al.'s (1996) 5-item measure to assess FWC. Items 1 and 3 of the scale originally asked about "family or spouse/partner." However, since family is an encompassing term that includes one's spousal relationships the terms "or spouse/partner" were removed from Items 1 and 3. Sample items from the scale are "I anticipate that the demands of my family will interfere with work related activities" and "I anticipate that family-related strain will interfere with my ability to perform job-related duties." In this study, the Cronbach's α for this scale was .97.

Self-Efficacy. Self-efficacy to continue work at the age of 60 and beyond was assessed using Chen, Gully, and Eden's (2001) 8-item new general self-efficacy scale. The scales were modified to reflect the specific task of continuing to work in paid employment past the age of 60. In the process of modification, all items were worded in accordance with Bandura's (2006) "can do" rather than "will do" phrasing, leading Item 1, "I can continue to work past the age of 60." Sample items are "Even if working beyond the age of 60 is difficult, I am certain that I can accomplish it" and "I can successfully overcome many challenges to working past the age of 60." The Cronbach's α for this scale in this study was .97.

Outcome Expectations. Outcome expectations of continuing work at the age of 60 and beyond was measured using 8 items from the research outcome expectations scale (Bieschke, 2000). Only those items deemed most fitting within the context of the present research were included out of the original 15-item scale. Item selection was based on Bandura's (1986) suggestion that measures of outcome expectations should capture positive and negative physical, social, and self-evaluative outcomes. However, since no physical outcome expectation items were included in the original measure, the

authors created and added 2 items (i.e., "working beyond the age of 60 will provide me with the opportunity to improve my standard of living" and "working beyond the age of 60 will not adversely affect my health") to the original scale to capture this dimension of the construct. This resulted in a total of 10 items. Other sample items are "Continuing to work beyond the age of 60 will be valued by significant people in my life" and "Continuing to work beyond the age of 60 will allow me to develop my skills." Cronbach's α for this scale in this study was .94.

Financial Satisfaction at Age 60. Financial satisfaction was measured using a modified version of Adams and Beehr's (1998) 5-item scale. The scale was modified to refer to perceptions of financial satisfaction at the age of 60. Sample items are "If I fully retire by the age of 60, I feel satisfied about the standard of living I will have" and "I can stop working by the age of 60 because I can afford to fully retire." Cronbach's α for this scale in this study was .97.

Preferences to Continue Paid Employment. We used the scale developed by Davies and Cartwright (2011) to assess preferences to continue paid employment beyond the age of 60. The original scale was modified to emphasize the concept of "preferences." Items were prefaced with "If I were to choose, my preference would be to ... " and followed by such items as "Continue to work beyond the age of 60" and "Work past the age of 60 in my present role." Cronbach's α for this scale in this study was .84.

Intentions to Continue Paid Employment. As with the scale we used for preference to continue to paid employment, we also assessed intentions to continue paid employment beyond the age of 60 using the 4-item scale developed by Davies and Cartwright (2011). The scale was modified to emphasis the concept of "intentions." Items were prefaced with "In reality, I intend to ... " followed by such items as "Continue to work beyond the age of 60" and "Work past the age of 60 in my present role." In the current study, the Cronbach's α was .86.

Control Variables. Consistent with previous research (Davis, 2003; Kim & Feldman, 2000), we included several control variables in order to rule out alternative explanations to our findings. First, we controlled for *employment sector* (0 = public sector and 1 = private sector) since research suggests that private sector employees may experience less job security (i.e., more prone to downsizing) than public sector employees (Davis, 2003). Because of this, private sector employees may consider working after the age of 60 as a more viable option as opposed to full retirement. Second, we controlled for employees' marital status ($0 = married \ or \ in \ a \ relationship$) as married couples tend to make conjoint retirement-related decisions (Davis, 2003). Finally, we controlled for employees' perceived health at the age of 60 as physical and mental decline may prevent employees to continue to engage in paid employment (Kim & Feldman, 2000). *Health status at the age of 60 and beyond* was measured using a modified version of Adams and Beehr's (1998) 4-item scale with a Cronbach's α for this study of .93.

Results

Descriptive statistics and zero-order correlations for the study's variables are depicted in Table 1. All correlations were in the expected direction. Employment sector (r = .16, p < .01), marital status (r = .12, p < .05), and health status at the age of 60 and beyond (r = .10, p < .05) were significantly correlated with intentions to work. Thus, these variables were controlled for in subsequent analyses. Although it would have been ideal to use structural equation modeling (SEM), the sample size for this study was smaller than the number of parameters to be estimated, resulting in inadequate power required for SEM analysis (Westland, 2010). Thus, we chose to test the proposed relationships using the Preacher and Hayes (2008) approach. This approach was chosen because it allows for the

Table 1. Descriptive Statistics, Zero-Order Correlations, and Reliability Coefficients of the Study Variables.	Correlati	ions, aı	id Reliabi	lity Coeffic	ients of th	e Study Va	ıriables.					
Variables	£	SD	_	2	ĸ	4	ß	6	7	œ	6	0
I. Employment sector	19.1	.49										
2. Marital status	I.28	.45	04									
3. Health at 60	4.98	1.26	.03	– .18 **	(.93)							
4. Work–family conflict	3.38	I.49	* - -	01	25***	(96)						
5. Family–work conflict	2.76	I.32	12*	0 <u>.</u>	26***	.73***	(76.)					
6. Self-efficacy	5.39	2.26	60 [.]	22***	.57***	29***	30***	(.97)				
7. Outcome expectations	4.63	I.08	90.	04	.30***	21***	16**	.47***	(.94)			
8. Financial satisfaction	3.19	19.1	10	19***	.23***	.02	90.	03	07	(76.)		
9. Preferences to continue paid employment	4.06	I.58	Н3*	.07	60 [.]	24***	–. 3 *	.33***	.52***	– . I 6 **	(.84)	
10. Intentions to continue paid employment	4.60	I.53	.I6**	.12*	*0I.	23***	22***	.43**	.48***	.62***	–.51***	(98.)
Note. N = 373.												

udy Variabl
s of the Stuc
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d Reliability
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Zero-Order C
ve Statistics,
I. Descriptiv
Table

p < .05, p < .01, p < .01

simultaneous testing of multiple mediators in one regression model and makes no assumptions that the total indirect effects of the mediators are normally distributed. We then empirically tested the moderation hypothesis following the procedure outlined by Aiken and West (1991). We entered the control variables in the first block of the regression equation. In the second step, preferences to continue paid employment and financial satisfaction at the age of 60 were entered to test for main effects. The interaction term was then computed between the independent variable and the moderator (preferences to continue paid employment \times financial satisfaction at the age of 60) and entered into the regression model at the third step.

Tests of Mediation

Hypotheses 1a and 2a propose that self-efficacy and outcome expectations will mediate the relationship between WFC and preferences to continue paid employment. The total indirect effect of WFC via self-efficacy and outcome expectations was significant (*total indirect effect* = -.10; with 95% bootstrap 95% confidence interval [CI] [-.16, -.03]). Examination of the specific indirect effects revealed that self-efficacy (*specific indirect effect* = -.04; with 95% bootstrap CI [-.07, -.01] and outcome expectations (*specific indirect effect* = -.07; with 95% bootstrap CI [-.12, -.02] were significant mediators. The direct effect of WFC remained significant over and above the indirect effects indicating partial mediation (*direct effect* = -.12, p < .05). Given that the range of the CIs were positive and does not include 0, Hypotheses 1a and 1b were supported.

Similarly, Hypotheses 1b and 2b propose that self-efficacy and outcome expectations will mediate the relationship between FWC and preferences to continue paid employment. The total indirect effect of FWC via self-efficacy and outcome expectations was significant (*total indirect effect* = -.08; with 95% bootstrap CI [-.16, -.01]. Examination of the specific indirect effects revealed that self-efficacy was a significant mediator (*specific indirect effect* = -.04; with 95% bootstrap CI [-.09, -.01]. However, the specific indirect effect via outcome expectations was not significant (*specific indirect effect* = -.04; with 95% bootstrap CI [-.11, .03]. Furthermore, both the total effect (*total effect* = -.12, *ns*) and the direct effect (*direct effect* = -.03, *ns*) of FWC on preferences to continue paid employment were not significant. These results suggest that the FWC—selfefficacy—preferences to continue paid employment link is typical of an indirect effect from the *a* and *b* paths are significant while the relationship between the main independent variable and the dependent variable are not significant (Mathieu & Taylor, 2006). Given these, Hypothesis 1b was partially supported, while Hypothesis 2b was not supported.

We also hypothesized that the relationship between self-efficacy and intentions to continue paid employment (Hypothesis 3a) and outcome expectations and intentions to continue paid employment (Hypothesis 3b) are partially mediated by preferences to continue paid employment. The analyses revealed that the indirect effect from self-efficacy (*indirect effect* = .28; with 95% bootstrap CI [.19, .34] and from outcome expectations (*indirect effect* = .37; with 95% bootstrap CI [.27, .47] to intentions to continue paid employment via preferences to continue paid employment were significant. Furthermore, the direct effect of self-efficacy (*direct effect* = .50, p < .001) and outcome expectations (*direct effect* = .31, p < .001) on intentions to continue paid employment remained significant indicating partial mediation. Overall, Hypotheses 3a and 3b were supported (see Table 2 for a summary of point estimates and CIs).

Test of Moderation

Hypothesis 4 states that the positive relationship between preferences and intentions will be moderated by financial satisfaction, such that the higher one's financial satisfaction the stronger the

	PE	CI	PE	CI	PE	CI
Path	WFC	C→SE→Pref	FWG	C→SE→Pref	SE➔I	Pref→Intent
a Path b Path Indirect effect	11 .27 03	[17,05] [.11, .43] [07,01]	13 .29 04	[20,06] [.12, .45] [09,01]	.60 .48 .29	[.43, .77] [.40, .56] [.19, .39]
Path	WFC	C→OE→Pref	FWC	C→OE→Pref	OE➔	Pref→Intent
a Path b Path Indirect effect	10 .67 07	[17,03] [.53, .81] [12,01]	07 .68 04	[15, .01] [.54, .82] [11, .03]	.78 .47 .37	[.65, .91] [.38, .56] [.27, .47]

Table 2. Point Estimates and Associated Confidence Intervals for Each Path in the Proposed Mod	Table 2. Point Estimates and	Associated Confidence	e Intervals for Each	Path in the Proposed Mode
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Note. SE = self-efficacy; OE = outcome expectations; Pref = preferences to continue paid employment; Intent = intentions to continue paid employment; PE = point estimate; CI = 95% confidence interval; a path = path from independent variable to mediator; b path = path from mediator to dependent variable; Indirect effect = effect of independent variable on dependent variable via the mediator. Bootstrapped estimates are based on 5,000 resamples.

relationship between preferences and intentions. Both preferences ($\beta = .52$, p < .001) and financial satisfaction ($\beta = -.46$, p < .001) were significantly related to intentions. Entry of the multiplicative term explained incremental variance over and above the effects of the control variables and main effects, $R^2\Delta = .06$, F(1, 366) = 63.85, p < .001.

We further examined the nature of the significant interaction term between preferences to continue paid employment and financial satisfaction at the age of 60 (see Figure 2). Simple slope analyses revealed that at high levels of financial satisfaction at the age of 60, there was a stronger positive relationship between preferences to continue paid employment and intentions to continue paid employment, t(368) = 22.74, p < .001. In contrast, at low levels of financial satisfaction at the age of 60, there was a weaker positive relationship between preferences to continue paid employment and intentions to continue paid employment and intentions to continue paid employment and intentions to continue paid employment, t(368) = 9.41, p < .001. Overall, Hypothesis 4 was supported.

Discussion

Pattern of Results

The objective of this study was to investigate the role of WFC in influencing older workers' preferences and intentions to continue paid employment using the SCCT (Lent et al., 1994) as an explanatory framework. In line with SCCT propositions, WFC acted as a contextual barrier, negatively influencing the preference to continue paid employment via decreasing older workers' self-efficacy and outcome expectations. That is, WFC may result in older workers' lowered beliefs about continued successful performance in their jobs as well as to expect fewer positive outcomes from continued paid employment. These in turn lower older workers' preferences for continuing paid employment past the age of 60.

Interestingly, the results for FWC were not similar with that of WFC. Instead, we found support for an indirect effects model (i.e., FWC was not significantly related to preference to continue paid employment but is significantly related indirectly via self-efficacy). Furthermore, we did not find support for the mediating role of outcome expectations in the FWC–preference relationship. One possible explanation for this difference comes from the changing social priorities of older workers as they approach retirement age (Carstensen, 1992). According to socioemotional selectivity theory (Carstensen, 1991), people's perception of the salience and benefits gained from social interaction

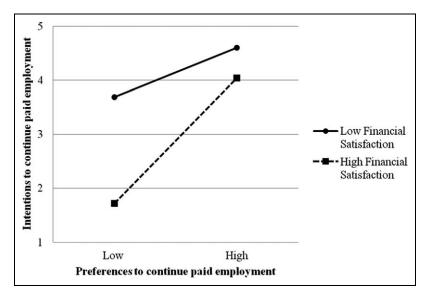


Figure 2. The interactive effects between preferences to continue paid employment and financial satisfaction at the age of 60 in predicting intentions to continue paid employment.

change depending on where they are in the life cycle. From early to late adulthood, interactions with acquaintances decline while those of significant others (e.g., parents, children, and spouses) increase (Carstensen, 1992). This change can be attributed to perceived limitations on time (i.e., mortality), which prompts older adults to invest their efforts in maintaining and deepening emotionally meaningful relationships (e.g., family relationships; Carstensen, Fung, & Charles, 2003). In the context of the present study, older workers may want to invest more time and effort in cultivating their family relationships more than that of work. Thus, expectations of WFC as opposed to FWC has more impact on preferences to continue paid employment because WFC leads to possible family distress which late-career workers' are more motivated to avoid since family relationships become more important in old age. Indeed, evidence suggests that the negative relationship between WFC and career satisfaction becomes stronger as age increases (Martins, Eddleston, & Veiga, 2002). Furthermore, older workers would inevitably have to retire at some stage, which prompts them to focus and place importance on the family sphere. Nonwork spheres such as the family become salient to retirees because it provides them with alternative role identity and opportunities for postretirement engagement (Wang, 2007). Although regression analyses did not support the FWC-outcome expectations—preferences link, significant correlations between these variables were observed. It should be noted that outcome expectations involve physical, self-evaluative, and social components. Older workers may find certain outcome expectations as more important given their age. For example, Dendinger, Adams, and Jacobson (2005) found that social reasons for working positively influenced attitudes toward bridge employment, while financial (i.e., physical) and personal (i.e., self-evaluative) reasons did not. Thus, future research may benefit from examining the relative influence of these individual components of outcome expectations as it relates to the decision to work past retirement age.

Also consistent with the SCCT (Lent et al., 1994), preferences partially mediated the respective relationships between self-efficacy, outcome expectations, and intentions to continue paid employment. That is, older workers decision to continue paid employment not only depends on their preference but also on their developed sense of efficacy and expected positive outcomes. Indeed, extant research supports this finding as self-efficacy, and outcome expectations were found to exert

both indirect and direct effects on influencing career interests and choice goals (Lent, Lopez, Lopez, & Sheu, 2008; Sheu et al., 2010).

As hypothesized, financial satisfaction was found to moderate the relationship between preference and intention to continue paid employment past the age of 60. In line with the SCCT, financial satisfaction acted as a proximal contextual factor influencing the translation of preferences to intentions to continue paid employment. Specifically, under conditions of low financial satisfaction, individuals are more likely to continue to work past the age of 60 regardless of their preference. Thus, even those late-career workers who would prefer to retire would forego this option if they think they are not financially able to sustain their retirement. This finding supports the importance of considering proximal contextual influences in the more active phases of career decision making and points to the dynamic nature of career choice behavior (Lent et al., 1994).

Theoretical Implications

The present study makes several theoretical and empirical contributions to the literature. First, we provide evidence that both WFC and FWC influence the career decision-making process both directly and indirectly through self-efficacy and outcome expectations. This addresses the need to investigate antecedents of career choice behavior among older workers that capture the interrelated relationship between work and family life (Westring & Ryan, 2011). Furthermore, it highlights the importance of considering subjective aspects of future work and family environments (e.g., expected conflict because of future work and family demands) as opposed to focusing entirely on objective family status (e.g., marital status and number of dependents). Specifically, older workers may face unique and often conflicting work and family demands that should be considered in retirement decision making. For example, the need to maintain structure in their daily lives through continued employment may conflict with new family responsibilities (e.g., caring for elderly parents and dependent children; Atchley, 1989; Grundy & Henretta, 2006).

Second, using the SCCT choice model, we were able to account for sociocognitive mechanisms that influence late-career workers' decision to continue paid employment. Understanding these mechanisms is important since retirement planning and decision making have been conceptualized as a process (Beehr, 1986; Feldman & Beehr, 2011). In this article, we found support for the notion that the decision to continue on paid employment past the age of 60 partly depends on appraisals of self-efficacy and perceived outcome expectations. That is, individuals do not simply react to their environment. During career decision making, older workers also engage in an appraisal process that includes an assessment of their efficacy beliefs (i.e., can I successfully perform work and family demands at the age of 60?) and outcome expectancies (i.e., can I expect positive outcomes of engaging in continued paid employment?) relative to perceived contextual barriers. This may explain instances where, in spite of barriers to career choice, individuals still pursue their interests and become successful in their chosen careers (Lent et al., 2000).

Finally, this study points to the importance of considering proximal contextual factors that influence the translation of preferences to intentions. This supports the SCCT's view that career decision making is not a static activity (Lent et al., 1994). Rather decisions may be reviewed and reappraised depending on one's situation (e.g., high or low financial status), which may not necessarily be congruent with one's preference.

Limitations and Future Research Directions

Like most research our study has limitations, and results should be viewed with these in mind. First, the present study is cross-sectional in nature. As such, it did not account for the temporal ordering of the variables in the SCCT model, which means inferences regarding causality cannot be ascertained. Thus, it will be beneficial to collect longitudinal data to more accurately model the decision-making process involved in postretirement work. Second, this study examined only the intent to continue paid employment not the actual behavior. However, it should be noted that extant longitudinal and empirical evidence suggests that intentions are strongly related to actual career-related behavior (Bedeian, Kemery, & Pizzolatto, 1991; Carpenter & Fleishman, 1987; Millar & Shevlin, 2003). Finally, a potential limitation of this research involves the criterion of the intention to continue paid employment beyond the age of 60. That is, it did not differentiate from different types of continued employment such as continued work in the same or different organization (Wang et al., 2008). Future research should consider these distinctions and examine possible differential effects. For example, self-efficacy judgments and outcome expectations may be higher for continued employment in the same organization as previous performance attainments can be used as more accurate indicators of success and possible outcomes (Bandura, 1986).

Practical Implications

In this research, the experience of WFC and FWC was shown to reduce late-career workers' intentions to continue to work beyond age 60. A number of potential strategies have been advocated to promote balance and alleviate WFC. Frone, Yardley, and Markel (1997) for instance, highlighted that WFC, the dominant form of conflict experienced by participants in this study, was negatively related to supervisor support. Therefore, ensuring the presence of supportive supervisors may be an effective strategy to reduce WFC among late-career workers. In addition, the provision for flexible work schedules (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005) may be particularly helpful since late-career workers often mention the need for flexibility in their work arrangements if they are to continue paid employment (Shacklock & Brunetto, 2005).

Applying the SCCT perspective in the study of older workers' continued paid employment has implications for career counseling. Because sociocognitive mechanisms such as self-efficacy are relatively more malleable compared with individual differences (Bandura, 1986), counseling interventions that would target increasing older workers' self-efficacy regarding their continued paid employment might be beneficial. One way this can be accomplished is through actively disputing aging stereotypes (Levy, 2003). Research suggests that negative aging stereotypes decrease selfefficacy by preventing older adults from being exposed to learning opportunities (Welch & West, 1995). Furthermore, counselors may also start with acquiring information about older adults' sources of self-efficacy (e.g., performance accomplishments and modeling experiences). Once this is done, counseling efforts may also focus on improving these sources to increase self-efficacy beliefs.

Evidence that financial satisfaction is a proximal contextual influence in the translation of preferences to intentions has implications for policy development. Specifically, policy makers may consider implementing financial disincentive strategies to those who will opt for early retirement. This may also include legislation restricting and delaying the availability of superannuation, pension, and other nonemployment income support schemes (Jackson et al., 2006). This implication is especially relevant in the light of recent policy debates on the most appropriate kind of financially driven strategies to retain late-career workers (Jackson et al., 2006; Karvelas, 2010).

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References

- Adams, G. A., & Beehr, T. A. (1998). Turnover and retirement: A comparison of their similarities and differences. *Personnel Psychology*, 51, 643–665.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.
- Atchley, R. (1989). A continuity theory of aging. Gerontologist, 29, 183-190.
- Australian Bureau of Statistics. (2009). *Australian social trends-retirement and retirement intentions*. Catalog No. 4102.0. Canberra, Australia: Author.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), Self-efficacy beliefs of adolescents (pp. 307–337). Greenwich, CT: Information Age Publishing.
- Bedeian, A. G., Burke, B. G., & Moffett, R. (1988). Outcomes of work-family conflict among married male and female professionals. *Journal of Management*, 14, 475–491.
- Bedeian, A. G., Kemery, E. R., & Pizzolatto, A. B. (1991). Career commitment and expected utility of present job as predictors of turnover intentions and turnover behavior. *Journal of Vocational Behavior*, 39, 331–343.
- Beehr, T. A. (1986). The process of retirement: A review and recommendations for future investigation. *Personnel Psychology*, *39*, 31–56.
- Beutell, N. J., & Wittig-Berman, U. (2008). Work-family conflict and work-family synergy for generation X, baby boomers, and matures: Generational differences, predictors, and satisfaction outcomes. *Journal of Managerial Psychology*, 23, 507–523.
- Bieschke, K. J. (2000). Factor structure of the research outcome expectations scale. *Journal of Career* Assessment, 8, 303–313.
- Bloom, D. E., Börsch-Supan, A., McGee, P., & Seike, A. (2012). Population ageing: Macro challenges and policy response. In J. R. Beard, S. Biggs, D. E. Bloom, L. P. Fried, P. Hogan, A. Kalache, & S. Jay Olshansky (Eds.), *Global population ageing: Peril or promise* (pp. 35–38). Geneva, Switzerland: World Economic Forum.
- Byars-Winston, A. M., & Fouad, N. A. (2008). Math and science social cognitive variables in college students: Contributions of contextual factors in predicting goals. *Journal of Career Assessment*, *16*, 425–440.
- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, 56, 249–276.
- Carpenter, P. G., & Fleishman, J. A. (1987). Linking intentions and behavior: Australian students' college plans and college attendance. *American Educational Research Journal*, 24, 79–105.
- Carstensen, L. L. (1991). Socioemotional selectivity theory: Social activity in life-span context. Annual Review of Gerontology and Geriatrics, 11, 195–217.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging*, 7, 331–338.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, 27, 103–123.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. Organizational Research Methods, 4, 62–68.

- Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64, 253–268.
- Davies, E., & Cartwright, S. (2011). Psychological and psychosocial predictors of attitudes to working past normal retirement age. *Employee Relations*, 33, 249–268.
- Davis, M. A. (2003). Factors related to bridge employment participation among private sector early retirees. Journal of Vocational Behavior, 63, 55–71.
- Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2005). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *The International Journal of Aging and Human Development*, 61, 21–35.
- Dilworth, J. E. L., & Kingsbury, N. (2005). Home-to-job spillover for generation X, boomers, and matures: A comparison. *Journal of Family and Economic Issues*, 26, 267–281.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior*, *66*, 124–197.
- Erdwins, C. J., Buffardi, L. C., Casper, W. J., & O'Brien, A. S. (2001). The relationship of woman's role strain to social support, role satisfaction, and self-efficacy. *Family Relations*, 50, 230–238.
- Farley, F. A., & Kramer, J. (2008). Work satisfaction and retirement plans of orthopedic surgeons 50 years of age and older. *Clinical Orthopedics and Related Research*, 466, 231–238.
- Feldman, D. C., & Beehr, T. A. (2011). A three-phase model of retirement decision making. American Psychologist, 66, 193–203.
- Feldman, D. C., & Kim, S. (2000). Bridge employment during retirement: A field study of individual and organizational experiences with post-retirement employment. *Human Resource Planning*, 23, 14–25.
- Flores, L. Y., & O'Brien, K. M. (2002). The career development of Mexican American adolescent women: A test of social cognitive career theory. *Journal of Counseling Psychology*, 49, 14–27.
- Fouad, N. A., & Smith, P. L. (1996). A test of a social cognitive model for middle school students: Math and science *Journal of Counseling Psychology*, 43, 338–346.
- Frone, M. R. (2000). Work-family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied Psychology*, 85, 888–895.
- Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational & Organizational Psychology*, 70, 325–335.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145–167.
- Geller, M. M., & Simpson, P. (1999). In search of late career: A review of contemporary social science research applicable to understanding late career. *Human Resource Management Review*, 9, 309–347.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *The Academy of Management Review*, *17*, 183–211.
- Gobeski, K. T., & Beehr, T. A. (2009). How retirees work: Predictors of different types of bridge employment. Journal of Organizational Behavior, 37, 401–425.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10, 76–88.
- Grundy, E., & Henretta, J. C. (2006). Between elderly parents and adult children: A new look at intergenerational care provided by the 'sandwich generation'. *Ageing & Society*, *26*, 707–722.
- Herz, D. E. (1995). Work after early retirement: An increasing trend among men. *Monthly Labor Review*, 115, 13–20.
- Huang, J. T., & Hsieh, H. H. (2011). Linking socioeconomic status to social cognitive career theory factors: A partial least squares path modeling analysis. *Journal of Career Assessment*, *19*, 452–461.
- Jackson, N. O., Walter, M., Felmingham, B., & Spinaze, A. (2006). Will older workers change their retirement plans in line with government thinking? A review of recent literature on retirement intentions. *Australian Bulletin of Labour*, 32, 315–344.

- Karvelas, P. (2010, May 22). Super incentive for elderly to keep working. *The Australian*. Retrieved from October 31, 2011, http://www.theaustralian.com.au/politics/super-incentive-for-elderly-to-keep-working/ story
- Kim, S., & Feldman, D. C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. Academy of Management Journal, 43, 1195–1210.
- Kubicek, B., Korunka, C., Hoonakker, P., & Raymo, J. M. (2010). Work and family characteristics as predictors of early retirement in married men and women. *Research on Aging*, 32, 467–498.
- Lent, R. W. (2005). A social cognitive view of career development and counseling. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 101–127). Hoboken, NJ: John Wiley.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior*, 45, 79–122.
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 47, 36–49.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of Counseling Psychology*, 33, 265–269.
- Lent, R. W., Brown, S. D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003). Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models. *Journal of Counseling Psychology*, 50, 458–465.
- Lent, R. W., Brown, S. D., Sheu, H. B., Schmidt, J., Brenner, B. R., & Gloster, C. S., ... Treistman, D. (2005). Social cognitive predictors of academic interests and goals in engineering: Utility for women and students at historically Black universities. *Journal of Counseling Psychology*, 52, 84–92.
- Lent, R. W., Lopez, A. M., Jr, Lopez, F. G., & Sheu, H. B. (2008). Social cognitive career theory and the prediction of interests and choice goals in the computing disciplines. *Journal of Vocational Behavior*, 73, 52–62.
- Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. Journal of Gerontology, 58, 203–211.
- Martins, L. L., Eddleston, K. A., & Veiga, J. F. (2002). Moderators of the relationship between work-family conflict and career satisfaction. *The Academy of Management Journal*, 45, 399–409.
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, 27, 1031–1056.
- Mein, G., Martikainen, P., Hemingway, H., Stansfeld, S., & Marmot, M. (2003). Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology and Community Health*, 57, 46–49.
- Millar, R., & Shevlin, M. (2003). Predicting career information-seeking behavior of school pupils using the theory of planned behavior. *Journal of Vocational Behavior*, *62*, 26–42.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400–410.
- Patrick, L., Care, E., & Ainley, M. (2011). The relationship between vocational interests, self-efficacy, and achievement in the prediction of educational pathways. *Journal of Career Assessment*, 19, 61–74.
- Peluchette, J. (1993). Subjective career success: The influence of individual difference, family, and organizational variables. *Journal of Vocational Behavior*, 43, 198–208.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Raymo, J. M., & Sweeney, M. M. (2006). Work-family conflict and retirement preferences. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 38, 119–125.
- Restubog, S. L. D., Florentino, A. R., & Garcia, P. R. J. M. (2010). The mediating roles of career self-efficacy and career decidedness in the relationship between contextual support and persistence. *Journal of vocational behavior*, 77, 186–195.

- Shacklock, K., & Brunetto, Y. (2005). Employees' perceptions of the factors affecting their decisions to retire. International Journal of Organisational Behaviour, 10, 740–756.
- Sheu, H. B., Lent, R. W., Brown, S. D., Miller, M. J., Hennessy, K. D., & Duffy, R. D. (2010). Testing the choice model of social cognitive career theory across Holland themes: A meta-analytic path analysis. *Journal of Vocational Behavior*, 76, 252–264.
- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92, 455–474.
- Wang, M., & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. Journal of Management, 36, 172–206.
- Wang, M., Zhan, Y., Liu, S., & Shultz, K. S. (2008). Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, 93, 818–830.
- Welch, D. C., & West, R. L. (1995). Self-efficacy and mastery: Its application to issues of environmental control, cognition, and aging. *Developmental Review*, 15, 150–171.
- Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9, 476–487.
- Westring, A. F., & Ryan, A. M. (2011). Anticipated work-family conflict: A construct investigation. Journal of Vocational Behavior, 79, 596–610.
- Wöhrmann, A. M., Deller, J., & Wang, M. (2013). Outcome expectations and work design characteristics in post-retirement work planning. *Journal of Vocational Behavior*, 83, 219–228.