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Does a relationship with a financial service professional overcome a client's sense of not being in control of achieving their goals?

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Abstract

Although considerable evidence suggests that setting goals increases the odds of behavior changes that lead to goal attainment, less research has been conducted examining what underlying traits allow some to successfully attain their goals when others do not. This study, using the Theory of Planned Behavior, examines the affects of individual control beliefs on financial goal progress. Findings suggest that low control beliefs are significantly associated with less financial-goal progress; however, the receipt of expert financial advice can reduce this negative effect and result in higher levels of goal progress than that of individuals with high control beliefs.

Keywords: Behavioral control; Self-efficacy; Goal progress; Financial advice

JEL classification: D14

1. Introduction

The establishment and pursuit of financial goals figures prominently in the financial planning process, and financial service professionals routinely emphasize the importance of developing clear specific, measureable, achievable, realistic, and timed (SMART) autono-

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mous (reflecting personal interest and values) financial goals (Koestner, Otis, Powers, Pelletier, and Gagnon, 2008; Latham and Locke, 1991; Schunk, 1991). Goals serve as motivational units for behavior modification by: directing attention and/or effort toward goal-relevant activities and away from goal irrelevant-activities; serving an energizing function, whereby high priority goals lead to greater effort than low priority goals; increasing persistence; and leading to the arousal, discovery, and/or use of task-related knowledge and strategies (Latham and Locke, 1991; Phillips and Gully, 1997). Goals also increase the ability to concentrate when necessary, delay gratification, and follow instructions (Sheldon and Kasser, 1998). As such, the setting and evaluating of goals for financial success is a grounding pillar of the financial planning process as outlined by the Certified Financial Planner Board of Standards, CFP Board of Standards.[1]

The setting of goals plays a critical role in aligning people's behaviors with the actions necessary for goal attainment (Bagozzi and Dholakia, 1999; Koestner, Lekes, Powers, and Chicoine, 2002; Neukam and Hershey, 2003). Stawski, Hershey, and Jacobs-Lawson (2007) find that goal clarity motivates individuals to plan for retirement. Cai and Yang (2012) find goal clarity influences risk tolerance and ultimately risk-taking strategies in goal attainment. Although researchers agree that certain types of goals are more likely to be initiated by individuals and that certain goal types are more likely than others to lead to behavioral change and ultimate goal attainment, very little is known in the finance domain as to why some people, with similar goals, are able to achieve their goals and others are not.

Personality traits and personal beliefs associated with goal setting behavior have been found to either facilitate or thwart the attainment of goals. As such, the medical field has embraced the inclusion of personality traits and beliefs into predicting behavior change and goal attainment. Anecdotal evidence in the finance domain also supports this finding; O'Neill et al. (2000) find that the most frequently reported resource needed for people to make progress toward financial goals is personal qualities; whereby personal qualities include "will power and determination," "positive thinking," "self control," and "belief in self." However, to date, empirical research investigating personal characteristics and goal progress, financial behaviors, or both, is limited to determining the influence of demographic characteristics on a person's willingness to set goals or initiate goal-attaining behavior (Chatterjee, Green-Pimentel, and Turner, 2010), a person's readiness to begin goal-based behaviors (O'Neill, Brennan, and Bristow, 2001; Xiao et al., 2003), and more recently and related, examining the association between locus of control and personality type (Type A or B) on the likelihood of displaying certain financial behaviors and taking risk (Britt, Cumbie, and Bell, 2013; Carducci and Wong, 1998).

Studies investigating the influence of personality traits on health-related behaviors are more common. However, there exist fundamental differences between finance- and health-related goals, for example financial goals (1) take longer to realize, (2) typically are not as conducive to tangible measurements of progress, (3) are not completely under the volition of the goal-setter, (4) have less concrete outcomes, and (5) have higher variability in performance than health-related goals (Eisingerich and Bell, 2007). As such, this study theoretically articulates and empirically examines the affects of personal qualities and beliefs, more specifically, perceived control beliefs (self-efficacy and controllability), on financial goal progress. More expressly, do personal assessments of self-efficacy and controllability impact

financial goal progress similarly as they do health-related goals. It also seeks to examine if having an on-going committed relationship with a financial services professional differentially affects the goal attainment progress of individuals with high and low control beliefs.

2. Literature review

Many financial goals are long-term in nature, require the occurrence of a particular event, or both, to know whether or not they have been achieved. For example, the goal of having $2.5 million at retirement may not be achieved for 30 to 40 years. Likewise, many financial goals do not lend well to quantitative measurement. However, to achieve a financial goal, a person must display behaviors that are congruent with that goal, and it is these behaviors that culminate in the attainment of a goal. Additionally, it is these behaviors, not the actual goal, that are under greater volitional control of the goal setter; for example, the behavior of contributing $2,000 per year to a Coverdall Education Savings account is much more under the control of the goal-setter than amassing $30,000 in a college savings account; as such, most financial goals are stated in terms of implementation behaviors, the linking of goals with goal-directed behaviors (Gollwitzer, 1999). Therefore, this study uses the terms financial-goals and behaviors interchangeably (Ajzen, 2002; Bagozzi and Dholakia, 1999). This review of literature will include studies that focus on goal setting (stating a goal intention), goal striving (initiating behaviors that will lead to goal attainment), personality traits and goal striving, and personality traits and advice.

3. Goal setting, goal striving, and behavior change

Setting goals is a committing to reaching a desired outcome or to perform a desired behavior (Gollwitzer, 1999). Much of consumer behavior is goal-directed. Personal goals are self-investments that provide individuals with a sense of purpose, structure, and identity (Elliot, Sheldon, and Church, 1997). It is generally accepted that the formation of goals influences consumer behavior through four mechanisms: serving a directive function by directing attention, effort toward goal-relevant activities and away from goal irrelevant-activities, or both; providing an energizing function, whereby high priority goals lead to greater effort than lower priority goals; stimulating persistence; and leading to the use of task-related knowledge and strategies (Latham and Locke, 1991). Conceptually, goal-oriented behavior can be classified into two phases: goal setting (i.e., intention) and goal striving. Goal setting involves decision-making processes in which goals are identified (Bagozzi and Dholakia, 1999), and goal striving is the initiation of actions or behaviors that lead to, as well as the assessment of progress toward, goal attainment (Gollwitzer and Brandstätter, 1997).

There is widespread agreement that achieving and effectively striving toward personal goals leads to heightened states of well-being (Brunstein, 1993; Christiansen, Backman, Little, and Nguyen, 1999). Feelings of competency and goal mastery are essential for one's vitality and self-esteem and result in a significant decline in discrepancy reduction (i.e., the

engagement in non-goal related behaviors) and an increase in overall performance (Elliot et al., 1997). Goal striving is also linked to increases in goal-related thinking, motivation, and overall goal commitment (Zhang and Huang, 2010). Schunk (1995) finds that people who perceive satisfactory goal progress feel capable of improving their skills and goal attainment, and Litmanen, Hirsto, and Lonka (2010) find that students who perceived progress in attaining their education goals, advanced more rapidly in their studies.

4. Personality traits and behavior change

Personality refers to internal factors that explain a person's unique and relatively stable patterns of behavior (Hogan, Hogan, and Roberts, 1996). Researchers agree that personality is best characterized by the big-five personality traits, extraversion, openness to experience, emotional stability, conscientiousness, and agreeableness. Zweig and Webster (2004) investigate and compare the impact of these personality traits on performance-orientated goals and find that the big-five do not account for all outcome variance in predicating outcomes. As a result, self-efficacy is commonly paired with personality traits to predict academic achievement (Caprara, Vecchione, Alessandri, Gerbino, and Barbaranelli, 2011), health-behavior changes (Strecher, DeVellis, Becker, and Rosenstock, 1986), and academic-goal progress (Lent et al., 2005). Personality traits in addition to the big-five, such as Rotter's (1966) locus of control (Schunk, 1990), perfectionism (Powers, Koestner, and Topciu, 2005), and personality strengths, 24 distinct strengths that range from creativity to leadership to humor (Linley, Nielsen, Gillett, and Biswas-Diener, 2010), have also been used to predict behavior changes. Of these studies, only a very limited number have examined the impact of these traits on financial behaviors; of which, the majority focus on locus of control (Joo, Grable, and Bagwell, 2003) or self efficacy (Hilgert, Hogarth, and Beverly, 2003; Perry and Morris, 2005). For example, Joo et al., (2003) find that college students with higher external locus of control have more positive attitudes toward credit card use, and Britt et al., (2013) find that college students with an external locus of control exhibit the worst financial behavior. However, only two studies could be identified that investigate the impact of personality traits on financial goal striving, progress, or both. Davis and Hustvedt (2012) find that perceived behavioral control is the most important predictor in savings behaviors; however, the participants in this study had all received prior former consumer economics, personal finance education, or both (i.e., had higher than average levels of financial knowledge, self-efficacy, or both) and may or may not have used the assistance of a financial services professional in their financial decision making. Xiao and Wu (2008) use the Theory of Planned Behavior (TPB) framework to investigate the impact of perceived behavioral control on the actual behavior of completing a debt management plan.

5. Expert advice, personality traits, and behavior change

In goal striving, it oftentimes becomes advisable to consider input from experts (Koestner et al., 2001). In the health field it has been found that expert advice proves consistently

effective in promoting the recommended behaviors for health-goal attainment. Expert recommendations can cause a change in exercise belief and behaviors among cancer patients. Oncologists' recommendations to exercise not only help patients develop successful strategies to maintain an exercise program (i.e., goal setting) but also result in greater levels of exercise (i.e., behavioral change) (Ingram, Wessel, and Courneya, 2010; Jones, Courneya, Fairey, and Mackey, 2005). In the finance field, a survey reports that nearly 80% of respondents cite the greatest benefit of receiving expert financial advice as the "motivation to do what's needed to meet retirement goals;" and empirically, persons who have met with a financial advisor are more likely to engage in goal-related retirement planning activities (Marsden, Zick, and Mayer, 2011).

However, research suggests that specific personality types may be more prone to seek and comply with experts' advice than others. Burish, Carey, Wallston, Stein, Jamison, and Lyles (1984) contend that externally oriented patients (i.e., those with an external locus of control) may be more receptive than internally oriented (i.e., internal locus of control) patients to advice from health-care professionals. However, Rosenstock (1985) finds no correlation between personality type and advice compliance when examining the behavioral changes of diabetic patients.

6. Theoretical framework

Much of the work done on goal intention and striving has been done under the framework of the theory of reasoned actions. However, the progress made on financial goals is characterized as earned progress. Earned progress, according to Zhang and Huong (2010), is the situation where a person attributes the degree of their advancement toward a goal to themselves (i.e., mostly under their own volition) and interpret that the progress reflects their own active pursuit of the goal. As such, the theory of planned behavior may serve as a better model for financial goal attainment, as this theory differs from reasoned action in its assertion that perceived behavioral control influences the likelihood of intentions and actions (Madden, Ellen, and Ajzen, 1992).

7. Theory of planned behavior

7.1. Goals and beliefs

Ajzen and Madden (1986) contend that goal intention and striving behaviors are guided by three consideration: (1) beliefs about the likely consequences or other attributes of the behavior (behavioral beliefs), (2) beliefs about the normative expectations of other people (normative beliefs), and (3) beliefs about the presence of factors that may thwart or facilitate the performance of the behavior (control beliefs). Behavioral beliefs result from a favorable or unfavorable attitude toward the behavior; normative beliefs result from perceived social pressure concerning the goodness, appropriateness of the behavior, or both; and control

belief affect the perceived ease or difficulty in performing the behavior (Webb, Christian, and Armitage, 2007).

7.2. Beliefs' impact on intentions and behaviors

Although all three beliefs play critical roles in goal initiation (i.e., setting) and completion, behavioral belief and normative beliefs occur during the first, "predecisional," phase of goal striving and result in the formation of goal intentions, and these goal intentions are immediate antecedents of behavior (Ajzen, 2002). Goal intentions are significantly positively associated with goal striving (Koestner et al., 2002); however, considerable evidence suggests that goal intentions do not necessarily translate into action. In fact the intention-behavior correlation is quite small with up to 82% of the variance in behavior being left unexplained (McCaul, Sandgren, O'Neill, and Hinsz, 1993; Webb et al., 2007). Additionally, Gollwitzer (1999) finds that setting a goal for example, "I intend to do x," and goal-attaining behavior are modestly correlated; intention accounts for between 20% and 30% of the variation in initiating behaviors that are in congruence with goal realization. The weak intention-behavior relation is hypothesized to be a result of people having good intentions but failing to act on them.

On the other hand, control beliefs significantly add to the prediction of health behavioral action and explain between 34% and 43% of the variance in the display of the goal-achieving behavior (McCaul et al., 1993). Control beliefs also indirectly impact behavior through increased intentions; a high level of perceived control increases effort and perseverance, strengthen a person's intention to perform the behavior, and subsequently increase the likelihood of displaying appropriate behavior (Ajzen, 2002). Fig. 1 diagrams these relations as theorized by Ajzen and Madden (1986). According to the TPB, goal intention is the immediate antecedent of goal-directed behavior, and goal intentions are influenced by behavioral beliefs, normative beliefs, and control beliefs. This theory differs from the theory of reasoned behavior by its inclusion of control beliefs and theorizing that these beliefs not only impact behavior indirectly through intentions (illustrated by the dashed relation line), but also directly.

People with low or no control beliefs believe that they have neither the resources nor the opportunities to perform or exhibit a certain behavior. They are unlikely to have strong behavioral intentions to engage in an action even if they hold a favorable attitude and believe that others would approve of them performing the behavior, that is, have strong behavioral and normative beliefs (Ajzen and Madden, 1986). On the other hand, given a sufficient degree of actual control over behavior (i.e., high control beliefs), people are expected to change their behavior when the opportunity arises (Ajzen, 2002).

7.3. Components of control beliefs: self-efficacy and controllability

The more resources and opportunities a person believes he or she has regarding the performance of a specific behavior, the greater their perceived behavioral control (PBC), and perceived behavioral control is an independent determinant of behavior (Madden et al., 1992). Perceived behavioral control can, and usually does, vary across situations and actions

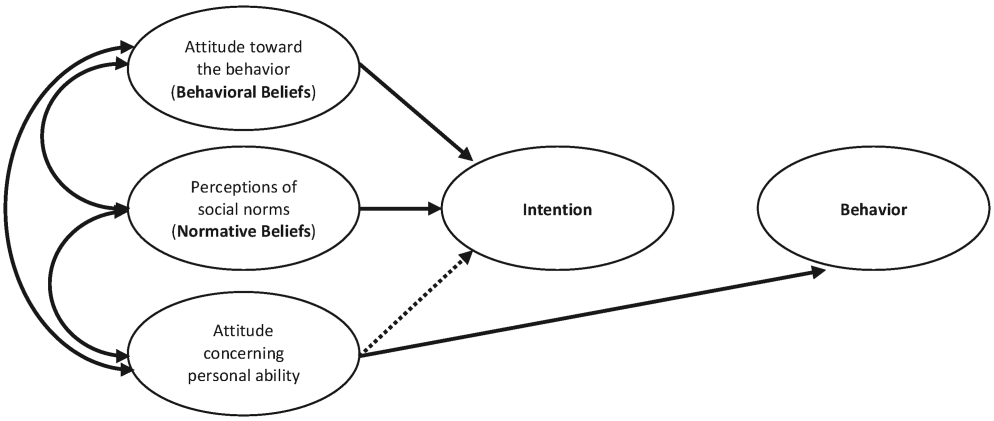

Fig. 1. Impact of beliefs on goal initiation behaviors. Based on the Theory of Planned Behavior proposed by Ajzen and Madden (1986).

and is comprised of two components, perceived self-efficacy and controllability. These two components are operationalized by different indicators, but together they comprise the higher-order concept of PBC (see Fig. 2).

Perceived self-efficacy is an internal assessment of whether one has the necessary resources, abilities, or talents to perform a specific behavior. It is based on a person's perceived ability to execute a course of action required to attain a specific outcome or to perform a behavior (Ajzen, 2002; McCaul et al., 1993; Phillips and Gully, 1997). This construct is a relatively stable personality quality. People who have a low sense of efficacy may avoid specific task, on the other hand, those who are more efficacious tend to work harder and persist longer when they encounter difficulties (Schunk, 1991).

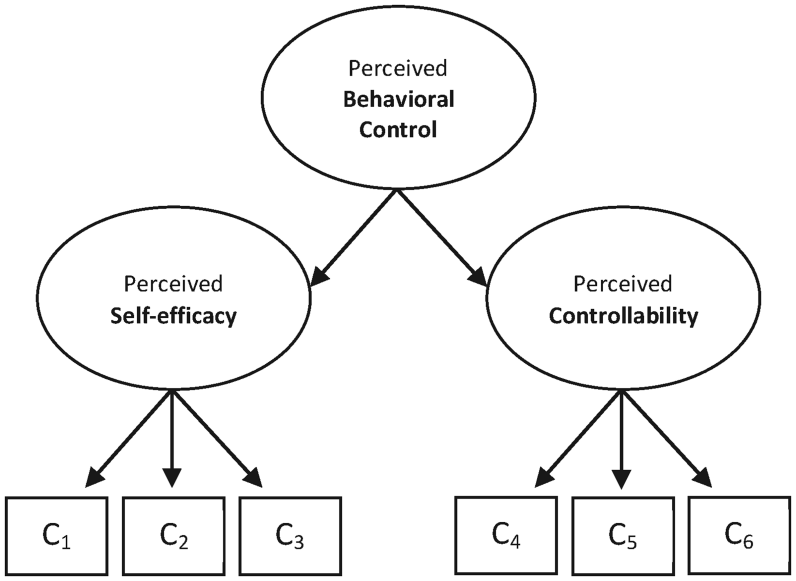

Fig. 2. Hierarchical model of perceived behavioral control based on Ajzen (2002).

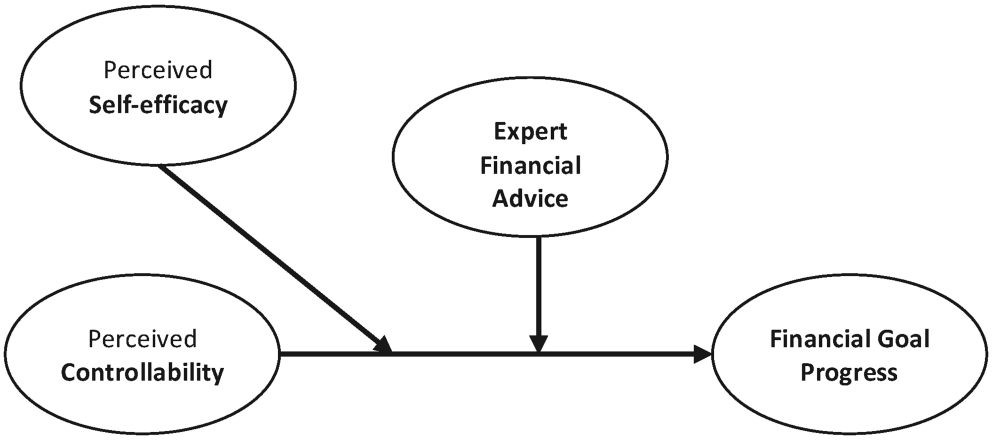

Fig. 3. Conceptual model of the impact of perceived controllability and self-efficacy on financial goal progress, including the moderating affect of expert financial advice on the effect of controllability on goal progress.

Controllability represents the extent to which performance is up to the person, as well as the perceived ease or difficulty of performing the behavior and the existence of opportunities to perform the behavior successfully (Ajzen, 2002; McCaul et al., 1993). Both controllability and self-efficacy can reflect both internal and external factors, and both have been found to account for significant portions of variance in behavior.

8. Conceptual framework

8.1. Additive moderation

The TPB is used to address the differences in financial goal progress between individuals with varying level of perceived behavioral control. This work builds on the goal setting research of Phillips and Gully (1997) by examining the impact of both self-efficacy and controllability on the goal setting progress. It has also been suggested that there exists a moderating relation between controllability and self-efficacy on financial goal progress; therefore, this study uses an additive moderation model (Perry and Morris, 2005). It is suggested that controllability cannot immediately be increased, so this study seeks to investigate if its influence on behavior can be impacted by receiving expert advice. This investigation extends the investigative line of inquiry, as initiated by Jones et al. (2005) in the health domain, by investigating the moderating affect of expert advice on perceived controllability. Therefore, it tests if having an on-going committed relationship with a financial services professional differentially affects the goal attainment progress of individuals with high and low control beliefs. The conceptual model tested is presented in Fig. 3.

9. Method

9.1. Hypotheses

Based on the above conceptual model, this study tests the following hypotheses:

Hypothesis 1: Individuals with lower perceived controllability will have lower levels of goal progress than those with higher level of perceived controllability.

Hypothesis 2: Individuals reporting lower levels of self-efficacy will report lower levels of financial goal progress than those with higher levels of self-efficacy.

Hypothesis 3: The negative relation between LPC and financial goal progress will be further increased by LPSE, that is, there is a moderating relation between perceived self-efficacy and controllability.

Hypothesis 4: The negative impact of LPC on financial goal progress will be lessened by the attainment of expert advice, that is, expert advice counteracts LPC in goal progress.

9.2. Data and sample

This study uses proprietary data cosponsored by a large independent financial services company and a financial planning professional association. A third party research company conducted the study online and collected the data in the summer of 2008 within the United States. The survey is designed to provide data that describe consumer attitudes and behavior in a changing economy. To be included in the study, respondents had to be adults and meet a threshold of having at least $50,000 in annual income or a minimum of $50,000 of investable assets. The sample contains data for 3,022 respondents. The individual is the unit of measure for nearly all of the questions asked. Two variables, income and investable assets, are household level variables.

Because this study examines the impact of perceived behavior control on financial goal progress, the data are censored to only those respondents who have reported having a particular financial goal. As such, the sample for each financial goal may or may not be identical.

9.3. Variable description and measurement

9.3.1. Dependent variables

Bagozzi and Dholakia (1999) use three items to measure action initiation in the goal setting and goal pursuit progress: (1) "how well have I enacted my plan," "am I making progress toward my goal," and "are there adjustments that need to be made," likewise this study uses perceived progress in goal attainment as the measurement of behavior initiation. Respondents that report having a goal were asked to rate how much progress had been made in achieving their financial goals, that is, to "*rate your progress in achieving this goal*." The goals included (1) reducing taxes, (2) planning for retirement, (3) insurance or financial protection needs, (4) saving money and/or accumulating of wealth, (5) credit and/or debt

management, and (6) estate planning. The level of progress for these goals was measured on a 1 to 4 Likert scale where 1 represents "little or no progress" and 4 represents "great deal of progress."

9.3.2. Independent variable

Controllability is a measure of whether the individual perceives an outcome to be under his or her control or under the control of outside forces. There is an abundance of research whereby beliefs about control of health would have been used to operationalize controllability in predicting health-related behavior (Winefield, 1982). As such, this study converts respondent's responses to "I have control of my finances" from a 1 to 5 Likert scale to binary variable where 1 represents LPC (Likert scale responses 1–3), and 0 represents HPC (Likert scale responses 4–5).

9.3.3. Moderating variables

Self-efficacy directs the choice to actively pursue a goal. Self-efficacy is typically an assessment of an individual's capacity to do what is required to accomplish a specific goal. An individual's belief that he or she possesses the knowledge, skills, and or abilities required to achieve that goal is thought to instill confidence in goals attainment and to spur goal-directed efforts (Affleck et al., 2001). Following Zimmerman and Bandura (1994) who find a strong correlation between self-efficacy and perceived knowledge, self-efficacy is operationalized in this study by the respondents 1–5 Likert scale response (1 = strongly disagrees to 5 = strongly agrees) to understanding financial-related issues.[2] Respondents were further classified into two groups, those with low level of perceived self-efficacy (Likert scale responses 1–3) and those with HPSE (Likert scale responses 4–5).

Expert financial advice is measured as a binary variable, based on the respondent's responses to, "*Do you have a written financial plan*?" and "*Which of the following describes how your financial plan was developed?. . . Comprehensive plan personalized for me after meeting and discussing with my financial planner about my goals.*" This variable is coded as 1 for those who are and/or have received expert financial advice regarding their financial goals, responded yes, and as 0 for those who responded no.

9.3.4. Control variables

In addition to the main variable of interest, self-efficacy and controllability, certain sociodemographic variables are controlled for in this study. These variables theoretically may impact a person's beliefs regarding attitude toward the behavior or perceptions of social norms, or play a critical role in goal progression and completion. These variables include gender, education level, income, and investable assets. By including these factors, this study attempts to control for the impact of one's financial condition on goal progress as well as better isolate the impact of control beliefs on goal progress.

10. Analysis

10.1. Preliminary analyses

Table 1 presents the descriptive statistics and χ^2 statistics for the dependent, independent, and moderating variables, as well as the other constraint variables used in the study. Approximately 10% and 27% of the sample have low levels of perceived control and self-efficacy, respectively; with lower self-efficacy being reported among persons with LPC. Fifty-percent of those with LPC reported low perceptions of self-efficacy compared to 21% of those with HPC. This difference in reporting is significantly different among the two groups, as measured by a χ^2 statistic of 220.878 ($p < 0.001$). Pearson Correlation coefficients (see Table 2) add further support to the descriptive statistics by highlighting a statistically significant positive correlation between perceived controllability and perceived self-efficacy; meaning having low controllability is associated with also having LPSE (Pearson correlation coefficient of 0.27, $p < 0.001$).

Table 1 Between sample statistics

Variable	Total sample (n = 3,022)	Low controllability (n = 312)	High controllability (n = 2,710)	χ^2 Statistic
Low perceived control	10.3%			
Moderating variables				
Low perceived self-efficacy	27.3%	50.3%	21.0%	220.878***
Expert advice	24.9%	13.4%	28.1%	58.872***
Financial goals				
Reducing taxes	24.8%	16.1%	27.2%	33.317***
Planning for retirement	66.5%	63.4%	67.3%	3.481
Protecting assets	15.4%	14.6%	15.6%	0.379
Saving and wealth accumulation	58.1%	52.1%	59.8%	12.194***
Credit and debt management	28.1%	46.1%	23.1%	134.291***
Estate planning	26.0%	17.1%	28.5%	34.334***
Control variables				
Female	41.5%	46.0%	40.3%	6.878**
College education or more	72.4%	68.8%	73.4%	5.367*
Income				
Less than $50,000	2.1%	1.7%	2.2%	0.625
$50,000–149,999	57.9%	67.2%	55.4%	29.322***
$150,000–249,999	26.2%	18.6%	28.3%	24.489***
$250,000 or more	24.4%	13.7%	27.4%	51.646***
Investable assets				
Less than $50,000	24.5%	40.1%	20.2%	109.360***
$50,000–249,999	19.9%	18.6%	20.3%	0.884
$250,000–999,999	20.6%	16.3%	21.7%	9.126**
$1,000,000 or more	18.1%	13.7%	19.3%	10.709**

Note. This table reports the mean values of the control beliefs, report of having each specific financial goal, and other variables hypothesized to impact the perceived financial goal progress. Means are compared between persons reporting a low perceived level of controllability and those with high perceived controllability. All data were included in this analysis.

Source: Author's estimates using proprietary data collected by an independent research company.

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 2 Pearson correlation matrix of low perceived controllability and self-efficacy, use of expert advice, and goal progress

	Mean	*SD*	1	2	3	4	5	6	7	8	9	10
1: Controllability	0.22	0.41	1.00									
2: Self-efficacy	0.27	0.44	0.27***	1.00								
3: Expert advice	0.25	0.43	−0.14***	−0.13***	1.00							
4: Saving for education	2.41	0.74	−0.18**	−0.19***	0.28***	1.00						
5: Reducing taxes	2.58	0.68	−0.22***	−0.16***	0.11**	0.57***	1.00					
6: Planning for retirement	2.75	0.67	−0.34***	−0.25***	0.21***	0.43***	0.34***	1.00				
7: Protecting assets	2.82	0.79	−0.30***	−0.29***	0.22***	0.30	0.50***	0.55***	1.00			
8: Saving and wealth accumulation	2.58	0.65	−0.37***	−0.28***	0.18***	0.44***	0.33***	0.65***	0.55***	1.00		
9: Credit and debt management	2.47	0.65	−0.29***	−0.21***	0.11**	0.42***	0.34***	0.31***	0.41***	0.53***	1.00	
10: Estate Planning	2.86	0.83	−0.18***	−1.17***	0.20***	0.31***	0.48***	0.55***	0.48***	0.47***	0.41***	1.00

Note. This table reports the Pearson correlation coefficients among the independent, moderating, and dependent variables.
Source: Author's estimates using proprietary data collected by an independent research company.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 3 Between sample goal progress statistics

Variable (Likert scale; ascending level of progress)	Low controllability	High controllability	χ^2 Statistic
Reducing taxes (n = 750)			
1	14.3%	4.0%	45.402***
2	55.4%	33.6%	
3	25.7%	56.4%	
4	4.8%	5.9%	
Planning for retirement (n = 2008)			
1	7.8%	1.5%	271.788***
2	60.9%	24.8%	
3	28.6%	61.9%	
4	2.7%	11.8%	
Protecting assets (n = 465)			
1	19.0%	3.0%	51.485***
2	35.8%	19.5%	
3	36.8%	58.1%	
4	8.4%	19.5%	
Saving and wealth accumulation (n = 1,757)			
1	13.6%	1.3%	274.943***
2	65.8%	34.3%	
3	19.2%	58.0%	
4	1.5%	6.4%	
Credit and debt management (n = 848)			
1	6.0%	1.6%	76.124***
2	67.7%	42.0%	
3	24.3%	49.1%	
4	2.0%	7.3%	
Estate planning (n = 786)			
1	12.6%	5.5%	33.034***
2	39.6%	20.1%	
3	34.2%	50.8%	
4	13.5%	23.6%	

Note. This table reports the frequency reporting of goal progress by respondents. Means are compared between respondents of varying levels of perceived controllability (i.e., low vs. high).

Source: Author's estimates using proprietary data collected by an independent research company. Percentages may not add to 100% because of rounding.

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 1 suggests that a person's control beliefs may also impact the type of financial goals that are initiated as well as the goal progress attained. Persons with LPC are statistically more likely to report having financial goals related to credit and debt management. Nearly half of the persons reporting LPC have goals related to credit and debt management compared to roughly one-fifth of those with high controllability beliefs (χ^2 statistic of 12.194, $p < 0.001$). On the other hand, those with HPC more frequently report having goals related to reducing taxes and savings and wealth accumulation than those with LPC (27% compared to 16%, and 60% compared to 52%). There appears to be no difference in the frequency of reporting retirement savings, or asset protection goals between levels of perceived controllability. Likewise perceived controllability also appears to impact the level of reported goal progress. Table 3 illustrates that in all six goals, high controllability persons report with greater

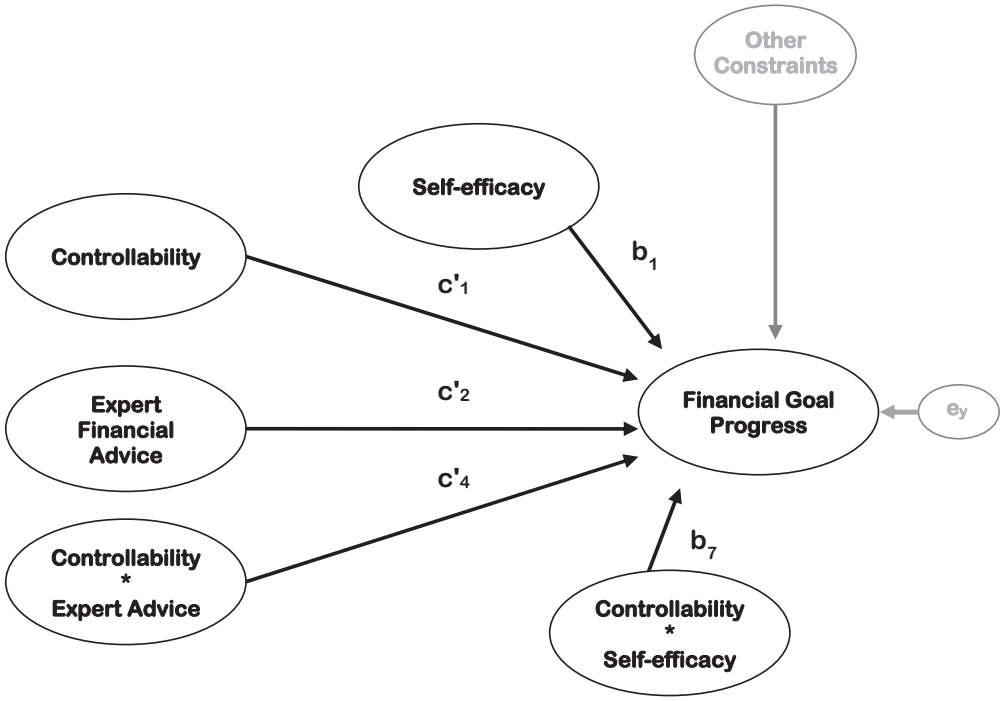

Fig. 4. Statistical additive moderation model of the impact of perceived controllability, expert advice, and self-efficacy on financial goal progress, including the moderating affect of expert financial advice and self-efficacy on the effect of perceived controllability on goal progress.

frequency higher level of progress than low-controllability persons. The three goals that receive the highest progress for those with high controllability are those related to asset protection, estate planning, and retirement planning. Conversely, those with LPC report higher levels of progress on goals related to estate planning, asset protection, and retirement planning, in descending order of progress.

Evidence is provided that personality type influences the seeking of expert advice. Persons with high controllability more frequently report using expert financial advice than those with low levels of controllability (nearly 30% compared to nearly 15%; χ^2 statistic of 58.872, $p < 0.001$, Table 1). Additionally, both low controllability and low self-efficacy are significantly negatively associated with seeking expert advice (Pearson correlation coefficient of -0.14 and -0.13, respectively; $p < 0.001$, Table 2).

The preliminary analyses further offers support Hypothesis 1 and 2 by showing statistically significant negative relations between low controllability and low self-efficacy and progress on all six reported financial goals.

10.2. Central analyses

An ordinary least squares regression is used to test Hypothesis 1–4. The additive statistical moderation model used is presented in Fig. 4. Six regression analyses were used in this study;

each modeled a unique financial goal's progress—financial goals related to (1) reducing taxes, (2) retirement planning, (3) asset protection, (4) Savings and wealth accumulation, (5) credit and debt management, and (6) estate planning. In Fig. 4, c_1' represents the direct effect of perceived low controllability on financial goal progress; this parameter estimate addresses Hypothesis 1; perceived low controllability is associated with lower levels of financial goal progress. Hypothesis 2, the impact of LPSE on goal progress, is assessed by parameter coefficient, b_1. The significance of the moderating relationship of LPC and LPSE is represented by b_7 and that of LPC and expert advice is represented by c_4', representing the determination of Hypothesis 3 and Hypothesis 4, respectively. Therefore, the conditional effect of *Controllability* on *Goal Progress* is represented by the equation, $c_1' + b_7$ (*Self-efficacy*) $+ c_4'$ (*Expert Advice*).

10.3. Direct effects

LPC has a significant influence in goal progress for five of the six studied financial goals, LPC does not have a significant influence on estate planning goal progress. In three of the five goal areas, LPC reduces goal progress by one-half point or more. LPC reduces asset protection goal progress by 0.60 points ($c_1' = -0.60$, $p < 0.001$); savings and wealth accumulation goal progress by 0.51 points ($c_1' = -0.51$, $p < 0.001$); and tax reduction goals by 0.47 points ($c_1' = -0.47$, $p < 0.001$). Progress in the two remaining impacted goals, retirement planning and credit and debt management, is reduced by 0.43 and 0.33 points, respectively. These finds lend support to Hypothesis 1. See Table 4 for complete regression results.

LPSE is consistently associated with lower financial goal progress; as represented by a significant b_1 parameter estimate in all models of financial goals. The analysis suggest that LPSE results in the greatest reduction in goal progress related to asset protection; a LPSE decreases asset protection goal progress by 0.34 points ($b_1 = -0.34$, $p < 0.001$). Likewise, saving and wealth accumulation progress is reduced by 0.24 points ($b_1 = -0.24$, $p < 0.001$); credit and debt management by 0.19 points ($b_1 = -0.19$, $p < 0.05$); and between 0.18 and 0.11 points for the remaining three goal classifications, reducing taxes, retirement planning, and estate planning; lending support to Hypothesis 2.

Expert advice does not consistently influence goal progress. Receiving expert advice is associated with increased progress in saving and wealth accumulation ($c_2' = 0.0692$, $p < 0.05$) and estate planning ($c_2' = 0.2537$, $p < 0.001$).

10.4. Moderating effects

The conditional effect of LPC because of its interaction, which is, moderating relation, with low self-efficacy is not unanimously supported in this study. Of the six financial goals examined, one, estate planning, reports a significant b_7 parameter estimate ($b_7 = -0.4563$, $p < 0.05$). This finding does not lend support the Hypothesis 3; LPSE does not appear to influence the effect of LPC on goal progress.

Analyses suggest a significant moderating relation between LPC and expert advice; in four of the six models the parameter estimate c_4' was positively significant. These models were

Table 4 Complete OLS regression analyses

	Reducing taxes		Retirement planning		Asset protection		Saving and wealth accumulation		Credit and debit management		Estate planning	
	Parameter estimate	*SE*	Parameter estimate	*SE*	Parameter estimate	*SE*	Parameter estimate	*SE*	Parameter estimate	*SE*	Parameter estimate	*SE*
Low perceived controllability (c_1')	−0.179*	0.072	−0.434***	0.048	−0.596***	0.122	−0.511***	0.048	−0.333***	0.063	−0.115	0.132
Low perceived self-efficacy (b_1)	−0.468***	0.102	−0.152***	0.037	−0.340***	0.089	−0.243***	0.039	−0.193**	0.061	−0.112	0.086
Expert advice (c_2')	0.050	0.057	0.063	0.033	0.154	0.083	0.069**	0.034	0.046	0.069	0.254***	0.064
Low controllability * low self-efficacy (b_7)	0.101	0.151	−0.067	0.069	0.628	0.225	0.119	0.073	0.026	0.093	−0.456*	0.182
Low controllability * expert advice (c_4')	0.395*	0.171	0.363***	0.093	0.628**	0.225	0.242*	0.096	0.034	0.134	0.063	0.195
Female	0.017	0.051	−0.016	0.027	−0.068	0.067	−0.052	0.028	−0.032	0.044	−0.082	0.059
College education or more	−0.036	0.058	0.003	0.031	0.195**	0.073	0.059	0.031	0.063	0.046	−0.157*	0.068
Income	0.065	0.120										
$50,000–149,999	0.019	0.126	0.033	0.086	−0.029	0.185	−0.049	0.073	0.044	0.133	0.099	0.141
$150,000–249,999	0.042	0.126	0.067	0.088	−0.018	0.196	−0.032	0.076	−0.043	0.140	0.154	0.149
$250,000 or more			0.046	0.089	0.092	0.198	−0.038	0.077	−0.137	0.146	0.129	0.150
Investable assets	−0.001	0.084										
$50,000–249,999	0.081	0.077	0.162***	0.038	0.025	0.097	0.102*	0.040	−0.035	0.058	0.119	0.109
$250,000–999,999	0.195*	0.081	0.325***	0.038	0.229*	0.094	0.322***	0.039	0.163**	0.059	0.105	0.096
$1,000,000 or more			0.501***	0.042	0.209*	0.102	0.495***	0.042	0.314**	0.086	0.306**	0.096
Obs.	750		2,008		465		1,757		848		786	
Adjusted R^2	0.0861		0.2453		0.225		0.2821		0.1370		0.1128	

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 4 Continued

	Saving and wealth accumulation			Credit and debt management			Estate planning		
	Parameter estimate	*SE*	*p*-Value	Parameter estimate	*SE*	*p*-Value	Parameter estimate	*SE*	*p*-Value
Low perceived controllability (c_1')	−0.511	0.048	0.000	−0.333	0.063	0.000	−0.115	0.132	0.383
Low perceived self-efficacy (b_1)	−0.243	0.039	0.000	−0.193	0.061	0.002	−0.112	0.086	0.194
Expert advice (c_2')	0.069	0.034	0.002	0.046	0.069	0.507	0.254	0.064	0.000
Low controllability * low self-efficacy (b_7)	0.119	0.073	0.102	0.026	0.093	0.779	−0.456	0.182	0.013
Low controllability * expert advice (c_4')	0.242	0.096	0.012	0.034	0.134	0.800	0.063	0.195	0.747
Female	−0.052	0.028	0.062	−0.032	0.044	0.469	−0.082	0.059	0.160
College education or more	0.059	0.031	0.062	0.063	0.046	0.173	−0.157	0.068	0.021
Income									
$50,000–149,999	−0.049	0.073	0.506	0.044	0.133	0.742	0.099	0.141	0.483
$150,000–249,999	−0.032	0.076	0.679	−0.043	0.140	0.761	0.154	0.149	0.303
$250,000 or more	−0.038	0.077	0.625	−0.137	0.146	0.348	0.129	0.150	0.392
Investable assets			0.011						
$50,000–249,999	0.102	0.040	0.000	−0.035	0.058	0.545	0.119	0.109	0.277
$250,000–999,999	0.322	0.039	0.000	0.163	0.059	0.006	0.105	0.096	0.272
$1,000,000 or more	0.495	0.042		0.314	0.086	0.003	0.306	0.096	0.002
Obs.	1,757			848			786		
Adjusted R^2	0.2821			0.1370			0.1128		

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

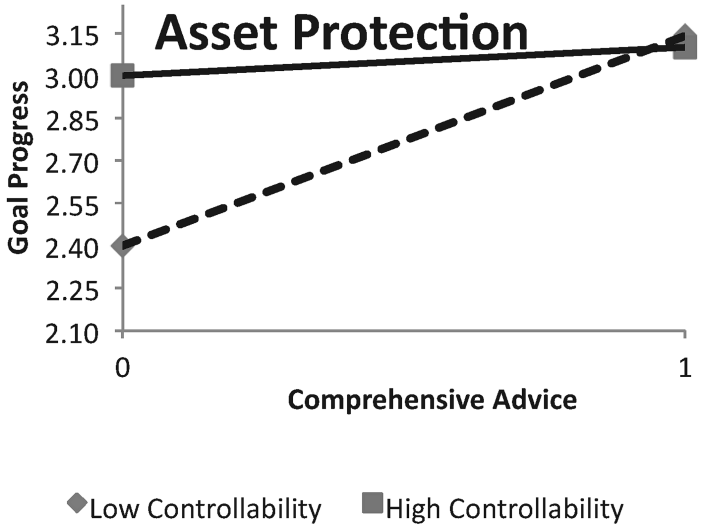

Fig. 5. To help visualize and interpret the nature of the moderation of perceived controllability's effect in asset protection goal progress, predicted values of goal progress were generated using various values of perceived controllability and the moderator. The covariates in the model were set to their sample mean when deriving the predicted values. This form of visualization is consistent with Preacher and Hayes (2004).

financial goals related to reducing taxes, retirement planning, asset protection, and savings and wealth accumulation. See Fig. 5 for a visual representation of this subsuming relation in financial goals related to protecting financial assets.

This figure illustrates how a positively significant moderating parameter estimate suggests LPC supplemented by expert financial advice results in greater goal progress than that of both LPC and HPC without expert advice, as well as HPC with expert advice. Additionally, the inclusion of the moderating relation increases the overall explanability of the models. The inclusion of the interaction variable (LPC $*$ expert advice) increases the adjusted r-square of the models by 8%, 2%, 6%, and 1% for tax, retirement, protection, and wealth goals, respectively. This findings offer credence to Hypothesis 4.

In the remaining two models, credit and debt management and estate planning, there is no evidence to support that the goal progress level for those with LPC and expert advice is statistically different from the expertly advised with both HPC and LPC or those with low controllability and are not expertly advised.

11. Discussion and implications

It is common practice for individuals to set financial goals, and as individuals become more responsible for their financial futures being able to achieve these goals is more imperative. This study provides a strong support for a model linking personality traits and goal striving. More specifically, this study suggests that the TPB can be used to model goal striving in the finance domain by finding that LPBC is associated with low financial goal progress and/or striving. This knowledge may be helpful in determining why some people

with the same financial goals are able to achieve their goals and others are not, as well as identifying people who may significantly benefit from expert advice in goal attainment.

Financial service professionals can use these findings to not only better serve their current client base, but also to appeal to LPBC persons who might not have considered seeking expert advice in the past. For the average person financial advice is positively associated with goal progress, and persons who receive expert advice have significantly higher goal progress than those without expert advice in goals related to savings and wealth accumulation and estate planning and marginally significant influence on retirement-planning goals, ceteris paribus. It also suggests an opportunity for advisors to increase their value to clients as related to attainment of retirement, because these goals have been cited as the most important financial goal for many people. In attracting a new clientele, these findings can be used to encourage LPBC persons, who would normally not seek expert advice, to seek advice in attaining their financial goals through marketing campaigns, referral request, and other communications.

LPSE has a dual negative impact on financial success. First it impedes goal progress as well as erodes goal motivation and second, it creates a self-fulfilling prophecy of failure and erodes overall well being. Perceived self-efficacy can be improved through appropriate financial education as well as through positive persuasive feedback and decision anxiety reducing techniques. Additionally, tackling moderately difficult, short-term financial goals before moving on to longer-termed more complex goals allows a client to do well and associate this success with his or her abilities; thereby, increasing self-efficacy.

Although LPC cannot be increased in the short-run, receiving expert advice reduces its negative influence on goal progress. In some financial areas there is no evidence to support that the goal attainment of persons with LPC is any different from that of persons with HPC, and in other goal domains, such as tax reduction, retirement planning, asset protection, and wealth accumulation, the goal progress of LPC persons exceeds that of all others. This is especially important as more individuals report planning for retirement as their main financial goal. These findings give more credence to value of expert financial advice and the role of advice in helping people with varying personality traits reach their financial goals.

11.1. Data limitations and future research

A possible limitation of this study is that the wealth and/or income requirements to be included in the survey (at least $50,000 in investable assets or income) may single out a portion of the U.S. population that has higher than average control beliefs, that is, those with low control beliefs may largely exist in the lower-income segments of the population. As such, the sample used may not contain an adequate representation of individuals with low control beliefs. However, when comparing the percentage of individuals in this sample that are of low control beliefs to that of a recognized nationally representative sample, the 1979 National Longitudinal Survey of Youth (NLSY), the percentage of low control belief individuals is higher in the sample. Therefore, the income and/or asset restrictions to be included in the study does not inhibit the number of low-control individuals and there are adequate members of the low controlled group to ensure reliable estimates to be reported for that group. Other data limitations include the small sample sizes associated with individuals

that utilize professional financial advice. It is well established in the literature that the number of households that use professional financial advice is small.

Despite the data's limitations, they offer an opportunity to begin to examine the role of PBC on an individual's ability and willingness to pursue financial goals. These data afford the opportunity to measure respondent's perceived financial control as measured by questions specifically related to one's level of control over his or her finances instead of the Rotter-Locus of Control Scale, which assesses general loci of control and has been used in prior studies. They also allow for ample control variables to be used in the analysis that better allow for the isolation of the effect of PBC on goal attainment from the respondent's financial condition.

Future studies of PBC on goal attainment should strive to address the limitations of this study as well as contain ample survey questions pertaining to personality traits, in addition to self-efficacy, that might impact financial goal progress.

Notes

1 The CFP is a regulatory organization that creates and enforces uniform standards of competency, practice and ethics of financial planners.
2 This measure of self-efficacy serves as both a measure of both perceived knowledge and perceived ability. Bell and Kozlowski (2002). find that high-ability individuals have the capabilities to do well on the difficult aspects of tasks and are therefore are expected to experience higher levels of self-efficacy. The present research, therefore, examines in more detail the interaction between goal achievement and an individual's level of cognitive ability.

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