Promoting the Australian Retirement Experience

REPORT PREPARED FOR NATIONAL SENIORS AUSTRALIA

By
Dr. Joanne K Earl
Ms. Tin Yu

Introduction

Brief overview

This report is based on data collected by The University of New South Wales and conducted with the assistance of National Seniors Australia (NSA). A total amount of $46,296 was granted by the NSA Productive Ageing Centre to The University of New South Wales towards a project entitled "Applying the integrated model of retirement adjustment: Using training interventions to promote productive ageing". The research was conducted in 2011 and it took place in the period of February to November.

Why does quality of retirement experience matter?

Demographic projections have shown that in the next decade, the number of people transitioning into retirement will significantly increase (Alley & Crimmins, 2007; Toossi, 2004) due largely to an aging Baby Boomer population and longer life expectancies. According to the Australian Bureau of Statistics, the number of people aged 65 years and over is expected to increase from 13 percent of the total population in June 2007 to between 23 and 25 percent by 2056 (Australian Bureau of Statistics (ABS), 2008). The increased number of people retiring and the increased length of time spent in retirement create significant social, psychological and economic challenges for individuals and society (Wang, 2007). While some people enjoy retirement, approximately 30% of retirees find the retirement transition stressful (Bosse, Spiro & Kressin, 1996), or show a decline in well-being after retirement (Wang, 2007). The quality of the retirement experience could affect a retiree's health indirectly, since maladjustment to retirement often manifests as a risk factor for retirees to engage in maladaptive coping behaviors, such as increased alcohol use (Perreira & Sloan, 2001), increased smoking (Henkens, Van Solinge & Gallo, 2008) and decreased mental health (Wang, 2007).

The aims of this research were to (1) understand how resources affect retirement adjustment and retirement satisfaction, (2) design and evaluate web based retirement interventions that could improve retirement planning and retirement adjustment, and (3) examine the relationships between psychosocial factors and retirement planning and retirement adjustment.

Aim 1. Understanding how resources affect retirement adjustment and retirement satisfaction.

Understanding the antecedents of retirement well-being is very important, in order to inform strategies for retirement planning, the design of retirement interventions, and improve retirees' experience of the potentially stressful transition. Amongst different theoretical frameworks that attempt to conceptualize the retirement experience, the resource perspective was identified as having significant potential to explain the retirement experience. The resource perspective suggests that the quality of retirement experience is the direct result of ones' access to resources.

Previous researchers have mainly focused on the role of physical and financial related resources in promoting retirement planning. In addition, previous research that adopted the resource perspective as a way of understanding retirement experience suggested that, firstly, individual's overall resource levels correlate positively with retirement well-being. Secondly, a change in resource level should result in a change in retirement well-being. Thirdly, resources tend to come in clusters but not exist in isolation (Kubicek, Korunka, Raymo & Hoonakker, 2011). Although the resource perspective has gained momentum in the retirement research area, research efforts have mainly focused on resources in the physical and financial domains, and none of the previous research has subjected the theoretical perspective to empirical testing. This study reports findings related to a newly-createdpsychological inventory, the retirement resources inventory (RRI) aimed at assessing a retirees' overall resource level in the six domains recommended by Wang and colleagues (2010, 2011), namely physical, financial, social, emotional, cognitive, and motivational. By

developing a standardized tool that measures retirement resources, not only can the relationship between retirement resources and retirement well-being be explored but the theory of resource perspective be tested empirically. The study also allows us to explore whether certain categories of retirement resources are more important than others in determining retirement well-being, since physical and financial resources are the two most researched resource categories. Therefore, it was expected that:

1. The RRI would consist of six subscales with sound internal consistency. These subscales being physical, financial, social, emotional, cognitive and motivational.
2. After controlling for demographic variables, retirement resources would significantly predict both retirement adjustment and satisfaction.
3. Of the six categories of retirement resources, physical and financial resources would be the most consistent predictors of retirement adjustment and satisfaction.
4. Access to retirement resources should lead to retirement adjustment (and satisfaction) but not the reverse.

Survey sample

A sample of retired individuals aged 50 years or above was recruited from NSA. Participants expressed their interest in participating by clicking on a link embedded in the Associations electronic newsletter then completing a consent form and beginning an online survey. The online survey consisted of three sections, namely demographic information, RRI, and measures of retirement outcomes (i.e. retirement adjustment and retirement satisfaction). After a one-month interval, participants were invited via email to complete the same survey without the demographic information to establish test-retest reliabilities.

A total of 267 retired individuals participated in the survey at Time 1. A detailed summary of the sample's demographic characteristics can be seen in Table 1.

Table 1: Frequency Distribution of Participants by Categorical Demographic Variables

Demographic variables			Frequency (*n*)	% Respondents
Gender	Male		133	50.6
	Female		130	49.4
		Total	263*	100.0
Relationship status	Single or dating		20	7.5
	Married		149	56.2
	couple, but not married		21	7.9
	separated but not divorced		7	2.6
	divorced		31	11.7
	widowed		37	14.0
		Total	265	100.0
Education	high school or under		47	17.6
	Trade/Diploma/Certificate		69	25.8
	Tertiary/Bachelor		76	28.5
	Postgraduate		75	28.1
		Total	267	100.0
Job position	Manager and administrator		101	38.0
	Professional		92	34.6
	Technician		8	3.0
	Community/personal service		6	2.3
	Clerical		29	10.9

	Sales assistant/associate		4	1.5
	Machinery operator		1	.4
	Labour/worker		1	.4
	Others		24	9.0
		Total	266	100.0
Current work activity	Part-time employment		128	49.6
	Full-time employment		5	1.9
	Not working		121	46.9
	Invalid[#]		4	1.6
		Total	258	100
Current household income	$7,799 or less		8	3.3
	$7,800 - $12,999		7	2.9
	$13,000 - $18,199		10	4.1
	$18,200 - $25,999		26	10.7
	$26,000 - $33,799		40	16.5
	$33,800 - $41,599		31	12.8
	$41,600 - $51,999		29	11.9
	$52,000 - $62,399		37	15.2
	$62,400 - $72,799		15	6.2
	$72,800 - $88,399		14	5.8
	$88,400 - $103,999		12	4.9
	$104,000 - $129,999		7	2.9
	$130,000 - $155,999		2	.8
	$156,000 - $181,999		2	.8
	$182,000 - $207,999		1	.4
	$208,000 or more		2	.8
		Total	243	100.0

* The total number of respondents may not add up to 267 because some participants did not answer that particular demographic item

[#] 4 participants mistakenly entered an invalid response of '0'

Out of the 267 individuals who participated in the survey during Time 1, 162 also completed the survey at Time 2. Characteristics of this subgroup were highly consistent with that of the overall sample. This subgroup of participants consisted of 80 males (50.3%) and 79 females (49.7%), with three participants failing to report their gender. Participants in this subgroup were aged from 52 to 84 years (M = 65.84, SD = 6.67). Data collected from these 162 individuals were used for the purpose of establishing test-retest reliability only and answering research question number 4.

Retirement resources inventory (RRI)

Initial item development of RRI. The first stage of the construction of RRI was to examine then define the concept of "resources". Six major dimensions of resources crucial to retirement well-being were identified based on Wang and colleagues' (2010, 2011) recommendation. The six domains included physical, financial, social, emotional, cognitive and motivational. Six subscale definitions and subscale items were generated based on a thorough literature search, with resources previously shown to predict retirement well-being given the highest priority, followed by those predicting successful stress-coping and aging. A majority of the items were designed by the author, while some items were adapted from existing scales (Rosenberg's self-esteem scale, Rosenberg, 1965; Life Orientation test, Scheier & Carver, 1985; Sense of Control scale, Lachman & Weaver, 1998; TGP & FGA, Brandtstadter & Renner, 1990).

A total of 54 items contributed toward the initial item pool. Across the 54 items, grammatical conventions were standardized and a standard 5-point Likert scale rating format was used. Rating scales were given specific anchors to match the content of a particular item. A majority of rating scales was related to the degree of abundance 1=*very little/none* to 5=*plenty of/excessive*, degree of severity 1=*not to* 5=*severely*, frequency 1=*never to* 5=*very often*, and the level of agreement 1=*strongly disagree* to 5=*strongly agree.*

Establishment of content validity of RRI. In order to assess the content validity of RRI, the initial pool of 54 items were presented to 17 students currently enrolled in the second year of the organisational psychology master program at University of New South Wales. During the process, students were required to perform two tasks: first, they were required to match the six subscale definitions to the appropriate subscale labels; second, they were asked to allocate items in randomized order to the appropriate subscales according to the subscale definitions.

The six subscale definitions were successfully matched with their corresponding subscale labels (100%). On average, items were correctly allocated to the intended subscales 82.5% of the time. Items were removed from the inventory if they were not correctly assigned back to the relevant subscale at least 70% of the time, except for items on the motivational subscale since these items were obtained from already published measures (TGP & FGA, Brandtstadter & Renner, 1990). Five motivational resource items that were not correctly assigned back to the motivational subscale were slightly reworded rather than deleted, so that they would better reflect the subscale definition. The final item pool for RRI, consisted of 49 items: physical subscale (5 items), financial subscale (7 items), social subscale (11 items), emotional subscale (6 items), cognitive subscale (11 items), and motivational subscale (9 items).

Retirement well-being

Retirement adjustment. Retirement adjustment was measured by the 13-item retirement adjustment measure (Wells deVaus, Kendig, Quine & Petralia, 2006). It consisted of 13 statements about retirement and respondents were asked to rate their level of agreement on each of 13 statements using a 5-point semantic scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Typical items included questions such as 'I am well adjusted to the changes'. Higher scores indicated better adjustment to retirement.

Retirement Satisfaction. The Retirement Satisfaction Inventory (RSI; Floyd, et al., 1992) was employed to measure retirement satisfaction. For the purpose of this study, ten items from the section on satisfaction with life in retirement were used. This section consists of three subscales: satisfaction with services and resources, satisfaction with health and activity, and satisfaction with marriage and home life. Participants indicated their level of satisfaction with various areas of life on a six point Likert scale 1= *very dissatisfied*, 6 = *very satisfied*. Total satisfaction score was calculated by summing ratings across the ten items with possible scores ranging from 10 to 60. Higher scores indicated greater satisfaction with retirement life.

Findings

As expected, RRI was shown to be reliable, as it possesses six internally consistent subscales. In addition, total RRI scores and subscale scores were also shown to possess good test-retest reliability.

In addition, as expected, retiree's overall resource level would determine his or her well-being in retirement. It was found that retirement resources significantly predicted both indicators of retirement well-being (i.e. retirement adjustment and retirement satisfaction) after controlling for

the influence of demographic variables. Therefore, our study demonstrated that the RRI was a valid measure. In addition, as expected, among the six categories of retirement resources, physical and financial resources would be consistent predictors of retirement adjustment and retirement satisfaction.
In terms of retirement adjustment, the more physical, financial, social, or cognitive resources a person had, the more likely he or she was well adjusted to retirement. For retirement satisfaction, the more physical, financial or social resources a person possessed, the greater retirement satisfaction the person was likely to experience. The order of predictive value of resources can be seen in Table 2.

Table 2: Retirement resources that significantly predicted retirement well-being after controlling the influence of demographic variable and the order of predictive value

Retirement well-being	Order of predictive value of retirement resources
Retirement adjustment	Cognitive > Social > Financial > Physical
Retirement satisfaction	Social > Physical = Financial

Furthermore, results confirmed the presence of a causal relationship between aggregated retirement resources and retirement well-being such that resources led to well-being but not the reverse.

Aim 2. Design and evaluate web-based retirement interventions

Historically, retirement research has mainly focused on individual characteristics such as income, health and social support (Moen, 1996; Smith & Moen, 2004) as antecedents of retirement adjustment. Recently, emerging new research highlights the importance of psychosocial factors apart from demographic and health characteristics in predicting retirement adjustment. Specifically, recent research identifies new psychosocial factors in predicting retirement adjustment, namely: mastery (Donaldson, Earl & Muratore, 2010), which can be defined as the degree to which one feels they have an overall sense of personal control over areas of ones' life (McKean Skaff, Pearlin & Mullan, 1996), self-efficacy (Van Solinge & Henkens, 2005), which can be defined as an individual's confidence to successfully perform a particular task (Bandura, 1997) and on-going planning post retirement (Donaldson et al., 2010), which can be defined as goal-directed thoughts and behaviors that promote better health, financial security, fulfilling lifestyles, and rewarding roles in retirement (Topa, Moriano, Depolo, Alcover, & Morales, 2009). In addition, goal setting has been proven to be the one of the best predictors of retirement planning across different life domains (Petkoska & Earl, 2009).

Despite the growing body of research into the demographic and psychosocial influences on retirement planning and retirement adjustment, to date few studies have investigated the use of interventions to influence the predictors of retirement planning and retirement adjustment at the post retirement stage. Therefore, taking a more proactive approach, the present research is among the first to design and test interventions to improve predictors of retirement planning and retirement adjustment. In the present research, two separate studies to design and evaluate web-based retirement interventions have been undertaken based on two different underlying constructs, they are (a) self-efficacy and (b) goal setting. A description of each study follows.

Study A. Retirement intervention based on self-efficacy

According to Bandura's (1997) social cognitive theory, four sources of self-efficacy were identified, arranged in a hierarchy from most to least influential; these are enactive attainment, vicarious

experience, verbal persuasion and emotional state. The term enactive attainment or mastery experiences can be defined as learning through personal experience where one achieves mastery over a difficult task and thereby enjoys an increase in self-efficacy (Bandura, 1997). This is the most powerful source of efficacy expectations. It helps the person develop and refine skills over tasks that generate successive mastery experience and most importantly, it fosters development of a repertoire of coping mechanisms to deal with problems encountered (Bandura, 1997; Eden & Aviram, 1993). The second most influential source of self-efficacy is vicarious experience or modeling. It involves observation of a similar other who is successful, which leads to the expectation of future good outcomes. The third source of self-efficacy is verbal persuasion, which involves assurance by others to increase self-efficacy. Finally, emotional state can influence perception of efficacy, and reduction of such state can lead to higher perceived self-efficacy.

Self-efficacy interventions have been shown to promote behaviour change in numerous ways, such as an increasing physical activity performance in older adults over a twelve week period (Allison & Keller, 2004) and improving breast-feeding self-efficacy, duration and exclusivity over a four week period (Nichols, Schutte, Brown, Lee & Price, 2007).

Despite the strong theoretical model and research on self-efficacy, limited studies have investigated the use of self-efficacy interventions to influence retirement outcomes. Different outcome measures have been used in this study (mastery, retirement self-efficacy, number of goals, goal specificity, post retirement planning and retirement adjustment), however the ones that we focus on is mastery, retirement self-efficacy, post retirement planning and retirement adjustment. The present study outlines two different training modules using two different underlying sources of self-efficacy, namely (1) Mastery experience and (2) Modeling, with the aim of improving mastery, retirement self-efficacy, retirement planning behaviors and retirement adjustment over a 4-week period. Therefore, it was expected that:

1. Participants who received interventions will increase their levels of mastery, retirement self-efficacy, on-going post retirement planning and retirement adjustment compared to the control group over a 4-week period.
2. Participants in the mastery experience intervention group will result in greater improvements in mastery, retirement self-efficacy, on-going post retirement planning and retirement adjustment compared to the participants in the modeling intervention group.

Description of two different self-efficacy based training modules

(1) Mastery experience. The mastery experience module consisted of three-sub sections, these were “Introduction”, “Retirement planning” and “Goal setting”. The “Introduction” section presented participants with several thought provoking questions, outlining the benefits of the training module, informing participants of the learning objectives and the rationale for the intervention. Then, participants were educated about the variables that affect retirement including a sense of control, retirement planning and goal setting. This module was accompanied by an activity with a set of exercises on sense of control and retirement planning. The sense of control exercise was adapted from an article by D’Aprix (2009). Examples of questions included “What can I control?”, “What can I influence or impact?” and “What do I have no control over at all?”. In the retirement planning exercise, participants were asked to fill a Retirement Planning Questionnaire (Muratore & Earl, 2010) and were given a scoring guide to calculate and record the average score for each domain (public protection, self-protection and self-insurance) to be referred to later in the second module.

The second section in the “Mastery experience” interventions was “Retirement Planning”. It included research regarding the importance of post retirement planning, resources that would affect the quality of the retirement experience and an example of an action plan. This module ended with an activity that required participants to reflect on their positive planning experiences, identifying the strategies used previously, and specifying an area or domain that they could target for future planning based on the scores obtained in the first module.

The third section was “Goal Setting’. It included the positive effect of setting goals on the post retirement planning process, six major areas of life that participants could consider setting goals in and illustrating the difference between specific and non-specific goals through examples. This module was accompanied by an activity that asked participants to review their original goals in the pre-test questionnaire that have been sent back to them via e-mail and to make them more specific. Participants were also invited to write down any new goals that they wanted to set, three specific goals relating to retirement, their confidence in setting goals and the types of resources they needed to be fully confident in setting goals.

(2) Modeling. An important feature of our modeling intervention was the use of videotaped footage of NSA members. Based on previously completed surveys these people were recognised as having positively adjusted to retirement whilst overcoming significant life challenges. In order to generate the video content for the “Modeling” modules, four seniors, two males and two females from the sample population were interviewed by a member of academic staff. The interviews resulted in four 30-minute videotapes, which were then edited to produce four 15-minute videotapes and one 2-minute preview to be incorporated in the following training modules.

Similar to the “Mastery experience” module, the “Modeling” module consisted of three sections. The first “Introduction” module in the intervention was the same as the first module in “Mastery experience”. However, rather than ending the first module with an activity as per the “Mastery” module, the first module in “Modeling” ended with a 2-minute preview of the role model interviews that participants would encounter in the second and third modules.

The second module in “Modeling” was entitled ‘Real life scenarios part I and II’. Two of the four 15-minute videoed interviews with positive retirement role models were presented to participants. While viewing the videos, participants were encouraged to think of the challenges that the role models have faced and the resources they used to manage those challenges. In addition, participants were encouraged to think and write down the new challenges that they were expecting to face in the future and the resources that they could use to cope with those challenges.

The third module in “Modeling” was ‘Real life scenarios part III and IV’. Participants were shown another two 15-minute videos on positive retirement role models and were asked to think of their own challenges and coping strategies in the same way as it did in the second module of “Modeling”.

Survey sample

A sample of retired individuals aged 50 years or above was recruited from NSA. Participants expressed their interest in participating by completing a consent form and the online survey by clicking on a link embedded in the Associations electronic newsletter. The online survey consisted of six sections, namely demographic information, level of mastery, post retirement planning, level of retirement self-efficacy, retirement adjustment and to list any goals in relation to retirement (however, we do not focus on goals in this section of the report). Participants who have completed the online survey were randomly assigned to three groups. Group 1 received an intervention with mastery experience as the source of self-efficacy, group 2 received an intervention with modeling as

the source of self-efficacy and group 3, the control group, did not receive any intervention. After completing the interventions, participants were invited via email to complete the same survey without the demographic information to assess pre and post test differences. Upon completion, participants who received an intervention were required to complete a qualitative evaluation of the training modules on how interesting, educational, and worthwhile they found the module as a whole. Feedback was used to identify potential areas for improvement when designing future online retirement interventions.

There were 173 respondents to the first online survey. Of the initial respondents, two were non-retirees, two had completed the survey twice, and 69 failed to complete the second questionnaire, so were excluded from the analysis. The final sample consisted of 99 participants, 50 males and 49 females, aged from 56 to 88 years. The detailed categorical demographic characteristics of the study participants can be seen in Table 3.

Table 3: Frequency Distribution of Participants by Categorical Demographic Variables

	Demographic Variables	Frequency	% Respondents
Gender	Male	50	50.5
	Female	49	49.5
	Total	99	100
Relationship Status	Single or dating	11	11.1
	Married	53	53.5
	Couple, but not married	3	3.0
	Separated, but not divorced	3	3.0
	Divorced	12	12.1
	Widowed	16	16.2
	Total	98	99.0
Education	Secondary or lower	16	16.2
	Trade or Diploma or Certificate	30	30.3
	Tertiary	27	27.3
	Postgraduate	26	26.3
	Total	99	100
Job Role	Manager and Administrator	35	35.4
	Professionals	36	36.4
	Technician	4	4.0
	Community or personal service	2	2.0
	Clerical	11	11.1
	Sales worker	1	1.0
	Machinery operator	0	0
	Labourer	1	1.0
	Others	9	9.1
	Total	99	100
Money Situation	Don't have enough	22	22.2
	Just enough	51	51.5
	Comfortably well off	26	26.3
	Total	99	100
Employment Status	Working part-time	51	51.52
	Working full-time	3	3.03
	Not working	39	39.40
	Total	93	93.95

Outcome measures

Level of mastery. Mastery was measured by the 7-item mastery scale (Pearlin & Schooler, 1978) to assess sense of control over life and capacity to deal with life's difficulties and had been reported in one recently published retirement study (Donaldson et al., 2010). Items included questions such as "I have little control over the things that happen to me". All items are rated on the Likert scale ranging from 1 = *strongly disagree* to 4 = *strongly agree* as shown in Appendix B. The sum of ratings across seven items was scored to give the total mastery scores, with higher scores indicating greater mastery. This was calculated at both Time 1 and Time 2 to test for statistical significance.

Retirement self-efficacy. The Retirement Self-Efficacy (RSE) Scale was used to measure retirement self-efficacy (Neuhs, 1991) using items focused on confidence in performing tasks across a wide variety of areas relating to retirement. Although few studies have previously used the RSE Scale, it is the only published instrument that measures retirement self-efficacy. The RSE Scale contains 27 items across five subscales, namely: health (i.e. maintain physical health and obtain health insurance) financial (i.e. have adequate money for different life domains), activities (i.e. remain active and independent), government and pension regulations (i.e. apply for government benefits), and retirement itself (i.e. cope with changes and successfully adjust in retirement) (Neuhs, 1991). All items were rated using a 5-point response scale, ranging from 1= *very little confidence* to 5 = *quite a lot of confidence* in being able to perform the identified retirement task.

Retirement planning. The Retirement Planning Questionnaire version II (RPQII) was used to measure retirement planning behavior post retirement (Muratore & Earl, 2010). This measure uses a 5-point scale, 1 = *very small amount of effort* to 5 = *very large amount of effort* across 28 items describing behavior relating to retirement planning. Respondents were asked to rate the amount of effort invested in each of the 28 behaviors in RPQII since retirement. The RPQII measures across three subscales including: public protection (government support), self-protection (independent financial security) and self-insurance (independent health and wellbeing planning). Higher scores indicated greater participation in post-retirement planning behaviors in a particular domain.

Retirement adjustment. Retirement adjustment was measured by the 13-item retirement adjustment measure (Wells et al., 2006). It consisted of 13 statements about retirement and respondents were asked to rate their level of agreement on each of 13 statements using a 5-point semantic scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Typical items included questions such as 'I am well adjusted to the changes'. Higher scores indicated better adjustment to retirement.

Qualitative evaluation survey. Upon completion, participants in the intervention groups were asked to provide comments about how did they find the modules on average under the three broad headings: *Interesting, educational* and *worthwhile* as used previously by Hershey, Mowen and Jacob-Lawson (2003). This data was collected to identify potential areas for improvement when designing future online retirement intervention.

Findings

As expected, compared with the control group, retirees' retirement self-efficacy in the activities domain (to remain active and independent) increased across the 4-week period in both the retirement interventions groups (i.e. mastery experience and modeling). However, contrary to expectation, both retirement interventions appeared to have no significant impact on retirees' post retirement planning behavior, levels of mastery and retirement adjustment compared to the control group (see Table 4).

Table 4: Summary table of findings of different groups on different outcome measures

Group	Outcome measure			
	Level of mastery	Retirement self-efficacy	Post retirement planning behavior	Retirement adjustment
Mastery experience	-	*	-	-
Modeling	-	*	-	-
Control	-	-	*	-

Note: * Indicates successful changes in the outcome measure and - indicates non-significant result

Furthermore, as shown in Table 4, results showed that just completing the survey (control group) promoted post retirement planning behavior. A possible explanation for this result is incidental learning. Incidental learning is unplanned and results from other activities (Woods and Daniel, 1998). Dixon (1978) found that it can occur from research participation and it is effective when participants were exposed to personally meaningful information (Woods and Daniel, 1998). Hence, by participating in our research and completing questionnaire about retirement planning behaviors that are perceived to be personally meaningful, participants in the control group learned about retirement domains and increased their planning behaviors.

Contrary to expectation, changes in the outcome measure, for example retirement self-efficacy, did not differ between the two self-efficacy based interventions (mastery experience and modeling). Put more simply the mastery intervention was as effective as the modeling intervention.

Qualitative feedback. In the mastery experience group, three consistent themes emerged in the feedback section: (1) It is laborious to revert back to previous answers, (2) It is not as useful for people who have retired, (3) It is not useful for people who have undertaken extensive retirement planning. Specifically, of the 18 qualitative feedback obtained from the mastery group, 27% reported that going backwards and forwards between answers took too long, 39% reported that they did not think it would be useful for people who have retired although they thought the modules would be more of an assistance to people preparing for retirement, 22% reported that the idea of retirement planning is not new to them and it would be more beneficial if the intervention could be tailored to different stages of retirement.

In the modeling group, two consistent themes emerged. Specifically, of the 27 comments, 18% reported the intervention were not useful for retirees and 50% of them reported it was a somewhat biased presentation as the real life retirees were tertiary educated, comfortably well off and married. Therefore, participants suggested that it would be more beneficial if we could include real life scenarios of a single male or female with a lower income prior to retirement.

Study B. Retirement intervention based on goal setting

Although several predictors of retirement adjustment have been identified, such as goal setting and retirement planning, there is an absence of practical empirical attempts to improve these using interventions. Researchers have shown that people who plan for retirement report better adjustment and greater satisfaction in retirement than those who did not plan (Donaldson et al., 2010), moreover, interventions promoting goal setting and planning have been shown to improve well-being (MacLeod, Coates & Hetherton, 2008).

Extending previous research focusing on the relationship between number of goals in different life domains of retirees and retirement planning behavior (Petskoska & Earl, 2009), this study aims to

develop and evaluate an online self-study intervention on goal pursuit by promoting greater goal specificity (i.e. goals that demand a specific standard of proficiency on a task, usually within a specified time limit; Locke, Shaw & Latham, 1981) or forming implementation intentions (i.e. having a specific plan that indicates when, where and how the intended action are executed; Gollwitzer, 1993) by the participants. Different outcome measures were used in this study, namely, goal specificity, goal commitment (i.e. one's determination to reach a goal by applying effort over time towards the accomplishment of the original goal and the unwillingness to abandon that goal; Locke & Latham, 2006) and post retirement planning.

Since the likelihood of taking action is higher when an individual forms an implementation intention compared to a goal intention alone at the same specificity (Martijn et al., 2008); and just forming an implementation intention may increase the likelihood of goal attainment (Ajzen, Czasch & Flood, 2009), then an intervention based on implementation intention should be sufficient to increase participants' retirement planning behaviors. On the other hand, a specific goal has been proven to provide a standard of one's acceptable level of performance hence any deviation can be easily detected (Locke & Latham, 2002), subsequently leading to higher goal attainment which in turn increase level of retirement planning behaviors. Therefore, it was expected that:

1. Participants who received an intervention would, on average show higher levels of goal specificity, goal commitment and higher level of retirement planning behavior than the control group.
2. Participants who received the intervention on goal specificity would show higher levels of goal specificity at post test relative to the other intervention group, while those who received the intervention on implementation intention would show higher levels of goal commitment at post test relative to the other intervention group.

Description of two different goal setting based training modules

(1) Goal specificity intervention. This intervention comprised of two modules. The first module focused on the general information and facts about the benefit of retirement planning and how goal setting can facilitate retirement planning. This educational material was followed by a shorter retirement planning questionnaire (RPQI) with dichotomous items developed by Petkoska and Earl (2009) with the purpose of raising participants' awareness of the insufficiency of planning in the domains denoted in the survey (i.e. Financial, Health, Leisure, Work & General). Participants were provided with instructions to enable them to self-score items. The results of the RPQI were not recorded as these were provided for the participants' own benefit.

The second module was presented to the participants assigned to the goal specificity group exactly one week after the release of the first module. In this module, educational information about goal specificity was presented to the participants and the information was accompanied with examples of goal statements in different major life domains with different levels of specificity which is then followed by a quiz. A blank space was also provided to the participants to amend the goals that were previously set and include additional goals when needed. The participants' responses in this exercise were not recorded since the exercise was carried out for the participants' own benefit. It was predicted that participants' goals would be more specific after receiving the intervention on goal specificity.

(2) Implementation intention intervention. This intervention comprised of two modules. The first module was the same as the first module in the goal specificity intervention. The second module in the implementation intention intervention was released in the same way as the module on goal specificity at exactly one week after the release of first module. In this module, educational

information about implementation intention that has been mentioned earlier was presented and accompanied by an example of an implementation intention statement, which was then followed by a short quiz. According to our expectation, this should result in an increase in commitment to the goals set which were measured and compared in the Pre/Post-test survey as per the goal specificity module.

Survey sample

The sample was recruited in the same way as Study A. The online survey consisted of four sections, namely demographic information, post retirement planning, goal commitment and goal specificity. Participants who have completed the online survey were randomly assigned to one of three groups. Group 1 received the goal specificity intervention, group 2 received the implementation intention intervention, and group 3, the control group, did not receive any intervention. After completing the interventions, participants were invited via email to complete the same survey without the demographic information to assess pre and post test differences. Upon completion, participants who received an intervention were required to evaluate the module by responding to a survey and provide qualitative feedback. Both sets of feedback were used to identify potential areas for improvement when designing future online retirement intervention.

There were 168 respondents to the first online survey. Of the initial respondents, 63 failed to complete the second questionnaire, so were excluded from the analysis. The final sample consisted of 105 participants, 50 males and 52 females, with a mean age of 65. The detailed categorical demographic characteristics of the study participants can be seen in Table 5.

Table 5: Frequency Distribution of Participants by Categorical Demographic Variables

	Demographic Variables	Frequency	% Respondents
Gender	Male	50	47.6
	Female	52	49.5
	Total	102	97.1
Relationship Status	Single or dating	6	5.8
	Married	57	54.8
	Couple, but not married	8	7.7
	Separated, but not divorced	3	2.9
	Divorced	9	8.7
	Widowed	21	20.2
	Total	104	99
Education	Secondary or lower	15	14.3
	Trade or Diploma or Certificate	31	29.5
	Tertiary	32	30.5
	Postgraduate	27	25.7
	Total	105	100
Job Role	Manager and Administrator	33	31.4
	Professionals	35	33.3
	Technician	4	3.8
	Community or personal service	2	1.9
	Clerical	18	17.1

	Sales worker		1	1.0
	Machinery operator		1	1.0
	Laborer		0	0
	Others		11	10.5
		Total	105	100
Money	Don't have enough		26	24.8
Situation	Just enough		52	49.5
	Comfortably well off		27	25.7
		Total	49	100
Employment	Working part-time		51	48.6
Status	Working full-time		3	2.9
	Not working		46	43.8
		Total	100	95.3

Outcome measures

Retirement Planning. The measure for retirement planning is the same as the one used in Study A (see page 10).

Goal commitment. Participants' commitments to goals before and after the intervention in each of the domains were measured and averaged using the Hollenbeck's 5-item scale of commitment (Klein, Wesson, Hollenbeck, Wright & DeShon, 2001). The reliability of the scale used in this study was consistently high. Examples for the items are 'I am strongly committed to pursuing this goal' and 'I think this is a good goal to shoot for'.

Goal specificity. Similar to one previous study (Collin, Mowbray & Bybee, 1999), participants' goals were analysed by assessors to determine specificity. Ratings were performed by the author and 2 research assistants in the School of Psychology of University of New South Wales. Assessors checked for desirable content namely, measurable objective, quantity of goals and time frames for achieving the goal (Fried & Slowik, 2004). In order to achieve high inter-rater reliability, all raters were trained to identify the components of specific goals and provided with example of goals with different specificity to ensure mutual understanding of the criterion. A 4-point scale ranging from 0 "This is a vague goal" to 3 "This is a specific goal with a measurable objective, quantity and time frames" was applied. For example, "I want to be rich" was rated as 0 since it is a vague goal. In contrast, "I want to increase my investment portfolio by 10% in 6 month" was rated as 3 since all three of the specific goal components were addressed. The ratings of all goals by all raters were compared individually and any rating with a standard deviation of 1.5 or greater were reviewed and discussed to achieve a compromise.

Evaluation survey. In order to partially determine the effectiveness of the training modules participants' reaction to the training module were measured as per Kirkpatrick (1977), upon completion of the training, participants' were asked to rate the overall rating (i.e. how positive, how good and how interesting), amount of information (i.e. how educational, amount of learning and information) and overall evaluation (i.e. quality and worthiness) the modules were on a 9-point scale using a survey adapted from the study by Hershey et al. (2003), The 9-point scale used ranged from 1 'low' to 9 'high' and included 10 items in total. . The scale was followed by a space for the participants to provide qualitative feedback in order to address the participants' opinions that cannot be covered by the scales.

Findings

Contrary to expectations, no evidence was found that either of the interventions was more effective in promoting the participants' goal specificity, goal commitment and the level of retirement planning than the control group (see Table 6). Moreover, no difference between the effect of two interventions on the level of goal specificity and the level of goal commitment were found.

Table 6: Summary table of findings of different groups on different outcome measures

Group	Outcome measure		
	Goal specificity	Goal commitment	Post retirement planning behavior
Goal specificity	-	-	-
Implementation intention	-	-	-
Control	-	-	*

Note: * Indicates significant changes in the outcome measure
- Indicates non-significant result

Similar to Study A, participants in the control group showed a significant increase in the level of retirement planning behavior across time (see Table 6). It is plausible that the significant increase in the level of retirement planning may due to incidental learning. Such incidental learning occurs by chance and it could be beneficial to the learner when the content can be connected to meaningful activities to the learner (Marsick, Watkins, Callahan & Volpe, 2009). The possible occurrence of incidental learning may suggest a possibility that merely presenting the information regarding retirement may be sufficient in itself as a form of intervention to promote retirement planning.

Evaluation survey. Results showed that participants who received the intervention in goal specificity rated their module higher overall and more informative relative to those receiving the implementation intention intervention. In addition, from qualitative comments summarizing the evaluations from participants, it was observed that many participants found the content not to be relevant to their circumstances if they had been retired for a long period of time. Furthermore, some participants found the content to be too simplistic and reported that they had learned about the content from other sources before; despite the irrelevance to those experienced retirees, some participants pointed out that the content was good for retirees that are inexperienced in goal setting for retirement.

Aim 3. Examining the relationships between psychosocial factors, retirement planning and retirement adjustment.

As mentioned earlier, recent research highlights the importance of psychosocial factors in predicting retirement adjustment. In particular, recent research identifies new psychosocial factors in predicting retirement adjustment, these being mastery (Donaldson et al., 2010), self-efficacy (Van Solinge & Henkens, 2005) and on-going planning post retirement (Donaldson et al., 2010). The relationship with retirement adjustment may be direct or indirect as mastery and self-efficacy may combine to promote planning which in turn predicts adjustment. These relationships have been poorly explored, primarily because of measurement unavailability and application of the concepts to the retirement area. Therefore, the purpose of the present study was to extend the findings from recent research and investigate psychosocial influences, namely mastery, retirement self-efficacy and on-going planning post retirement on retirement adjustment and retirement planning.

Predictors of retirement planning

Self-efficacy and mastery. Previous research demonstrates that self-efficacy and mastery can influence retirement planning behavior indirectly by increasing one's tendency to set task related goals (Seijts & Latham, 2001). Apart from having indirect effects on retirement planning behaviors, self-efficacy can also influence retirement planning behavior directly. Previous research has showed that individuals with higher levels of self-efficacy were more likely to actively plan for retirement (Morgan & Eckert, 2004).

Predictors of retirement adjustment

Mastery. Prior research from the stress and coping literature has shown that a sense of mastery or personal control may be a key psychosocial resource for well-being in retirement (Ryff, 1989; Skinner, 1996). In addition, two recent studies have provided preliminary evidence that higher levels of mastery could promote better retirement adjustment, over and above the effects of health and individual influences (Donaldson et al., 2010; Price & Balaswamy, 2009).

Retirement self-efficacy. According to Taylor & Shore (1995), individuals who expect to successfully transition to retirement tend to plan to retire at younger ages, and this is considered evidence of retirement self-efficacy. In addition, workers who have higher levels of retirement self-efficacy tend to experience lower levels of pre-retirement anxiety, suggesting retirement self-efficacy influences the feelings associated with retirement transition (Fretz, Kluge, Ossana, Jones & Merikangas, 1989).

On-going post retirement planning. Earlier research suggested that planning can facilitate a more successful transition into retirement (Glass & Flynn, 2000). In particular, individuals who plan for retirement report lower levels of preretirement anxiety, better adjustment, and greater satisfaction in retirement than those who have failed to plan (Glass & Flynn, 2000; Moen, 1996). However, empirical evidence regarding the relationship between retirement planning and successful adaptation to retirement has been inconsistent, as recent research reported that retirement planning failed to predict retirement satisfaction (Topa et al., 2009).

Therefore, the aim of the present study is to examine the relationships between psychosocial variables and retirement planning as well as retirement adjustment. It is expected that:

1. After demographic influences have been controlled for, mastery, retirement self-efficacy and on-going post retirement planning can predict retirement adjustment.
2. After controlling for demographic influences, mastery and retirement self-efficacy can predict retirement planning.

Survey sample

This study used the same sample as in Study A (see page 8).

Findings

Contrary to expectations, sense of mastery and retirement self-efficacy was not predictive of retirement planning (see Table 7).

With regard to psychosocial influences on retirement adjustment, there was partial support to our expectation, such that mastery and retirement self-efficacy predicted retirement adjustment (see Table 7).

Table 7: Summary table of findings of relationships between different variables

	Dependent variable	
Psychosocial variables	Post retirement planning	Retirement adjustment
Mastery	-	*
Retirement self-efficacy	-	*
Post retirement planning	?	-

Note: * Indicates the particular psychosocial variable significantly predicts the dependent variable
? Indicates did not measure in the present study
- Indicates non-significant result

In addition, the current findings extend previous research by showing that retirement self-efficacy was a better predictor of retirement adjustment than mastery, which has been consistently found to have an important impact on retirement adjustment.

Conclusions and Future Directions

Retirement is one of the most important life transitions in later adult life. While some people enjoy retirement, approximately one third of retirees find the retirement transition stressful or show a decline in well-being. Since maladjustment to retirement may lead to detrimental effects on health, the aims of this research were to develop a retirement resources inventory (RRI) in order to understand how resources affect retirement adjustment and retirement satisfaction, design and evaluate web based retirement interventions that could improve retirement planning and retirement adjustment, and last but not least, examine the relationships between psychosocial factors and retirement planning and retirement adjustment.

Three studies were undertaken to achieve the research aims. A summary of findings for each of the three studies can be seen in Table 8.

Table 8: Summary of findings for each of the three studies in the present research

Research study	Summary of findings
Aim 1. Understand how resources affect retirement adjustment and retirement satisfaction	a) This study developed a reliable retirement resources inventory (RRI) with six subscales b) After controlling for demographic influences, retirees' retirement resources significantly predicted retirement adjustment and retirement satisfaction. c) Among the six subscales of resources, physical and financial resources were consistent predictors of retirement adjustment and retirement satisfaction d) This study found the presence of a causal relationship between aggregated retirement resources and retirement well-being, such that resources led to well-being but not the reverse

Aim 2A. Design a retirement intervention based on self-efficacy	a) Retiree's retirement self-efficacy to remain active and independent was increased by the retirement intervention based on either one of the two sources of self-efficacy (mastery experience and modeling) b) Both retirement interventions (mastery experience and modeling) appeared to have no significant impact on retiree's post retirement planning behavior, levels of mastery and retirement adjustment compared to control group c) Completing the survey alone (control group) promoted post retirement planning behavior d) Changes in outcome measures, such as retirement self-efficacy did not differ between the two self-efficacy based interventions (mastery experience and modeling)
Aim 2B. Design a retirement intervention based on goal setting	a) There was no evidence suggesting either of the interventions (goal specificity or implementation intention) were effective in promoting the participants' goal specificity, goal commitment and the level of retirement planning in relation to the control group b) No significant differences were found between either intervention on the level of goal specificity and the level of goal commitment c) Completing the survey alone (control group) promoted post retirement planning behavior
Aim 3. Examine the relationships between psychosocial variables and retirement planning and adjustment	a) Sense of mastery and retirement self-efficacy were not predictive of retirement planning b) Sense of mastery and retirement self-efficacy but not post retirement planning predicted retirement adjustment c) Retirement self-efficacy was a better predictor of retirement adjustment than sense of mastery

Practical implications

Several practical implications were generated from the present research based on our findings. In the first study (i.e. understanding how resources affect retirement adjustment and retirement satisfaction) practical implications included:

- Resources in other domains such as social, emotional and cognitive were as important as physical and financial resources. Therefore, researchers, individuals entering retirement, retirees and professionals should view resources in an aggregated sense and devote more attention to these neglected resource categories, including emotional and cognitive.
- When designing retirement interventions, professionals could identify specific resource deficits in retirees and tailor the intervention to suit individual needs.

In the second study (i.e. designing retirement interventions based on self-efficacy and goal setting) practical implications included:

- By targeting the two most influential sources of self-efficacy (mastery experience and modeling) in a retirement intervention, retirement self-efficacy could be enhanced. Therefore, it would be beneficial for counselors and psychologists to target underlying sources of self-efficacy when designing retirement interventions.
- Based on the ineffectiveness of retirement intervention based on goal specificity and implementation intention, it is believed that focusing on goal setting and action planning alone may not increase post retirement planning behavior. The preparedness to set goals in the absence of mastery may not result in improved planning.
- Since participants in the control group in both studies (A and B) have shown a significant increase in the level of post retirement planning behavior across time, it is plausible that the increase may be attributed to incidental learning. Therefore, it is possible that just by asking retirees to fill in surveys that were relevant and meaningful to them, they could incidentally learn about the different retirement domains and increase their planning behaviors.

In the third study – examined the relationships between psychosocial variables and retirement planning and adjustment, practical implications are as follow:

- Retirement self-efficacy and mastery have been found to promote retirement adjustment, while retirement self-efficacy could predict retirement adjustment to a greater extent than mastery. Counselors and psychologists working with retirees are encouraged to focus on increasing retirees' beliefs that they can cope with challenges in retirement and expect to succeed at the tasks related to retirement adjustment. This could be facilitated by designing interventions aimed at improving retirement self-efficacy as well as mastery.
- Findings suggested that having a plan at post-retirement does not guarantee retirement adjustment. Although yet to be fully investigated, it is more important for retirees to have a sense of control and believe that they can successfully implement a retirement plan, as a sense of mastery has been found to mediate the relationship between post-retirement planning and retirement adjustment (Donaldson et al., 2010). Therefore, rather than simply encouraging retirees to plan, retirement interventions should aim to enhance retirees' mastery and self-efficacy to implement their plans and educate them about the benefits of having an on-going plan during retirement in order to facilitate retirement adjustment.

Future directions

Firstly, all measures included in this study were self-report, and therefore the reliability of data could be threatened by self-presentation bias. Participants influenced by self-presentation bias could have resulted in higher ratings on all measures in the present research (i.e. levels of mastery, retirement self-efficacy, RRI, retirement adjustment and satisfaction) because they wished to present themselves as more resourceful, adjusted and satisfied. Nevertheless, self-presentation bias was not expected to influence the data in a substantial way because participants completed the survey without being monitored and they were told that their responses would be kept confidential.

In the current research, sample size was relatively small in each of the three studies in comparison to previous retirement research. Therefore, future research should recruit more participants in order to achieve sufficient power to detect the true effects. In order to increase sample size, monetary incentives could be used in future studies to maintain participation and reduce attrition between time 1 and time 2.

In addition, participants were recruited from a non-profit membership-based organization and self-selected into the study. Although the demographic characteristics of the current sample are similar to previous retirement adjustment research, the current sample did not fully represent retirees in Australia (ABS, 2009) as the NSA group was more educated and wealthy than the Australian general population. Therefore, future studies should seek participation from a broader range of participants from different communities, such as people from different educational backgrounds, levels of income and marital status.

References

Alley, D., & Crimmins, E. (2007). The demography of aging and work. In K. S. Shultz & G. A. Adams (Eds.), *Aging and work in the 21st century* (pp. 7-23). New York: Psychology Press.

Ajzen, I., Czasch, C., & Flood, M., G. (2009). From Intentions to Behavior: Implementation Intention, Commitment, and Conscientiousness. *Journal of Applied Social Psychology, 39,* 1356-1372.

Australian Bureau of Statistics (ABS). (2009). *Retirement and Retirement Intentions, Australia, Jul 2008 to Jun 2009* (Catalogue No. 6238.0). Canberra, ACT: ABS.

Australian Bureau of Statistics. (2008). *Population projections, Australia, 2006 to 2101* (Catalogue No. 3222.0). Canberra, Australian Capital Territory: ABS.

Bossé, R., Spiro III, A., & Kressin, N. R. (1996). The psychology of retirement. In R. T. Woods (Ed.), *Handbook of the clinical psychology of ageing* (pp. 141-157). Chichester, England: John Wiley & Sons.

Brändtstadter, J., & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging, 5*, 58-67.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Collins, M. E., Mowbray, C. T., & Bybee, D. (1999). Establishing individualized goals in a supported education intervention: program influences on goal-setting and attainment. *Research on Social Work Practice, 9,* 483-507.

Donaldson, T., Earl, J. K., & Muratore, A. M. (2010). Extending the integrated model of retirement adjustment: Incorporating mastery and retirement planning. *Journal of Vocational Psychology, 77,* 279-289.

D'Aprix, A. (2009). Living in the Present Moment. *Certified Senior Advisors Journal, 43*, 50-52.

Dixon, P. N. (1978). Subject recruitment incentives, personality factors and attitudes toward experimentation in a simultaneous intentional-incidental learning task. *The Journal of General Psychology, 99*, 99-105.

Eden, D., & Aviram, A. (1993). Self-Efficacy Training to Sped Reemployment: Helping People to Help Themselves. *Journal of Applied Psychology, 78*, 352-360.

Floyd, F. J., Haynes, S. N., Doll, E. R., Winemiller, D., Lemsky, C., Burgy, T. M., Wele, M., & Heilman, N. (1992). Assessing retirement satisfaction and perceptions of retirement experiences. *Psychology and Aging*, *7,* 609-621.

Fried, Y., & Slowik, L. H. (2004). Enriching goal-setting theory with time: An integrated approach. *Academy of Management Review, 29,* 404-422.

Fretz, B. R., Kluge, N. A., Ossana, S. M., Jones, S. M., & Merikangas, M. W. (1989). Intervention targets for reducing preretirement anxiety and depression. *Journal of Counseling Psychology, 36,* 301-307.

Gollwitzer, P. M. (1993). Goal achievement: The role of intentions. In M. Hewstone &W. Stroeve (Eds.), *Eueopean review of social psychology* (Vol. 4, pp. 141-185). Chichester, England: Wiley.

Glass, J. C., & Flynn, D. K. (2000). Retirement needs and preparation of rural middle-aged persons. *Educational Gerontology, 26,* 109–134.

Henkens, K., van Solinge, H., & Gallo, W. T. (2008). Effects of retirement voluntariness on changes in smoking, drinking and physical activity among Dutch older workers. *European Journal of Public*

Health, 18, 644–649.
Kirkpatrick, D. L. (1977). Evaluating training programs: Evidence vs. proof. *Training & Development Journal, 31,* 9-12.
Kubicek, B., Korunka, C., Raymo, J. M., & Hoonakker, P. (2011). Psychological well-being in retirement: The effects of personal and gendered contextual resources. *Journal of Occupational Health Psychology, 16*, 230-246.
Klein, H., J., Wesson, M., J., Hollenbeck, J., R., Wright, P., M., & DeShon, R., P. (2001). The Assessment of Goal Commitment: A Measured Model Meta-Analysis. *Organizational Behavior and Human Decision Processes, 85,* 32-55.
Locke, E., A., Shaw, K., N., Saari, L., M., & Latham, G., P. (1981). Goal Setting and Task Performance: 1969-1980. *Psychological Bulletin, 90,* 125-152.
Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Current Directions in Psychological Science, 15,* 265-268.
Locke, E., A., & Latham, G., P. (2002). Building a Practically Useful Theory of goal Setting and Task Motivation. *American Psychologist, 57,* 705-717.
Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, *74*, 763-773.
Moen, P. (1996). A life course perspective on retirement, gender, and well-being. *Journal of Occupational Health Psychology, 1,* 131–144.
McKean Skaff, M., Pearlin, L. I., & Mullan, J. T. (1996). Transitions in the caregiving career: effects on sense of mastery. *Psychology and Aging, 11,* 247-257.
Muratore, A.M., & Earl, J.K. (2010). Predicting retirement preparation through the design of a new measure. *Australian Psychologist, 45*, 98-111.
MacLeod, A., K., Coates, E., & Hetherton, J. (2008). Increasing well-being through teaching goal-setting and planning skills: results of a brief intervention. *Journal of Happiness Studies, 9,* 185-196.
Martijn, C., Alberts, H., Sheeran, P., Peters, G. Y., Mikolajczak, J., & de Vries, N. K. (2008). Blocked goals, persistent action: Implementation intentions engender tenacious goal striving. *Journal of Experimental Social Psychology, 44,* 1137–1143.
Marsick, V. J., Watkins, K. E., Callahan, M. W., & Volpe, M. (2009) Smith, M. Cecil (Ed.); DeFrates-Densch, Nancy (Ed), *Handbook of research on adult learning and development* (pp. 570-600). New York, NY: Routledge/Taylor & Francis group.
Morgan, L. A., & Eckert, J. K. (2004). Retirement financial preparation: Implications for policy. *Journal of Aging and Social Policy, 16*, 19–34.
Neuhs, H. P. (1991). Ready for retirement? Give the quiz to find out the retirement issues that can erode or threaten self-confidence in an elder's golden years. *Geriatric Nursing, 12,* 240-241.
Nichols, J., Schutte, N. S., Brown, R. F., Lee, C. D., & Price, I. (2007). The Impact of a Self-Efficacy Intervention on Short-Term Breast-Feeding Outcomes. *Health Education & Behavior, 36*, 250-259.
Perreira, K. M., & Sloan, F. A. 2001. Life events and alcohol consumption among mature adults: A longitudinal analysis. *Journal of Studies on Alcohol*, *62*, 501-508.
Petkoska, J. & Earl, J. K. (2009). Understanding the influence of demographic and psychological variables on retirement planning. *Psychology and Ageing, 24*, 245- 251.
Pearlin, L., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19,* 2–21.
Price, C. A., & Balaswamy, S. (2009). Beyond health and wealth: Predictors of women's retirement satisfaction. *The International Journal of Aging & Human Development, 68,* 195-214.
Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069−1081.
Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.

Seijts, G. H., & Latham, G. P. (2001). The effect of learning, outcome, and proximal goals on a moderately complex task. *Journal of Organizational Behavior*, *22*, 291–302.

Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology, 71*, 549−570.

Smith, D. B., & Moen, P. (2004). Retirement satisfaction for retirees and their spouses: Do gender and the retirement decision-making process matter? *Journal of Family Issues, 25*, 262–285.

Scheier, M. F., & Carver, C. S. (1985). Optimisim, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.

Toossi, M. (2004). Labor force projections to 2012: The graying of the U.S. workforce. *Monthly Labor Review, 127*, 3-22.

Taylor, M. A., & Shore, L. M. (1995). Predictors of planned retirement age: An application of Beehr's model. *Psychology and Aging, 10*, 76-83.

Topa, G., Moriano, J. A., Depolo, M., Alcover, C., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior, 75*, 38–55.

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., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist, 66*, 204-213.

Wells, Y., deVaus, D., Kendig, H., Quine, S., & Petralia, W. (2006). Healthy Retirement Project: Technical Report [Electronic version]. Retrieved March 11, 2011. Available from: http://www.latrobe.edu.au/alpc/projects/hrp.pdf.

Woods, L. L., & Daniel, L. G. (1998). Effects of a tourism awareness program on the attitudes and knowledge of older adults. *Educational Gerontology, 24*, 69-78.