

**GOAL CLARITY AND FINANCIAL PLANNING  
ACTIVITIES AS DETERMINANTS OF  
RETIREMENT SAVINGS CONTRIBUTIONS**

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**ABSTRACT**

Retirement counselors, financial service professionals, and retirement intervention specialists routinely emphasize the importance of developing clear goals for the future; however, few empirical studies have focused on the benefits of retirement goal setting. In the present study, the extent to which goal clarity and financial planning activities predict retirement savings practices was examined among 100 working adults. Path analysis techniques were used to test two competing models, both of which were designed to predict savings contributions. Findings provide support for the model in which retirement goal clarity is a significant predictor of planning practices, and planning, in turn, predicts savings tendencies. Two demographic variables—income and age—were also revealed to be important elements of the model, with income accounting for roughly half of the explained variance in savings contributions. The results of this study have implications for the development of age-based models of planning, as well as implications for retirement counselors and financial planners who advise workers on long-term saving strategies.

Economic studies indicate that most Americans are poorly prepared to maintain a profile of financial independence throughout the entire retirement period (Warshawsky & Ameriks, 2000). Unfortunately, many individuals encounter a late-life financial shortfall that stems, in part, from a failure to set aside sufficient personal savings during their working years (Lusardi, Skinner & Venti, 2003). From an applied perspective, it is important to understand why individuals fail to plan and save more aggressively, particularly in light of the well-established positive relationships between financial independence, life satisfaction, and quality of life (Dorfman & Moffett, 1987; Kim & Moen, 2001). The present study was designed to investigate the extent to which retirement goal clarity and planning activities influence retirement saving tendencies.

Well over one hundred papers on retirement savings have appeared in the scientific literature during the past two decades. A large majority of these papers have been atheoretical in nature, focusing on the presence or absence of empirical relationships between demographic indicators and savings practices. Findings from this line of work have revealed that retirement savings tendencies are positively related to age (Grable & Lytton, 1997; Warner, 1996), level of household income (Bassett, Fleming, & Rodriguez, 1998; Poterba, 1996), and level of education (Yuh & Olson, 1997). Savings accumulations have also been linked to gender and marital status, with women saving less, on average, than men (Glass & Kilpatrick, 1998a), and single individuals less likely to save than those who are married (Yuh & Olson, 1997). Moreover, it is clear that certain opportunity structures (Blau, 1994; Ekerdt, DeViney, & Kosloski, 1996; Henskens, 1998) specific to retirement finances, such as pension plan availability or access to an employer sponsored 401(k) plans help set the stage for adaptive savings decisions. The studies cited above shed light on *who* saves for retirement, but according to Hanushek and Maritato (1996), one of the most important questions remains unanswered: Why do some individuals save more than others?

Although strong predictive relationships are often identified between demographic indicators and savings practices, relatively little is known about the psychological mechanisms that predispose individuals to save. In a recently developed model of financial planning for retirement, Hershey (2004) suggested that psychological predispositions mediate the relationship between demographic variables and savings tendencies. In that model, Hershey argued that demographic indicators are useful inasmuch as they are proxy variables for the social forces that operate on the individual. These social forces—collectively known as the cultural ethos—help to differentially shape a worker's cognitions (e.g., domain-specific knowledge, perceptions of financial need), personality traits (e.g., investor risk tolerance), and financial motivations (e.g., goal strength, and financially-related personal values and self-beliefs). It is these psychological forces, in turn, which affect the tendency to save. The structure of this model suggests that psychological variables exert a proximal influence on saving tendencies, and demographic variables (i.e., representing the impact of the cultural ethos) have a distal influence on saving predispositions.

The model described above has not yet been extensively tested; however, there is a small but growing body of work that has demonstrated psychological factors are positively related to both retirement preparedness and financial decision-making competence. Particularly influential psychological variables include domain-specific knowledge (Ekerdt & Hackney, 2002; Ekerdt, Hackney, Kosloski, & DeViney, 2001; Grable and Lytton, 1997; Hershey & Walsh, 2000/2001; Mitchell & Moore, 1998; Walsh & Hershey, 1993; Yuh & DeVaney, 1996), personality indicators such as conscientiousness, emotional stability, risk tolerance, and future time perspective (Bernheim, Skinner & Weinberg, 1997; Burtless, 1999; Grable & Lytton, 1999, 2003; Hershey & Mowen, 2000; Lusardi, 1999; Vora & McGinnis, 2000; Yuh & DeVaney, 1996), perceptions and attitudes related to the financial planning process (DeVaney & Su, 1997; Jacobs-Lawson & Hershey, 2003), and affective influences on retirement planning such as financially-oriented fears and worries (Glass & Kilpatrick, 1998a; Neukam & Hershey, 2003).

In the present study the model of financial planning proposed by Hershey (2004) serves as a backdrop against which two competing models of retirement savings tendencies are tested. Both models contain the same five constructs: two demographic variables (age and income) a psychological variable (retirement goal clarity), a behavioral indicator (financial planning activity level) and a composite measure of voluntary retirement savings contributions (the criterion). The goal of the investigation is to examine whether goal clarity and planning activities are sequentially related to one another (such that goals predict planning, and planning predicts savings tendencies), or whether the influence of goals and planning activities are complementary, together producing an additive effect on the tendency to save. More will be said later about the structural distinctions between these two models; first, however, a brief review of the literature on goal clarity and financial planning activities is provided.

### **Retirement Goals**

According to Austin and Vancouver (1996), the research literature on goals can be divided into three broad categories: content research, which focuses on the content of individuals' specific goals (e.g., travel; relaxation); structural research, which describes how goals are inter-related (e.g., hierarchically; sequentially); and process research, which seeks to characterize how goals influence motivational, information processing, and behavioral patterns. The present investigation, with its emphasis on how goal clarity and planning activities are related to saving practices, falls within the latter of these research traditions.

Winnell (1987) argued that an individual's goals "define long-range values that give the person strong direction, a sense of coherence, and meaning" (p. 271). She also indicated that ideally, goals should be clear enough to provide feedback on whether concrete objectives have been achieved. This led her to conclude that individuals with clear life goals should experience greater levels of personal

effectiveness and life satisfaction. Clear and specific goals not only enhance functioning and provide a yardstick against which we measure our achievements, but they also provide a framework to help establish future intent, and guide the enactment of purposeful behavior (Gollwitzer, 1993).

Only a handful of empirical studies have focused on the topic of retirement goals, which is surprising given the important role they play in structuring long-term planning activities (Beach, 1993, 1998). Cantor and Zirkel (1990; see also Cantor & Kihlstrom, 1987) argued that there exist a series of “age-graded normative goals” that correspond to specific tasks encountered at different life stages. Consistent with this developmental perspective, Hershey, Jacobs-Lawson and Neukam (2002) observed age-related reductions in the number of retirement goals workers hold, as well as age differences in the concreteness of specific retirement goals. These developmental differences in the number and concreteness of individuals’ goals suggest that retirement goal clarity may also reveal a changing normative developmental profile.

A few recent studies have demonstrated the impact of retirement goals on retirement savings tendencies. For instance, using a 5-item “Planning Drive” indicator of financial goal strength, Neukam and Hershey (2003) demonstrated that financial goals are significantly related to retirement savings contributions. Similarly, Glass and Kilpatrick (1998b) revealed that the level of priority of one’s retirement savings goals was an important indicator of the magnitude of individuals’ financial accumulations. Moreover, in a recent savings intervention study, Hershey, Mowen, and Jacobs-Lawson (2003) found that the presence of goal-based content in a brief, group-based retirement seminar had a noteworthy impact on planning activities one year following the intervention.

Taken together, the studies cited above indicate that goals play a critical role in the retirement planning process. By all accounts, clearer retirement goals are associated with a more active pattern of retirement planning behaviors. Statistically, the effects of retirement goals on planning and saving behavior tend to be in the moderate range. Goals help to structure perceptions of the retirement experience, they allow individuals to form expectations about future resource needs, and as mentioned above, they help increase both actual savings levels as well as the intention to save. In the following section of the article the spotlight shifts from goals to planning activities, which have also been shown to be a critical determinant of savings tendencies.

### **Financial Planning Activities**

Even a cursory review of the financial investment literature reveals the import of planning activities when it comes to accruing an adequate retirement nest egg. Research by Lusardi (1999) indicates that planning behaviors have a clear impact on personal savings practices. She found heads of households who had not engaged in planning activities had accumulated significantly less wealth than

households in which the head had done some planning. Ameriks, Caplin, & Leahy (2002) reported similar findings.

Financial planning activities, as traditionally defined, span a wide range of behaviors. One class of behaviors involves information-seeking activities, which entails, for instance, meeting with a financial investment or retirement counselor (Joo & Grable, 2001; Richardson, 1993), attending a financial seminar (Lusardi, 2003), or participating in a workplace retirement preparation program (Bernheim & Garrett, 1996; Madrian & Shea, 2001). These activities are important because they increase investor knowledge (Bernheim, 1998), which in turn, stimulates savings practices (Gustman & Steinmeier, 2001). Group-oriented educational interventions, such as seminars and workplace programs, also presumably serve to stimulate an internal locus of control and positive attitudes toward investing (Abel & Hayslip, 1987; Lynch, Ogg, & Christensen, 1975), and simultaneously enhance anticipated levels of retirement satisfaction (Taylor-Carter, Cook, & Weinberg, 1997). Other common forms of financial information seeking behaviors include reading books or pamphlets on investing, tuning in to financial programming on the radio or television, and visiting financial planning Web sites on the World Wide Web.

It is also not uncommon for financial planning activities to be operationalized in terms of instrumental behaviors. Examples of such behaviors would include gathering, organizing, and reviewing one's financial and investment records, calculating how much will be needed to attain a desired standard of living, ascertaining one's projected level of social security benefits, comparing the characteristics of different investment vehicles, and developing a long range financial plan. The amount of time individuals spend thinking about retirement has also been used as a measure of planning (Jacobs-Lawson, Hershey, & Neukam, 2004). Findings from the Retirement Confidence Survey revealed that only about one-third of American workers have spent the time required to calculate how much they will need to save to fund a comfortable retirement, and some 37% of workers have given little or no thought to their retirement whatsoever (Yakoboski & Dickemper, 1997). Along similar lines, Ameriks et al. (2002) found that only 29% of respondents to a TIAA-CREF retirement survey either "agreed" or "strongly agreed" they had spent a great deal of time developing a financial plan. Among those who agreed that they had developed such a plan, a striking 97% reported having gathered and conducted a detailed review of their household financial records as a part of the process.

### **Present Study**

The purpose of this investigation is to examine how retirement goal clarity and planning activities are related to retirement savings contributions. To this end, two plausible competing theoretical models were identified, evaluated and compared using path analysis techniques, each of which are described separately.

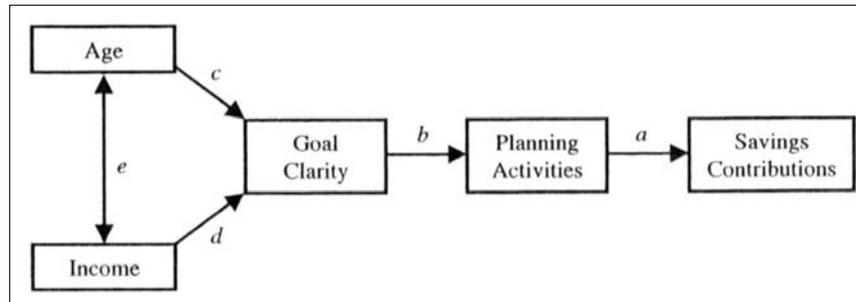


Figure 1. Hypothesized sequential model designed to predict retirement savings contributions.

The first of the two models, hereafter referred to as the *sequential model* (see Figure 1), indicates that financial planning activities influence savings contributions (path a), and retirement goal clarity has a direct effect on planning activities (path b). Underlying the model are two key assumptions: that goal clarity is a force that motivates individuals to plan (Beach, 1998), and planning activities help define how much one can afford to allocate to retirement savings. This model also suggests that older individuals are likely to have clearer retirement goals than younger persons (path c), based on the theoretical ideas advanced by Cantor and her colleagues (1987; 1990) and the empirical findings from Hershey et al. (2002). It is also expected that household income will be positively related to goal clarity (path d), based on the notion that those with higher incomes would be more likely to have resources that would facilitate long-range goal setting activities. Finally, age and income are allowed to correlate in the model (path e), based on the well established degree of overlap between these two indicators (e.g., DeNavas-Walt & Cleveland, 2002).

In addition to the sequential model, an *additive model* was also formulated in which both planning activities and goal clarity directly influence savings contributions (see Figure 2). As in the sequential model, in the additive model it is assumed that planning activities specify how much discretionary income will be available for savings purposes (path a). However, in the latter model retirement goal clarity is posited to have an independent and direct influence on savings (path b). Paths d through f represent hypotheses that specify age and income will be positively related to planning and goal clarity, and path g allows for a correlation to exist between the two demographic markers. Paths e, f, and g were specified for the reasons described in the previous paragraph. Furthermore, age and income were hypothesized to predict planning activities (paths c and d, respectively), based on the notion that financial planning becomes increasingly important with

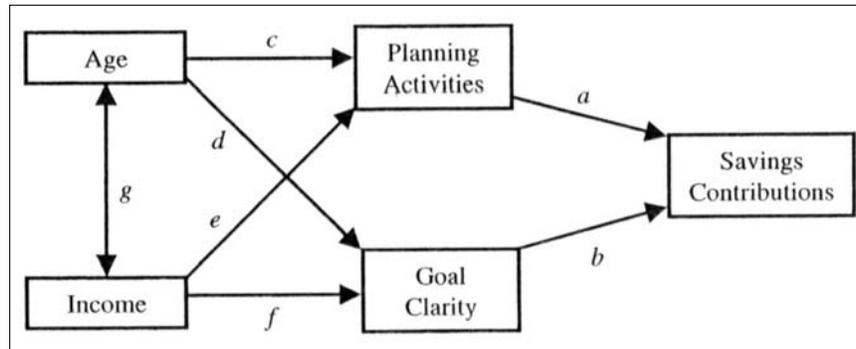


Figure 2. Hypothesized additive model designed to predict retirement savings contributions.

advancing age (Cutler, 2002), and higher income individuals are more likely to plan than those with lower incomes (Lusardi, 2000).

The two models described above are both hierarchically organized and fully mediated. That is, paths are specified to exist *only between adjacent levels* in the two hierarchies of variables. Full mediation in this context provides the most stringent test of Hershey's (2004) model of financial planning. In that model, psychological constructs were posited to mediate the relationship between individual level demographic indicators and savings behaviors. However, a fully mediated model may be too restrictive when attempting to predict retirement savings contributions, which is presumably based on a complex and dynamic set of influences. Therefore, partial mediation models will also be considered. However, to avoid capitalizing on spurious relationships, partial mediation will only be considered in cases where both: (a) the modification criteria suggest a cross-level path is indicated, and (b) the path is theoretically plausible.

## METHOD

### Participants

One-hundred adults (46 men; 54 women) between the ages of 19 and 63 ( $M = 40.2$ ,  $SD = 12.4$ ) served as voluntary participants in the study. Data were collected at shopping malls, parks, airports, libraries and other public locations in North Central Oklahoma. All individuals were pre-screened to ensure they were employed a minimum of 20 hours per week. The average household income was \$61K ( $SD = \$37K$ ), and participants' mean level of formal education was 15.4 years ( $SD = 1.9$ ). Although this income and level of education are somewhat high relative to national averages, they are not substantially greater than the median

values for these variables among individuals employed on a full-time basis. The racial composition of the sample was roughly equivalent to that of the region: 93% Caucasian, 5% African-American, and 2% Native American.

### Measures and Scale Characteristics

Each participant individually completed a questionnaire that contained 14 Likert-type items (1 = *strongly disagree*; 7 = *strongly agree*) designed to measure level of retirement goal clarity and financial planning activities (see Appendix). The instructions asked respondents to focus their attention on goals and planning activities that had transpired during the preceding 12 months. The criterion measure—retirement savings contributions—was based on two items, which together were designed to be a general measure of savings involvement. The first was a Likert-type item that read: “Made voluntary contributions to a retirement savings plan during the past 12 months.” (1 = *strongly agree*; 7 = *strongly disagree*). The second item queried participants as to the percentage of household income they contributed to a retirement savings plan or account during the preceding twelve months. Scores on this latter item were coded along a 5-point scale as follows: 1 = no contributions, 2 = 1-4%, 3 = 5-9%, 4 = 10-14%, and 5 = 15% or more. Demographic variables were also assessed, including age, current household income, gender, educational level, and ethnicity. The latter three indicators, however, were used only for purposes of classification, as they were found to be unrelated to the other constructs in the investigation.

To identify the factor structure of the goal clarity and financial planning activity scales, an exploratory factor analysis was conducted using the 14 items believed to be related to those two constructs (i.e., the “voluntary contributions” and “percentage of income contributed” items were excluded from the analysis). A principal components extraction with oblique (equimax) rotation revealed four separate factors with eigenvalues greater than one. Together, these four factors accounted for 76.1% of the variance in the model. The 14 items and their respective rotated factor loadings are shown in Table 1, along with eigenvalues and *R*-squared values for each of the factors. Loadings greater than .35 are shown in boldface italicized type. The first five items in the table appear to represent a general *retirement goal clarity* factor. All items contained in this factor in some way either reflect the act of thinking about, discussing, or setting *general* (as opposed to financially-oriented) retirement goals for the future. The minimum factor loading across these five items was .71.

The three remaining factors in Table 1 appear to represent different dimensions of a broader construct—retirement planning activities. The second factor, a *financial information seeking* dimension, contained four items: tuning into television or radio shows on investing, reading articles on financial planning, reading books on the topic, and visiting financial or investment sites on the World Wide Web. All loadings for this factor were greater than .70. Organizing financial

Table 1. Rotated Factor Loadings for the Goal Clarity and Financial Planning Scales

Item	Goal clarity	Information seeking	Instrumental activities	Advice seeking
Set clear goals for gaining information about retirement.	<b>.71</b>	.26	.33	.34
Thought a great deal about quality of life in retirement.	<b>.86</b>	.22	.16	.10
Set specific goals for how much will need to be saved for retirement.	<b>.71</b>	.23	.27	.33
Have a clear vision of how life will be in retirement.	<b>.74</b>	.23	.15	.13
Discussed retirement plans with a spouse, friend, or significant other.	<b>.79</b>	.11	.29	.05
Tuned in to television or radio shows on investing or financial planning.	.19	<b>.84</b>	.22	.01
Read brochures/articles on investing or financial planning.	.33	<b>.71</b>	.26	.34
Read one or more books on investing or financial planning.	.21	<b>.82</b>	.13	.26
Visited investing or financial planning sites on the World Wide Web.	.08	<b>.80</b>	.27	.20
Gathered or organized your financial records.	.11	.18	<b>.89</b>	.13
Assessed your net worth.	.35	.14	<b>.72</b>	.23
Identified specific spending plans for the future.	.16	.27	<b>.72</b>	.05
Discussed financial planning goals with a professional(s) in the field.	.19	.15	.10	<b>.85</b>
Discussed financial retirement plans with employer's benefits specialist.	.02	.13	.10	<b>.90</b>
Eigenvalue	6.7	1.5	1.3	1.1
R-squared	47.7	11.6	9.3	7.9

**Note:** Items greater than .35 are shown in boldface italicized type.

records, calculating net worth, and developing or revising a budget were found to group together to form an *instrumental planning activities* factor, all with loadings greater than .71. The fourth and final factor—a *professional advice seeking* dimension—contained only two items: discussed financial plans with a professional in the field, and discussed retirement plans with an employer benefits specialist. Loadings for these two items were both greater than .84. No secondary loadings greater than .35 were observed across any of the four factors.

Based in part on the conceptual similarities across items for the latter three factors (i.e., all reflect financial planning activities), we sought to determine whether it would be appropriate to collapse them into a single construct. Empirical support for the aggregation of the nine items came from two different sources. First, examination of the scree plot provided evidence for a two-factor solution. Second, a reliability analysis demonstrated that the minimum item-total correlation was .60 when all items from the latter three factors were cast in the form of a single scale. Based on these two observations, the nine planning items were deemed to reflect a single, higher-order construct. They were subsequently treated as a set, forming the basis of a single planning activity scale.

Total scores for the 5-item goal clarity scale and 9-item financial planning scale were derived by summing over items, within each scale, for each individual. Total scores for the goal clarity measure ranged from 5 to 34 ( $M = 23.2$ ,  $SD = 6.92$ ), and scores on the financial planning scale ranged from 14 to 61 ( $M = 37.7$ ,  $SD = 12.29$ ). The raw score distributions for both scales were quasi-normal, and both revealed a slight negative skew. Coefficient alpha values for the goal clarity and financial planning scales were .90 and .87, respectively. The minimum item-total correlation was .76 for the goal clarity scale, and as indicated above, .60 for the planning scale. Two-week test/retest questionnaires were administered to 20 of the participants, revealing T1/T2 Pearson correlations were .87 for the goal clarity measure, and .79 for planning. A correlation matrix that includes each of the constructs used in the study is shown in Table 2.

The two items that together served to make up the criterion measure were also found to exhibit reasonable psychometric properties. The mean score for the Likert-type item (i.e., “made voluntary contributions”) was 4.98 ( $SD = 2.02$ ), and

Table 2. Pearson Correlation Matrix of Constructs Included in the Study

	1	2	3	4	5
1. Age	—				
2. Income	.41	—			
3. Goal Clarity	.45	.35	—		
4. Planning Activities	.32	.28	.64	—	
5. Savings Contributions	.36	.38	.41	.49	—

**Note:** All values are statistically significant at the  $p < .01$  level.

the mean score for the percentage of income saved variable was 3.02 ( $SD = 0.99$ ). The Pearson product-moment correlation for these two items was .53 ( $p < .01$ ). For analysis purposes, these two dependent measures were converted into standard score units, and then a mean retirement savings contribution score was calculated for each individual. The resulting distribution of z-scores ranged from a minimum of  $-2.00$  to a maximum of  $0.99$ .

## RESULTS

The two conceptual models depicted in Figures 1 and 2 were estimated separately using the AMOS v. 4.0 statistical package. The fit indices recommended by Hu & Bentler (1999) were adopted to evaluate the quality of the models. These authors argued that a reasonable fitting model is one in which the Tucker-Lewis index (*TLI*) and the comparative fit index (*CFI*) are greater than .95, and the root mean square error of approximation (*RMSEA*) is less than .06. In cases where model fit indices were less than optimal, a revised model was tested only after first eliminating non-significant paths, and adding new paths based on modification index values. New paths were only added, however, in situations where the bivariate relationship between indicators (directional or otherwise) was either supported by previous empirical findings, or considered to be theoretically plausible.

### Analysis of the Sequential Model

The initial fit indices for the sequential model were found to be marginal,  $X^2(5) = 22.59$  ( $p < .01$ ),  $CFI = .97$ ,  $TLI = .90$ , and  $RMSEA = .19$ . All paths were statistically significant except for the directed path from income to goal clarity, suggesting it should be eliminated. Moreover, the modification index indicated that a better fitting model could be achieved by adding a directed path from income to savings contributions. No other modifications were recommended. The addition of an income to savings contributions path is both theoretically and intuitively reasonable. Higher income individuals have been shown to save more for retirement (or are more likely to save) than those in lower earnings brackets (Grable & Lytton, 1997; Jacobs-Lawson & Hershey, 2003). Therefore, this one new path was added to the model, the non-significant income to goal clarity link was omitted, and a revised sequential model was computed.

The revised sequential model was found to be an excellent fit to the data  $X^2(5) = 5.77$  (*ns*),  $CFI = .99$ ,  $TLI = .99$ , and  $RMSEA = .04$ . Moreover, the modification index failed to indicate any paths should be added, and significance levels for parameter estimates suggested none should be deleted. Figure 3 contains a diagram of the revised model showing multiple *R-squared* values for each endogenous variable. Also shown are standardized beta weights and Pearson *r* values for directed and undirected pathways, respectively. In this model, four of the five originally hypothesized effects shown in Figure 1 were observed (all

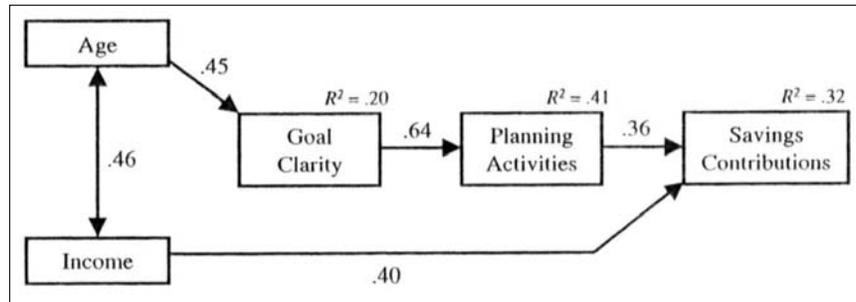


Figure 3. Revised sequential model designed to predict retirement savings contributions. Standardized beta weights are shown as well as the proportion of explained variance for each endogenous variable. All paths in the model are significant at the  $p < .05$  level.

except the path between income and goal clarity), and all paths were found to be statistically significant at the .05 level. Notably, 32% of the variance in savings contributions was accounted for, 41% of the variance in planning was explained on the basis of goal clarity, and 20% of the variability in goal clarity was captured by age alone. Furthermore, income was found to have a significant direct effect on savings contributions, rather than an influence on contributions mediated through goal clarity, as originally predicted.

### Analysis of the Additive Model

Next, the additive model shown in Figure 2 was evaluated. The fit indices for this model were clearly inadequate,  $X^2(3) = 60.84$  ( $p < .01$ ),  $CFI = .58$ ,  $TLI = .41$ , and  $RMSEA = .44$ . Three paths in this model were non-significant, including: income to goal clarity, income to planning activities, and goal clarity to savings contributions. Furthermore, the modification index indicated that one path should be added to the model, a directed relation from income to savings contributions. The additive model was again estimated following deletion of the three non-significant paths, and the addition of a path between income and savings contributions.

From a goodness-of-fit perspective, the revised additive model was found to be a reasonably good fit to the data,  $X^2(4) = 5.53$  ( $ns$ ),  $CFI = .99$ ,  $TLI = .97$ , and  $RMSEA = .06$ . Moreover, the modification index failed to suggest any new paths be added, and critical values for individual parameters failed to suggest any should be deleted. Figure 4 contains a diagram of the revised additive model showing explained variance estimates and individual parameter values. All paths in the diagram are significant at the .05 threshold. Only four of the seven effects depicted

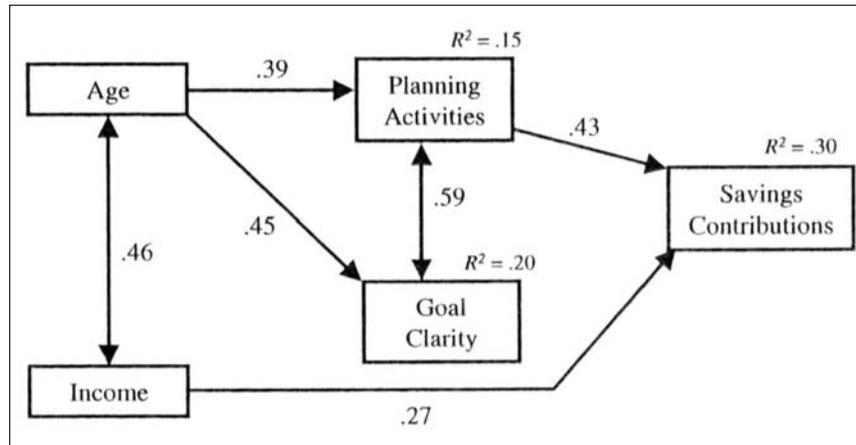


Figure 4. Revised additive model designed to predict retirement savings contributions. Standardized beta weights are shown as well as the proportion of explained variance for each endogenous variable. All paths in the model are significant at the .05 level.

in Figure 2 were observed, including the paths between planning activities and savings contributions, age and planning, age and goal clarity, and age and income. Thirty percent of the variance in savings contributions was accounted for on the basis of planning activities and income, which is roughly comparable to the explained variance in the revised sequential model. In the revised additive model, income was found to have a direct influence on savings contributions, which is also comparable to an effect observed in the revised sequential model. Notably absent in the revised additive model was the proposed link between goal clarity and savings contributions.

## DISCUSSION

This investigation pitted two competing models of retirement savings contributions against one another. In the sequential model, retirement goal clarity was specified to predict planning activities, and planning activities predicted savings involvement. The additive model, in contrast, specified that goal clarity and planning activities acted in parallel to predict savings practices. Findings revealed substantial support for both formulations. Careful consideration of the estimated models (shown in Figures 3 and 4), however, suggests that from a theoretical perspective, the revised additive model may be the less tenable of the two. This is because in the additive model, the goal clarity construct is ultimately found to have no impact whatsoever on savings contributions. It would seem

unlikely, in light of the substantial literature on the relationship between goals and behavior (Austin & Vancouver, 1996), that retirement goal clarity would altogether fail to play a role in the retirement savings process.

The sequential configuration shown in Figure 3 is arguably the more tenable of the two competing models. In contrast to the additive model, which resulted in a theoretically counterintuitive outcome, the sequential model was found to be more parsimonious (i.e., it contained fewer paths) and it is consistent with strong theory that suggests goals are an important precursor to behavior. Savings contributions are well predicted by planning activities and income, planning is adequately predicted on the basis of goal clarity, and goal clarity is reasonably accounted for by age. Notably, 32% of the variance in savings was accounted for, 41% in planning activities, and 20% in goal clarity. In this model not only were the final set of links consistent with existing psychological theory, but from an empirical perspective, the specified relationships were found to be relatively strong. Moreover, in contrast to the additive model, the sequential model allows for a role of goal clarity in the retirement planning and saving process, which, from both theoretical and commonsense perspectives, would seem to be important. The model suggests that goal clarity exerts an indirect influence on savings through planning activities. One interesting aspect of the model was the role of age in relation to the other variables. In many studies of retirement planning, age has been found to be a significant predictor of savings tendencies (Bassett et al., 1998; Grable & Lytton, 1997). However, findings from the present study suggest that goal clarity mediates the age—savings relationship.

One non-hypothesized path emerged as significant in both sets of analyses which made it necessary to relax the full mediation assumption. Specifically, income was found to have a direct effect on savings contributions over and above its effect as mediated through goal clarity and planning. In fact, in the revised sequential model, income was found to account for roughly half of the explained variance in savings contributions. This result is consistent with findings from the 1997 Retirement Confidence Study (see Yakoboski & Dickemper, 1997), which revealed that although a fair number of working individuals are saving for retirement, relatively few engage in basic financial planning activities (such as doing the calculations necessary to estimate one's retirement need). Individuals offered a variety of reasons for why they saved without having planned, including the fact that retirement is too distant to plan for, the planning process is too complicated, and their resources were already overstretched (therefore, planning would not have led to additional savings even if additional contributions were indicated). The direct effect between income and savings contributions may also stem, in part, from that segment of the population who invest in retirement savings vehicles as a form of tax sheltering. Logically, savings decisions primarily driven by tax sheltering considerations would circumvent the "standard" route to determining a retirement savings contribution (i.e., retirement goals that stimulate planning activities, and planning activities that stimulate savings contributions).

The results of this study not only have implications for the development of age-based theoretical models of planning, but on a more applied level, the findings stand to inform practitioners and intervention specialists who seek to improve retirement planning practices. From a theoretical perspective, goal clarity was shown to be an important psychological mechanism that motivates individuals to plan for the future. Furthermore, to the extent that one can draw developmental conclusions from cross-sectional data, the findings from this study speculatively suggest that goal clarity strengthens as a function of age, stimulating a greater proportion of planning to occur in the years prior to retirement. Clearly, as a construct, general retirement goal clarity can be added to the growing list of factors that influence financial preparedness, which already include a variety of demographic indicators (Glass & Kilpatrick, 1998a; Poterba, 1996; Yuh & Olson, 1997), cognitive and personality traits (Grable & Lytton, 1997; Hershey & Mowen, 2000), and perceptions of late life financial need (DeVaney & Su, 1997; Jacobs-Lawson & Hershey, 2003).

In terms of the implications of this research, from an applied perspective the findings from this study suggest that retirement intervention specialists should routinely encourage their clients to cultivate clear and specific retirement and investment goals. Most presently available group-based training and intervention programs focus exclusively on the presentation of financial information, based on the questionable assumption that workers already are sufficiently motivated to plan and save. However, the inclusion of a goal-setting module as part of an intervention program could go a long way toward stimulating participant involvement levels, particularly among individuals with ill-defined goals, or those who have done little or no previous planning (see Hershey et al., 2003 on this point). Another intriguing applied issue is whether retirement goal clarity can be “cultivated before its time” among younger workers, say, individuals in their twenties. If this were possible, then it would extend the typical time frame in which individuals make financial accumulations, thereby reducing the investment capital needed for individuals to meet their financial goals.

One limitation of the present investigation is that self-report data were used to assess planning activities and savings practices. Although independently derived objective data would be preferred to establish values for these markers, the sensitive nature of the topic makes this type of data, for all practical purposes, nearly impossible to obtain. We hope that if there are inaccuracies or biases in individuals' estimates of their planning and savings activities, these errors would not be systematic in nature, but rather random with respect to actual levels of behavior. A second limitation has to do with the fact that cross-sectional data were used to draw inferences about what is essentially a developmental phenomenon. In terms of future research, it would seem to be important to explore the psychological determinants of the retirement planning process from a longitudinal perspective (Zickar & Gibby, 2003) to establish how psychological and behavioral variables play out in a real-time, real-world dynamic economic environment.

One other promising future research direction would be to use what has been learned in the present study to develop a more integrative, empirically based socio-psycho-economic model of financial planning for retirement (cf., Thaler, 1994). Toward that end, the conceptual model of financial planning outlined in Hershey (2004), which received preliminary empirical support in this investigation, could provide heuristic value. It was suggested in that paper that psychological variables (such as goal clarity) bridge the gap between socio-cultural influences (as measured by demographic indicators) and savings behaviors, effectively linking the retirement planning research of sociologists and economists. Until relatively recently, however, psychologists have been unprepared to meet sociologists and economists halfway in offering theoretical constructs that would fit into such a model. Fortunately, that state of affairs no longer exists. A partial list of psychological constructs that could be effectively incorporated into such a model include financial knowledge, perceptions of financial planning need and planning relevance, future time perspective, conscientiousness, and financial risk tolerance. A true interdisciplinary model of planning would not only have the potential to advance our understanding of individual economic behaviors, but it would also provide a theoretical framework that would be useful in helping to design applied savings intervention efforts.

As indicated in the introduction, only a small handful of empirical studies have examined workers' goals for retirement. This study contributes to the existing literature by describing a psychological mechanism—retirement goal clarity—that develops over the course of adulthood and motivates individuals to plan. Future studies are needed to identify what it is about the aging process that influences the rate at which retirement goal clarity develops, whether the clarity of individuals' goals can be shaped through intervention, and how general goal clarity influences planning tendencies in non-financial retirement decision domains.

## **APPENDIX**

### **ITEMS FROM THE GOAL CLARITY AND FINANCIAL PLANNING ACTIVITY MEASURES**

#### **General Retirement Goal Clarity Scale (alpha = .90)**

1. Set clear goals for gaining information about retirement.
2. Thought a great deal about quality of life in retirement.
3. Set specific goals for how much will need to be saved for retirement.
4. Have a clear vision of how life will be in retirement.
5. Discussed retirement plans with a spouse, friend, or significant other.

**Financial Planning Activity Scale (alpha = .87)**

1. Tuned into television or radio shows on investing or financial planning.
2. Read brochures/articles on investing or financial planning.
3. Read one or more books on investing or financial planning.
4. Visited investing or financial planning sites on the World Wide Web.
5. Gathered or organized your financial records.
6. Assessed your net worth.
7. Identified specific spending plans for the future.
8. Discussed financial planning goals with a professional(s) in the field.
9. Discussed financial retirement plans with employer's benefits specialist.

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