An Evaluation of the Risk-Taking Characteristics of Affluent Households

by Michelle Kruger; John E. Grable, Ph.D., CFP®; and Sarah S. Fallaw, Ph.D.

Michelle Kruger is a Ph.D. student studying financial planning at the University of Georgia. Her research interests include understanding the determinants of household financial behavior, financial risk tolerance, and financial therapy interventions.

John E. Grable, Ph.D., CFP®, holds an Athletic Association Endowed Professorship at the University of Georgia where he conducts research and teaches financial planning. He is best known for his work related to financial risk tolerance assessment and behavioral financial planning. He serves as the director of the Financial Planning Performance Laboratory at UGA.

Sarah S. Fallaw, Ph.D., is the founder and president of DataPoints, a company that analyzes the behaviors and experiences of individuals related to how they manage their household finances. She received her Ph.D. in applied psychology from the University of Georgia and is a member of the Society for Industrial and Organizational Psychology.

Executive Summary

- The purpose of this study was to test whether affluent households differ in the frequency of engaging in certain financial risk-taking tasks and to evaluate the association between net worth and performance of risk-taking tasks.
- Data from two survey samples showed that affluent respondents reported more frequently taking above-average investment risk, understanding risk levels, and understanding the risk and return characteristics of investments. Less affluent respondents reported taking fewer financial risks.
- Results also showed that net worth was associated with conceptualizing and understanding risk and return trade-offs.
- Under both FINRA and SEC rules and guidelines, financial planners are required to evaluate their clients' risk tolerance profiles prior to making recommendations. The results from this study suggest that this requirement may be more important than previously thought.

Identifying the nuances of wealth accumulation at the household level has been the subject of research and discussion for nearly 100 years. Atwood (1926), for example, attempted to understand the attitudes and behaviors of the affluent of his day, concluding that the truly wealthy act differently than others and engage in behavior that those without wealth sometimes interpret as being arrogant or odd (for example, having a rather mundane lifestyle). According to Schervish and Havens (2001), this "fascination with and opinion about the millionaire has never gone out of style" (page 76). Klontz, Seay, Sullivan, and Canale (2014) noted the following: high wealth-holding individuals and households act differently than others. The affluent are less likely to avoid money issues or overvalue assets, income, and wealth. They also exhibit higher levels of financial knowledge and more planning behavior to increase wealth.

Nearly 20 years earlier, Stanley and Danko (1996) uncovered similar attitudes and behaviors. In their well-known book, *The Millionaire Next Door*, Stanley and Danko reported the results of a series of surveys designed to document the types and frequencies of tasks engaged in by wealthy households. They created a now widely used formula to estimate how much wealth someone should have in relation to their age and income.[1] Ultimately, what emerged from their work was evidence documenting what wealthy households do on a regular basis, in terms of personal finance tasks.

Based on the work of Stanley and Danko (1996), Klontz et al. (2014), and others, financial planners now know that it is not always possible to gauge a person's financial situation simply by viewing what a person exhibits to the world (for example, their home, car, or clothing). According to Stanley and Danko, those who live frugally are more likely to also be wealthy. The affluent among the population tend to spend less than they earn and save aggressively. Those who under accumulate wealth are more likely to signal their social

status by spending on cars, clothing, vacations, and luxury items and services. As noted by Ameriks, Caplin, and Leahy (2003), those with less wealth often fail to control their spending through pre-planning activities, limiting wealth accumulation.

Much of the analytical work devoted to evaluating differences between those who have accumulated large sums of wealth and others has focused on attitudes, traits, cognition, and planning behavior as explanatory variables (e.g., Ameriks et al. 2003). Fewer studies have focused on the similarities and differences among households in terms of the engagement of risk-taking tasks.

Some evidence suggests that there may be differences in the risk attitudes and behaviors of those who report possessing high levels of wealth compared to others. Again, the work of Stanley and Danko (1996) provides some insight on this topic. They documented that the affluent are willing to take risks if the returns are reasonable and the rewards outweigh possible losses. According to Stanley and Danko, the affluent tend to be willing to invest in riskier assets, such as equities and private businesses. They are not, however, gamblers or speculators. Rather than taking a long-shot bet on an investment, Stanley and Danko argued that the affluent prefer, in general, to diversify their investments across higher-return assets. They also tend to avoid holding large positions in cash and other lower-return investments.

These insights are now considered to be foundational concepts within the personal finance community (Bosch-Domènech and Silvestre 2006; and Carroll 2000). Yet, whether there are, in fact, associations between frequently engaging in certain risk-taking tasks and having a high net worth has not been verified in the literature. This study was undertaken to help fill this gap in the literature.

The primary purpose of this study was to reevaluate the risk-taking task domains originally presented by Stanley and Danko (1996) in order to determine whether the affluent behave differently than others in the frequency of performing certain financial risk-taking tasks.

Literature Review

The relationship between engagement in risk-taking behavior and wealth accumulation is a complex one that starts with the concept of risk tolerance. Risk tolerance is generally defined as a person's willingness to accept the possibility of a loss in pursuit of a gain (Nobre and Grable 2015). The engagement in risk-taking behavior is thought to be positive (Rolison and Scherman 2002). Additionally, Finke and Huston (2003) hypothesized that financial risk tolerance and wealth are positively associated. People who described themselves as being more willing to take financial risk generally did engage in more risky investment behavior, and they often reported greater levels of wealth accumulation. It is important to note, however, that the relationship is not perfectly linear. Hallahan, Faff, and McKenzie (2004) found that the affluent are not always willing to accept more risk in all situations.

Finke and Huston (2003) used the 1998 wave of the Survey of Consumer Finances to examine how financial risk tolerance impacted levels of financial assets owned by a household and net worth. They found that net worth was more than two times greater among those who were willing to accept higher risk, compared to others who were not willing to accept any risk. Among those who reported having below-average risk tolerance, the difference was more than three-and-a-half times greater. Those with a moderate level of risk tolerance also reported having a significantly lower average net worth and financial asset ownership in comparison with those in the highest risk-tolerance group.

Hallahan et al. (2004) presented two perspectives on the relationship between wealth and risk-taking behavior. The first was that affluent investors could afford to take more risk because they could withstand higher levels of losses. This is akin to saying that affluent households have a greater risk capacity (Yao 2011). The second was that affluent investors were more conservative with their money perhaps because they had more to lose, whereas the less affluent had less to lose and perhaps viewed risky investments as an opportunity similar to buying a lottery ticket.

Guiso and Paiella (2008) used the Bank of Italy Survey of Household Income and Wealth to investigate the relationship between risk aversion (the inverse of risk tolerance) and wealth. They found that risk tolerance was both positively associated with risk-taking and wealth, but that risk tolerance increased at a proportionately slower rate than wealth. In a similar study, Carroll (2000) found that, in general, portfolios of affluent households were more heavily invested in higher-risk assets such as stocks and mutual funds.

Over time, portfolios of the affluent have become more varied. Evidence of a shift in portfolio risk was documented in the U.S. Federal Reserve's Survey of Financial Characteristics of Consumers between 1962 and 1995. Data from the surveys indicated a decrease in stock ownership and an increase in mutual fund ownership among affluent households.

Today, those who are affluent are more likely to be involved in entrepreneurial activities, such as starting and running their own businesses. For these business owners, much of their income and net worth is derived from and concentrated in their business. As a result, their investment portfolios are risky in that their wealth is concentrated in one investment and not well diversified.

Robust literature has shown a positive association between engaging in risky financial behavior and wealth accumulation; however, there is also evidence that the amount at stake in a given situation can influence a person's willingness to take risks. To test the effect of risk-taking on wealth levels, Bosch-Domènech and Silvestre (2006) conducted an experiment with two groups of Spanish high school students living in the same city in their last year of a university-track program. Each group had 21 participants randomly selected from a group of students who volunteered to participate. Both groups had similar proportions of males and females of the same age. The affluent group was selected from a high-tuition, private school in a high-income neighborhood. The less affluent group was selected from a public school in a low-income neighborhood. Bosch-Domènech and Silvestre found that, on average, participants in the less affluent group were more likely to risk large amounts of money, while participants in the affluent group were more likely to risk small amounts of money. They concluded that the affluent take more risks when the stakes are low and fewer risks when the stakes are high.

In general, the existing literature on the relationship between wealth and financial risk-taking supports the findings of Stanley and Danko (1996) with regard to the risk-taking characteristics of the affluent. It appears that the affluent tend to be more willing to take financial and investment risk, but only when the risk is deemed appropriate. The affluent also avoid unnecessary risk.

This study adds to the literature by documenting how frequently the affluent engage in risk-taking tasks compared to others, and then linking these behaviors to household wealth. The remainder of this paper provides a brief theoretical discussion, a description of the methodology, a summary of the results, and a discussion of findings.

Theoretical Issues

Very little has been published on the theoretical dimension of behavioral risk-taking from a financial planning perspective. Nearly all the previous theoretical work in the field has been conducted from a normative economic utility perspective (Hanna, Gutter, and Fan 2001). Prospect theory is an exception. However, this theory is most useful in describing behavior from the context of the way in which risky outcomes are framed and described (for example, positive and negative choice dilemmas). It is known, within the context of prospect theory, that people are more willing to take financial risk when outcomes are framed negatively. They are less willing to take risk when outcomes are couched in positive terms (Kahneman and Tversky 1979). While useful in describing the way people arrive at a choice preference, prospect theory is less helpful in explaining or predicting what shapes a person's general willingness to engage in a set of behaviors, or how often the affluent engage in tasks to understand their willingness to take financial risk.

Much of what is known about the factors that influence the choice to engage in risky financial behavior comes from descriptive studies designed to isolate the determinants of risk attitudes or from other fields, such as adolescent development. The prevailing theoretical orientation is that risky behavior follows a person's willingness to engage in the behavior (Yao 2011).

Some have voiced a concern, however, about the notion of endogeneity regarding this relationship. This concern is one of causality in models of risk-taking. For example, is it true that risky behavior follows a person's willingness to take risk, or is it possible that risk tolerance is shaped by risky behavior? Similarly, is it possible that greater risk capacity when it comes to wealth shapes risk-taking behavior, or is the relationship the other way around? The financial planning literature offers little theoretical guidance to answer these questions.

Given the lack of direct theoretical evidence in the field of financial planning, insight into the endogeneity question related to risk-taking can be found in other disciplines that have grappled with this question. Rolison and Scherman (2002) summarized the situation as follows: "It is interesting to note that perceived risk correlate[s] negatively with risk involvement, indicating the more risky one assesses a situation to be, the less chance he or she will become involved in it" (page 593). This implies a direct association between risk tolerance and subsequent risky behavior. Although it is certainly possible that dual causality among certain risk domain variables may exist (making it difficult to clearly state that risk-taking behavior or the accumulation of wealth follows from holding a particular risk attitude), what can be said with greater certainty is that a positive association exists between and among risk attitudes, risk-taking behavior, and wealth accumulation.

Consider the case of a teenager faced with the question of whether to engage in a sensation-seeking behavior for the first time in his or her life (e.g., taking drugs, smoking, engaging in unprotected sex, etc.). Because the person has no prior experience with the behavior as a way to evaluate potential costs and benefits, the teenager must rely on other factors when shaping his or her behavioral decision. These factors include news reports, stories from others, and personal feelings, preferences, and perceptions.

Here is another way to think about the situation: assume a person is prompted by a friend to jump out of a third-story window as an experiential exercise. With no previous experience to rely on, the person must calculate the potential gains and losses associated

with the act of jumping from the window. Each person who is faced with the same choice will use a different calculus to arrive at a cost-benefit estimate. Factors such as feelings of control and capacity, as well as preferences for and perceptions of the risks involved all contribute to shaping a person's willingness to engage in the behavior (Rolison and Scherman 2002). The experience and knowledge gained from engaging in a behavior (for example, jumping from a window or buying stock) will influence future behavior. However, the fact remains that someone must be willing to engage in a behavior before he or she engages in the activity (unless the person is coerced into action).

A conceptual issue comes into play regarding the association between and among risk attitudes, behaviors, and wealth accumulation in the context of financial planning. Specifically, causality cannot be easily ascertained when a cross-sectional data technique is used to collect attitudinal and behavioral information from individuals. All that can be said is that an association exists between engagement in certain tasks and behavioral outcomes.

Although it would be helpful to say with certainty that high-risk tolerance always leads to greater risk-taking, and thus wealth accumulation, this paper acknowledges that such a conclusion is not realistic. Results from this study showed that there is a positive association between engaging in certain activities and current wealth status. Whether respondents in this study exhibited similar risk attitudes 30, 20, 10, or one year ago, or whether they have always engaged frequently in certain tasks cannot be determined with certainty. Coming back to the notion of endogeneity, it is possible that people's risky behaviors change in direct proportion to their wealth status. If true, then the relationship between wealth and risk-taking may be bidirectional rather than causal.

What is more commonly reported, however, is a direct positive association between a person's willingness to take risk and his or her eventual engagement in a risky behavior (Davey 2012; Rolison and Scherman 2002; Yao 2011). It is important to note that this is a generalized statement, and that risk tolerance is not necessarily consistent across behavioral domains (Smith 2017). Someone could be willing to gamble but not be willing to take drugs. Another person may be willing to invest aggressively but not be willing to smoke. However, unless induced with misleading information or coerced into a behavior, willingness to engage in the behavior must almost always come before the action is taken (Nobre and Grable 2015). The action then leads to a behavioral outcome.

This leads back, again, to the issue of endogeneity. If (a) financial risk tolerance, as a subjective attitudinal construct, is relatively stable over time; and (b) behavior follows willingness to engage in the behavior, then it is also reasonable to assume that the accumulation of wealth is related to, and most likely follows, the willingness to take financial risk (Finke and Huston 2003). As such, the identification of an association between engaging in risk-taking tasks and wealth status can be beneficial for those practicing financial planning.

This paper shows those with more wealth tend to report engagement in similar risk-taking behavior compared to others. Those with less wealth exhibit different task engagement. With this knowledge, a financial planner might be able to help his or her clients think about and conceptualize risk concepts on a more frequent basis. Although there is no direct evidence that this will result in a sudden improvement in wealth status, such a change would likely bring these clients' attitudes and behaviors into alignment with what is known about high wealth-holding individuals and households.

Methodology

Two samples of individuals (affluent and less affluent) were collected during September 2013 and June 2014 using two different online survey methodologies.[2]

Affluent sample characteristics. The affluent sample, collected in September 2013, was generated from high- and ultra-high-net worth individuals who participated in the Affluent Market Institute[3] panel studies between 2010 and 2013. A total of 113 individuals responded to four different surveys regarding financial behaviors over a four-week period. Due to missing data for some items, 95 respondents were included in the regression analysis. The sample was purposely delimited to over-represent knowledgeable and affluent households.

Approximately 75 percent of respondents in the affluent sample were male. On average, respondents were 41 years of age at the time of the survey. The vast majority were White (93 percent), with the remainder being either Black/African-American (5 percent) or Asian (2 percent). More than 97 percent of respondents indicated owning investments. The average before-tax household income of respondents was $230,352 ($SD$ = $156,224). The net worth of respondents (including home equity) was relatively high (M = $958,923, SD = $1,499,561).

Those in the affluent sample were asked to consider seven risk-taking tasks by indicating the frequency in which they engaged in each task. The risk-taking tasks were embedded in a longer survey of financial tasks, which included topics such as budgeting, use of credit and debt, financial planning, and investing. The task statements were adapted from the work of Fallaw, Kruger, and Grable (2017) and Stanley and Danko (1996).

The task statements were generated

Table 1: Demographic Comparison of the Two Samples

	Affluent Sample			Comparison Sample			Test Statistics		
	n	*M*	*SD*	*n*	*M*	*SD*	*t*	X^2	*p*
Age	110	41	10.37	156	40	11.85	0.94		0.35
Gender								10.78	0.001
Male	82			69					
Female	27			86					
Ethnicity								4.92	0.03
White	102			127					
Other	11			31					
Own Investments								49.43	0.001
Yes	97			92					
No	2			66					
Income	109	$230,352	$156,224	145	$82,547	$73,949	10		0.001
Net Worth	108	$958,923	$1,499,561	143	$288,660	$1,617,987	3.35		0.001

using a job analysis methodology to identify critical and frequent tasks of individuals who manage the finances of their households. The risk-taking tasks were: (1) take average financial risks when investing; (2) understand the appropriate level of risk to take for own investment portfolio; (3) take substantial financial risks when investing; (4) take above-average financial risks when investing; (5) take few, if any, risks when investing; (6) understand the nature of investments and their likelihood of risk and return; and (7) invest in high-risk investments (e.g., penny stocks, junk bonds).

Frequency was measured as follows: 1 = never; 2 = rarely; 3 = sometimes; 4 = often; and 5 = very often/always. No definitional guidance was provided for these tasks. It is important to note that terms like "average" and "substantial" could have represented different characteristics across the sample.

Comparison sample characteristics. A comparison sample of 156 respondents was surveyed during June 2014 using an automated mechanical Turk (MTurk) survey system.[4] This sample completed the survey in one administration and was screened as follows: the participant (a) had to be responsible or jointly responsible for household finances; (b) had to answer a net worth definitional question correctly; and (c) needed to have at least $25,000 of household income. Unlike the affluent sample criteria, those in the comparison sample were not required to report having a positive net worth. Due to missing data, 91 respondents were included in the final regression analysis.

Those in the comparison sample exhibited, on average, a different socioeconomic profile compared to the affluent sample. Approximately 44 percent of respondents were female. Respondents were 40 years of age, on average, at the time of the survey. The majority of respondents were White (85 percent), with the remainder being Black/African-American (8 percent), Asian (6 percent), or some other race (1 percent). Only 58 percent of those in the comparison sample indicated owning investments. The average before-tax household income of respondents was $82,547 (*SD* = $73,949). The average net worth of respondents (including home equity) was $288,660 (*SD* = $1,617,987), which was significantly lower than the amount reported by those in the affluent sample.

Table 1 shows how the two samples (affluent group and comparison group) compared in terms of these demographic factors. The affluent sample was comprised of more White males with higher household income and net worth. Those in the affluent sample were also more likely to report owning investments. There was no difference between the samples in terms of age.

Like those in the affluent sample, those in the comparison group were asked to report their frequency of engagement in a survey of financial tasks, including the seven risk-taking tasks described previously. Descriptive statistics for these risk items, and a comparison to the affluent group, are shown in Table 2.

Data analysis. A *t* test was conducted to confirm that the two samples were significantly different in terms of their net worth. Descriptive mean and standard deviation task frequency statistics from the affluent and comparison samples were then calculated, as shown in Table 2.

It was hypothesized that an item with either a high or low frequency rank among the affluent sample could be used as a standard against which the comparison sample could be assessed. A *t* test was performed to identify the difference in task frequency between the affluent and comparison samples in order to determine how similar or dissimilar respondents in the two samples were to each other. A correlation analysis was then conducted to determine which of the risk-taking tasks were associated with net worth.

For the purposes of this study, the net worth variable was transformed using

Table 2: Descriptive Risk-Taking Statistics for the Affluent and Comparison Samples

Task	Frequency			
	The Affluent		Comparison Group	
	M	*SD*	*M*	*SD*
1. Take average financial risks when investing.	3.69	0.85	3.58	0.86
2. Understand the appropriate level of risk to take for own investment portfolio.	4.67	0.57	3.96	0.88
3. Take substantial financial risks when investing.	2.15	0.97	1.98	0.87
4. Take above-average financial risks when investing.	2.55	1.04	2.22	1.05
5. Take few, if any, risks when investing.	2.09	1.08	2.81	1.09
6. Understand the nature of investments and their likelihood of risk and return.	4.73	0.59	3.88	1.06
7. Invest in high-risk investments (e.g., penny stocks, junk bonds).	1.30	0.61	1.37	0.71

Table 3: Sample Comparisons of Risk-Taking Task Frequencies

Task	*t*	*Df*	*Sig.*
1. Take average financial risks when investing.	0.9	184	0.371
2. Understand the appropriate level of risk to take for own investment portfolio.	6.65	185	0
3. Take substantial financial risks when investing.	1.25	184	0.211
4. Take above-average financial risks when investing.	2.13	182	0.034
5. Take few, if any, risks when investing.	–4.52	181	0
6. Understand the nature of investments and their likelihood of risk and return.	6.76	183	0
7. Invest in high-risk investments (e.g., penny stocks, junk bonds).	–0.75	181	0.455

the natural log (ln(x+1)) (M = 11.62, SD = 3.28). The significant items from the t tests were then used in an ordinary least squares (OLS) regression, controlling for gender (coded 1 = female, and 2 = male), age, race (coded 1 = White, otherwise 0), and log transformed household income (ln(x+1)), to determine to what extent the frequency of engaging in the risk-taking tasks was associated with net worth.

Limitations

It is worth noting a few limitations associated with this study. First, the sample size for the affluent and comparison groups limited the scope of the regression model. Future studies should include other control variables, such as education and marital status.

Second, data were descriptive. As such, it was not possible to determine how a particular respondent achieved his or her wealth status. It is possible that some people in the dataset inherited their wealth or serendipitously gained or lost wealth. This limitation may not be a significant issue, however; regardless of a person's wealth situation, those with more wealth did report engaging in some risk-taking tasks more than others. Although this study does not make an argument that engagement in a particular task causes wealth creation, the findings do suggest that the affluent engage in some risk-taking tasks more frequently than others.

The notion of endogeneity is one that future studies need to address. Ultimately, financial planners need better models to determine the causal factors associated with wealth accumulation. As noted by Klontz et al. (2014), "A deeper understanding of the financial psychology of high-income clients can help financial planners better serve this market niche, predict possible behavioral risk to those with high incomes and net worth, and help clients aspiring to increase their income and net worth through insights gleaned from this population" (page 46). Future studies should attempt to test whether the tasks analyzed in this study may, in fact, be causal factors. This type of study will help address the research need as outlined by Klontz and his associates.

Results

As shown in Table 1, a t test was used to ensure that the affluent (coded 1) and comparison (coded 0) samples were, in fact, different in terms of their net worth. Those in the affluent sample had a net worth (M = $958,923) that was approximately 330 percent greater than those in the comparison sample (M = $288,660). The difference was significant, t_{249} = 3.35, $p < 0.001$. Based on this finding, a comparison of the two sample groups was undertaken to assess similarities in risk-taking task frequencies.

Table 3 shows the risk-taking tasks that were statistically different between the two samples. The affluent respondents differed significantly from those in the comparison group on four of the seven task domains.

Those in the affluent sample were more likely to report doing the following more frequently:

Table 4: Correlation Coefficients Between Net Worth and Risk-Taking Task Frequencies

	Net Worth	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Net Worth	1							
Take average financial risks when investing. (Item 1)	–0.13	1						
Understand the appropriate level of risk to take for own investment portfolio. (Item 2)	0.18*	0.23**	1					
Take substantial financial risks when investing. (Item 3)	–0.03	–0.06	0.1	1				
Take above-average financial risks when investing. (Item 4)	–0.01	–0.07	0.17*	0.62**	1			
Take few, if any, risks when investing. (Item 5)	0.06	–0.03	–.25**	–0.20**	–0.28**	1		
Understand the nature of investments and their likelihood of risk and return. (Item 6)	0.20**	0.15*	0.67**	0.15*	0.12	–0.18*	1	
Invest in high-risk investments (e.g., penny stocks, junk bonds). (Item 7)	0.05	0.02	0.05	0.32**	0.22**	-0.07	0.12	1

Note: *p < 0.05, **p < 0.01

- Understand the appropriate level of risk to take for their own investment portfolio;
- Take above-average financial risks when investing; and
- Understand the nature of investments and their likelihood of risk and return.

And those in the comparison group were more likely to:

- Take few, if any, risks when investing.

The primary differences between those in the affluent and comparison group samples related to understanding the nature of risk and avoiding risk as an investment strategy. Keep in mind that both concepts represent reported frequencies of behavior, and it is possible that these task statements were denoting a confidence bias on the part of the affluent. Even so, it was apparent from the results that the affluent were more likely to report being cognizant of the risks they were taking and were significantly less likely to report being risk avoiders. The less affluent were more likely to report taking no risks when investing and saving.

Tables 3 and 4 provide insights into the association between net worth and frequency of risk-taking tasks. A correlation analysis was conducted to determine which of the risk-taking tasks were associated with net worth. The two samples were combined for this analysis.

As shown in Table 4, item 2 (understand the appropriate level of risk to take for own investment portfolio) and item 6 (understand the nature of investments and their likelihood of risk and return) were significantly associated with net worth. The coefficients were positive, indicating that greater task frequency related to understanding risks was associated with greater net worth.

An OLS regression technique was used to further evaluate the association between task frequency and net worth. The natural log of net worth was used as the dependent variable. All the statistically significant variables from Table 3 were included in the regression. The purpose of the analysis was to determine if the frequency of understanding the risk associated with different investment situations, and the frequency of taking either above-average or few financial risks when investing, was associated with net worth, controlling for gender, age, race, and household income.

Given the high correlation between risk-taking task items 2 and 6 (those that dealt with understanding risk) a factor score comprised of the two items was created and saved for each respondent. The factor score was based on a principal components analysis using varimax rotation. The two items loaded together with a high degree of commonality (coefficient = 0.91). The median score was 0.28, with a range of 4.95. Given the way factor scores were calculated, a score of zero meant that the person's score was close to the sample average. A positive score indicated greater task frequency; a negative score was indicative of less task frequency. The factor was called "understanding risk" and included in the OLS regression with the gender of each respondent, the year of each respondent's birth (which was used as a proxy for age), and the two risk-taking tasks.

The regression model was statistically significant, $F_{7,141} = 8.79$, $p < 0.001$, with approximately 30 percent of the variance in reported net worth being explained by the model (see Table 5). Household income was the only significant control variable at the $p < 0.05$ level. Had the sample been larger, it is likely that the gender and age variables would have reached significance at the $p < 0.05$ level, with men and older respondents exhibiting a higher net worth. Taking above-average financial risks when investing was positively associated with net worth.

The factor score variable (understanding risk) also was positively related to net worth. Those who reported more frequently understanding the appropriate level of risk to take for their own investment portfolio and understanding

Table 5: Regression Results Showing the Relationship Between Frequency of Engaging in Risk-Taking Tasks and Net Worth

Variable	*B*	*Std. Error*	β	*t*	*Sig.*
Gender (1 = Female, 2 = Male)	1.03	0.53	0.14	1.94	0.06
Age	0.05	0.02	0.14	1.94	0.06
Race (1 = White, otherwise 0)	0.95	0.83	0.09	1.15	0.25
Household income	1.22	0.35	0.28	3.49	0
Take above-average financial risks when investing	0.72	0.25	0.22	2.92	0
Take few, if any, risks when investing	0.30	0.23	0.10	1.33	0.19
Understanding risk	0.70	0.30	0.19	2.32	0.02
Constant	–9.26	4.13		–2.24	0.03

Note: $F_{7,141} = 8.79$; $p < 0.001$; $R^2 = 0.30$

the nature of investments and their likelihood of risk and return exhibited a higher net worth compared to others.

Conclusion

In this study, the affluent were more likely to report frequently taking above-average risk when investing. They were also more likely to report a greater frequency of understanding the appropriate level of risk to take in their investment portfolio and understanding the nature of investments and their likelihood of risk and return. Those in the comparison group were more likely to frequently report taking few, if any, risks when investing.

Four risk-taking task differences were noted between the affluent group and the comparison group; however, only two of these were found to be associated with household net worth. When net worth was evaluated controlling for the gender, age, race, and income of respondents, those who reported more frequently being willing to take above-average financial risks when investing and those who took steps to frequently understand risk reported a higher net worth. Males and older respondents were found to also exhibit a higher net worth.

Practical Implications for Planners

The findings from the study have direct implications for financial planners. Financial planners can serve an important role in moderating their clients' perceptions about the riskiness of the financial environment and financial recommendations.

It may seem obvious that clients who desire to accumulate wealth should not be risk avoiders; however, the results from this study suggest that there may also be value in not being too aggressive. Financial planners can help their clients keep risk in perspective. This may occasionally require a financial planner to nudge his or her client toward taking risks or pulling a client back from taking too much risk.

The findings from this study emphasize the important dual roles of providing education and using professional judgment when working with clients. Financial planners are encouraged to keep in mind that the association between wealth and risk attitudes and behaviors may be bidirectional. This means that as a client's wealth situation changes, his or her risk profile may also change, and vice-a-versa. Such a change presents an opportunity for greater client-planner dialogue.

This study showed that, overall, affluent households generally reported more frequently taking financial risk in their investment portfolios; however, the frequency of understanding risk and return trade-offs associated with investing turned out to be an even more important factor closely associated with actual net worth. This finding also has important implications for financial planners.

Under both FINRA and SEC rules and guidelines, financial planners are required to evaluate their clients' risk tolerance profiles prior to making recommendations. The results from this study suggest that this requirement may be more important than previously thought. A risk tolerance assessment can serve as a baseline measure of a client's attitude toward taking financial risk in his or her investment portfolio. An appropriate assessment also can provide information about the client's understanding of risk and return trade-offs. A risk tolerance assessment can be used to help a client understand how his or her willingness to take risk and his or her understanding of risk and return trade-offs compare to affluent households. With this information in mind, the role of education, guidance, and counseling takes on a greater importance in terms of engaging clients on topics of risk and risk-taking.

One technique that can be used by financial planners when working with a less affluent client involves helping the client reframe the investment environment. It is possible that some clients associate concepts such as loss, fear, or regret with a word like "risk." When this happens, the client may shy away from taking above-average financial risks on a more frequent basis. He or she may instead attempt to avoid taking risks and seek out the safest investment options, even when this choice may lock

in a low rate of return. This behavioral choice is obviously counterproductive for those wishing to accumulate wealth over an extended period of time. In this situation, a financial planner could reframe the concept of "risk" as opportunity, gains, or achievement. Note that reframing may take more than one meeting. Continual education and reinforcement is often necessary to help a client re-conceptualize what was once fearful into something that is pleasing.

Financial planners should not use the results from this study to assume a causal relationship between risk-taking task engagement and wealth accumulation. As previously mentioned, results indicate that the affluent engage in different risk-taking tasks on a more or less frequent basis compared to those with less financial affluence.

Affluent households were found to frequently be more willing to take risks. This may be due to experience or knowledge, as proxied by the findings showing that the affluent frequently engaged in more tasks that increased their understanding of risks and returns. The relationship may also be related to the concept of risk capacity. Risk capacity refers to a household's ability to fiscally withstand a possible financial loss (Nobre and Grable 2015; Yao 2011). As noted earlier, those with greater net worth may be in a better position to absorb a financial loss, which may make them more willing to take financial risk. Whether there is bidirectional causality is a question that needs additional analysis in future research studies.

Contribution to the Literature

Results from this study add to the literature in several ways. First, findings add support to the arguments of those in the popular press (for example, Stanley and Danko (1996)) that have concluded that the affluent act differently than others when conceptualizing and taking risk. Given the finding that those in the comparison group preferred avoiding financial risk, it is not surprising that they also held a larger percentage of their household portfolios in cash and other liquid assets.

Second, results suggest that risk-taking characteristics are important inputs into personal finance and financial planning models. Specifically, it does appear useful for those making household financial decisions (and for those who are advising others when making financial decisions) to take the time to conceptualize and understand their risk-taking characteristics.

Third, findings provide evidence to put forward a hypothesis that wealth accumulation over the life cycle is, to some extent, associated with a person's engagement in tasks that increase understanding of the risks and returns associated with investments and portfolios. As noted previously, it is possible that these tasks may not be indicative of true knowledge, but instead may be capturing greater confidence among the affluent. If true, the affluent may be engaged in biased thinking that could result in overconfidence. Nonetheless, those who were affluent in this study reported greater task engagement in understanding the appropriate level of risk to take in an investment portfolio and, generally, in understanding the likelihood of risks and returns in an investment situation much more than the comparison group.

When viewed holistically, these findings suggest that those whose goal it is to accumulate wealth over the life cycle ought to take the time to gauge their risk-taking characteristics. Being willing to take, at least frequently, above-average risk with an understanding of risks and returns appears to be an essential element associated with being affluent. ■

Endnotes

1. Stanley and Danko (1996) argued that households should have a net worth equivalent to one-tenth the age of the household head multiplied by current annual household income. Using this formula, a household with a head who is age 50 and earns $170,000 per year in income from all sources should have $850,000 in balance sheet wealth (.10 x 50 x $170,000). Those whose wealth exceeds the wealth estimate are known as wealth accumulators. Those whose net worth falls short of the wealth estimate are considered to be under accumulators of wealth.
2. As with all survey data, a lag existed between the data collection period and data usage for this paper. The possibility of data becoming stale, tainted, or not representative of the intended population is always a concern; however, at the time of the analysis there was no reason to believe that the data were no longer valid. Indicators of potential limitations, such as significant differences in macroeconomic factors between the initial data collection period and the analysis period, were not present. As noted by Berman (2015), data more than 100 years old are potentially useful as a research tool if the data help describe, explain, or predict a phenomenon.
3. The Affluent Market Institute is an entity created by the authors of *The Millionaire Next Door* and *The Millionaire Mind* to collect the data used in those books. DataPoints has used this entity to collect data to use in creating proprietary products, but made the data avilable to use for this research.
4. As was the case with the first sample, there was no reason to believe that the data were no longer representative of less affluent households at the time of the analysis.

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