

Examining the Savings Habits of Individuals with Present-Fatalistic Time Perspectives using the
Theory of Planned Behavior

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ABSTRACT: This paper examines the relationship between present-fatalistic time perspective and savings behavior. A model was conceptualized using the theory of reasoned and planned behavior and analyzed using a structural equation model. Using data collected in 2011 from 234 respondents, the results suggest that individuals with a present-fatalistic time perspective save less money. A relationship between a person's intention to save money and actual savings behavior was noted. The study did not find a significant indirect relationship from holding a present-fatalistic time perspective through intention to actual saving behavior. Implications for financial service professionals are provided.

Introduction

Concerns about saving behaviors at the household level in the United States has been an almost constant worry among financial news pundits and policy makers for the past three decades. At the turn of the millennium, the general concern was that Americans were not saving enough. After the mortgage and equity market meltdown beginning in 2008, worries shifted away from savings to thinking about the aftermath of debt loads. The good news about the personal savings rate in the United States is that, as of 2011, it was much improved. According to Glick and Lansing (2011), “Following a 20-year decline, the U.S. personal saving rate bottomed out at around 1% in the third quarter of 2005. Since then, the rate has been trending upward, reaching around 6% in the third quarter of 2010”(p. 1). The bad news is that despite this trend, many Americans are not saving enough money for retirement, other large expenses, or even for emergencies (Lusardi, 2010).

Why aren't Americans saving adequate amounts of money? Bannerjee (2010) attributed this poor behavior to factors such as lack of education, income, age, gender, and race. Lusardi (2010) ascribed inadequate savings to low levels of financial literacy. Utilizing both the theory of reasoned and planned behavior (Ajzen, 1991) and the Zimbardo time perspective theory (Gonzalez & Zimbardo, 1985), this paper explores savings habits from a different perspective: time perspective. Specifically, this study explores the savings habits of those with a present-fatalistic time perspective. Individuals with a present-fatalistic time perspective are described as having “a fatalistic, helpless, and hopeless attitude toward the future and life” (Zimbardo and Boyd, 1999). In *The Time Paradox*, Zimbardo and Boyd (2008) describe the money habits of those with a present-fatalistic time perspective:

Present-fatalists treat money as though it doesn't matter. To them, the lessons of the past are irrelevant, and investments are unlikely to pay off in the future. Consequently, their environment strongly influences them. If they see something interesting, they buy it not because the purchase gives them pleasure but because they cannot think of anything better to do with their money. Their spending and investment habits tend to be variable and random. When what you do with your money does not matter, all possible use of it appears equally appealing and unappealing. They don't want to preserve what they had yesterday, enjoy what they have today, or save for tomorrow. It just does not matter. For them, money is not special. Money does not hold the key to the past or the future, and they believe that how much or little they have is largely beyond their control. (p. 229)

Since money has no real appeal to those with a present-fatalistic perspective, it would seem likely that savings habits of individuals with this time perspective would be less than that of the total population. As such, the purpose of this paper was to evaluate whether individuals with a present-fatalistic time perspective save more or less than others, and to test if these individuals exhibit random savings actions as opposed to planned savings actions.

Theoretical Foundations and Literature Review

This paper draws on two distinct theories as a conceptual framework. The independent (exogenous) variable is present-fatalistic time perspective, a construct defined by the Zimbardo time perspective theory (Zimbardo & Boyd, 2008). The conceptualization of this study is also driven by the theory of reasoned and planned behavior (Ajzen, 1991).

The time perspective theory argues that those with a present time perspective will perceive future goals as being temporally farther away, while a person with a future time perspective will perceive those future goals as being temporally much closer. In addition, the

magnitude or attractiveness of that future goal will be increased for those with a future time perspective and decreased for those with a present time perspective. Similarly, the magnitude of a present choice will be increased for those with a present time perspective and decreased for those with a future time perspective (Gonzalez & Zimbardo, 1985).

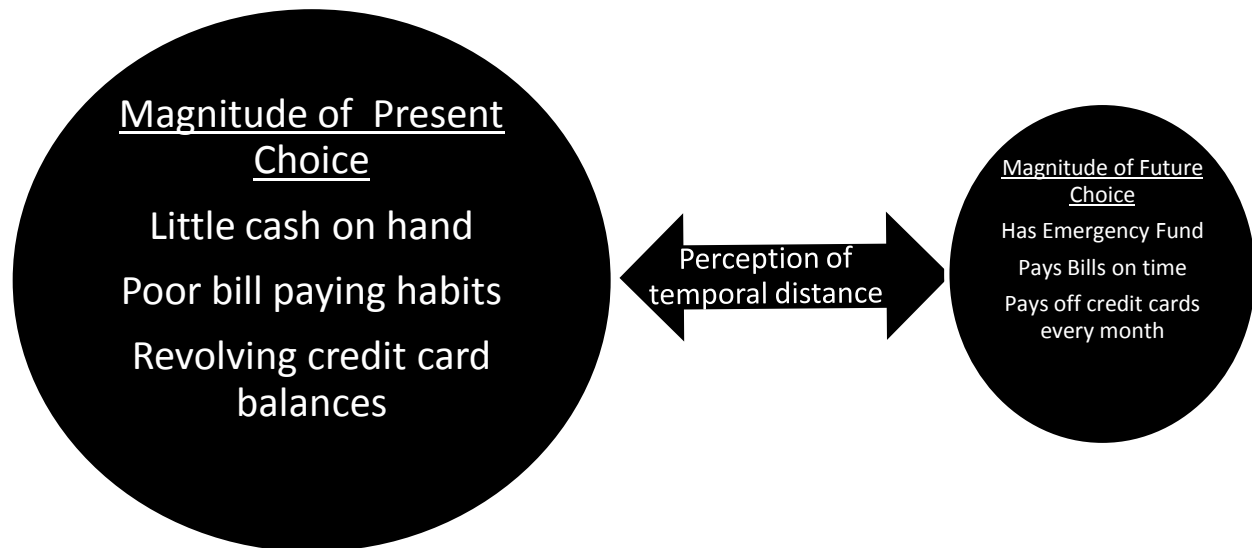


Figure 1: Time Perspective Theory 1

Zimbardo and Boyd (1999) state that “Time perspective is a fundamental dimension in the construction of psychological time, emerges from cognitive processes partitioning human experience into past, present, and future temporal frames.” Time perspectives are divided into 5 categories: (a) past-negative, (b) past-positive, (c) present-fatalism, (d) present-fatalistic, (e) present-hedonistic, and (f) future. This paper explores only the present-fatalistic time perspective for two primary reasons. People with a present-fatalistic time perspective live in the present but feel as if they are trapped in it. The primary feeling from this group is helplessness, as they feel they have no power to change their current or future situation. People in this category tend to think that luck and fate are guiding factors in determining the direction their

lives take (Gonzalez & Zimbardo, 1985; Zimbardo & Boyd, 1999). It is reasonable to assume that these present-fatalistic people would be more likely to have a problem saving money. The second reason is that, while present-hedonism and future time orientations have received attention as it relates to financial behavior, there has been very little research conducted to test the association between present-fatalistic time perspective and household financial behavior.

The theory of reasoned and planned behavior states that an individual's action or behavior is preceded by an intention to perform or engage in that behavior (Ajzen & Fishbein, 2005). The theory is diagrammed in Figure 2.

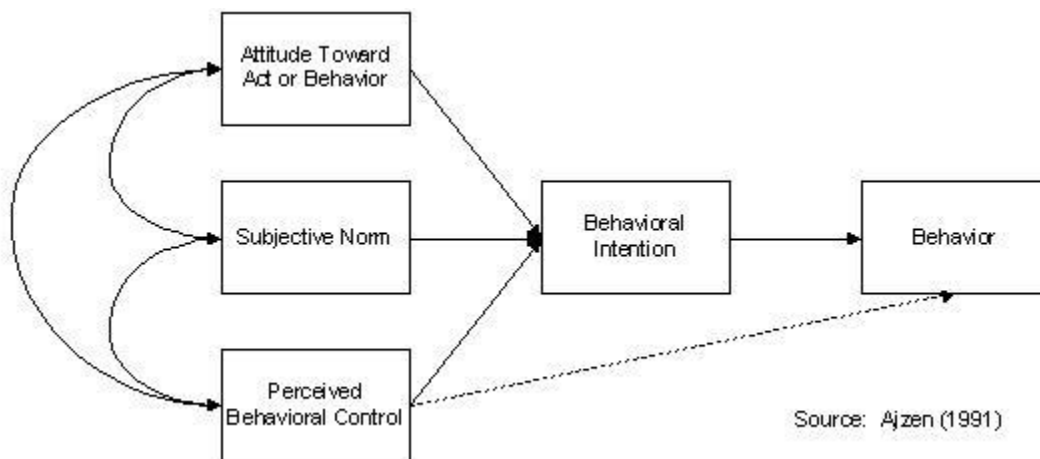


Figure 2: Theory of Reasoned and Planned Behavior

In order to apply this model, one must accept five basic assumptions:

1. Intention is the immediate antecedent of actual behavior.
2. Intention, in turn, is determined by attitude toward the behavior, subjective norm, and perceived behavioral control.
3. These determinants are themselves a function, respectively, of underlying behavioral, normative, and control beliefs.
4. Behavioral, normative, and control beliefs can vary as a function of a wide range of background factors” (Ajzen, 1991, p. 194).

Rutherford and Devaney (2009) described the three contributors to behavioral intention concisely:

An attitude toward a behavior is defined as one's positive or negative evaluation of the particular behavior based on the person's beliefs. A subjective norm is a person's perception of whether significant referents approve or disapprove of the behavior. Perceived control is the perceived difficulty of performing the behavior.
(p.49)

Hypotheses and Conceptualization

The model tested in this study is conceptualized as seen in Figure 3. It is important to note that only one component of the theory of reasoned and planned behavior was tested in the current study. Specifically, the link between perceived behavioral control and saving intention and perceived behavioral control and saving behavior was evaluated. In this study, behavioral control was proxied by present-fatalistic time perspective. Present-fatalism is evaluated in conjunction with both the intent to save and actual savings behavior. Present-fatalism can be classified as a perceived control factor in the theory of reasoned and planned behavior model. This suggests that it is a contributor to an individual's perceived difficulty in actually saving money. As a perceived control item, it is associated both with the intention variable and with the actual action variable.

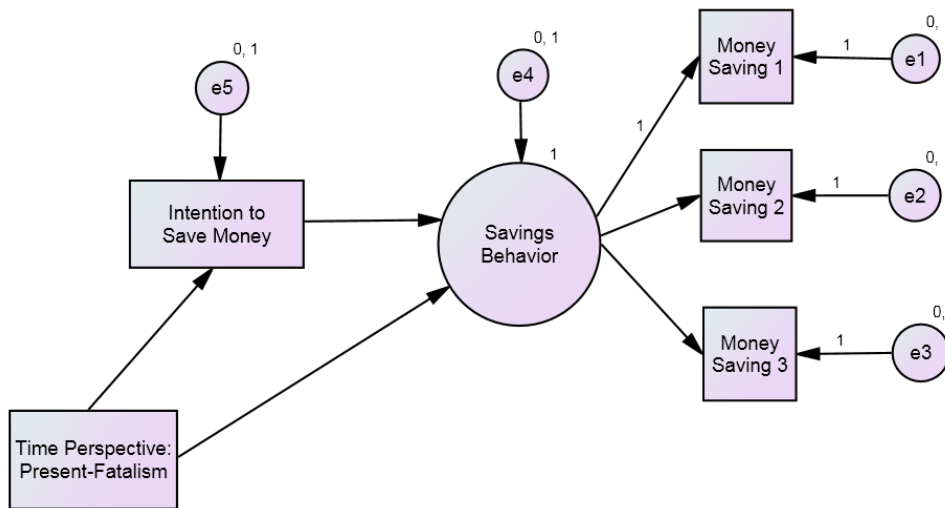


Figure 3: Conceptualization Model

Present-fatalistic people are individuals with little hope, living in the here and now, with few cares about the future. Since the future does not concern them, it is inferred that saving money will not be a very high priority for them. As such, the following association was hypothesized:

H1: Individuals with a present-fatalistic time perspective will be less likely to save money.

In conjunction with the theory of reasoned and planned behavior, it was assumed that individuals will have an intention to save money before they actually do save money. This assumption comes directly from the theory of reasoned action. The second and third hypotheses were derived from this assumption.

H2: Individuals with a present-fatalistic time perspective will exhibit a lower intention to save money.

H3: An individual's intention to save money will influence their saving behavior.

Methodology

Survey data were taken from 232 individuals in a survey conducted at a large Midwestern university in Fall, 2011. An online survey method was used to collect data. The individuals in the sample ranged from 18 to 78 years of age with a mean age of 40.76 years (SD = 15.044). The sample consisted of 102 men (43.97%) and 130 women (56.03%).

Outcome Variable

The Savings Behavior variable was created by using a confirmatory factor analysis, using a structural equation model procedure, which ultimately produced a single factor. The three questions contained in this factor are:

TABLE 1

Savings Behavior Items

Item	Mean	SD
1 How do you grade yourself in the following areas? Saving Money: (Likert scale: 1-5, with 1 = poor and 5 = excellent)	3.29	1.231
2 Please indicate your level of agreement with the following statements: I set money aside for savings. (Likert scale: 1-5, with 1 = almost never and 5 = almost always)	3.79	1.157
3 Over the last year, how would you describe your savings habits? a. Save regularly, put money aside each month b. Spend regular income, save other income c. Spend income from one family member, while saving income from the other d. No regular plan e. Don't save (This question was originally coded on a scale of 1-5, with a=1, b=2, c=3, d=4, and e=5. It was reverse coded for this study, such that a=5, b=4, c=3, d=-2, and e=1.)	3.79	1.482

Exogenous Variables

The most well-known assessment for time-perspective is the Zimbardo Time-Perspective Inventory (ZTPI), sometimes also known as the Stanford Time-Perspective Inventory (Zimbardo & Boyd, 2008). The survey contained the scale items attributable to the present-fatalistic time perspective, as found in table 1. These questions were ranked on a Likert scale (from 1-5, with 1 = very untrue and 5 = very true). These items were then summated to form a single variable for present-fatalistic time perspective. The mean for this summated variable is 16.906, with a standard deviation of 5.20396. The coefficient alpha for the summated scale is 0.83.

TABLE 2

Time Perspective Items

Item	Mean	SD
1 Fate determines much in my life.	2.17	0.964
2 Since whatever will be will be, it doesn't really matter what I do.	1.50	0.754
3 It takes joy out of the process and flow of my activities if I have to think about goals, outcomes, and products.	1.81	1.024
4 You can't really plan for the future because things change so much.	1.68	0.810
5 My life path is controlled by forces I cannot influence.	1.68	0.739
6 It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway.	1.65	0.801
7 Life today is too complicated; I would prefer the simpler life of the past.	2.69	1.197
8 Spending what I earn on pleasures today is better than saving for tomorrow's security.	1.90	0.873
9 Often luck pays off better than hard work	1.85	0.914

For the savings intention variable, a single question was used (Mean = 3.39, SD= 1.410).

1. How much money do you intend to save every month in a separate savings or investment account outside of your retirement plans?

- a. \$0
- b. \$1 - \$100
- c. \$101 - \$250
- d. \$251 - \$500
- e. \$501 or more

(Coded a=1, b=2, c=3, d=4, e=5)

Methodology

Data were evaluated using a structural equation model (SEM). The SEM included a confirmatory factor analysis (CFA) to develop the savings behavior variable, and a path analysis to evaluate the relationship between the exogenous variables and the outcome variable.

Results

The specified SEM had a sample size of 234, with 5 degrees of freedom. The process generated a chi-square of 8.664 and it was not significant. In this case, an insignificant chi-square suggests that the model may be strong, in that the sample may be a reasonable representation of the population ($\chi^2 (5, N=234) = 8.664, p > .05$). Model fit was also evaluated using the CFI, NFI, and RMSEA measures. The model has an NFI of .977, which was above the stated minimum of .9. The CFI was .99, which was also above stated value of .9, and a RMSEA of .056, which was below the stated maximum of .10. All four of these indicators were within the defined parameters, leading to the conclusion that the model was a strong one.

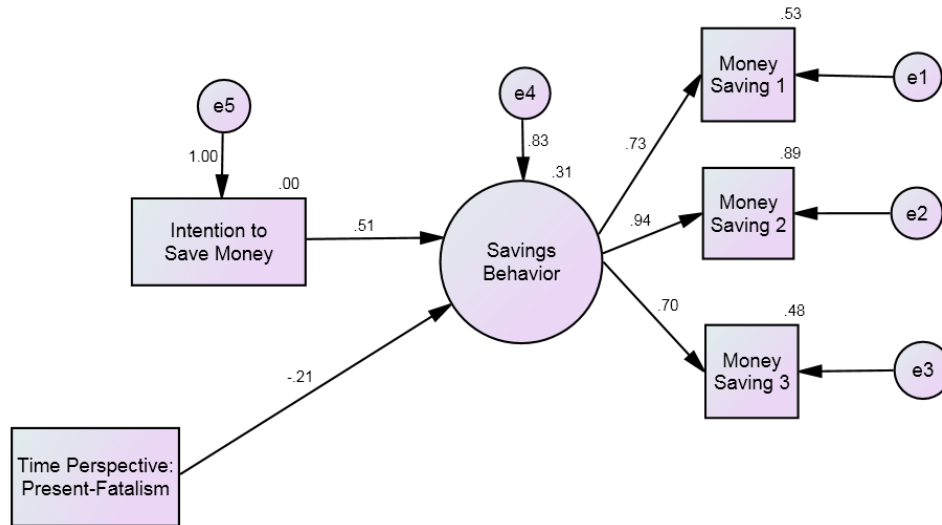


Figure 4: Specified Model with Standardized Coefficients

The outcome variable, savings behavior, was derived by performing a confirmatory factor analysis on the three money saving questions. Table 3 shows the factor scores. All three factors loaded well above the .4 minimum.

Table 3: Confirmatory Factor Analysis showing Standardized Direct Effects

	Savings Behavior
Money Saving 3	0.695
Money Saving 2	0.943
Money Saving 1	0.727

Hypothesis 1, which stated that individuals with a present-fatalistic time perspective will be less likely to save money, was supported by the model. Table 2 reports the regression weight for the association as being significant at the $p < .05$ level, with a standardized co-efficient of -

.205. The negative number indicates that individuals with a present-fatalistic time perspective were likely to save less money.

Table 4: Standardized Regression Weights

Variable Association			Estimate	P
Savings Behavior	<---	Intention to Save Money	0.513	.001
Savings Behavior	<---	Time Perspective: Present-Fatalism	-0.205	.001

*** p < .05

Hypothesis 2 stated that individuals with a present-fatalistic time perspective will exhibit a lower intention to save money. No support was found for this hypothesis, as the relationship between time perspective and the intention to save money was found to not be significant. This is graphically illustrated in Figure 4, where the line connecting the two variables has been removed.

Support was found for hypothesis 3, which stated that an individual's intention to save money will influence their saving behavior. As reported in table 2, a standardized coefficient of .513 was calculated at the p < .05 significance level.

Discussion

As expected, this study found that individuals with a present-fatalistic time perspective appeared to be less likely to save money. This is consistent with the premise that such individuals are anchored in the present, and thus would have no real need or desire to save money for the future. Similarly, this study also found a strong association between an individual's intention to save money, and that individual's actual savings behavior. This is consistent with the theory of reasoned and planned behavior.

The most surprising finding was the lack of a relationship between a present-fatalistic person's intention to save money, and the actual savings behavior of that present-fatalistic person. There are numerous possible explanations for this. Low intention-behavior relationships can be found in several instances: when there is a lack of compatibility in the action, context, and time elements; when there is a lack of compatibility of the measures; or when there is literal inconsistency between intentions versus actions (Ajzen, 1991, p188-9). In a quest to explain this finding, the incompatibility of measures would seem to be a good place to focus, yet the intention to save money and the actual savings behavior proved significant for the sample as a whole, just not for present-fatalistic individuals. There are other factors to consider, including sample size, but these concerns seem to be mitigated by the strength of the model.

It is also possible that the theory of reasoned and planned behavior is not an effective tool for evaluating the behaviors of those with a present time orientation. One could hypothesize that the sequence of intention followed by action may be applicable to those with a future time perspective, as it requires a certain level of planning and intent, but not to those who have a present orientation, who generally exhibit a lack of focus on planning for the future.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173–221). Mahwah, NJ: Erlbaum.
- Banerjee, S. (2011). How do financial literacy and financial behavior vary by state? EBRI Notes, 32(11).
- Bleichrodt, H., & Gafni, A. (1996). Time preference, the discounted utility model and health. *Journal of Health Economics*, 15(1), 49-66.
- D'Alessio, M., Guarino, A., De Pascalis, V., & Zimbardo, P. G. (2003). Testing Zimbardo's Stanford time perspective inventory (STPI)-short form. *Time & Society*, 12(2-3), 333.
- Glick, R., & Lansing, K. (2011). Consumers and the economy, part I: household credit and personal saving. *FRBSF Economic Letter* 2011-01.
- Gonzalez, A., & Zimbardo, P.G. (1985). Time in perspective: A *Psychology Today* survey report. *Psychology Today*, 21-26.
- Lusardi, A. (2010). Financial capability in the United States: consumer decision-making and the role of social security. Michigan Retirement Research Center, Research Paper No. 2010-226.

- Rutherford, L. & DeVaney, S. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards. *Journal of Financial Counseling and Planning*, 20(2), 48-63.
- Worthy, S. L., Jonkman, J., & Blinn-Pike, L. (2010). Sensation-seeking, risk-taking, and problematic financial behaviors of college students. *Journal of Family and Economic Issues*, 31(2), 161-170.
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology*, 77(6), 1271-1288.
- Zimbardo, P. G., & Boyd, J. N. (2008). *The time paradox: The new psychology of time that will change your life*. New York, NY: Free Press.