



Extending the integrated model of retirement adjustment: Incorporating mastery and retirement planning

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ABSTRACT

Extending earlier research, this study explores individual (e.g. demographic and health characteristics), psychosocial (e.g. mastery and planning) and organizational factors (e.g. conditions of workforce exit) influencing retirement adjustment. Survey data were collected from 570 semi-retired and retired men and women aged 45 years and older. Findings suggest that higher income, and having better psychological and physical health accounted for better retirement adjustment. After controlling for the effects of demographics and health, a higher personal sense of mastery and more favorable conditions of exit significantly predicted adjustment to retirement. Pre-retirement planning was not related to retirement adjustment. However, analyses revealed that the effect of post-retirement planning on retirement adjustment was mediated by mastery. Practical implications for the design of interventions to promote mastery in later life and provide control over the transition from the workforce are discussed.

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Introduction

The imminent retirement of the baby boomer generation has stimulated global interest in understanding the factors that promote a successful transition to retirement. Yet, research regarding the psychological impact of retirement is inconsistent (Kim & Moen, 2002). For most individuals, retiring from the primary career job represents an important life event, marking the transition from one life stage to another (Kiefer & Briner, 1998). While some evidence suggests that most retirees report being satisfied with their lives, other reports indicate that up to one third of retirees experience the transition as stressful or experience a decline in well-being after retirement (Bosse, Aldwin, Levenson, & Workman-Daniels, 1991).

Historically, retirement research has focused on individual characteristics of retirees and was guided by theories relating to the loss of the work role (Szinovacz, 2003). However, researchers are now beginning to explore the role that other factors such as retirement planning (Elder & Rudolph, 1999; Noone, Stephens, & Alpass, 2009) and the context in which retirees left the workforce (e.g. Quine, Wells, DeVaus, & Kendig, 2007; Wong & Earl, 2009) contribute to retirement adjustment. There is also increasing interest in examining the role that personal control or mastery (Pearlin & Schooler, 1978) plays in a successful retirement (Kim & Moen, 2002).

Earlier research (Wong & Earl, 2009) proposed an integrated model consisting of individual (demographic and health), psychosocial (work centrality), and organizational (conditions of workforce exit) predictors of retirement adjustment. Drawing upon role theory, the study explored whether those people with higher levels of work centrality would have trouble adjusting to retirement. Their integrated model hypothesized that higher level psychosocial or organizational influences will add to the prediction of retirement adjustment over and above lower-level individual influences. Within the sample of 394 retirees (aged 45–93 years) only individual and organizational influences were found to predict better retirement adjustment. Since work centrality

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was not related to retirement adjustment the authors concluded that psychosocial influences least influenced retirees' subsequent behaviour. The importance of conditions of exit in predicting retirement adjustment led the authors to recommend a closer examination of planning beyond health and financial domains. They also recommended exploring other possible theories to explain findings including that of a life course perspective (Elder, 1995; Elder & Johnson, 2003). While there is growing evidence that individual and organizational influences play an integral role in retirement adjustment, additional research is required to identify which, if any, psychosocial factors promote retirement adjustment (Wong & Earl, 2009).

Building on this previous research, the present study will test the assumption that both contextual and psychosocial factors influence adjustment guided by the life course perspective. Specifically, using a sample of Australian retirees, the aims of the current study are; (1) to determine whether; individual characteristics (e.g. demographic and health characteristics), psychosocial (e.g. mastery and planning) and organizational factors (e.g. conditions of workforce exit) predict retirement adjustment; (2) to investigate the relationship between planning, mastery and retirement adjustment. For the purpose of the current study retirement adjustment is conceptualised as a person's positive retirement experiences (Atchley, 1999).

Life Course Theory

One of the fundamental assertions of life course theory is that both contextual and psychological factors need to be considered in order to understand the consequences of life transitions (Elder & Johnson, 2003; Quick & Moen, 1998). As retirement represents a transition in which organizational and individual factors interact with psychological factors, it is particularly important that retirement research examines the context of the transition in relation to psychological factors (Taylor-Carter & Cook, 1995). In viewing retirement as a life course transition, the current study examines the contribution of individual, psychosocial and organizational influences to retirement adjustment.

Individuals' Resources as Predictors of Retirement Adjustment

Three key personal resources have been identified as influencing retirement. These resources are; income, health, and social support (Moen, 1996; Szinovacz, 2003). Specifically, research has found that higher income promotes better retirement adjustment, while inadequate income and financial stress are associated with dissatisfaction and more negative retirement experiences (Atchley, 1976; Gallo, Bradley, Siegel, & Kasl, 2000; Price & Joo, 2005). Similarly, better physical and psychological health has been repeatedly associated with better retirement adjustment (Mutran, Reitzes, & Fernandez, 1997; Richardson & Kilty, 1991; Quick & Moen, 1998; Van Solinge & Henkens, 2008). Finally, being married appears to be beneficial for retirement satisfaction. Compared to their unmarried peers, married adults have reported more positive attitudes towards retirement (Mutran et al., 1997) and higher levels of retirement satisfaction (Price & Joo, 2005). Taken together, these findings indicate that having higher income, better physical and psychological health and being married are key factors for successful retirement.

Other demographic characteristics such as number of years retired, age and gender, have also been proposed as contributors to well-being in retirement (Atchley, 1976; Moen, 1996). In particular, while age is negatively associated with physical health (Moor, Zimprich, Schmitt, & Kliegel, 2006) it is positively associated with well-being (Von Hippel, Henry, & Matovic, 2008; Warr, 1992). Similarly, existing evidence suggests that the longer a person has retired, the more satisfaction they report (Fletcher & Hansson, 1991; Gall, Evans, & Howard, 1997). Jointly these findings advocate that being older and retired for longer are likely to positively influence feelings of well-being and satisfaction with retirement.

In regards to gender, there is still some uncertainty about its influence on retirement adjustment. Earlier studies reported that women have fewer adjustment difficulties than men (Hatch, 1987). Yet, more recent research suggests that women have more negative attitudes towards retirement, experience more financial insecurity, more severe depression, loneliness and report lower perceived health, self-esteem and morale (DeViney & Solomon, 1995; Kim & Moen, 2001; Price & Joo, 2005; Quick & Moen, 1998). Thus, based on the most current evidence, gender is predicted to influence retirement adjustment, such that men will report more positive retirement experience than women.

Impact of Planning on Retirement Adjustment

Encouraging retirement planning in order to promote success in retirement makes intuitive sense. Based on this common belief, a diverse range of antecedents and consequences of retirement planning have been investigated (Topa, Morano, Depolo, Alcover, & Morales, 2009). However, the nature of the planning and retirement adjustment relationship is unclear (Taylor & Doverspike, 2003). Earlier research supported the view that retirement planning promoted positive attitudes and successful adaptation to retirement (Mutran et al., 1997). More recent studies have challenged these findings. Based on their meta-analysis, Topa and colleagues (2009) reported that while a small positive relationship between retirement planning and retirement satisfaction was found, retirement planning failed to predict retirement satisfaction. The inconsistency in the previous findings may stem from the use of narrow samples of planning behaviour, which often focus on financial planning (Petkoska & Earl, 2009). By using a more comprehensive measure of retirement planning, (Muratore & Earl, 2010), the current study aims to investigate whether retirement planning promotes a positive retirement experience.

As with other variables that determine satisfaction in retirement, the relationship between planning and adjustment is likely to vary over time. Although planning does not end when people retire, research efforts focus on how much planning individuals do prior to retirement, when it is believed to have the most influence (Reitzes & Mutran, 2004; Taylor & Doverspike, 2003). Increased

longevity and a greater focus on self-sufficiency in retirement, necessitates continued planning to ensure one's well-being in later life (Denton et al., 2004). As such, whether or not people plan or continue to plan during retirement may be an important predictor of retirement adjustment. Therefore, the present study will investigate whether individuals make plans or continue to plan in order to satisfy their on-going financial, health, leisure and social needs in retirement and whether this is predictive of later life satisfaction.

Mastery as a Predictor of Retirement Adjustment

Mastery has been defined as the degree to which one feels they have a general sense of control over what goes on in his or her life (McKean Skaff, Pearlin, & Mullan, 1996). Based on evidence from the stress and coping literature, a sense of mastery or personal control may well be a key psychosocial resource for well-being in retirement (Ryff, 1989; Skinner, 1996). Specifically, maintaining a sense of control has been found to aid in the ability to cope with stressors in general (Bandura, 1989; Lachman & Burack, 1993) and have a protective influence in survivors of natural and human-induced disasters (e.g. Benight, Swift, Sanger, Smith, & Zeppelin, 1999; Ben-Zur, 2008; Sumer, Karanci, Berument, & Gunes, 2005).

Skaff, Pearlin and Mullan (1996) in drawing upon the work of others (e.g. Bandura, 1997; Gecas, 1989; Lefcourt, 1983; Rodin, 1990) define mastery as a broad construct capturing elements of both self-efficacy and locus of control (LOC). According to the authors, while self-efficacy focuses on the ability to perform a specific task, mastery relates to control over one's life. Similarly, while locus of control distinguishes between whether the source of control is to be found within the individual or in the external world, mastery makes no such distinction. For these reasons, mastery is considered a more global measure of control. The choice of mastery in the present study is consistent with previous research using Pearlin's measure in favour of measures of LOC to indicate control (e.g. Noh & Avison, 1996; Turner & Avison, 1992).

The feeling that one is in control of his or her life is considered a major determinant of well-being in older adults and an important characteristic of successful aging (Lachman & Weaver, 1998). However, while some research has investigated the effects of retirement on personal control (e.g. Ross & Drentea, 1998), surprisingly little research has examined the relationship between a sense of mastery and adjustment to retirement. Preliminary evidence suggests that higher levels of mastery may have a significant positive impact on retirement well-being. For example, Kim and Moen (2002) found that during the transition to retirement, a greater sense of mastery was predictive of higher morale for men, and less depressive symptoms for both men and women. However, given the paucity of research on the role that mastery plays in promoting a satisfying retirement experience, the current study aims to extend the preliminary findings from Kim and Moen's study (2002) investigating whether higher mastery positively influences retirement adjustment.

Mastery as a Mediator between Planning and Retirement Adjustment

Part of the reason that the relationship between planning and retirement adjustment remains unclear may be because planning is confounded by other variables. There is some evidence to suggest that planning leads to a greater sense of control and to an increase in perceptions of well-being (Bandura, 1997; Lachman & Burack, 1993). For example, Prenda and Lachman (2001) report that personal control mediated the relationship between planning and life satisfaction among 25–74 year olds. The authors concluded that future planning creates a sense of control and that this in turn enhances life satisfaction. Based on earlier findings, it is proposed that people who engage in more pre-retirement and post-retirement planning behaviours will feel a greater sense of mastery and control, which will promote better retirement adjustment. That is to say, while it is important to plan, believing one can influence the outcome is most critical.

The Impact of Transition from the Workforce on Retirement Adjustment

It is easier to adapt to planned or anticipated events than it is to adjust to unanticipated events (Moen, 1996). However, retirement is increasingly influenced by unexpected contextual factors, including extenuating personal circumstances, such as health problems, and organizational decisions such as downsizing, redundancy or being offered early retirement incentives (Quine et al., 2007). Recently researchers have turned their attention to investigating how differences in the conditions of workforce exit (e.g. voluntary versus involuntary; gradual versus abrupt) alter an individual's retirement experience (Quine et al., 2007; Wong & Earl, 2009). To date, a lack of choice in the retirement decision has been found to have negative consequences including; poor initial adjustment (Reitzes & Mutran, 2004), lower health and poorer well-being (Szinovacz & Davey, 2005). Furthermore, perceived choice in the retirement decision has been promoted as more important for retirement well-being than whether the transition was gradual or abrupt (Calvo, Haverstick, & Sass, 2009; DeVaus, Wells, Kendig, & Quine, 2007) and the level of identification one had to their previous work role (Wong & Earl, 2009). These results highlight the importance that characteristics of the transition can have on retirement adjustment. Specifically, more favorable conditions of exit (i.e. having a choice in the timing and nature of the transition) will promote better adjustment to retirement.

The Present Study

To summarize, guided by the life course perspective, the present study was designed to investigate individual (e.g. demographic and health characteristics), psychosocial (e.g. mastery and planning) and organizational (e.g. conditions of workforce exit) influences

on retirement adjustment. While these areas represent emerging topics of interest in retirement research, to date no studies have comprehensively measured and tested these factors in combination. Therefore, the present study will test the following hypotheses:

Hypothesis 1. Demographic influences—higher income, being married, older, male and retired for more years will predict better retirement adjustment.

Hypothesis 2. Health influences—better psychological and perceived physical health will predict more positive retirement adjustment.

Hypothesis 3. Psychosocial and organizational influences—more favorable conditions of exit, greater pre-retirement and post-retirement planning behaviour and higher levels of mastery will predict better retirement adjustment.

Hypothesis 4. Mastery as a mediator—(a) a sense of mastery will mediate the relationship between pre-retirement planning and retirement adjustment; (b) a sense of mastery will mediate the relationship between post-retirement planning and retirement adjustment.

Methods

Participants and procedure

Participants were self-classified retirees aged 45 years of age and over. National Seniors Australia (NSA), a not-for-profit membership-based community organisation, provided access to retirees living in NSW, Australia. Participants were recruited via an advertisement in two issues of the NSA e-newsletter and one issue of the NSW Seniors Card e-newsletter inviting people to complete an online questionnaire. The final sample consisted of 570 participants (268 female, 301 male). Participants were aged from 49 to 97 years, with a mean age of 64.9 years ($SD = 5.9$ years). Respondents had been retired for 6.35 years ($SD = 6.7$ years, range 0–60 years) on average. Consistent with Wong and Earl (2009), married retirees were over-represented in the sample (73%). Status in last job was fairly evenly represented across the three categories: manager (28%), professional (37%) and non-professional (27%). The median level of education for the group was a Bachelors degree and the median income was \$52,000–\$62,399 Australian (\$ 46,778–\$56,138 USD).

Materials

Demographic information

Participants were asked to provide information about their gender (female = 0, male = 1) and marital status (not married = 0, married = 1). Information was also obtained about retirees' household income, highest level of education, position in their last job, and years since retirement.

Psychological health

The 12-item version of the General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988) was used as a global measure of psychological well-being. Sample items include "I have recently been able to concentrate on what I'm doing" and "I have recently been losing confidence in myself". Respondents are asked to rate the frequency with which they have experienced each item over the past two weeks. Ratings are made on a 4-point scale, ranging from (1) *not at all* to (4) *much more than usual*. Higher scores on the GHQ-12 indicate better psychological health. Consistent with past research, internal reliability in the current study was high (Cronbach's $\alpha = .87$).

Perceived physical health

Current perceived physical health was assessed with one item "How would you rate your current physical health?" adapted from research by van Solinge and Henkens (2008). Respondents rated their physical health on a 5-point scale ranging from (1) *poor* to (5) *excellent*. Higher scores indicate better perceived current physical health.

Mastery

Mastery was measured using the seven-item Mastery Scale developed by Pearlin and Schooler (1978). Sample items include "I can do just about anything I really set my mind to do" and "I have little control over the things that happen to me". Participants responded on a 4-point scale ranging from (1) *strongly disagree* to (4) *strongly agree* with higher scores indicating greater mastery. Cronbach's alpha in this study (Cronbach's $\alpha = .88$) were comparable to previous studies (e.g. Kim & Moen, 2002; Cronbach's $\alpha = .84$).

Retirement adjustment

Retirement adjustment was operationalized using the 13-item retirement adjustment measure reported in the Healthy Retirement Project (Wells, DeVaus, Kendig, Quine, & Petralia, 2006). Respondents rate their level of agreement with each of 13 statements about retirement using a 5 point semantic scale. Sample items include "I am well adjusted to the changes," "I miss being a part of the action" and "I enjoy being able to spend more time with my spouse/partner". Higher scores indicate better

adjustment to retirement. Use of this scale is supported by evidence of high internal reliability (Cronbach's $\alpha = .81$; Wells et al., 2006). In the current study, Cronbach's alpha was .88.

Pre-retirement planning

The Retirement Planning Questionnaire II (RPQII; Muratore & Earl, 2010) was used to assess retirement planning behaviour prior to retirement. The 31-item RPQII was designed, using an Australian population, as a comprehensive measure of retirement planning. Using a 5-point scale, ranging from (1) *very small amount of effort* to (5) *very large amount of effort*, respondents were asked to retrospectively rate the amount of effort they spent looking into each of the 31 retirement planning behaviours prior to retirement. Higher scores indicate greater participation in pre-retirement planning behaviours. Use of this scale in this study was supported by evidence of good internal consistency (Cronbach's $\alpha = .91$).

Post-retirement planning

To assess whether people engage in planning behaviour once they have retired, participants were asked to indicate whether they had spent time *since retirement* looking into, or re-evaluating, each of the 31 behaviours in RPQII using a dichotomous scale (Yes/No). This simpler scale was used as pilot testing of materials suggested that repetition of the measure with the 5-point scale confused participants. Items on each of the three domains; public protection self-protection, self-insurance were summed, then combined to provide a global measurement of post-retirement planning behaviour (Cronbach's $\alpha = .77$). Higher scores indicate greater participation in post-retirement planning behaviours.

Transition from the workforce—Conditions of exit

The context in which older workers exited the workforce was assessed using five items reported by Wells et al. (2006). These items measure retirees' choice in the retirement decision, say in the timing of retirement, level of preparation for retirement, the ease or difficulty of the retirement decision and the abruptness of the exit from the workforce. A variable 'conditions of exit' was calculated from the sum of the ratings across the five items (Wong & Earl, 2009). Total scores on the scale ranged from 5 to 23 with higher scores indicating more favorable conditions of exit. This scale has been supported by evidence of acceptable internal reliability (Cronbach's $\alpha = .79$; Wong & Earl, 2009). Internal reliability in the current study was comparable (Cronbach's $\alpha = .79$).

Results

Initial Analysis

To ensure that results were not influenced by common method variance (Podsakoff & Organ, 1986), Harman's one-factor test was used. According to Podsakoff and Organ, problematic common method variance can be identified if a single factor emerges from the factor analysis or if one factor accounts for most of the shared variance. Therefore, an exploratory factor analysis (EFA) on all 14 variables was performed using principle axis factoring (Conway & Huffcutt, 2003). Approximately half (47%) of the total variance was accounted for by 5 factors with eigenvalues greater than 1, with the largest factor accounting for only 19% of the total variance. Although not precluding the possibility of common method variance, these results do suggest that it is not a likely explanation for the reported findings.

Descriptive Statistics and Bivariate Results

Table 1 presents means, standard deviations and correlations for the independent variables and the dependent measure, retirement adjustment. Correlations between the demographic variables and retirement adjustment show that married retirees and retirees with a higher income tended to report better retirement adjustment, though the effect sizes are small (Cohen, 1988). Both health variables were associated with adjustment, with a moderate effect size for psychological health and a large effect size

Table 1

Means, standard deviations and correlations for the 11 independent variables and the dependent variable, retirement adjustment.

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	64.91	5.93	–											
2. Gender	0.53	0.50	.11**	–										
3. Marital status	0.74	0.44	–.16**	.30**	–									
4. Income	7.96	3.40	–.24**	.11**	.35**	–								
5. Years retired	6.35	6.67	.54**	.05	–.11**	–.22**	–							
6. Physical health	3.30	1.04	–.03	.03	.13**	.22**	–.10*	–						
7. Psychological health	22.13	4.93	.02	.09*	.05	.15**	–.03	.36**	–					
8. Mastery	21.83	3.96	–.03	.10*	.10*	.20**	–.10*	.46**	.59**	–				
9. Conditions of exit	16.43	4.04	.05	.02	.14**	.22**	–.03	.26**	.26**	.34**	–			
10. Total pre-retirement planning	70.30	18.29	.09*	–.17**	–.03	–.05	–.06	–.05	.01	.14**	.13**	–		
11. Total post-retirement planning	15.84	4.24	.19**	–.08	–.01	–.06	.09*	.02	.11*	.19**	.14**	.52**	–	
12. Retirement adjustment	3.57	0.70	–.01	.02	.13**	.19**	–.01	.41**	.54**	.59**	.50**	.04	.15**	–

* $p < .05$. ** $p < .01$.

for physical health. Mastery had a strong positive association with retirement adjustment as did conditions of exit. Post-retirement planning had a small positive association with retirement adjustment, while Pearson's correlation was trivially small and non-significant for pre-retirement planning.

Hierarchical Regression: Influences of Retirement Adjustment

Do Demographic Variables Influence Retirement Adjustment?

To test the combined effects of demographic, health, psychosocial and organizational variables on retirement adjustment, a three-step hierarchical regression analysis was conducted. Demographic variables were entered at step 1, health variables at step 2, and psychosocial and organizational variables at step 3. The results of this analysis are shown in Table 2. Hypothesis 1 predicted that higher income, being married, older, male and retired for more years will predict better retirement adjustment. At step 1, the set of demographic variables significantly accounted for approximately 4% of the total variance in retirement adjustment. However, income was the only demographic variable to significantly predict retirement adjustment, with higher income predicting greater adjustment ($\beta = .17, p < .001$). Regression weights for age, gender, marital status and years retired were not significant. Thus, there was only partial support for hypothesis 1.

Does Psychological Health and Perceived Physical Health Influence Retirement Adjustment?

Hypothesis 2 predicted that better psychological and physical health predict better retirement adjustment. Step 2 of the hierarchical regression detailed in Table 2, shows that psychological and physical health together predict 31% of the variation in retirement adjustment after controlling for demographic variables. Effects were stronger for psychological health ($\beta = .45, p < .001$) than physical health ($\beta = .23, p < .001$).

Does Mastery, Conditions of Exit, and Pre and Post Retirement Planning Influence Retirement Adjustment?

Hypothesis 3 asserted that more favorable conditions of exit, higher mastery and more pre and post planning behaviour will predict better retirement adjustment. Since previous research has shown that demographic variables, psychological and physical health are associated with retirement adjustment, psychosocial and organizational variables were entered at step 3 of the hierarchical regression (after demographic and health variables at steps 1 and 2 respectively). After controlling for demographic and health effects, psychosocial and organizational factors accounted for an additional 16% of the variance in retirement adjustment. As hypothesized, conditions of exit ($\beta = .31, p < .001$) and mastery ($\beta = .30, p < .001$) significantly predicted better retirement adjustment over and above demographic characteristics, psychological and physical health. However, contrary to expectations, neither pre-retirement planning ($\beta = -.08, p = .08$) nor post-retirement planning ($\beta = .06, p = .14$) were predictive of retirement adjustment over and above demographic and health effects.

Table 2

Summary of hierarchical regression with retirement adjustment regressed on demographic, health and mastery variables ($n = 396$).

	<i>B</i>	<i>SE B</i>	β
Step 1			
Age	.00	.01	.04
Gender	-.05	.07	-.03
Marital status	.14	.09	.09
Income	.04	.01	.17**
Years retired	.00	.01	.02
Step 2			
Age	.00	.01	-.01
Gender	-.09	.06	-.06
Marital status	.13	.07	.08
Income	.01	.01	.06
Years retired	.01	.01	.05
Physical health	.16	.03	.23***
Psychological health	.07	.01	.45***
Step 3			
Age	-.01	.01	-.05
Gender	-.09	.06	-.07
Marital status	.08	.06	.05
Income	.00	.01	-.01
Years retired	.01	.01	.06
Physical health	.07	.03	.10*
Psychological health	.04	.01	.25***
Mastery	.05	.01	.30***
Conditions of exit	.05	.01	.31***
Pre-retirement planning	.00	.00	-.08
Post-retirement planning	.01	.00	.06

Note. $R^2 = .04$ at Step 1 ($p < .01$); $\Delta R^2 = .31$ at Step 2 ($p < .001$); $\Delta R^2 = .16$ at Step 3 ($p < .001$).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Mediation Analysis

Does Mastery Mediate the Relationship between Retirement Planning and Adjustment?

Hypothesis 4 proposed that a sense of mastery would mediate the relationship of both pre- and post-retirement planning with adjustment. As can be seen in Table 1, pre-retirement planning was not associated with retirement adjustment and therefore Hypothesis 4a was not tested. Thus, the mediation effect of mastery on the relationship between planning and adjustment was tested for post-retirement planning only.

To test Hypothesis 4b, that a sense of mastery would mediate the relationship between post-retirement planning and retirement adjustment, a mediation analysis was conducted. Post-retirement planning was significantly associated with retirement adjustment ($r = .15, p < .01$) and mastery ($r = .19, p < .01$). When retirement adjustment was regressed onto post-retirement planning and mastery, mastery significantly predicted retirement adjustment ($\beta = .58, p < .001$). Finally, the relationship between post-retirement planning and retirement adjustment ($\beta = .15, p < .001$) effectively became zero when mastery was controlled for ($\beta = .05, p = .222$). It therefore appears that mastery fully mediates the relationship between post-retirement planning and retirement adjustment. Therefore, Hypothesis 4b was supported.

Discussion

Main Findings

The current study had two aims: first, to identify factors influencing retirement adjustment, and second, to explore the relationship between planning, mastery and retirement adjustment. In line with the life course approach, psychosocial and contextual factors accounted for differences in retirement adjustment over and above individual factors. Overall, the results indicate that conditions of exit and mastery were the best predictors of retirement adjustment, then psychological health and physical health. The analyses also suggest that a sense of mastery mediated the relationship between post-retirement planning and adjustment. A discussion of the current findings, how they relate to present literature, as well the practical implications, limitations and future research directions is presented below.

Predicting Retirement Adjustment

Individual Predictors—Demographics

An investigation of the demographic influences on retirement adjustment provided partial support for hypothesis 1. Results indicated that retirees who had a higher household income were more likely to report better retirement adjustment. The current findings lend support to the previous literature which reported a positive relationship between greater financial resources and satisfaction in retirement (e.g. Gallo et al., 2000; Richardson & Kilty, 1991). Significant relationships between marital status and retirement satisfaction disappeared when other demographic factors were controlled for. These findings are in contrast to previous research (e.g. Price & Joo, 2005) that has found divorced or separated women were more dissatisfied than married, remarried or widowed women. Consistent with Wong and Earl (2009) but contrary to expectations, being older, male and retired for longer was not predictive of better retirement adjustment.

Individual Predictors—Health

As expected, individuals who reported better psychological health and better perceived physical health were more likely to report better adjustment to retirement. The current study adds to the extant literature concerning the benefits of being both physically (Quick & Moen, 1998; Reitzes & Mutran, 2004) and psychologically healthy (Wong & Earl, 2009) to retirement adjustment. Future studies should consider measuring physical health using either (1) more comprehensive self-report measures (e.g. SF-36, FIC) or (2) objective measures of health. A number of studies have successfully used the SF-36 (e.g. Hawthorne, Osborne, Taylor, & Sansomi, 2007) to determine the health status of research participants. This measure consists of 36 items across eight domains: physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotion and mental health. Similarly the FIC (functional impairment checklist) measures functionality indicative of health including breathlessness, muscle strength, and engagement in activities (Lam, Tsui, Chan, Lam, & So, 2006). Objective measures might include measurement of lifestyle indicators such as BMI or the 6 minute walking test (Lam et al., 2006).

Organizational Influences

As anticipated, more favorable conditions of exit significantly predicted better retirement adjustment. In this way, the current study replicates Wong and Earl's (2009) findings and provides further support for the assertion that it is the characteristics of the transition that influence the level of stress experienced, rather than the occurrence of the transition itself. The current findings extend previous research by showing that conditions of exit and mastery were more important predictors of subsequent retirement adjustment, than other factors, such as health and wealth, which have been consistently found to have an important influence on retirement adjustment.

Psychosocial influences—Mastery

As expected, people who reported higher mastery tended to report greater retirement adjustment. In fact, mastery produced a result comparable to that of conditions of exit. These findings add weight to the proposition that feelings of mastery are linked to well-being (Lachman & Burack, 1993) and builds on the preliminary evidence (e.g. Kim & Moen, 2002) that mastery is an important resource in later life, by showing the salutary effect of mastery on retirement adjustment.

Psychosocial influences—Planning

Contrary to expectations, pre-retirement planning was not predictive of retirement adjustment. Although these results are in contrast to the previously established findings that prior retirement planning has a positive impact on satisfaction in retirement (Elder & Rudolph, 1999), our results are consistent with a recent meta-analysis (Topa et al., 2009) in which retirement planning did not predict retirement satisfaction. Similarly, Noone and colleagues (2009) also reported that attending a planning seminar and thinking about retirement were not predictive of later life well-being. Combined, these findings suggest that planning alone may not be sufficient for ensuring well-being in retirement.

Theoretical and Practical Implications

The results of the current study have important theoretical and practical implications. Findings provide support for the practical utility of the life course perspective in understanding retirement adjustment. The current analysis further highlights the importance that control has in promoting better retirement adjustment. Taken together, these findings call attention to the important role that employers and career counsellors have in promoting well-being in retirement.

Retirement and the Life Course Perspective

As the large baby boomer cohort begin retiring, the focus on understanding what factors promote a successful transition into retirement and well-being in later life will continue. To this end, the life course perspective provides a useful framework for examining the dynamic and complex nature of the retirement transition and adjustment process. Specifically, by viewing the retirement transition as one where individual, contextual and psychological factors interact, researchers and practitioners can begin to gain a more holistic understanding of the retirement process.

Importance of Control over Conditions of Exit for Retirement Adjustment

The finding that the condition under which a person exits the workforce is one of the most important predictors of subsequent retirement adjustment has important practical implications for individuals, policy makers, and employers. In light of these findings, it is encouraging that Governments in many of the OECD countries, including Australia, have implemented policies providing greater flexibility for older workers approaching retirement (Organisation for Economic Cooperation and Development (OECD), 2007). For example, the mandatory retirement age for public servants has been abolished and tax incentives for those remaining in the workforce have been introduced (Quine et al., 2007). However, survey findings indicate that in many western countries up to 50% of early retirement can be classified as forced (Van Solinge & Henkens, 2008). Therefore, sharing and recognising stories of best practise amongst employers is essential.

Integrate Retirement Plans into Career Development Programs

Findings suggest that unless employers also create opportunities for employees to have control over the conditions in which they leave the workforce, many individuals will experience an uneasy transition and poorer adjustment to retirement. Further, given the sensitive nature of retirement preparation conversations, employees may be particularly reluctant to initiate these discussions unless culturally sanctioned options are provided. This highlights the importance of including retirement preparation in standard career development processes and identifying other ways in which organizations can enable employees to exercise increased levels of control in the retirement decision (Quine et al., 2007). Some examples of initiatives employers could introduce include; job sharing, job transfers, sabbaticals and other flexible work arrangements to provide greater options for older workers (Wang, 2007).

Importance of Mastery for Retirement Adjustment

Another important contribution of the current study is the finding that having a higher sense of mastery promotes more successful retirement adjustment, over and above the effects of health and individual influences. That is, retirees who believe they have control over their life, experience greater psychological benefits in retirement. The findings highlight opportunities for organizations to design interventions increasing individuals' sense of mastery. Counsellors and organizational psychologists are encouraged to focus on empowering individuals and building resilience by fostering beliefs regarding individuals' ability to influence positive outcomes (Creed & Bartrum, 2008). In this way, there is something to be learned from research showing that behaviour modelling workshops and control enhancing experiences can be effective in improving mastery and well-being (e.g. Eden & Aviram, 1993; Vinokur & Schul, 1997). It is hoped that future research will identify ways of enhancing individuals' feelings of mastery through retirement interventions, and other initiatives, as a means of facilitating better retirement adjustment.

Limitations and Future Research Directions

Longitudinal Designs and Sampling

With respect to the limitations of the current study, as with any cross-sectional research, the findings from this study present a static view of retirement adjustment (Moen, 1996). Longitudinal studies are required to enable more conclusive statements regarding the nature of the retirement process. For example, our results cannot rule out the possibility that poor retirement adjustment leads to reduced feelings of personal control and the perception of less favorable conditions of exit. In particular, future research employing longitudinal designs could investigate the causal direction and possible reciprocal relations between adjustment, mastery, conditions of exit, planning and health. This type of research will be particularly important for investigating the nature of the planning relationship with adjustment and mastery. In the current study participants were asked to retrospectively report the planning effort and behaviour they engaged in prior to retirement, which previous research suggests may be susceptible to memory biases (e.g. Henry, MacLeod, Phillips, & Crawford, 2004). Using time series analyses to investigate these constructs will enable researchers to gain a better understanding of the dynamics between the retirement transition and how changes in individuals and their environment vary over time. It would be particularly valuable to track planning prior to retirement, at the point of retirement and then for some time after retirement. This would enable us to determine whether pre-planning was sufficient, created unrealistic expectations or was treated as a static rather than dynamic process.

Although the demographic characteristics of the current sample are comparable to previous retirement adjustment research (e.g. Wong & Earl, 2009), the sample was not entirely representative of the Australian general population of retirees (ABS, 2007). It is therefore recommended that future research seek participation from people with varied educational backgrounds, work histories including more labourers, technicians and tradespersons, and people who are not married or partnered.

Mastery as an Antecedent versus Consequence of Retirement Adjustment

As expected, the relationship between post-retirement planning and adjustment was mediated by mastery, such that individual's who engaged in more post-retirement planning, had higher feelings of mastery, which in turn predicted retirement adjustment. Previous research has found that mastery mediates the relationship between planning and life satisfaction in the general population (Prenda & Lachman, 2001). The current study demonstrates that this relationship is also evident in a retired population, such that mastery mediates the relationship between planning and adjustment in retirement.

Given the paucity of research investigating the influence of mastery on retirement adjustment, future research should investigate the antecedents associated with feelings of mastery. It would be worthwhile determining changes in mastery across time, particularly the role of contextual factors that may leave people feeling vulnerable. Similarly, future research should examine whether mastery mediates the relationship between other variables previously considered to have a direct effect on retirement adjustment. For example, it may be that having poorer psychological health leaves people feeling fragile, leading to a lower sense of mastery, and thereby influencing their satisfaction with retirement. In relation to conditions of exit, future research could build on the current findings by investigating whether having control over specific aspects of the retirement transition are more important than others.

Continuous Improvement of Retirement Planning Measures

Clearly our research suggests that planning alone is not sufficient to guarantee adjustment to retirement, but it is important that comprehensive measures of planning continue to be used in research beyond financial and health concerns. Over time we may find that while some aspects of planning are static (e.g. financial) others are dynamic (e.g. social) and some of the sub-scales may predict adjustment better than others. While retirement benefits and support for retirees vary across countries, aging populations and the need for self sufficiency are global issues. While measures used in this study were designed for specific application with an Australian population, we believe that the three factor structure will have universal applications. More research will determine whether this is the case. The planning measure used in this study is available from the author and readers are directed to Muratore and Earl (2010) for more information. Pilot testing revealed that replicating the post-retirement planning measure with a five point response scale was confusing for participants, so the post-retirement planning measure was presented in the final survey with a dichotomous scale. However, this may have reduced the sensitivity of the measure, resulting in the lower internal consistency for post-retirement than pre-retirement planning measures in this study. Therefore, it is recommended that future research investigate post retirement planning behaviours using more sensitive measures of post-retirement planning efforts.

The Role of Career Development Programs in Predicting Adjustment

If conditions of exit and mastery both predict retirement adjustment the opportunity exists to determine what role career development programs play in developing these. Future studies may investigate whether support for career development programs in organizations predicts favorable conditions of exit and mastery. It seems reasonable to assume that organizations incorporating a life span perspective into their career development programs may be providing benefits to employees post-employment. Supporting and nurturing the employee beyond the exchange of skills for wages is consistent with organizations who care for the whole person and want to create a positive workplace culture. Furthermore trust may predict whether or not conversations take place between individuals and organizations about how and when employees exit the organisation. Trust may operate on two levels: at the supervisory and organizational level, and these may not always be consistent. It would be interesting to determine which of these conversations matter most and whether frequency and proximity to retirement make a difference.

Concluding Comments

The current study highlights the importance of considering factors beyond health, wealth and planning in order to gain a holistic understanding of retirement adjustment. Specifically, the present research highlights the critical role that other modifiable factors, such as more favorable conditions of exit, as well as a greater feeling of mastery, play in influencing satisfaction in retirement. To this end, individuals, organizations, career counsellors and psychologists all have an important role to play in promoting well-being in retirement.

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