

## **AGE DIFFERENCES IN EXPECTED SATISFACTION WITH LIFE IN RETIREMENT**

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### **ABSTRACT**

Research on expected quality of life in retirement has focused on the perceptions of individuals either living in retirement or nearing retirement age. In this article, data are reported that examine expectations of (future) retirement quality of life among younger and middle-aged adults. Toward this end, a new scale—the Satisfaction with Life in Retirement Scale—is introduced. As part of the study, a pair of age-specific, theoretically-driven, hierarchically-structured path models were tested in which individuals' perceptions of future retirement satisfaction were regressed on indicators of financial knowledge, future time perspective, financial risk tolerance, and parental financial values. Models from both age groups were successful in accounting for variability in perceptions of future retirement satisfaction; however, age differences in the model were observed. The results of this investigation have implications for retirement counselors and intervention specialists who seek to cultivate positive perceptions of late life among individuals of different ages.

### **INTRODUCTION**

How do individuals envision their quality of life 2, 3, 4, or even 5 decades into the future, once they have left the workforce and entered retirement? Do they invariably see their lives through rose-colored glasses, envisioning a bright future in which they see themselves experiencing a high quality of life free from strife

and turmoil? Or do significant inter-individual differences exist in the way people view their possible future (Markus & Nurius, 1986; Wagner, Lüdtkke, Jonkmann, & Trautwein, 2013)?

In the present investigation, we sought to answer these questions by examining individuals' perceptions of their future life in retirement. This was accomplished by administering a newly developed "retirement version" of a well-known measure of subjective well-being—the Diener, Emmons, Larsen, and Griffin (1985) Satisfaction with Life Scale (SWLS). One important goal in addressing the conceptual questions raised above was to determine whether age differences exist in individuals' expectations of life in retirement. This was accomplished by exploring the perceptions of two different groups of individuals—college students (hereafter referred to as the young group) and middle-aged adults. The second research goal was to explore the psychological dimensions that underlie (i.e., predict) expectations of satisfaction with life in retirement for these two groups of individuals.

There exists a variety of reasons to examine anticipated satisfaction with life in retirement. One is because the quality of an individual's future expectations can help to define the nature of one's long-range goals (Austin & Vancouver, 1996) and retirement intentions (Brougham & Walsh, 2005). Another reason it is important to study expectations of satisfaction is because expectations motivate individuals to engage in adaptive goal-striving behaviors, so as to achieve a desired state, such as having financial independence during retirement (Ellen, Wiener, & Fitzgerald, 2011). Indeed, Beach and colleagues (Beach, 1998; Beach & Mitchell, 1987) have argued that goal-based motives strengthen as a function of the magnitude of the discrepancy between one's expected and desired goal states, a relationship that has been empirically demonstrated in the retirement decision-making literature (Brougham & Walsh, 2007). A third reason to assess anticipated satisfaction with life is because doing so may allow for the identification of the psychological factors that underlie individual differences in expectations of the future. If different underlying forces are found to influence perceptions of younger and older adults, then it may be possible to develop age-appropriate intervention approaches designed to better calibrate individuals' expectations of the future.

The Diener et al. (1985) scale is designed to be a brief global cognitive assessment of the quality of one's life (Pavot & Diener, 2009). Since its inception, the SWLS has been used in hundreds of investigations of subjective well-being. On the whole, investigations have shown that individuals tend to view their lives in a positive fashion (Pavot & Diener, 2008), with most samples found to be satisfied or highly satisfied with their lives. SWLS scores have also been found to be positively correlated with the quality of one's health (Lyubomirsky, King, & Diener, 2005), the strength of social relationships (Diener & Seligman, 2002), and marital satisfaction (Bailey & Snyder, 2007; Glenn & Weaver, 1981). SWLS scores have also been shown to be unrelated to gender and age (Pavot & Diener,

2009). Moreover, because scores on the SWLS are based on individuals' own standards for what constitutes "satisfaction," respondents who have experienced a relatively poor quality of life due to other circumstances (e.g., alcoholism, psychiatric disorders, marital abuse, incarceration) tend to produce lower ratings on the scale than those not experiencing a unique negative life situation (Pavot & Diener, 2008, 2009). And although life satisfaction has been demonstrated to be stable within individuals (Fujita & Diener, 2005), substantial changes within individuals have been observed when accompanied by changes in life domains such as job satisfaction or marital satisfaction (Heller, Watson, & Ilies, 2006).

Of relevance to the present investigation, college student samples in Russia, Scotland, and China report scores that are lower than the neutral point on the scale, but American and French-Canadian student samples report scores higher than the neutral point (Pavot & Diener, 2008). Pavot and Diener (2009) explain this difference in student outcomes by suggesting that the current life conditions of students in the former countries are more likely to be lower than the life to which they aspire (which is likely not the case for American and Canadian students). A different investigation of college students revealed that stress levels were inversely related to satisfaction with life (SWL) using the Diener et al. instrument (Weinstein & Laverghetta, 2009).

Other investigators have found that judgments of life satisfaction are not only a reflection of individual difference attributes or one's current life condition, but also of one's life stage (such as the retirement stage). In fact, a study examining individual and joint SWL among retirees and their spouses (Smith & Moen, 2004) revealed that 77% of retirees were satisfied, but only 67% of spouses were satisfied and that figure dropped to 59% among couples reporting joint satisfaction. Other investigations have shown that life satisfaction is linked to the nature of one's transition into retirement, with those experiencing an involuntary workforce exit having lower life satisfaction scores than those who retire voluntarily (Bonsang & Klein, 2012; see also Hershey & Henkens, 2013).

Studies of age differences in life satisfaction using the SWLS have also provided insights into perceptions of well-being. One study by Hamarat, Thompson, Zabrocky, Steele, Matheny, and Aysan (2001) revealed that older adults (over age 66) had higher SWLS scores than middle-aged adults (41-65 years), who, in turn, had higher scores than young adults (18-40 years). Follow-up tests revealed that the difference between scores for the old and young groups was statistically significant, but differences failed to be identified between the old and middle-aged groups, and the middle-aged and young adults. Consistent age difference findings were observed by Bronk, Hill, Lapsley, Talib, and Finch (2009), who found that adolescents ( $M_{\text{age}} = 14.0$ ) had lower SWLS scores than emerging adults ( $M_{\text{age}} = 21.0$ ), who had lower scores than middle-aged adults ( $M_{\text{age}} = 35.5$ ).

Although other scales of retirement satisfaction exist (e.g., Floyd, Haynes, Doll, Winemiller, Lemsky, Burgy, et al., 1992; Fouquereau, Fernandez, & Mullet,

1999), for the purposes of the present investigation the decision was made to use an adapted version of the Diener et al. (1985) SWLS. Reasons for this include the brevity of the SWLS, the global nature of the evaluation required, its demonstrated psychometric strength and stability across different cultures, and its high levels of predictive validity across a variety of domains.

### **Development of the SWLRS**

It was a relatively straightforward task to adapt the original 5-item Diener et al. (1985) SWLS into a measure designed to tap future retirement satisfaction—what we refer to hereafter as the Satisfaction with Life in Retirement Scale (SWLRS). As shown below, four of the items from the original scale required only subtle wording changes to reframe the context of the judgment:

SWLS Item #1: *In most ways my life is close to ideal.*

SWLRS Item #1: *I expect that in retirement my life will be close to ideal.*

SWLS Item #2: *The conditions of my life are excellent.*

SWLRS Item #2: *Once I enter retirement, the conditions of my life will be excellent.*

SWLS Item #3: *I am satisfied with my life.*

SWLRS Item #3: *After I retire, I will be satisfied with my life.*

SWLS Item #4: *So far I have gotten the important things I want in life.*

SWLRS Item #4: *After I retire, I will have gotten the important things I wanted in life.*

One item from the SWLS (i.e., “*If I could live my life over, I would change almost nothing*”) was omitted from the SWLRS for two reasons. The first is because this item required a counterfactual judgment in which individuals are required to look back over the course of their lives. If this item were to be reworded to fit a prospective retirement context, then it would have potentially been confusing to respondents given the forward-looking nature of the new measure. The second reason it was eliminated from the SWLRS is because in a number of previous empirical investigations this item has been shown to have an appreciably lower factor loading than the first four items on the SWLS, which are all focused on quality of life in the present (see Pavot & Diener, 2008, for a discussion).

## **PRESENT INVESTIGATION**

One empirical goal of this study is to determine the extent to which younger and middle-aged adults share a common view of quality of life in retirement.

Stated differently, do they expect to achieve roughly equivalent levels of life satisfaction after leaving the workforce? Middle-aged adults might be expected to have a more nuanced and realistic view of retirement than younger adults, simply by virtue of the fact that they have lived a longer life and witnessed more individuals exit the workforce into a variety of different quality of life situations (i.e., some positive, some negative, some neutral). Whether this life experience might be expected to shape impressions of their own transition, and whether those expectations differ from those of young adults, is yet to be seen.

Beyond examining age differences in expectations of retirement satisfaction, a second goal is to examine the psychological factors that underlie scores on the SWLRS. Toward this end, two age-specific hierarchical path models (young adults; middle-aged adults) will be tested in which cognitive and personality indicators serve as predictors of participants' expectations of the future. Although a number of different types of resources (Wang, 2007) could be thought of as contributing to retirement quality of life (e.g., social resources, physical resources, financial resources, health resources), in this investigation we focus on the role of anticipated financial resources as a determinant of quality of life expectations. Toward that end, in addition to assessing future time perspective, we examine a set of financially-linked predictors of future retirement satisfaction including: one's knowledge of retirement planning, financial risk tolerance, and whether one's parents served as positive role models when it came to saving for the future.

## Hypotheses

As shown in Figure 1, scores on the SWLRS are hypothesized to be positively related to one's level of retirement-linked financial knowledge (H1). This is because individuals with higher levels of financial literacy are more likely to plan for retirement than those whose literacy levels are lacking, and engagement in planning activities, it has been argued, is likely to leave individuals better positioned for old age (Lusardi & Mitchell, 2011). With respect to the second and third hypotheses, in previous investigations financial knowledge has been shown to be predicted on the basis of two personality indicators—future time perspective (Hershey, Henkens, & Van Dalen, 2010; Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007) and level of financial risk tolerance (Grable, 2000). These established relationships provide empirical support for H2 and H3 in the model, respectively. Levels of the two personality indicators, in turn, are posited to have their roots in one's childhood socialization experiences. Research by Kopusko (2012; see also Hershey et al., 2010) has demonstrated that parental influences on saving is positively linked to future time perspective, thereby providing support for H4. And although a link between parental influences on saving and financial risk tolerance has not been empirically established, it has been argued that parental financial values readily transfer to their children

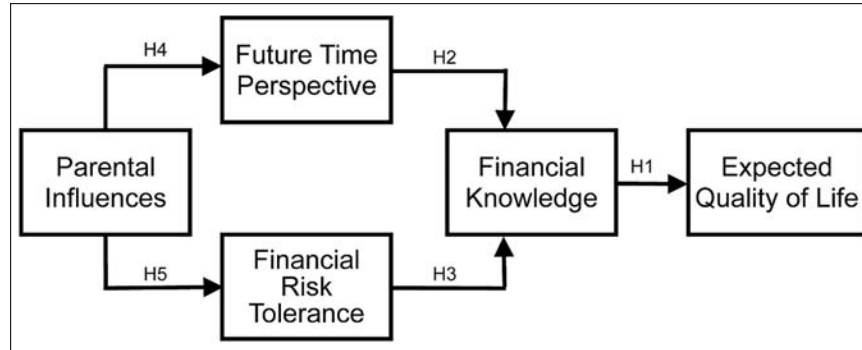


Figure 1. Measurement model of the five factors in the study. Factor loadings to the left of the slash for indicators are for members of the young adult sample; loadings to the right side of the slash are for members of the middle-aged group. Correlations between constructs (based on unit-weighted scale scores) are reported in Table 1.

(American Education Savings Council & Employee Benefit Research Institute, 2001). Thus, it is conceivable that the types of messages a child receives from his or her parents about saving and investing could very well shape the child's willingness to take on financial risk (H5). All valences for path coefficients in the model are expected to be positive.

### Theoretical Framework

Collectively, the set of hypotheses described above are supported by the propositions outlined in a psychological theory of decision making called image theory (Beach, 1998; Beach & Mitchell, 1987). By way of background, image theory posits the existence of three qualitatively different types of images: a trajectory image, a value image, and a strategic image. The trajectory image is thought to capture one's view of the future—that is, where one sees oneself at some distant point in time. In the context of the present investigation, individuals' impressions of future quality of life (as indexed by scores on the SWLRS) are believed to reflect the nature of one's trajectory image. The second image—the value image—reflects an individual's morals, values, and general beliefs about right and wrong in a decision making or life planning context. In the hypothesized model shown in Figure 1, three variables are thought to reflect an individual's value image: parental influences on saving, future time perspective, and financial risk tolerance. All three presumably mirror either early lessons learned as a child or the accumulation of life experiences that shape one's attitudes and outlook on the world. The third of Beach's images—the strategic image—is comprised

of the set of plans and tactics one might engage in to realize elements of the trajectory image. In this study, respondents' self-rated level of financial retirement knowledge serves as a proxy indicator for the strategic image. That is because individuals who are differentially knowledgeable about financial planning for retirement are likely to have a set of strategies in place that are designed to help them to achieve their long-range financial goals.

### **Analysis Plan**

Initial analyses will focus on the psychometric properties and characteristics of the SWLRS. Specifically, the factor structure and internal consistency of the new measure of subjective well-being will be examined as part of a complete measurement model assessment involving all five scales in the study. This analysis will be followed by age-based comparisons of mean SWLRS scores, as well as other retirement-linked indicators.

The second part of the analysis plan involves testing two separate, fully-mediated path models—one for young adults and a second for middle-aged respondents—that are designed to explore the constructs that underlie SWLRS scores (see Figure 1). This will be accomplished by the use of hierarchical regression techniques, in which levels of nested variables are entered as predictors for each endogenous construct in the model. Consistent with recommendations for path analysis (Olobutuyi, 2006), a separate regression model will be estimated for each endogenous construct in each of the two models. And although direct effects from one variable to another that “skip” one or more hierarchical levels are not hypothesized (e.g., parental influences to financial knowledge; see Figure 1), any such paths will be entertained as possible amendments to the model in instances where they are found to exist, with the proviso that they be theoretically reasonable and not inconsistent with the tenets of image theory.

## **METHOD**

### **Participants**

Participants in the middle-aged sample were 90 adults (25 men; 65 women) who took part in a larger investigation of response times and information processing (Gutierrez & Hershey, 2013). One inclusion criterion for the study was that all participants still be in the workforce (i.e., not yet retired, even if temporarily unemployed). Individuals were recruited in the North Central Oklahoma region through advertisements placed in the print and electronic media, through personal contacts, and via snowball sampling. The average age of respondents was 49.09 years ( $SD = 7.91$ ; min. = 34; max. = 65) and the sample was predominantly White (76.7%), which is representative of the region.

Participants in the young adult sample were 1,560 undergraduate students (600 men; 960 women) attending a large state university in the Midwest. The inclusion criteria specified above (that all participants be in the workforce) was not applied to this sample, as individuals in this group were mostly non-working college students. To equate sample sizes across age groups (and, thus, the power to detect significant differences), 90 students were randomly selected from the initial sample of 1,560 to form the young adult sample. The average age of this reduced group respondents was 19.49 years ( $SD = 2.08$ ; min. = 18; max. = 33) and the majority of participants were freshmen and sophomores (72.4%). The sample was predominately White (78.9%), which again, is representative of the region.

### **Questionnaire/Measures**

In addition to the newly developed SWLRS, each participant provided responses to items from four other scales that in previous studies have been shown to be linked to retirement planning predispositions (described below). Respondents answered 15 different items that together make up the five constructs in the investigation (all items are shown in the Appendix). Questions for all five scales used a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*), and participants were asked to indicate the extent to which each statement reflected their attitudes, beliefs, or predispositions. In previous investigations the future time perspective, financial knowledge, and financial risk tolerance measures have been shown to possess reasonable psychometric properties.

As pointed out earlier in the introduction, the SWLRS was designed to assess expectations of satisfaction with life after leaving the workforce. In the present investigation, the SWLRS was shown to have a coefficient alpha value of .87 for members of the young adult sample, and .85 for middle-aged adults.

The measure of self-rated financial knowledge was based on a scale originally published by Jacobs-Lawson and Hershey (2005; see also Hershey, Jacobs-Lawson, et al., 2007). This three-item measure is designed to assess individuals' perceptions of knowledge of financial planning for retirement, including beliefs about one's financial knowledge relative to others. The measure demonstrated a high degree of internal consistency, with a coefficient alpha value of .94 for young adults, and .91 for those in the middle-aged group. In previous investigations, this scale has been shown to be predictive of not only retirement savings tendencies, but also engagement in retirement-oriented financial planning activities.

Future orientation was assessed using a three-item scale from the Jacobs-Lawson and Hershey (2005; see also Hershey, Henkens, & Van Dalen, 2007; Hershey, Jacobs-Lawson, et al., 2007) time perspective measure. In previous investigations, this measure has been shown to be related to not only financial knowledge, but also the clarity of individuals' retirement goals. When examining the data from the present study, one of the three items ("*I enjoy thinking about how I will live years from now in the future*") resulted in low coefficient alpha values for both groups, and was therefore excluded from further consideration.



Coefficient alpha values for the two remaining items were .83 for young adults and .61 for those in the middle-aged sample. Although this latter value is not a particularly high level of internal consistency, scales with alpha values in the .60 to .70 range are still deemed to be acceptable for research purposes (Lance, Butts, & Michaels, 2006).

Financial risk tolerance was measured using a four-item scale published by Jacobs-Lawson and Hershey (2005) which was designed to assess one's willingness to accept risk in relation to long-range financial investing. In previous research, this scale has been shown to be predictive of retirement savings tendencies. Preliminary factor analytic findings from this study revealed that one of the four items ("*I am willing to risk financial losses*") produced low factor loadings for both age groups and, therefore, it was excluded from further consideration. The resulting three-item scale was found to have a coefficient alpha value of .72 among young adults, and .69 among those in the middle-aged group.

The last of the five measures—the parental influence on savings scale—was designed to assess the extent to which one's parents shared important lessons about planning and saving for the future during the respondent's formative years. In the present investigation, this three-item measure was found to have a coefficient alpha value of .78 for young adults, and .77 for those in the middle-aged group. This scale has not previously been published, however, in an investigation by Hershey et al. (2010) one of the items—"*Saving money for the future was an important lesson I learned as a child*"—was found to be predictive of individuals' level of future time perspective.

### Measurement Model

Prior to testing the research questions outlined in the introduction, a measurement model containing items from each of the five constructs was computed using the Analysis of Moment Structures statistical modeling software (AMOS v. 20; Arbuckle, 2011). As per recommendations contained in Byrne (2010), confirmatory factor analyses were first computed separately for members of each age group. The graphical structure for that analysis, along with standardized factor loadings for both groups, is shown in Figure 2.

As seen in the figure, all loadings were in the acceptable range, and no substantial cross-loadings were found to exist. The modification indices for the initial measurement models revealed only one suggested change—to correlate error terms for two SWLRS items (SWLRS1 and SWLRS2)—which was judged to be a reasonable addition to the model. Both the revised young and middle-aged adult models were found to be a satisfactory fit to the data, based on criteria outlined in Brown (2006). For the young adult group, the fit indices were:  $\chi^2_{(79)} = 130.61$ ,  $p = .000$ ,  $\chi^2/df = 1.653$ ,  $IFI = .933$ ,  $CFI = .930$ ,  $RMSEA = .086$  (90% CI = .059, .111); and for the middle-aged group the fit indices were:  $\chi^2_{(79)} = 151.08$ ,  $p = .000$ ,  $\chi^2/df = 1.910$ ,  $IFI = .947$ ,  $CFI = .946$ ,  $RMSEA = .071$  (90% CI = .054, .089).

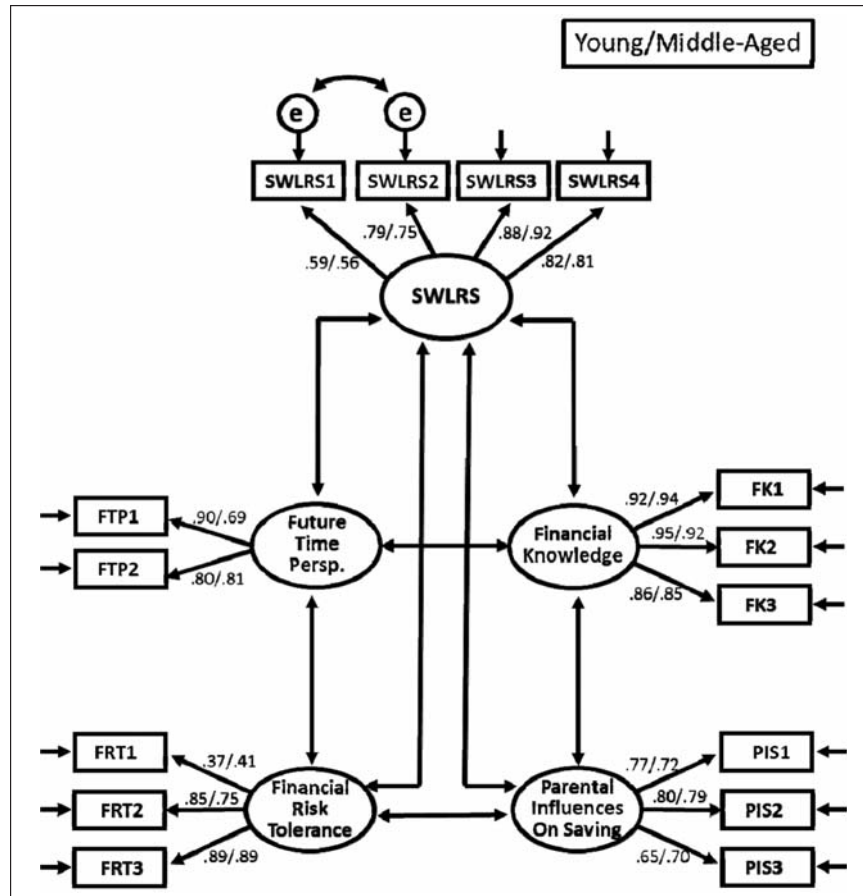


Figure 2. Conceptual model of hypothesized influences on expected Satisfaction with Life in Retirement Scale (SWLRS) scores.

## RESULTS

Initial descriptive analyses focused on the response distribution of SWLRS scores for the two age groups. Among young adults, 4.4% disagreed or strongly disagreed with the notion that they would experience a satisfying retirement. This is in contrast to 15.6% of middle-aged individuals. Some 47.8% of young adults provided neutral responses to the set of four items, compared to 62.2% of middle-aged respondents. And finally, 47.8% of younger individuals agreed or strongly agreed with the notion that they would experience a satisfying retirement, in contrast to only 22.2% of middle-aged adults. Overall, these differences

suggest younger adults are more optimistic about what the future holds than middle-aged respondents.

Descriptive statistics (correlations and mean scores) organized by group status are shown in Table 1 for each of the five constructs. Comparisons between means reveal that younger individuals had a more positive view of retirement than their middle-aged counterparts, with the mean SWLRS scores for students being significantly larger than that of middle-aged adults,  $t(178) = 4.73, p < .01$  (see Table 1). Comparisons of means for other constructs in the study revealed age differences for two of the four scales—with middle-aged adults reporting more financial knowledge than younger adults,  $t(178) = 4.98, p < .01$ , and middle-aged adults reporting a longer future time perspective,  $t(178) = 2.28, p = .02$ . No significant differences in means were observed for financial risk tolerance ( $t(178) = 1.07, ns$ ), or parental influences on saving ( $t(178) = 1.48, ns$ ).

One final set of preliminary analyses probed for gender differences in SWLRS scores. A  $2 \times 2$  analysis of variance (ANOVA) was computed, in which gender (female; male) served as one independent variable (IV) and age group status (young; middle-age) served as the second. Gender was found to be unrelated to SWLRS scores, as was the gender by group interaction ( $F(1, 176) = 0.90, ns$  and  $F(1, 176) = 0.20, ns$ , respectively). That is, consistent with findings from Pavot and Diener (2009), who examined current SWL, gender differences failed to be observed in expected retirement satisfaction scores.

### PATH MODEL ANALYSES

To test the hypothesized path analysis model shown in Figure 1, for each of the two samples four separate hierarchical regression analyses were calculated (one for each endogenous variable). The path diagrams shown in Figures 3 (young adults) and 4 (middle-aged adults) graphically display the results of those analyses. Included in the figure are all hypothesized pathways, non-hypothesized paths that were found to be statistically significant, standardized beta weights, and  $R^2$  values for endogenous constructs.

#### Young Adults

In the model for young adults, respondents' expected satisfaction with life in retirement was regressed on three sets of predictors:

1. financial knowledge in level one;
2. future time perspective and financial risk tolerance in level two; and
3. parental influences on saving in the third level.

The first level was significant,  $F(1, 88) = 10.89, p < .01$ , with 24% of the variance accounted for in the criterion. In support of H1, the standardized beta weight for the path between financial knowledge and satisfaction with life in retirement

Table 1. Correlations, Mean Scores, and Standard Deviations for Members of the Two Groups

	SWLR	FK	FTP	FRT	PIS
<b>Young Group</b>					
Satisfaction with Life in Retirement (SWLR)	1.00				
Financial Knowledge (FK)	.33**	1.00			
Future Time Perspective (FTP)	.05	.26*	1.00		
Financial Risk Tolerance (FRT)	.23*	.34**	-.22*	1.00	
Parental Influences on Saving (PIS)	.43**	.24*	.10	.23*	1.00
Mean (SD)	5.06 (1.30)	2.44 (1.49)	4.03 (1.53)	3.10 (1.27)	4.85 (1.67)
<b>Middle-Aged Group</b>					
Satisfaction with Life in Retirement (SWLR)	1.00				
Financial Knowledge (FK)	.26*	1.00			
Future Time Perspective (FTP)	.07	.37**	1.00		
Financial Risk Tolerance (FRT)	.19	.07	-.22*	1.00	
Parental Influences on Saving (PIS)	.22*	.31**	.23*	-.04	1.00
Mean (SD)	4.16 (1.27)	3.58 (1.59)	4.57 (1.67)	3.30 (1.28)	4.48 (1.77)

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

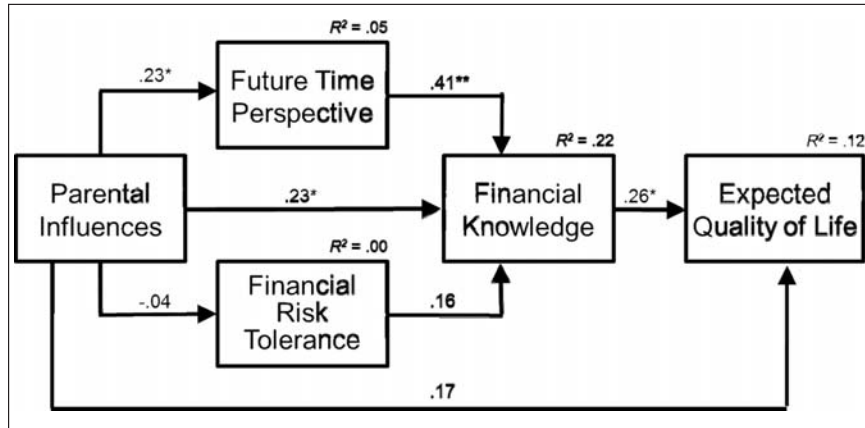


Figure 3. Observed path model for members of the young adult sample. All coefficients shown are standardized beta weights. Beta weights marked with a single asterisk are significant at the .05 level, those with a double asterisk are significant at the .01 level.

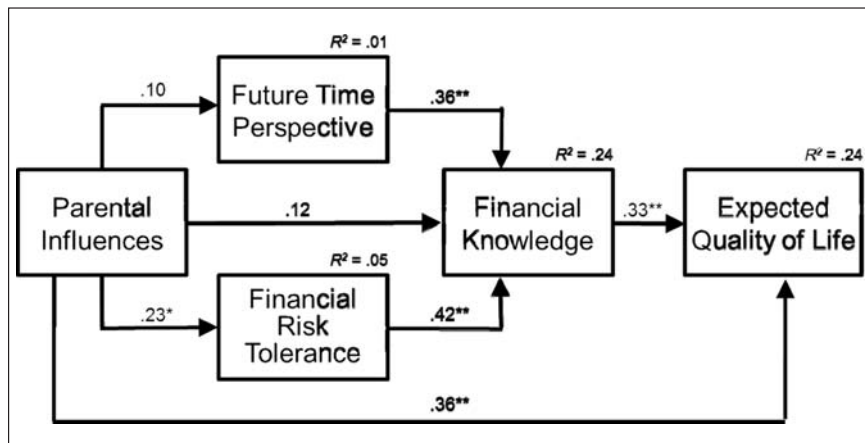


Figure 4. Observed path model for middle-aged adults. All coefficients shown are standardized beta weights. Beta weights marked with a single asterisk are significant at the .05 level, those with a double asterisk are significant at the .01 level.

was .33 ( $p < .01$ ). The change in variance at the second hierarchical level was not statistically significant (as predicted), but contrary to expectations the change in variance associated with the third hierarchical level was significant,  $F(4, 85) = 6.88$ ,  $p < .01$ ,  $R^2_{\Delta} = .12$ , with parental influences on saving scores reliably predicting anticipated retirement satisfaction ( $\beta = .36$ ). In sum, 24% of the variance in anticipated satisfaction levels was explained.

Next, financial knowledge was regressed on future time perspective and financial risk tolerance (level one), and parental influences on saving (level two). The first hierarchical level was significant,  $F(2, 87) = 13.73$ ,  $p < .01$ ,  $R^2 = .24$ . In support of H2 and H3, both future time perspective and risk tolerance were found to reliably predict knowledge scores at the .01 level, with standardized beta weights of .36 and .42, respectively. As anticipated, the variance explained in the second hierarchical level was not statistically significant.

Subsequently, future time perspective was regressed on parental influences on saving. Contrary to expectations outlined in H4, this regression was not statistically significant,  $F(1, 88) < 1$ ,  $R^2 = .01$ . Finally, financial risk tolerance was regressed on parental influences on saving (H5). This model revealed a significant effect,  $F(1, 88) = 4.97$ ,  $p < .05$ ,  $R^2 = .05$ , with a standardized beta weight equal to .23 ( $p < .05$ ).

### Middle-Aged Adults

The first hierarchical regression for the middle-aged sample involved regressing SWLRS scores on financial knowledge. This regression was found to be statistically significant,  $F(1, 88) = 6.24$ ,  $p < .05$ , with 6.6% of the variance accounted for in the criterion ( $\beta = .26$ ,  $p < .05$ ). Consistent with a priori predictions, the three non-hypothesized paths tested in the second and third levels all failed to reach the significance threshold.

Next, financial knowledge was regressed on future time perspective and financial risk tolerance (level one), and parental influences on saving (level two). The first hierarchical level was significant,  $F(2, 87) = 8.35$ ,  $p < .01$ ,  $R^2 = .16$ . In support of H2, future time perspective was found to reliably predict knowledge scores at the .01 level ( $\beta = .41$ ). However, in contrast to H3, risk tolerance failed to predict knowledge. The change in variance associated with the second hierarchical level was also statistically significant,  $F(3, 86) = 7.85$ ,  $p < .01$ ;  $R^2_{\Delta} = .05$ , with parental influences on saving shown to have a (non-hypothesized) significant impact on financial knowledge.

Subsequently, future time perspective was regressed on parental influences on saving. Lending support to H4, this regression ( $\beta = .23$ ,  $p < .05$ ) was found to be statistically significant,  $F(1, 88) = 4.80$ ,  $p < .05$ ,  $R^2 = .052$ . For the final regression model, financial risk tolerance was regressed on parental influences on saving. Contrary to H5, this model failed to approach the significance threshold.

### Age Comparisons Involving Path Models

*T*-test comparisons across groups for the seven matched pairs of slope parameters from the path models revealed that five of the seven beta weights were significantly different from one another. Path comparisons for H1 (financial knowledge to SWLRS) and H2 (future time perspective to financial knowledge) both failed to reveal significant age effects;  $t(176) = 1.27$ , *ns*, and  $t(176) = 1.25$ , *ns*, respectively. However, comparisons between risk tolerance and financial knowledge (H3) did reveal an age difference; the standardized coefficient for younger individuals ( $\beta = .42$ ) was significantly larger than the comparable coefficient for middle-aged respondents ( $\beta = .16$ ),  $t(176) = 4.33$ ,  $p < .01$ . A significant difference was also observed in slope magnitudes for the H4 link between parental influences on saving and future time perspective ( $\beta_{\text{Young}} = .10$ ;  $\beta_{\text{Middle-Age}} = .23$ ),  $t(176) = 3.25$ ,  $p < .01$ . Furthermore, H5 revealed a significant difference in coefficients across age groups, with the link between parental influences on saving and financial risk tolerance for younger individuals being larger than that of middle-aged adults (.23 versus  $-.04$ , respectively),  $t(176) = 9.00$ ,  $p < .01$ . Finally, coefficients for both non-hypothesized paths revealed age effects. Specifically, beta weights between parental influences and financial knowledge emerged as different from one another ( $t(176) = 3.00$ ,  $p < .01$ ), as did the pathways between parental influences and SWLRS,  $t(176) = 6.33$ ,  $p < .01$ .

## DISCUSSION

The overarching goals of this study were to: (i) explore the possibility of age differences in individuals' expectations of satisfaction in retirement, and (ii) identify the psychological factors predictive of those perceptions of the future. Image theory served as a theoretical backdrop for the investigation. A comparison of SWLRS scores revealed that younger adults had significantly more positive impressions of retirement than their middle-aged counterparts. Moreover, the path analysis models were effective at identifying the psychological factors responsible for individuals' perceptions of retirement. Structurally, the two age-based path models were found to be quite similar, with three of the five a priori hypotheses supported in the middle-age model and four of the five supported in the young adult model. But that said, group-based comparisons of matched beta weights across models revealed differences for five of the seven observed paths. Taken together, these findings make a novel contribution to the literature on perceptions of life satisfaction.

It is interesting to speculate as to why the mean retirement satisfaction ratings of young adults were significantly larger those that of middle-aged respondents. One possibility is that younger adults' ratings could be inflated by the fact that

they have yet to encounter the range of successes and failures one is likely to experience throughout much of one's working years. That is, young adults can afford to be optimistic when envisioning life in retirement, given the absence of feedback regarding their quality of life in the pre-retirement period. Some middle-aged respondents, in contrast, will have already experienced a poor quality of life, others will have experienced an above average quality of life, and still others will have had mixed experiences. On that basis, respondents in the middle-aged group might be more likely to discriminate differences in future quality of life outcomes, which empirically would result in a lower overall group mean on the SWLRS. This premise could be empirically tested in future investigations by looking at the correspondence between working adults' current SWL ratings and their expected ratings for the post-employment period using SWLRS scores. At any rate, the finding from this study that younger adults had higher SWLRS ratings than middle-aged respondents stands in contrast to previous age difference findings using the SWLS, which have shown that older adults make higher ratings than younger individuals (Bronk et al., 2009; Hamarat et al., 2001).

Beyond differences in mean scores on the SWLRS, findings from the path models provide insights into the psychological dimensions that underlie retirement satisfaction ratings. Financial knowledge was found to be an important predictor of SWLRS scores for members of both groups. However, for members of the young group, parental influences on saving was also found to have an appreciable direct effect on satisfaction ratings, over and above the (indirect) effects that were mediated through financial risk tolerance, future time perspective, and financial knowledge. A comparable direct effect failed to be observed for members of the middle-aged group. One possible reason for this is that younger respondents received those financial lessons from their parents far more recently than members of the middle-aged group, and accordingly, those lessons appear to be exerting a more powerful influence on the satisfaction ratings of young adults. An alternative possible explanation is that members of the young group received more salient financial lessons from their parents than those in the middle-aged group (suggesting a cohort effect), which manifested itself as a higher (parental influence to SWLRS) path coefficient in the young adult model.

Another notable result from the path models was that twice as much variance in satisfaction ratings was explained in the young adult model relative to the model for middle-aged respondents. This difference could be accounted for if younger participants were assumed to have a relatively simple (financially-based) perspective of the determinants of happiness in old age. Middle-aged adults, in contrast, appear to have a more nuanced view of the resources (Wang, 2007) that serve as a foundation for life satisfaction in retirement. That is, they may view life satisfaction as being based not only on finances, but also on



the ability to maintain one's health, strong social bonds, and physical and intellectual vigor.

The majority of hypothesized paths in the two models emerged as expected, which provides replicative support for previous investigations that have demonstrated significant linkages between personality indicators, parental influences on saving, and financial knowledge (Grable, 2000; Hershey, Henkens, & van Dalen, 2007, 2010; Kopusko, 2012). Notably, H3 and H5 failed to emerge as significant in the middle-aged group, but both of those paths were supported in the young model. In other words, for older respondents the indirect impact of parental influences on financial knowledge (mediated through financial risk tolerance) was non-existent. Instead, parental influences had a direct impact on knowledge (a non-hypothesized effect). Exactly the opposite was the case for young adults. The direct link between parental influences and knowledge was not statistically significant, but both H3 and H5 emerged, which suggests that for young adults there was an indirect effect between these two variables that was mediated through risk tolerance.

The broad pattern of support found among the two path models speaks to the power of image theory (Beach, 1998; Beach & Mitchell, 1987) to specify a priori predictions when it comes to the relationships between one's personal values (value image), future goals (trajectory image), and tactics that can be used to achieve those goals (strategic image). In both models, value image elements (parental influences on saving, future time perspective, and financial risk tolerance) were found to account for appreciable variance in the proxy for the strategic image (financial knowledge). The proxy indicator for the strategic image was also effective in accounting for variance in the trajectory image (SWLRS scores); although, as pointed out above, the magnitude of this relationship was superior in the young adult model. Indeed, one strength of the present investigation involved the ability to use propositions contained in image theory to successfully specify relationships among constructs in the model.

From a theoretical perspective, the findings from this investigation shed light on the mechanisms that underlie individuals' ratings of future life satisfaction. One key theoretical implication involves the fact that a relatively understudied group in the area of retirement expectations (young adults) was a focus of attention. Most previous studies of retirement expectations have centered attention on older pre-retirees (cf. Brougham & Walsh, 2009; Wong & Hardy, 2009). A second theoretical implication involves the contribution of a new scale (the SWLRS) to the literature on retirement expectations. Strengths of the measure include its brevity, its strong psychometric properties, and the fact that it provides for a global, cognitively-based evaluation of one's quality of life after leaving the workforce. From an applied perspective, findings from this study suggest that retirement counselors, financial

advisors, and human resource professionals could benefit from developing programs and advising services that cater to the unique needs of college students and middle-aged workers. The data from this study suggest that intervention specialists could profitably exploit the impact parental values are likely to have on the goal formation process of younger adults. Beyond highlighting the impact of financial security on future life satisfaction, intervention specialists could tout the importance of maintaining one's health, productivity, and social interactions with others. More traditional approaches to intervention (e.g., building financial knowledge; increasing risk tolerance) would seem to be more appropriate discussion topics when working with middle-aged (and presumably older) workers.

One limitation of this investigation involves the fact that members of the young group had not yet entered the workforce and, therefore, may have had a limited perspective regarding quality of life in the post-employment period. This restricted perspective could have led to some form of unknown response bias. Future studies might seek to replicate the findings from the college student sample using a sample of younger adult workers. A second limitation involved the fact that we examined ratings of retirement satisfaction primarily from the perspective of one's financial resources (cf. Wang, 2007). An interesting extension of this investigation might involve examining how perceptions of other types of personal resources (e.g., social resources, health resources, cognitive/intellectual resources) influence one's anticipated satisfaction with late life. For the reasons outlined earlier in the discussion, this expanded resource perspective could be particularly illuminating when examining the determinants of satisfaction for middle-aged adults, who perhaps have a more nuanced view of quality of life relative to their younger counterparts. A third limitation involves the fact that in this study group differences were attributed to differences in age. However, we recognize that age is confounded with birth cohort (Donaldson & Horn, 1992; Schaie & Hertzog, 1983) and it could be that one's birth cohort (not age) was responsible for the observed effects. That being the case, another promising future direction would involve using a cohort sequential design as a way of disentangling age and cohort effects.

In response to the two questions posed in the opening of this article, it was found that in general, individuals tend to foresee bright futures for themselves in retirement, with younger adults having a more positive perspective on late life than middle-aged individuals. Furthermore, age differences were found to exist in the psychological dimensions that underlie those perceptions of the future. In our opinion, these findings set the stage for future studies that are designed to more closely examine the linkages that exist between one's goals, planning behaviors, and anticipated view of the future.

**APPENDIX:**  
**Items that Comprise the Five Scales in the Investigation**

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*Satisfaction with Life in Retirement*

1. I expect that in retirement my life will be close to ideal
2. Once I enter retirement, the conditions of my life will be excellent
3. After I retire, I will be satisfied with life
4. After I retire, I will have gotten the important things I wanted in life

*Financial Knowledge*

1. I know a great deal about financial planning for retirement
2. I have informed myself about financial preparation for retirement
3. I know more than most people about retirement planning

*Future Time Perspective*

1. I pretty much live on a day-to-day basis (R)
2. I enjoy living for the moment and not knowing what tomorrow will bring (R)

*Financial Risk Tolerance*

1. I (would) prefer investments that have higher returns even though they are riskier
2. I am very willing to make risky investments to ensure financial stability in retirement
3. As a rule, I would never choose the safest investment when planning for retirement

*Parental Influences on Saving*

1. Saving money for the future was an important lesson I learned as a child
2. My parents did a good job of planning and saving for their own retirement
3. My parents would expect me to save for retirement

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*Note:* Items marked with (R) were reverse coded.

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