

Causal Attributions as Predictors of Financial Planning Behavior

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There is a paucity of formal financial education in our schools. Such training would better prepare students for financial success in later life. Such training seems important for more than simply building wealth. For example, previous research has indicated that those who employ financial planning techniques are relatively more satisfied with their financial lives. Such satisfaction or dissatisfaction has been empirically linked to the decision to divorce. This research explored whether one's preferred method of looking at life events has any predictive ability with respect to willingness to engage in financial planning behavior. It was hypothesized that those who tended to see good events in their lives as due to external, unstable and uncontrollable causes and bad events in their lives as due to internal, stable and controllable causes would be less likely to engage in many of the financial techniques recommended by financial planners and educators. Data were collected from 145 college undergraduates from an urban commuter campus in the Western United States. Analysis of regression results indicated support for the hypothesis, but only with respect to the respondent's view of positive life events. Ramifications are discussed for public policy makers, society and financial planners and educators.

INTRODUCTION

It has been noted that those who employ more of the financial strategies recommended by experts in the field are relatively more satisfied with their financial lives, and that the opposite is also true (Parotta & Johnson, 1998). The consequences of being satisfied with ones financial life (or conversely, dissatisfied) have been noted. Financial distress and dissatisfaction with the nature of one's financial lifestyle can be a contributing factor to the decision to divorce, with its concomitant costs (both economic and social), for the individuals involved (Poduska & Alred, 1990).

How well are we preparing young adults to transition into a world of financial responsibility that has very real economic and social consequences? Statistical evidence would suggest that the answer is: not very well. According to a recent study conducted by the Jump\$tart Coalition for

Personal Financial Literacy, only 15% of high school seniors reported having some sort of systematic training in personal financial management before leaving high school. The same study reported that only 50% of high school seniors could answer a set of basic financial literacy questions correctly. Further, that percentage has fallen consistently from 58% in 1997 and 52% in 2000 (Jump\$tart Coalition, 2002). If these statistics are a representative indicator of the state of financial education of our youth (and not just anecdotal evidence) we are sending young people into the adult world systematically unprepared (or at least under-prepared) to make the decisions with which they will be faced. What are some of the likely outcomes of this set of circumstances?

Investment theory teaches that if dollars are misallocated to asset classes systematically throughout an individual's investing career, the result can be a substantial reduction in the return on investment, and (as a result), the amount of funds accumulated at retirement. This results in a lower post-retirement level of consumption at the cost of greater risk in the portfolio.

If the tax code is not understood to at least a minimal degree and tax planning is not engaged in, it is likely that one's annual tax liability will be higher than is necessary. This will reduce the dollars available for savings and therefore the amount of funds that can be used to either increase assets or pay down liabilities. In either case, net worth will be systematically and artificially depressed from the lack of understanding of how the tax code functions.

If the basics of insurance planning are not understood, individuals will operate at the mercy of salespeople working on a commission basis. Here, it is very likely that an agency problem may exist: the best interests of the insurance agent and the best interests of the client may not be the same. As a result, the client may be led to purchase inappropriate products in light of their needs while other risk exposures may go unaddressed altogether. This may leave the client exposed to a potentially catastrophic loss that could wipe out a lifetime of wealth accumulation. All of these potential scenarios are reasonable, and are the real world consequences of what the Jump\$tart Coalition (2002) has described. They result directly from a lack of understanding of basic financial management techniques.

Recent years have seen an increase in the effort expended in the personal financial management arena. The National Endowment for Financial Education has developed a curriculum specially designed for high school students (NEFE, 2004). Several colleges and universities across the United States and Canada have started degree and certificate programs in financial planning (CFP Board of Standards, 2004) designed to train future financial planners to work more effectively with their clients.

While these efforts are commendable, a nagging question exists. What if the effectiveness of these educational programs is impacted by one's psychological makeup? Recent research has suggested, using the Myers-Briggs Personality Type Indicator, that individuals process information differently, and that this differential extends into the financial realm (McKenna, Hyllegard & Linder, 2003). If individuals process information regarding finances differently, and if these differences effect the extent to which people are willing to plan for their financial futures, then avoiding the consequences of poor financial literacy will involve more than simply designing more financially thorough curricula.

Our research proposes that a psychological construct does, in fact, exist, that impacts the degree to which one will be willing to engage in planning for one's financial future. This construct is detailed and described by one of the theories of human learning known as attribution theory. This project examined the ability of attribution theory to predict the degree to which individuals are willing to employ the financial planning and wealth-building techniques

recommended by financial planners and educators. We would expect individuals willing to employ such strategies to accumulate substantially greater sums of wealth than those who are not (i.e., those who may hold a differing attributional perspective).

We propose that this differential in perspective is independent of the level of financial knowledge; indeed, for the latter group of individuals, we contend that in accord with the theory, acquiring additional knowledge will be seen as irrelevant and a waste of time. We expect that such a perspective might lead these individuals down a path ending in depressed levels of net worth, lower levels accumulated assets, higher levels of debt, a reduced standard of living post-retirement, reduced ability to fund family financial goals pre-retirement, and in extreme cases, dependence on public assistance programs.

For these individuals, additional financial education is not the issue, because they will not see additional information as relevant or meaningful to their financial futures. It will be viewed as useless clutter. For these people to benefit economically, other solutions must be found.

RELATED LITERATURE

Theoretical Background

In an effort to explore the psychological predictors of financial planning behavior, this project relies for its theoretical foundation upon one of the various theories of human learning that have together come to be known as behavioral attribution theories.

One of the earliest attribution theorists was Fritz Heider (1958), who took the position that people are driven to understand the events that occur in their lives. In short, they engage in a search for an answer to the question “why?” Heider believed that the outcome of this search would affect the subsequent thoughts and behavior of the perceiver. Rotter (1966) built on Heider’s work and developed the construct of locus of control, which classified individuals according to whether they believed that control of their lives resided primarily inside of themselves (internals) or outside of themselves (externals). According to Rotter, internals could be expected to be more goal-directed and persist longer in the face of failure and setbacks than externals.

Despite initial progress in this area, early research findings using the locus of control construct were frequently inconsistent and contradictory. Weiner (1979, 1985, 1986) contended that part of the issue might be that Rotter’s (1966) locus of control construct was incomplete, and therefore insufficiently robust to predict human behavior consistently. For example, if an “internal” student failed an exam, that student might realistically attribute the F to two competing internal causes: effort or stupidity. While effort is presumably a very unstable and controllable cause (one can consciously decide to study harder for the next test), presumably stupidity is a very stable and uncontrollable explanation for the failure (it is quite difficult to change one’s genetic code). Therefore, the likelihood of this student being willing to study harder for the next test depends critically on whether the failure is attributed to effort (an internal, unstable and controllable cause) or stupidity (an internal, stable and uncontrollable cause). In the first case, increased effort is likely to be expended at studying; in the second case, it is not. In order to address these issues, Weiner proposed an additional two dimensions to the locus of control model: stability and controllability of the cause as perceived by the actor. Now, a three-dimensional predictive model of human behavior had been created.

Other researchers have proposed that over time, people develop habitual ways of looking at the world (Abramson, L., Seligman, M. & Teasdale, J., 1978). In searching for the causes of the

events occurring in one's life, the specific cause itself obviously varies, but the causes themselves will, over time, tend to share certain *common characteristics*. In short, individuals, over time, will tend to adopt preferred ways of looking at the world, and regardless of what unique causes are identified for specific life-events, the causes of these events will tend to share common traits. It was this postulated tendency to look at the world in a relatively consistent and predictable fashion that Abramson, et al. (1978) contended would allow researchers to predict future behavior.

A marriage of Weiner's attribution model with the construct of explanatory style would define one's explanatory style as a function of one's position along three separate and distinct dimensions: internality (the degree to which the cause for an event is seen as being internal or external to oneself); stability (the degree to which the cause is expected to remain stable over time) and controllability (the degree to which the cause is believed to be under one's direct and voluntary control).

With respect to explanatory styles, Weiner believed that the most functional perspective was held by those who tend to see their successes as due to events that were internal, stable over time, and highly controllable. Specifically, given the internal nature of the cause, the success allowed the perceiver to increase their self-esteem. Further, the belief in the stable nature of the cause could reasonably lead to a sense that the future would be filled with similar successes. Finally, the controllable nature of the cause should give the perceiver confidence that they might exert enough control over their environment to create situations conducive to success by bringing the cause into play. Conversely, Weiner considered the most dysfunctional attributional perspective to be held by people who tend to see their successes as being due to external, unstable and uncontrollable causes. The external nature of the cause prevents the perceiver from taking any personal credit for the success (inhibiting growth in self-esteem); the unstable nature of the cause reflects a perception of the success as a fluke, indicating the likelihood of future success is likely very low; while the uncontrollable nature of the cause suggests that the ability of the perceiver to control his environment by bringing about conditions favorable to success would be similarly low.

In mirror fashion, the most functional perspective on failures would be to see them as due to causes consistently external, unstable and uncontrollable. The external nature of the cause insulates and protects the perceiver's self-esteem ("it wasn't my fault"); the unstable nature of the cause allows the perceiver to believe that the failure is not likely to repeat itself (allowing for a confident perspective on the future); while the uncontrollable nature of the cause permits the perceiver to take solace in their belief that there was little or nothing that they could have done, in any event, to change the failure outcome. On the other hand, the most dysfunctional among us tend to identify causes for failures as being primarily internal, stable and controllable. This combination implies that full personal credit can be taken for each failure; which can be counted upon to occur with astonishing regularity; and implies that the perceiver believes that the failure could have been avoided if he had "smart enough" to foresee what was coming and done something to prevent it (further confirming the perceiver's own ineptness).

Implications

It is generally true that most, if not all, of the behaviors advocated by financial planners and educators as being conducive to long-term financial well being and wealth-building tend to be fairly time and labor intensive (e.g., keeping a written budget, calculating financial ratios to identify problem areas in one's financial life, tracking spending, comparing planned versus

actual spending, researching investment choices, etc). Economic theory would hold that a rational actor will not engage in such activities absent a belief that there will be a future payoff at least equal to the present costs expended.

From a financial management perspective, this suggests that people who attribute successes to causes that are external, unstable, and beyond their control and failures to causes that are internal, stable and highly controllable should be less willing to spend the time and effort necessary to plan their financial futures. A person who sees successes and failures in this way will have a difficult time believing that their actions today will bring about positive life changes tomorrow. Being somewhat pessimistic about their ability to effect positive change in their lives, the natural attitude regarding recommended financial management behaviors that are time and labor intensive may well be, “Why bother?” Given this attitude, the lack of planning activity that is likely to follow will reduce the probability that substantial wealth will ever be accumulated and will make it equally likely that what scarce financial resources are present will be misallocated, since they will likely be allocated by default rather than by design.

It is interesting to note that while attribution theory has been used extensively to explore several other areas of social interaction (i.e., perceptions of date rape [Workman & Freeburg, 1999], failure rate of new business enterprises [Zacharakis, Meyer, & DeCastro, 1999], coping behavior [Amirkhan, 1998], workplace safety performance [DeJoy, 1994], etc.), it has thus far rarely been applied rigorously or consistently to the study of how people manage their finances, despite the fact that each financial transaction entered into clearly involves a social component, both within and outside the family unit.

On the very few occasions when attribution theory has been applied to research in the financial realm, it has been only narrowly applied and the results have been inconsistent and contradictory. For example, when the outcome variable has been credit and/or debt, some researchers have found external causal attributions to be linked to more favorable attitudes toward credit (Kidwell, Brinberg, & Turrisi, 2003; Livingstone & Lunt, 1992; Tokunaga, 1993). Other researchers, however, have been unable to find a significant relationship between internal/external attributions and attitudes toward debt (Lea, Webley & Walker, 1995). Still other researchers have been unable to find direct links between internal/external attributions and debt accumulation, but have found indirect links between the variables with attitude toward debt as an intervening variable (Davies & Lea, 1995).

It is likely that methodological flaws account for the inconsistent nature of these findings. Specifically, each of the studies cited above defined and measured causal attributions as a uni-dimensional construct (internal vs. external), thereby contaminating the results (as previously discussed in the exam failure example). Thus, the inconsistent results are likely due not to an inability of the attribution model to lend greater explanatory power to the study of financial behavior, but rather to a fundamental misapplication of the attributional model. The dated nature of these studies simply indicate that researchers declared this line of research prematurely deceased. A thorough and exhaustive literature review revealed no more recent published works in the financial management arena that are grounded in attribution theory.

Yet when the full, three-dimensional richness of the attributional model has been employed, the results have been telling. In a study of residents of an economically depressed, inner-city neighborhood, Camp (1999) used a variation of Weiner’s original model (Abramson, Seligman, & Teasdale, 1978) to explore the link between explanatory style and financial distress. The results of the study indicated that those who identified causes for successes as external, unstable and effecting only a few areas of their lives experienced statistically significantly higher

levels of financial distress than those with other less dysfunctional explanatory styles (The model used by Abramson, et. al considered whether the cause was considered to be limited or widespread in its influence as its third dimension). Interestingly, the residents' perspectives on failures were not found to be predictive of financial distress in the study. These findings were consistent with Weiner's contention (1986) that explanatory styles are most commonly relied upon to explain either failure or novel outcomes. Given the economic demographics of this sample, it may well have been that failures were considered the norm and therefore the successful outcomes were considered to be out-of-the-ordinary, requiring more involved causal searches.

Camp, Bagwell and Joo (2002) were able to show (using proxy variables for the dimensions represented in Weiner's attribution model, and using a sample from a nationally representative database) that variables for explanatory style were a significant predictor of willingness to engage in retirement planning behavior. Consistent with Weiner's model, results indicated that those most optimistic about their future in retirement (i.e., featuring an internal, stable and controllable explanatory style for successes and an external, unstable and uncontrollable explanatory style for failures) were significantly more likely to engage in the day-to-day financial management behavior seen as conducive to wealth accumulation.

In a later study, Camp and Bagwell (2003) discarded the proxy variables necessitated in the prior study by the nature of the data set, and were able to utilize the full Weiner model as originally conceptualized. Consistent with the model, results showed that in a sample of college undergraduates, more dysfunctional explanatory styles for failure events were negatively associated with the amount of effort the students spent on day-to-day financial management activities. This, in turn, was found to be an intervening variable in the amount of self-reported financial distress experienced by the students. That is, students who explained failures as tending to be due to internal, stable and controllable causes tended to expend the least effort managing their daily finances, and also tended to experience significantly higher levels of financial distress.

Research has also been conducted that links causal attributions to credit card overextension. In a sample of college undergraduates, an attributional model combining the dimensions of internality, stability and controllability was able to successfully predict the likelihood of increased credit card debt and late credit card payments among respondents (Camp, 2004). Consistent with the theory, those who exhibited the most dysfunctional explanatory styles were shown in a logistic regression model to be significantly more likely to be carrying higher balances on their credit cards relative to three years prior and were also significantly more likely to have been delinquent with at least some of their payments during the same period.

Research Question

Based on the underlying theoretical model and the supporting empirical evidence, the research question at issue here was whether one's attributional style, as patterned on the Weiner attributional model, would have any predictive ability with respect to the respondent's willingness to engage in forward-looking financial planning behavior.

METHOD

Sample

Data for this research were collected during the spring of 2004 at a commuter college located in the downtown area of a large city in the Western United States. Permission was obtained from several instructors to visit their classrooms and administer a paper-and-pencil questionnaire to the students in the class. Data generated by that questionnaire formed the database for this research.

In an effort to generate the broadest possible range of ages in the sample and to move the mean age of the sample outside the traditional 18-22 year bracket for research on college student respondents, only classes that began after 4:00 pm on weekdays and those that met on Saturdays were included in the sample frame. It was hoped that this design would allow for inclusion of more non-traditional students in the sample, as it was assumed that a higher proportion of older students would be attending such classes since their work and class schedules would be less likely to come into conflict. From the original sample frame of 184 classes, 32 were selected at random. The instructors were contacted, and the instructors of 12 classes gave permission for one of the researchers to visit the classroom and administer the questionnaire. The departments represented by these 12 classes included marketing, English, music, natural sciences, psychology, sociology and management. Based on a post-hoc review of the classes surveyed, the researchers are of the opinion that a broad enough cross-section of disciplines were sampled to preclude the existence of any discipline-specific bias in the data.

The students were informed that the goal of the research was to obtain information regarding the sorts of financial behaviors that the student (or their household) had engaged in during the past 12 months. They were also informed that they would be asked to think about and answer questions regarding the three best and three worst events that had occurred in their lives during the past year. The students were informed that participation in the study was completely voluntary and that they were free to discontinue participation at any point in the data collection process, should they choose to do so. Throughout the process, only two students chose to take advantage of this option. Generally speaking, it normally took approximately 30 minutes for all the students in a class to complete the questionnaire. A total of 145 surveys were collected from 197 students registered in all classes sampled, representing a 74% participation rate of the students selected to participate.

Of the total sample, approximately 64% were female and about 35% were male. Almost half were in their senior year in college, with the remainder of the sample split almost equally between students in their sophomore and junior years. The overwhelming majority of the sample (62%) was single, and had never been married, while another 28% were married and lived with their spouses. Most (61%) described themselves as being from a suburban background, while 27% claimed rural communities of origin, and 13% hailed from an urban locale. Of the total sample, only 29% fell within the typical age range for the undergraduate population of 18-22 years, although the sample was nevertheless comprised primarily of young adults, with a mean age of 27.4 years (median = 25.0). A more detailed presentation of the demographics of the sample is presented in Table 1.

**TABLE 1
DEMOGRAPHICS OF THE SAMPLE**

<u>Gender</u>	<u>n</u>	<u>%</u>	
Male	51	35.2	
Female	93	64.1	
<u>Age</u>	<u>n</u>	<u>%</u>	
18-25 years	78	54.5	Mean = 27.4 years
26-33 years	37	25.9	Median = 25.0 years
34-41 years	16	11.2	Std Dev = 7.73 years
42-49 years	8	5.6	Range = 18 – 52 years
50-57 years	4	2.8	
<u>Year in School</u>	<u>n</u>	<u>%</u>	
Freshman	13	9.1	0-30 credit hours
Sophomore	27	18.9	31-60 credit hours
Junior	29	20.3	61-90 credit hours
Senior	69	47.6	91+ credit hours
Post-Graduate	5	3.5	
<u>Marital Status</u>	<u>n</u>	<u>%</u>	
Never Married	89	62.2	
Married, Living w/ spouse	40	28.0	Mean Years of Marriage = 6.78
Separated	2	1.4	Median Years of Marriage = 3.50
Divorced	11	7.7	Standard Deviation = 3.50
Widowed	1	.7	Min, Max = 1, 30 respectively
<u># of Children</u>	<u>n</u>	<u>%</u>	
0	95	71.4	
1	17	12.8	Mean = .54
2	10	7.5	Standard Deviation = 1.00
3	9	6.8	Range = 0 - 4
4	2	1.5	
<u>Household Income</u>	<u>n</u>	<u>%</u>	
Less than \$20,000	46	32.6	
\$20,001-\$40,000	45	31.9	Mean = \$36,383
\$40,001-\$60,000	23	16.3	Median= \$30,000
\$60,001-\$80,000	18	12.8	StandardDeviation= 6,330
\$80,001-\$100,000	4	2.8	
More than \$100,000	5	3.5	
<u>Community Type</u>	<u>n</u>	<u>%</u>	
Rural	38	26.6	
Suburban	87	60.8	
Urban	18	12.6	

Note. The N's for some individual demographic variables may not total 145 because some respondents (either inadvertently or intentionally) did not respond to all questionnaire items and were dropped by the SPSS software.

Variables

Explanatory Style

The respondent's explanatory style was measured by means of an 18-item scale based on a modified version of the Attributional Style Questionnaire (Peterson, Semmel, von Baeyer, Abramson, Metalsky & Seligman, 1982). In the current study, respondents were asked to identify the three best and three worst events that had taken place in their lives within the previous 12 months, and write them in the questionnaire booklet. Once these six events were identified, the respondents were asked to identify what they felt was the one primary cause for each of the six identified events and write each cause in the booklet. Then, the respondents were asked to assess, on a 7-point Likert scale, the degree to which each cause was internal to themselves (measuring perceived internality), expected to persist over time (measuring perceived stability) and the degree to which the respondent believed they could exercise conscious control over the cause. For each of the respondents, it was possible to calculate a composite score as well as a score for "good events" and a score for "bad events" by adding the responses to the internality, stability and controllability ratings for each cause.

In this fashion, composite attributional style scores could range from 0-108 (3 causes x 2 event types (good/bad) x 3 dimensions each rated at a maximum of 6 points each), while scale scores for good and bad events could range from 0-54 (3 causes x 3 dimensions each rated at a maximum of 6 points each). It should be recalled that in each case, the scales were arranged and formatted such that higher scores represented a more problematic explanatory style with respect to good and bad events separately as well as in composite. Cronbach's alpha coefficients for the explanatory style scales were as follows: composite (good and bad events combined) .64; "good event" subscale .74; "bad event" subscale .70. Descriptive statistics for the sample with respect to the focus variables are presented below in Table 2.

TABLE 2
DESCRIPTIVE STATISTICS FOR FOCUS VARIABLES AT STUDY

	N	Mean	Std Dev	Min	Max
Financial Distress Score	133	13.6	8.3	1	44
Financial Planning Score	122	26.2	11.8	3	56
Composite Attributional Style	124	45.5	13.6	4	89
Attributional Style, Good Events	142	17.6	9.9	0	50
Attributional Style, Bad Events	125	27.7	10.6	0	54

Note. The N's for some individual variables may not total 145 because some respondents (either inadvertently or intentionally) did not respond to all questionnaire items and were dropped by the SPSS software.

Financial Distress

The respondent's level of financial distress was measured by means of a 16-item scale that listed a series of financial outcomes (some positively worded, some negatively worded) and asked the respondent to indicate to what extent the statement described the state of the respondent's financial affairs during the previous 12 months. The positive, or more functional, financial outcomes were reverse scored such that higher scores indicated a respondent who was experiencing a greater degree of financial distress. Examples of scale items were: "I have been assessed an extra charge for paying a bill late"; "Although it still runs, I can't afford to keep my

car maintained properly” and “I can afford to buy small luxury items for myself whenever I want”. Responses to the individual items were scored on a 5-point Likert scale (Response points labeled: Never, Rarely, Sometimes, Often, Always), so that possible financial distress scores could range from 0-64. Data analysis revealed a Cronbach’s alpha of .86 for the financial distress scale, indicating a high degree of internal consistency.

Financial Planning Behavior

Financial planning behavior was operationalized by a 15-item scale that listed a series of forward-looking planning behaviors (some positively worded, some negatively worded) considered by financial planners and educators to be necessary attributes for success in accumulating wealth. The full scale was composed of five 3-item subscales that assessed the respondent’s self-reported participation in cash management, insurance planning, retirement planning, investment management and tax planning behaviors.

The respondent was asked to indicate to what extent the specified behavior described their actual behavior. The negative, or more dysfunctional items were reverse scored such that higher scores on this scale indicated that a respondent more frequently engaged in the stated financial planning behavior. Examples of scale items were: “I check my investment portfolio regularly to make sure it is properly diversified”; “I never go to the trouble of estimating what my tax liability will be for the coming year” and “I have never tried to estimate how much money I will need when I retire; so many things can change between now and then I just can’t see the point”. Responses to the individual items were scored on a 5-point Likert-type scale with the endpoints of the scale labeled Never Describes Me and Always Describes Me and the midpoint of the scale labeled Sometimes Describes Me. Possible financial management scale scores could range from 0-60, with higher scores indicating a greater tendency to spend time managing one’s personal finances. Analyses of the data revealed a Cronbach’s alpha of .82 for the financial management scale, indicating high internal consistency.

Hypothesis

Based on the underlying theoretical model, it was hypothesized that respondent’s explanatory style scores would be negatively related to their financial planning scale scores. If the hypothesis were supported, this would indicate that those with more dysfunctional explanatory styles (successes attributed to external, unstable and uncontrollable causes; failures attributed to internal, stable and controllable causes) would be shown to be significantly less likely to engage in forward-looking financial planning, wealth management behaviors such as those suggested by financial planners and educators.

RESULTS

The research hypothesis posited that one’s explanatory style score would be negatively related to the respondent’s financial planning scale score. The results of the regression analysis supported the hypothesis, as is shown in Table 3. For this regression, 104 of the original respondents (72%) were included in the analysis; the remaining 41 respondents either intentionally or inadvertently failed to respond to at least one of the questionnaire items and as a result were dropped from the regression procedure by the SPSS software. The variables gender, age, year in school, marital status, number of children, community type, credit card experience, number of credit cards owned, number of owned credit cards at their maximum limit and

percentage of credit cards currently at their maximum credit limit were not found to be significant. In the interest of keeping the model as parsimonious as possible, these variables were dropped from the regression equation.

Table 3
Results of Regression on Respondent's Self-Reported Financial Planning Behavior

Independent Variables	Parameter Estimate	Standard Error	Standardized Coefficient	t-Score	Sig. Level
Intercept	30.369	2.993		10.145	
Household Income	1.853E-04	.000	.415	5.003	.000
Financial Distress Score	-.381	.119	-.264	-3.188	.002
Explanatory Style Score (Good Events only)	-.295	.095	-.248	-3.106	.002

Model Summary

	Sum of Squares	df	Mean Square	F-Statistic	Significance Level
Model	5234.159	3	1744.720	19.144	.000
Residual	9113.601	100	91.136		
Total	14347.760				

Model R² = .365; Adjusted R² = .346

The analysis indicated that, as hypothesized, those with higher explanatory style scores tended to engage less frequently in forward-looking financial planning behavior. The counter-theoretical result was that this relationship held only for explanatory styles for good events; a corresponding relationship was not found for explanatory styles related to bad events (which would have been more in keeping with the theory). In other words, those respondents who tended to explain the good things that happened in their lives as being due to external, unstable and uncontrollable causes were shown to be significantly less likely to engage in financial planning behavior. A similar negative relationship was not found for those who tended to explain bad events as being due to internal, stable and controllable causes.

The analysis also showed significant results with respect to the predictor variables of income and financial distress. Not surprisingly, respondents with higher levels of income were shown to engage in significantly higher levels of financial planning behavior. Additionally, the regression analysis identified that respondents' financial distress scores were negatively related to the amount of financial planning behavior in which they were engaged. Those respondents experiencing higher levels of financial distress tended to engage in significantly less financial planning behavior, and vice versa.

DISCUSSION

This research was intended to test the proposition that the way in which people explained and made sense of the events that occurred in their lives might influence the degree to which they engaged in active, forward-looking financial planning behavior. In this context, forward-looking

financial planning behavior is distinguished from financial management behaviors, which are financial behaviors designed to facilitate the smooth economic operation of a household on a day-to-day basis. A group of 145 college undergraduates at a large, urban commuter college was sampled in order to test this proposition. In particular, it was hypothesized that those who tended to see good events as due to causes that were primarily external, unstable and uncontrollable (and bad events as due to causes that tended to be internal, stable and controllable) would be less likely to engage in such forward-looking financial planning behaviors.

Although the hypothesis was supported by the regression analysis, the results indicated that financial planning behavior was best predicted by the way in which the respondent explained good events as opposed to bad events. Weiner has previously argued that attributions would be most actively sought for negative and/or novel outcomes. Since the findings here explicitly rule out the negative outcome explanation, the nature of these findings implicitly suggest that, for this sample of undergraduates at least, good events are considered the “novel outcomes” and therefore worthy of the time and effort necessary to examine and explore.

Implications of the Findings

It is becoming increasingly clear that explanatory style can be used to predict financial management outcomes and financial management behavior. In this study and in previous studies, the three dimensional causal attribution model has been shown to have predictive ability with respect to financial distress levels, willingness to engage in day-to-day financial management activities, credit card overextension and now forward-looking financial planning behavior.

Society

If these findings can be replicated with samples that are more nationally representative and extended into other areas of personal financial management, it seems clear that it is in society’s best interest to do two things. First, to do our best to instill positive explanatory styles in children as they grow older; to show them concrete examples of ways in which they can and do control their environments. Second, to explore the efficacy of attributional retraining methods whereby people with dysfunctional explanatory styles can be taught to see the world in more functional ways. Such retraining methods have been employed with good success in a number of different areas ranging from changing the outlook of patients at geriatric day care centers (Weinberg, 2000) to improving athletic performance (Miserandino, 1998). The mechanics of such programs have been described at length (Layden, 1982; Seligman, 1990) elsewhere. By pursuing these two goals, society can work simultaneously to limit the extent to which people are hampered in their wealth accumulation efforts by their psychological frames of reference, and to move people back to a position where the vast resources being spent on financial education programs may have some reasonable foundation for success.

Financial Planners

The results of these analyses suggest that there is a great deal for those in the financial planning industry to take away from this study. One of the greatest challenges in making a financial planning practice a viable business concern is the planner’s ability to attract and retain the right kind of clients. A financial planner is employed to be a problem solver. The planner gathers information relevant to the problem, analyzes the information in light of the client’s

particular situation, and then recommends a preferred course of action, based on knowledge and experience.

The ideal client will be a partner, engaged in this process, offering additional input and qualifying existing information as needed and then, once the recommendation is offered, either accepting or rejecting the proposed course of action. The dangerous client, from the planner's perspective, is the client who doesn't really see a point in the process because of the client's method of processing information. If the planner is unlucky enough to be working with this sort of client, then additional input and qualifying information will be difficult to obtain, thus hampering the planner's ability to generate an appropriate or realistic solution to the problem at hand. More threatening, though, will be the client's tendency to throw the decision back in the planner's lap. Since all paths are viewed as equally worthwhile (each is equally likely to generate the benefits advertised), the client's perspective will likely be, "You choose. You're the planner. This is what I pay you to do."

This is a dangerous trap into which the planner must not fall. For as soon as the planner succumbs, and begins making decisions for the client, rather than simply offering recommendations, a clear line has been crossed. The planner will now be (even if unconsciously) imposing his own value system upon the client. Apart from the ethical ramifications of doing so, there is the question of what the client's response will be the first time the planner makes a decision that future events prove to be incorrect and costs the client money. It is possible that the client's response will be, "All roads would have lead to the same place anyway, and if this was going to happen, it was going to happen. No hard feelings." Alternatively, it is possible that the client's response will be, "YOU made me do this!" The tragic truth is that the client will be right, and the planner can then try to figure out how to pay for the legal bills that will be incurred in the litigation that will follow.

Planners should be careful to assess (to the extent possible) the psychological makeup of potential clients before signing binding documents for services. This assessment could take the form of an administration of an assessment tool such as the ASQ, although some clients might find the exercise somewhat off-putting and planners may not wish to risk losing the potential revenue. Alternatively, planners during any initial consultation must be alert for (and actively probe for) indicators that the client might see good events as flowing from external, unstable and uncontrollable causes with bad events stemming from internal, stable and controllable causes. Regardless, the planner must be emotionally and financially prepared to let certain clients walk out the door and lose potential revenue as certain explanatory styles entail risks that are not offset by the potential revenue streams they offer.

Public Policy

The results have implications for government policy makers as well. One of the major issues in the just concluded presidential campaign was the Bush administration's intention to "privatize" the Social Security system. Although the exact details of this proposal are still unclear, what is clear is that the intent is to give individuals personal control of at least a portion of the money now being directed into the Social Security trust funds. Although such a plan may be popular with many Americans, these results suggest that there will be significant number of people who, even if given the opportunity to control their own Social Security investments, will not see the point in making the investment decisions taken for granted in the design of the plan.

Therefore, it is likely that assets managed by this portion of the population will be insufficiently diversified to provide needed safety, and the asset allocation decisions will be

correspondingly random. To what effect? Consider that the future value of \$100 in contributions invested monthly (2% of a worker's \$60,000 annual salary) at a 9% annual rate of return for the 35 years over which the Social Security Administration calculates benefits (Landis, 2001) is some \$294,000. Reduce that rate of return by just two percentage points due to inaction, inattention, indifference or any other cause, and the future value falls to approximately \$180,000. This represents a cost of nearly \$114,000 in future benefits to the retiree, which is a sum sufficient to meaningfully reduce one's standard of living. And the key issue is that this is not due to a lack of knowledge or information or education; it is due to the way a certain segment of the population thinks about the world and processes information. This issue of cognitive differences among members of the population will have meaningful differences in the benefits that any privatization plan delivers; such ramifications should be considered fully before any proposal is finalized.

Limitations of the Study

The clearest limitation for generalizing the findings beyond the sample at hand is to be found in the nature of the sample itself. These results were based on an analysis of a sample of college undergraduates that was composed primarily of single females who were raised in the suburbs. As such, the results may not extend to an older, gender-neutral population comprised of married couples. Further research utilizing such samples is needed in order to extend and replicate these findings to the American population at large. In order to pursue this, what is desperately needed is follow-on research that studies samples at the regional level at a minimum, or ideally at the national level. It will only be at this point that we will be able to place true faith and confidence in the general direction that these findings are taking. Until then, these results will have to be viewed as tentative and preliminary.

Another clear limitation is the reliance of the current research upon self-report data with respect to engagement in financial planning behavior for its conclusions. Although every effort was made by the researchers not to "telegraph" the research hypothesis to the participants, it seems reasonable that a clear risk of social response bias exists with regard to asking about levels of financial distress being experienced or the amount of financial planning behavior they engage in: both have very clear socially "correct" answers. Although the research hypothesis was supported, and financial distress was identified as a significant predictor variable, the existence of such bias in the data, present to an unknown degree, could well have influenced the magnitude of the observed relationships between the variables.

Directions for Future Research

The results of this project, viewed in combination with the results of previous work in this area still leave several questions unanswered. While it is becoming increasingly clear that causal attributions do have predictive power in a number of very different financial contexts, the results have previously all used a composite index to measure explanatory style. The folding of internality, stability and controllability into a single index designed to measure the "functionality" of one's outlook on the world has had its detractors. Carver (1989) correctly notes that by so doing, the researcher loses the ability to separate the unique effects each independent dimension may have on the variable of study. Although attribution theory as conceived by Weiner is a three dimensional model, are we justified in assuming that each of the three dimensions is equally "powerful" in driving the financial decisions that people make? If not, which dimension(s) seem to have the most impact on those choices? Use of the composite

as described and utilized in the Attributional Style Questionnaire weights each dimension equally. Are we justified in making this assumption?

It is also possible that causal attributions may predict a willingness to engage (or a reluctance to engage) in one area of financial planning, while having no ability whatever to predict the same outcome in another. Future research might seek to isolate whether the results identified in this study are specific to a part of the financial planning process or more global in nature. This research might seek to identify the component parts of the financial planning process that may be jeopardized by having certain explanatory styles. Once these areas are identified, individuals with more dysfunctional explanatory styles could see to it that those component parts are handled by third parties, while retaining responsibility themselves for the other areas.

Another potential topic for study concerns the focus on self-reported data with respect to the independent variable in many of the previous studies in this area. Although the initial findings have been promising, and consistent with theory, the results of previous studies have all relied on the respondent's self-report of the incidence of the variable of interest. If there is a social response bias at work, and a difference exists between the respondent's self-report and objective reality, continuing the present design will never identify it and the validity of this line of research will continue to be an open question. The only way to resolve this issue is to design future studies that allow for an objectively verifiable measure of the outcome variable. In this way, the potential for social response bias contaminating the results will be removed, and consumers of future studies in this area will have more reason to have faith in the validity of the conclusions.

REFERENCES

Abramson, L., Seligman, M., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.

Amirkhan, J. (1998). Attributions as predictors of coping and distress. Personality and Social Psychology Bulletin, 24(9), 1006-1018.

Camp, P. L. (1999). Why does stuff like this always happen to me: The psychological and cognitive predictors of financial distress. Unpublished doctoral dissertation. Purdue University: W. Lafayette, IN.

Camp, P. L. (2004). The psychology of credit card overextension: An attributional perspective. Proceedings of the National Business and Economics Society (CD-ROM). Lakewood, OH: NBES.

Camp, P. L., & Bagwell, D. C. (2003). Exploring the psychological predictors of financial distress among college undergraduates: An attributional perspective. In Stuart Michelson (Ed.), Proceedings of the Annual Conference of the Academy of Financial Services (CD-ROM). DeLand, FL: AFS.

Camp, P. L., Bagwell, D. C., & Joo, S. (2002). Optimism as a predictor of financial management behavior: Implications for retirement planning. In M. J. Alhabeed (Ed.), Proceedings of the 31st Conference of the Eastern Family Economics and Resource Management Association, 68-79. Athens, GA: EFERMA.

Carver, C. (1989). How should multi-faceted personality constructs be tested: Issues illustrated by self-monitoring, attributional style and hardiness. Journal of Personality and Social Psychology, 56, 577-585.

Certified Financial Planner Board of Standards. (2004, September 27). List of Current CFP Board Registered Programs. Retrieved from <http://www.cfp.net/teamup/colleges.asp>.

Davies, E. & Lea, S. (1995). Student attitudes to student debt. Journal of Economic Psychology, 16, 663-679.

DeJoy, D. (1994). Managing safety in the workplace: An attribution theory analysis and model. Journal of Safety Research, 25(1), 3-17.

Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley & Sons.

Jump\$tart Coalition for Personal Financial Literacy. (2002). From bad to worse: Financial literacy drops further among 12th graders. Press release, April 23.

Kidwell, B., Brinberg, D., & Turrisi, R. (2003). Determinants of money management behavior. Journal of Applied Social Psychology, 33(6), 1244-1260.

Landis, A. (2001). Social Security: The inside story (3rd Edition). Crisp Publications: Menlo Park, CA.

Layden, M. (1982). Attributional Style Therapy. In C. Antaki & C. Brewin (Eds.) Attributions and Psychological Change: Applications of Attributional Theories to Clinical and Educational Practice, 63-82. London: Academic Press.

Livingstone, S. & Lunt, P. (1992). Predicting personal debt and debt repayment: Psychological, social and economic determinants. Journal of Economic Psychology, 13, 111-134.

Lea, S., Webley, P. & Walker, C. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. Journal of Economic Psychology, 16, 681-701.

McKenna, J., Hyllegard, K. & Linder, R. (2003). Linking psychological type to financial decision-making. Financial Counseling and Planning, 14(1), 19-29.

Miserandino, M. (1998). Attributional retraining as a method of improving athletic performance. Journal of Sport Behavior, 21(3), 286-297.

National Endowment for Financial Education. (2004, October 18). High School Financial Planning Program. Retrieved from <http://www.nefe.org/pages/educational.html>.

- Parotta, J., & Johnson, P. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. Financial Counseling and Planning, 9(2), 59-74.
- Peterson, C., Semmel, A., von Baeyer, C., Abramson, L., Metalsky, G., & Seligman, M. (1982). The attributional style questionnaire. Cognitive therapy and Research, 6, 287-299.
- Poduska, B. & Allred, G. (1990). Family finances: The missing link in MFT training. American Journal of Family Therapy, 18, 161-168.
- Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, 1-28.
- Seligman, M. (1990). Learned optimism: How to change your mind and your life. New York: Simon and Schuster.
- Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. Journal of Economic Psychology, 14, 285-316.
- Weinberg, L. (2000). Attributional retraining: Effects on geriatric day hospital clients health-related cognitions. The Gerontologist, 40(4), 91-103.
- Weiner, B. M. (1979). A theory of motivation for some classroom experiences. Journal of Educational Psychology, 71, 3-25.
- Weiner, B. M. (1985). An attributional theory of achievement motivation and emotion. Psychological Review, 92, 548-573.
- Weiner, B. M. (1986). An attributional theory of achievement and emotion. New York: Springer-Verlag.
- Workman, J. & Freeburg, E. (1999). An examination of date rape, victim dress and perceiver variables within the context of attribution theory. Sex Roles: A Journal of Research, 41(3), 261-277.
- Zacharakis, A., Meyer, G., & DeCastro, J. (1999). Differing perceptions of new venture failure: A matched exploratory study of venture capitalists and entrepreneurs. Journal of Small Business Management, 37(3), 1-13.