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UNDERSTANDING RISK TAKING IN RETIREMENT SAVINGS THROUGH ATTITUDE

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EXECUTIVE SUMMARY

This paper examines the state of attitudinal research on the explanation of risk taking in retirement savings by reviewing two studies of direct and mediated influences of risk taking among higher education employees in their institution-sponsored savings plans. A review of the literature revealed a scholarly bias toward demographic correlates and decision making in the research on retirement savings behavior. Absent from the body of knowledge was the role that dispositions and attitude play in determining risk taking.

Accordingly, two empirical studies were conducted to investigate the role attitude has in determining retirement savings risk taking behavior. For each study, samples of university staff and faculty were surveyed regarding demographics, attitude levels, dispositions, knowledge and past behavior. Risk taking decisions were measured as either a retirement savings allocation scenario or self-reported actual allocations of retirement savings. Risk scores were assigned to each.

The first study examined direct correlates of risk taking in the scenario. It revealed that knowledge of investment principles, self efficacy, general risk taking propensity,

income, age and gender each were related to risk taking in savings allocations. The second study modeled the mediated effects of dispositions, opportunity perception, experience, inertia, and demographics, and the direct effects of an attitudinal risk preference and knowledge of investment principles on risk taking behavior in retirement savings. It demonstrated that the risk preference attitude played a central role as the conduit through which the other determinants affected risk taking. It also showed that risk preference had more than twice the standardized effect on risk taking than did knowledge of investment principles.

The findings led the authors to propose the integration of attitude assessment and training into existing knowledge training and counseling programs to help workers better understand how they form their decisions about risk in their retirement savings portfolio.



INTRODUCTION

Widespread agreement exists among scholars and public policy makers that future retirees will need to increasingly depend on their participation in employer-sponsored retirement plans and their own savings rather than on social security. Over the past 25 years there has been a shift in the type of plan typically offered to employees from defined benefit plans (DB) to defined contribution plans (DC). DB plans are formula-based plans in which employers typically promise to pay their employees a benefit based on the employee's retirement age, final average salary, and years of service. The employer maintains a pension fund and holds the risk of investment and returns on that fund. These plans have the potential of exposing employers to the risk of paying out greater benefits if workers live longer than expected.

In contrast, DC plans are similar to savings plans and provide a benefit based on annual contributions, as a percentage of pay made by the employer and employee, and accumulated investment earnings on the employee's account. The employer's obligation is limited to providing a plan that meets regulated guidelines and to any promise to contribute to the plan on behalf of the employee. Consequently, participants in DC plans are the ones who bear the risk of investment loss. The risks faced by the worker also include accumulating sufficient savings to replace prior earned income during retirement, outliving one's savings, and maintaining sufficient savings in the face of economic conditions such as financial market fluctuations.

A unique aspect of DC plans is the responsibility employees have to manage their retirement savings and allocate contributions among investment options that have differing levels of risk. The decisions individuals make in selecting among investment options and risk levels in those funds have important effects on the level of savings they are able to achieve (Porterba, 2004). Because greater investment returns are often associated with taking on greater investment risk, if a worker is to achieve sufficient savings, she or he generally will have to choose among investment options, such as equities, that have greater variability in outcomes (Shapira, 1995). Most troubling for investment outcomes is the decision by a third of 401(k) participants in the U.S. to place all of their assets in non-equity savings options (Munnell & Sunden, 2006).

In spite of the importance of investment risk taking in DC retirement savings plans, an inadequate amount of attention has been given to the individual investment decision process and to developing models that examine the determinants of risky decision-making among DC plan participants. The research that has been conducted has been largely descriptive. The focus has been on topics such as socio-economic predictors of investment risk behavior (e.g., Bajtelsmit, 1996) and inferring individual risk attitudes by examining proportions of total wealth allocated to risky assets (e.g., Riley & Chow, 1992).

To help address this research need, this current paper reports the results of two studies that examined determinants of investment risk behavior among higher education employees managing their DC retirement savings allocation process. These studies were based on field surveys of higher education employees who participated in university-sponsored DC plans. The first study (Dulebohn, 2002) tested a direct effects model, and the second study (Dulebohn & Murray, 2007) tested a mediated model of investment behavior. Mediated models propose that there is a chain of relationships; for example, a positive investment outcome history leads to perceiving risk taking as an opportunity, which leads to a greater preference for risk in the investment portfolio, which causes a greater amount of risk taking behavior. The mediators are each of the intermediate linking variables in the chain. Both the direct and mediated approaches examined the role of demographic, dispositional and attitudinal determinants of the risk level of employees' contribution allocation among their DC retirement savings plan investment alternatives.

RISK TAKING

Risk taking is a complex psychological and behavioral process. A general conclusion among researchers is that risk behavior does not necessarily generalize across situations and may vary across individuals (Bromiley & Curley, 1992; Wiseman & Levin, 1996). This has been demonstrated in research that has found little within-subject consistency in risk behavior across situations and domains (MacCrimmon & Wehrung, 1986; Weber & Milliman, 1997). Specifically, research has found that individuals may be risk-takers in certain decision situations (e.g., making financial decisions at work) while being risk-adverse in other situations (e.g., selecting investment decisions with personal assets) (MacCrimmon & Wehrung, 1986). This situational specificity underscores the importance of examining determinants of risk taking behavior among DC retirement plan participants.

Because of the complexity of the process, prior to discussing the results of the two studies, we briefly review prior research on the risk allocation question and summarize key findings in major approaches that historically have been used to examine risk taking behavior. First, we review literature on demographic correlates to risk-taking based on initial risk taking research that focused on this area. Second, we review research on behavioral tendencies in decision-making. Subsequently, we present the results of two studies that tested models of risk behavior in the investment allocation process that included demographic, attitudinal, and dispositional factors influencing the risk allocation decision. Attitudinal factors are an individual's evaluative psychological assessments of the risk; for example, "I am satisfied with the amount of risk in my portfolio." Conversely, dispositional factors are characteristic traits of the person or tendencies in how he or she responds to a situation. For instance, "In general, I like to take risks" is a dispositional expression of how the person engages potentially risky situations.

RESEARCH ON DEMOGRAPHIC FACTORS

Several demographic factors have been studied relative to risk taking in retirement savings. Overall, demographic correlations do not explain much of the variance in retirement decision making behavior and the relationships that have been found have not been consistently supported across all studies. Common demographic variables that have been studied include age, income, education, gender, and marital status:

- Age is typically expected to be negatively related to risk taking in retirement savings. As an individual approaches retirement age, it was traditionally expected that investments would be moved toward less volatile savings vehicles, because the time horizon for recovery from loss was reduced. The empirical evidence regarding the age to risk relationship has been equivocal. It has been shown to be negatively related to increased risk taking in retirement savings allocations (Dulebohn, 2002), to not be related (Sunden & Surette, 1998), or to be positively related (Dulebohn & Murray, 2007).
- Income, or wealth, is expected to be positively related to risk taking in retirement savings because individuals who have greater wealth, should be better positioned to substitute other savings or accept losses in retirement savings. Empirical evidence has supported this expectation (Agnew, Balduzzi & Sunden, 2000).
- Education is expected to be positively related to risk taking because individuals with higher education either have greater earning potential or are better able to understand the role of risk in their retirement savings. The empirical evidence in regard to the education and risk relationship has been weak. Some studies have yielded an unexpected negative relationship (Bernasek & Shwiff, 2001), while others have found no relationship (Sunden & Surette, 1998).
- Females are expected to include less risk in their retirement savings allocations (Agnew et al., 2000; Bernasek & Shwiff, 2001). However research has found that this assertion depends on marital status and the characteristics of the spouse (Lyons & Yilmazer, 2004).

RESEARCH ON DECISION MAKING

A large amount of research attention has been given to risky decision-making among various groups such as managers and executives (Sullivan & Kida, 1995), negotiators (Ghosh, 1992); gamblers (Rhoda, Olson, & Rappaport, 1999); financial planners (MacGregor, Slovic, Berry, & Evensky, 1999), and entrepreneurs (Brockhaus, 1980). In addition, research on risk taking primarily has focused on issues including preferences for risk (Ross, 1981), perceptions of risk (Geweke, 1992), and individuals' determination of probable outcomes in risky decisions (Shapira, 1995). Less research attention has focused on identifying determinants of risky decision-making in the investment allocation process among DC plan participants.

The research that has been conducted on decision making has provided several contributions to our understanding of how workers approach allocating their retirement savings to investment options. Important findings for decision making about risk taking in retirement savings include:

- While workers intend to balance the risk in their portfolios, they often do not follow through and engage in the actions necessary manifest the intention (Benartzi & Thaler, 1999).
- Workers are influenced to change allocations based on situational context, so a planned and consistently managed approach to savings decisions is observed less often than not (Benartzi & Thaler, 2002).
- When workers are exposed to annual returns data that include short-term losses, they subsequently make lower risk allocations than they would have if they had reviewed long term compound data (Benartzi & Thaler, 1999).
- Workers are influenced by the number and types of savings options with which they are presented. For example, if the workers have more equity options, they will include more equity holdings in their savings portfolio (Benartzi & Thaler, 2001).

MODELS OF RISK BEHAVIOR IN INVESTMENT ALLOCATION

Up until recently, there was a limited amount of attention given to developing and testing models of risk behavior in the investment allocation process. Further, while research on the role of demographic factors and decision making provides some insight into factors involved in risk behavior in DC decision making, Dulebohn, Murray and Sun (2000) provided the first research integrating attitudes, perceptions, and demographic predictors to explain participants' decision making when choosing among types of pension plans. Their results identified primary predictors distinguishing plan selection and indicated that employees' preferences for plan features (such as investment choice for a DC plan, benefit formula for a DB plan, and portability for a hybrid plan) explained significant variation in their selection among pension plans. The results highlighted the critical role played by individual differences, such as risk preference, in plan choice beyond demographic predictors.

INVESTMENT RISK BEHAVIOR STUDY 1

In response to the limited research on investment decision making in DC savings plans, Dulebohn (2002) presented and tested a direct effects model of the determinants of risk taking behavior in the investment allocation process. The direct effects model proposes that each predictor variable influences the risk taking behavior without being mediated or filtered by another variable in a causal chain.

Dulebohn operationalized investment risk behavior, as the dependent variable, in two ways. First, investment risk behavior was measured in terms of investment risk level. Respondents were asked to complete an investment allocation scenario where they were asked to allocate an annual contributions total of \$10,000 on a table listing investment categories offered at the time by TIAA-CREF. The investment options were ranked according to their relative risk level using risk betas. Second, risk behavior was measured in terms of real loss tolerance. In a second scenario, respondents were instructed to allocate their next year's retirement contributions of \$10,000 among two DC retirement plan investment options: fixed annuity and stock account. The annuity option represented the status

quo or riskless asset since the option provided a guaranteed return. The other option represented a choice with a potential for loss of principal.

Model: Dulebohn's (2002) model of the determinants of investment risk taking behavior consisted of three constructs posited to be determinants or predictors of investment risk taking behavior. The first construct was *ability to recover from loss* based on the premise that an investor's ability to assume risk is related to her ability to recover from possible loss. This construct was operationalized in terms of income level, age, and participation in another DC pension or retirement savings plan.

The second construct in Dulebohn's (2002) model was *perceived personal control* based on the premise that individuals are generally motivated to seek control over their environments (Langer, 1982). In addition, risk taking has been viewed as being associated with perceptions of personal control and that low perceptions will contribute to individuals' efforts to enhance control by selecting less risky investments that have more predictable outcomes (Greenberg & Strasser, 1991). Dulebohn operationalized perceived personal control in terms of internal locus of control, self-efficacy, and knowledge of investment principles.

The third construct in Dulebohn's (2002) model was *behavioral tendencies* based on attitude theory, which has posited consistent behavioral responses toward decision situations. Prior research has found that when decision situations are characterized by risky decision-making, there are gender and risk propensity differences towards them. This construct was operationalized in terms of gender and general risk propensity. Risk propensity refers to an individual's general risk orientation or tendency to take or avoid risks, and research has found that individuals demonstrate consistency in their personal risk taking behavior (MacCrimmon & Wehrung, 1986; 1990).

Sample: Dulebohn (2002) mailed a survey to a random sample of 4,000 college and university employees in a Midwestern state who are active participants in a major state sponsored retirement system. This organization administered several employer-sponsored pension plans, for 60 participating employer organizations covering over 80,000 employees. The participating employer organizations included community colleges, state colleges and universities, and university hospitals. Seven hundred and ninety five surveys were returned representing a response rate of approximately 20%. The response rate was not low for a mail survey. The sample characteristics were compared to the population; t-tests indicated that there were no significant differences between the population and sample distributions in terms of age, gender, or job classification.

Results: Statistical tests of the demographic and attitudinal variables operationalizing the three constructs found support for: knowledge of investment principles, self-efficacy, general risk propensity, income, age, and gender. While explaining a significant amount of variance in investment risk taking behavior in DC retirement plans, Dulebohn's (2002) results suggested that a direct effects approach did not adequately explain DC plan investment risk taking behavior. His results validated Sitkin and Pablo's (1992) assertion that while prior research on organizational risk taking had focused on the direct effects of one or two determinants, a mediated approach, or causal chain of predictors, would better reflect the complex sets of factors that may influence risky decision making behavior.

INVESTMENT RISK BEHAVIOR STUDY 2

As a follow-up to Dulebohn (2002), we examined the mediating or intervening effects of risk preference and opportunity perception for a number of attitude and individual difference determinants of retirement savings risk behavior (Dulebohn & Murray, 2007). Opportunity perception was an individual's assessment of whether taking risk in retirement savings investments provided primarily upside or downside potential. That is, was the investing glass half full or half empty? In this study, attitude theory served as the theoretical foundation for the model specification. Figure 1 presents the hypothesized model and variables tested.

Model: Reported Risk Level. We operationalized *investment risk behavior*, as the dependent variable by asking survey respondents to complete a table with the investment allocation options offered by their DC retirement plan provider. Four separate versions of the survey were administered each differing with respect to the page that presented the particular list of the investment allocation options provided by each of the four DC provider companies. The sheet listing the particular investment options, in each version, was identical to that provided by the fund to participants to use to select their investment options.

The survey directions asked participants to access their most recent DC plan provider quarterly account statement and asked them to record which investment allocation options they allocated their payroll contributions to and to specify the percentage of their contributions that they allocated to each investment allocation. We standardized the allocation options using the beta weights provided by Morningstar for each of the investment options. Next, we summed the percentages that each participant allocated to the funds in each category and then multiplied the percentages for each category by the mean beta weight for the category. Finally, we added the scores together to arrive at an overall retirement savings risk level score for each respondent. This measure of retirement savings risk behavior was labeled Reported Risk Level as presented in Figure 1.

Determinants. As noted in Figure 1, we included two independent variables as direct determinants of investment risk taking behavior. These variables included:

- *Knowledge of investment principles* which represents individuals' or laypersons' understanding of the generally accepted investment principles communicated by providers of financial products. Following Dulebohn (2002), we expected that individuals with higher knowledge of investment principles would better understand the differences among investment allocation options, the risk and return trade-off, and the need to assume risk to obtain the potential for higher returns in DC pension plans.
- *Risk preference* which represented an individual's attitude towards risk taking in a specific context, in this case preference for investment risk. We expected those individuals who preferred higher investment risk would select investments with an overall higher risk level, and those who preferred less investment risk would select investments with an overall lower risk level.
- Control variables included: *age, income, marital status, education, and gender.*

Mediated determinants. In addition to being hypothesized as a determinant of retirement savings risk level, investment risk preference is presented in Figure 1 as a mediator between risk level and three independent variables: general risk propensity, inertia, and opportunity perception. Risk preference functions as a mediator in that it accounts for the relationship between the predictors and reported risk level of retirement savings. Figure 1 indicates that general risk propensity, inertia, and opportunity perception are associated to retirement savings risk level; and that the relationship is indirect through their effect on investment risk preference.

- *Risk propensity* represents the decision maker's general risk orientation, in contrast to his or her specific attitudinal preference for investment risk. The risk propensity trait has failed to consistently predict risk taking behavior across a variety of situations. Therefore, researchers have suggested that risk propensity affects attitudes toward risk in specific contexts (March & Shapira, 1987; Bromiley & Curley, 1992). Consequently, we expected the effect of risk propensity on retirement savings risk level to be indirect and mediated through the investment risk preference attitude.
- *Inertia* refers to the overall level of investment risk that the decision maker has had a tendency to select in the past. In light of the possible influence of prior behavior on attitudes or preferences, we expected that the influence of inertia, on risk behavior, is primarily through its influence on the risk preference attitude. For those who have exhibited high-risk behavior with their investment allocation in the past, this tendency or pattern of behavior should influence their preference for higher risk investments which in turn influences retirement savings risk level behavior.

- *Opportunity perception* refers to the degree that participants viewed their investment allocation choices as an opportunity rather than as a threat. Our contention is that perceiving the retirement investment situation as an opportunity leads to a higher investment risk preference, and consequently higher risk behavior. In contrast, perceiving the task as a threat leads to lower investment risk preference and subsequent lower risk behavior.

Opportunity perception was also studied as a mediator of several determinants of risk taking behavior. Research has shown that decision makers tend to view situations that are controllable as opportunities and uncontrollable situations as threats (Krueger & Dickson, 1994). As presented in Figure 1 we positioned *locus of control*, *self-efficacy*, and *outcome history* as three determinants of risk behavior mediated by opportunity perception and investment risk preference. We selected these variables because they represent determinants of risk taking behavior that are related to evaluations of personal control and thus opportunity perception.

- *Locus of control* refers to individual beliefs about whether the outcomes of one's actions are contingent on what one does (internal locus of control) or on events outside one's personal control (external locus of control). Researchers have found risk taking to be associated with an internal locus of control orientation (e.g., Shapira, 1995). With respect to investing, we expected that individuals with an internal locus of control orientation view their investment outcomes, to some degree, under their control and therefore perceive risky choices as representing an opportunity rather than as a threat.
- *Self-efficacy* refers to the judgments an individual makes about her ability to marshal the cognitive resources, motivation, and courses of action necessary to engage in performance on a specific task (Gist & Mitchell, 1992). Research on entrepreneurs has indicated that entrepreneurs often have high perceptions of self-efficacy, which leads them to frame risky situations as opportunities they can control rather than as uncontrollable threats (Krueger & Dickson, 1994). Based on this research, we expected that high self-efficacy is positively related to perceiving the investment selection task as an opportunity while low self-efficacy is related to perceiving the task as a threat.
- *Outcome history* refers to results of respondents' prior investment decisions. Research has indicated that prior success in risk taking behavior influences subsequent risk taking behavior and that decision makers are more willing to accept risks after experiencing gains rather than losses (Sitkin & Pablo, 1992). With respect to opportunity perception, March and Shapira (1987) found that prior success in risk taking led to a tendency to underestimate subsequent risks; this suggested higher perceptions of control or views of the risk situation as an opportunity rather than a threat. We expected that prior investment success is positively related to risk taking behavior and that the influence of outcome history of retirement savings risk behavior is indirect and mediated by opportunity perception and investment risk preference.

Sample: We mailed surveys to a random sample of 3,000 active university faculty and professional employees employed at six institutions in a southern state university system. The sample of employees surveyed in the study participated in the university system's DC retirement plan. Surveys were sent to employees who allocated their DC contributions to one of four of the ten available provider companies: Aetna, Fidelity, TIAA-CREF and Valic. Seventy-five percent of the university system employees, who participated in the DC program, participated in one of these four plans. Seven hundred and fifty surveys were sent to participants in each of the DC plan provider companies.

The total number of useable responses was 795 representing an overall response rate of 27% and response numbers were approximately 200 for each plan. The response rate was not low for a ten page mail survey. The sample characteristics were compared to the population; t-tests indicated that there were no statistically significant differences between the sample and population distributions in terms of gender, education, age, income, and position classification.

Results: We found significant support for a direct effect of knowledge on the reported risk level demonstrating that workers' knowledge of investment principles was positively related to the risk level in their DC savings plan allocations. In addition, the proposed direct effect of risk preference on reported risk level was supported, indicating that investment risk preference directly influenced risk taking in retirement savings allocations. Risk propensity, inertia, and opportunity perception were all found to directly affect risk preference and to have an indirect effect mediated by investment risk preference on reported risk level.

We also found that opportunity perception mediated the relationship between a worker's experienced investment outcome history, self-efficacy toward managing investments, and locus of control with investment risk preference and risk taking in allocations. Specifically, outcome history, self-efficacy, and internal locus of control were directly related to opportunity perception; and each of these variables' mediated effects (by opportunity perception and investment risk preference) on reported risk level were also supported. Finally, of the demographic control variables, age, marital status, and gender were significantly related to risk preference. Age was the only control variable to relate significantly directly to reported risk level.

WHAT DID WE LEARN?

Attitude has long been considered a direct and immediate cause of intention and behavior, yet much of the theorizing and empirical studies of risk taking in retirement savings have focused on more distal correlates like demographics and decision making biases. The studies summarized here point out two very direct influences on risk taking that can be managed: investment knowledge and an attitudinal preference for different risk levels in savings. Of these two risk taking triggers, the data showed that attitudinal preference had an effect that is almost three times greater on levels of risk in retirement savings portfolios than investment knowledge has.

To understand the utility of what we have learned about the lynch pin role of attitudinal preference connecting the various determinants to risk taking behavior, it needs to be examined in light of what we already know about attitudes. It is widely accepted that attitudes are an expression of an expectancy-valence relationship (Fishbein & Ajzen, 1975). The level of an attitude toward a particular object, whether it be a person, place, thing, or behavior, is a function of the value (i.e., valence) the object produces, which may be positive or negative, and the expectancy or likelihood that the value will be produced. The greater the combined levels of value and expectancy, the stronger will be the expressed level of the attitude.

Given the central role of attitude as a mechanism for describing why workers take on different levels of risk, what did we learn about it? First, it is a conduit through which the demographic correlates express themselves. Risk preference mediated the expected effects of age, marital status and gender. To understand conceptually why the demographics are related to risk taking, the best approach accordingly is to describe why they should be related to higher or lower levels of preference for risk taking in retirement savings. For example, age provides arguments of both a valence and expectancy nature. The time horizon characteristic of age affects the expectancy or probability of payoff or recovery from loss. Age, likewise, is an indicator of closeness to retirement, at which time the value or utility of greater savings and earnings levels are more salient. Given the competing roles of expectancy and valence that age can potentially represent, it is consequently not surprising that the results of empirical studies of the age to risk taking relationship have been equivocal.

Second, people express their general risk taking disposition as levels of a preference for risk taking in retirement savings. Like demographics, personality and disposition are difficult to change, so our best approach to them is to look at them in regard to how they affect workers' preferences for risk taking. That is, there should be a logical fit between the definitional characteristics of the trait and the perceived value they produce for each worker.

Third, attitudinal preference for risk taking filters the effect of perception on risk taking. Workers translate their perceptions or beliefs into different levels of preference for the risk in their retirement savings portfolios. Beliefs are commonly believed to be causes of attitudes, so we were not surprised by this finding. The important finding was that perception or belief about opportunity was the direct influence on preference, and that the opportunity perception, itself, was a mediator of worker's experience, beliefs and disposition. This finding is especially instructive in light of the expectancy-valence model of attitude formation, because it speaks directly to the expectancy part of the equation. That is, it tells us how the likelihood of opportunity versus threat people see in an investment situation influences the preferred level of risk taking to achieve the desired ends.

IMPLICATIONS

What should be done based on what we learned? First, because attitudinal preference explains risk taking above and beyond investment knowledge, training programs can be improved by building attitude assessment and education into them. The extent that people more systematically examine their value and expectancy perceptions, they will be able to make more informed decisions that meet their situation. It's one thing to know the nuts and bolts of investing, but it's more informative to know how one reacts to, feels about, and copes with the investing risk.

Second, because beliefs and perceptions directly influence attitudes, communication and training programs should be designed with the goal of helping people to form beliefs that are objectively appropriate to their circumstance. For example, it means helping people learn how their decisions and perceptions might be influenced by framing effects and short-term loss avoidance biases.

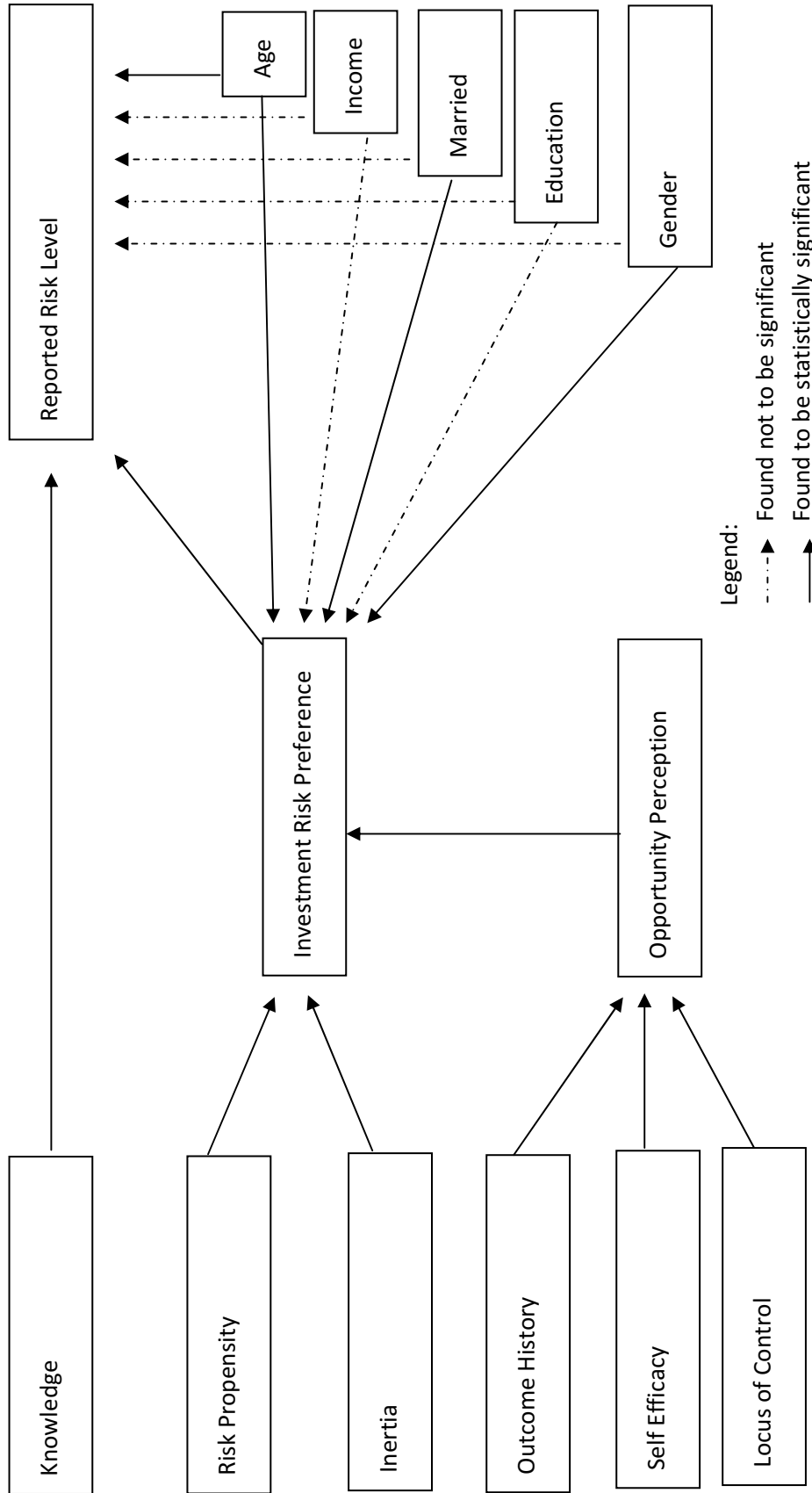
What's left to learn? There is a great deal about risk taking in retirement savings that has yet to be explained. The study of mediation that was reported here ultimately explained only 37% of the variation in the reported risk taking levels, even after taking into account a wide range of determinants including demographics, dispositions, attitudes, inertia, experience and knowledge. Likely suspects for explaining additional variation in risk taking include system-level effects of differences in savings plan characteristics and administration or interpersonal effects like social identity or subjective norms, which have been proposed in the attitude literature as having effects on intention and behavior (Ajzen, 1991; Fishbein & Ajzen, 1975). Additionally, risk preference is only one dimension of attitude. Retirement savings behavior is a "complex object" that might be a function of several different attitudes, like attitude toward saving or attitude toward the activity of investing. Additional studies of attitude, accordingly, merit some amount of future research.

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FIGURE 1: MEDIATED MODEL OF RISK LEVEL IN EMPLOYEE RETIREMENT SAVINGS ALLOCATION (FROM: DULEBOHN & MURRAY, 2007)



ABOUT THE AUTHORS

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