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The Theory of Planned Behavior and the Earned Income Tax Credit

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The Earned Income Tax Credit (EITC) seeks to reduce poverty and provide the resources necessary for an individual to become self-sufficient. The EITC achieves this annually by lifting millions of households above the poverty level through income supplementation. However, recent evidence suggests that the long-term upward economic mobility provided by the EITC in practice is limited. To investigate the factors associated with achieving this financial independence, this study utilized the Theory of Planned Behavior to determine if (a) attitudes—as measured by time preference and self-esteem, (b) subjective norms—as measured by education, parents' poverty level or work status, and religiosity, and/or (c) perceived behavioral control—as measured by self-efficacy (perceived effectiveness in accomplishing tasks) were significant in moving beyond qualification standards of the EITC. Using data from the National Longitudinal Survey of Youth (NLSY79), the EITC utilization pattern of a sample of 178 individuals was investigated. Results reaffirmed the economic advantages of marriage, suggesting that, by protecting and support healthy marriages, financial therapists can actively contribute to improved financial outcomes. Results also indicated that individuals with a high degree of mastery (feeling in control) were more likely to experience economic improvement, as measured through movement above EITC qualification standards. This suggests that financial therapists should work to facilitate growth in personal mastery as a part of helping clients reach their financial goals.

Keywords: Earned Income Tax Credit (EITC); Theory of Planned Behavior; self-esteem; efficacy; financial therapy

INTRODUCTION

Sufficient savings provide protection against financial hardship and create a path toward greater economic stability (Manturuk, Dorrance, & Riley, 2012). However, saving money has proven to be a challenge for many low and moderate income American families,

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especially in an economic environment of stagnant wages, high unemployment, increased cost of living, and record foreclosure rates. With persistent unemployment and a slow growth economy in 2012, government programs such as the Earned Income Tax Credit (EITC) are an important source of family income for some Americans.

The Earned Income Tax Credit (EITC) began as part of the Tax Reduction Act of 1975 and has become the flagship of anti-poverty programs in America due to its dual purpose of rewarding work and reducing poverty. Previous research indicates that the EITC is successful in helping families meet their day-to-day needs, raising millions of families above the poverty threshold (Simpson, Tiefenthaler, & Hyde, 2010). Although incredibly successful as a current supplement, the EITC has been less successful in leading recipients to long-term financial freedom through wealth creation and savings (Beverly, Tescher, Romich, & Marzahl, 2005; Prawitz, Kalkowski, & Cohart; 2012; Smeeding, Phillips, & O'Connor, 2000). According to Simpson et al. (2010), a contributing factor to the lack of upward mobility lies in the intention of how the EITC is to be used by recipients. In a survey of 282 EITC recipients, Simpson et al. sought to identify how recipients intended to use their refund. Respondents were allowed to identify multiple intended uses, as they could use their refund in more than one way. Of the responses received, 64% of participants planned on using at least a portion of their refund for meeting basic needs, 50% of participants identified they would use a portion of their refund for debt repayment, and 27% of respondents indicated they would use a portion of their refund to purchase a durable good. Less than 3% of respondents reported saving any portion of their refund as their top priority, with only 25% of the sample listing saving as one of their top three priorities.

These reported intentions may represent rational decision making on the part of recipients, as the qualification standards will limit recipients to those needing income supplements to meet their daily needs. Further, saving may not be the optimal use for recipients because that would mean incurring increased charges on existing debt. A downfall of the EITC design is that recipients may suffer the potential loss of benefits from means-tested programs if their assets increase. Nevertheless, the EITC has the dual purpose of rewarding work and reducing poverty (i.e., increasing income) as stated above. In looking to improve outcomes related to economic mobility (increased income), the University of Wisconsin's Financial Literacy Consortium suggested that educating low income populations about financial topics is important. Efforts that are focused on behavioral change, particularly on spending and saving concepts, may be more effective for promoting long-term financial well-being (Turnham, 2010). Behavioral research suggests that people incorporate non-financial factors (such as values, emotions, early life experiences, psychological characteristics, and misconceptions) into their financial decision making. According to Maton, Maton, and Martin (2010), financial therapy has the ability to create positive changes in financial behaviors. In addition, this can give clients a sense of accomplishment and motivation to maintain those behaviors. According to the focus groups identified by Turnham (2010), people in general are motivated to save. However a participant's ability to save was affected by the lack of opportunity, lack of knowledge, lack of willpower, and their attitudes toward savings and saving institutions (Turnham, 2010).

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A financial therapist can assist in meeting the full needs of a client (Kinder & Galvan, 2007), especially in situations where marital conflict among couples is related to family finance.

Given this background, the purpose of this study is to investigate the belief and behavior systems that may prevent individuals and families from using the EITC as a way toward upward mobility. Using the National Longitudinal Survey of Youth 1979 cohort data (NLSY79), this study applies the Theory of Planned Behavior (TPB) to examine the attitudinal, social, and perceived control indicators of reduced usage of the EITC. The low and moderate income (LMI) households are of particular interest to researchers and policymakers because even minor unexpected expenses can lead to damaging financial outcomes (Manturuk et al., 2012). While the EITC is certainly valuable as a current income supplement, this study will examine the future prospects of the EITC recipient and the ability of the program to pull individuals into financial freedom. As Manturuk et al. noted, "understanding the financial decisions, attitudes and behaviors of the LMI consumers can help create more effective programs and policies aimed at building financial security as well as improving potential financial education opportunities" (Manturuk et al., 2012, p. 4). It should be noted that movement above EITC qualification standards is a somewhat arbitrary threshold, although directly driven by policy. It is quite possible that an individual has improved their financial situations considerably, but not enough to exceed the qualification limits. Additionally, when evaluated from the perspective of its main focus of raising families about the income-based poverty threshold in a given year, the EITC has been impactful. Therefore, this study should not be seen as an overall critique of the EITC program or a commentary on its overall effectiveness, but rather a targeted investigation of how the Theory of Planned Behavior informs the likelihood an individual receiving the EITC will experience upward mobility.

THEORETICAL FRAMEWORK AND RELATED LITERATURE

Historical Overview of EITC

In the late 1960s, former President Richard Nixon introduced the Family Assistance Plan (FAP) that emphasized work above all else. Even though the FAP failed to be passed into law, its structure and delivery mechanism were incorporated into the EITC creating a "welfare benefit" which was un-stigmatized as a payment for work. The working poor, under Nixon's FAP, would receive benefits that contained similar subjective societal norms as "welfare," whereas the EITC was viewed as an income supplement to a deserving segment of the population, particularly the working single mom (Hotz & Scholz, 2003; Steensland, 2006). In the early 1970s, Congress viewed the EITC as an alternative to conventional welfare (Ventry Jr., 2000). By 1977, under then President Jimmy Carter, officials recognized the significant anti-poverty and anti-welfare potential of EITC. In 1978, the EITC became part of the Internal Revenue Code and has received some minor enhancements throughout its existence (Internal Revenue Service, 2012). Throughout its history, the EITC embodied the vision that it would move individuals into paid employment (Ventry Jr., 2000). According to Congress, its original tenets were to provide an incentive for low income people to work, thereby reducing welfare dependency and inducing individuals with families to support themselves (U.S. Congress, 1975).

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Eligibility requirements for single and married filers remained identical until 2001, when married couples became eligible for larger benefits than single filers. In 2009, as part of the American Recovery and Reinvestment Act, the program was expanded to provide additional benefit for filers with three or more qualifying children and eligibility for married couples was increased (Athreya, Reilly, & Simpson, 2010). In 2010, an estimated 5.4 million people, roughly half of them children, were lifted out of poverty by the EITC program (U.S. Census Bureau, 2011). For tax year 2012, the maximum EITC credit was $5,891 for filers with three or more qualifying children, $5,236 for filers with two qualifying children, $3,169 for filers with one qualifying child, and $475 for filers with no qualifying children. Currently, income eligibility standards are set so that individuals or families, adjusted for household size, with income below 175% of the federal poverty threshold are eligible for the EITC (Lim, DeJohn, & Murray, 2012). Regardless of the number of children in the household, the EITC requires the tax filer to have earned income throughout the year providing a work incentive (Hotz & Scholtz, 2003). However, due to the complicated structure of household size and income structure, Hotz and Scholtz noted that "the overall effect of the EITC on hours of work is ambiguous" (p. 160). The objective of this study is to use the Theory of Planned Behavior to determine what factors are associated with people successfully transitioning off of EITC qualification status (i.e., improving their economic situation).

Theory of Planned Behavior

Individuals in many cases have the intention to change their behavior, but often fall short of their goals. The Theory of Planned Behavior (TPB) (see Ajzen, 1991) is frequently used to explain such patterns and better understand how individuals make behavioral decisions (Xiao, 2008). Ajzen indicated that the precedent of any behavior is the formation of an intention towards that behavior. Intentions are based on a "person's attitude toward the behavior, the subjective norm, and the relative importance between the attitude and the subjective norm" (Xiao, 2008, p. 73). Attitudes are described as whether individuals believe engaging in a certain behavior is good or bad, whereas subjective norms are characterized by how individuals perceive whether society believes engaging in a certain behavior is good or bad. Perceived control is defined as whether individuals believe they are capable of changing their behavior. If attitudes and subjective norms indicate individuals should change their behavior, intention will be high and behavior change is likely to occur. However, the amount of perceived control can negate those beliefs, thereby reducing intentions and the likelihood of behavior change. See Figure 1 for a visual aid of the Theory of Planned Behavior.

Attitudes. TPB suggests that attitude is an important component that informs the intention to engage in a behavior. Attitude towards behavior is based on an evaluation of an individual's positive or negative feelings about executing the behavior. The more favorable the attitude towards the performance of the behavior is, the higher the intention will be to carry it out (Ajzen, 1991). Time preference is the extent to which individuals would be willing to delay immediate gratification from consumption (Manturuk et al., 2012). Although it can be measured in different ways it is generally assumed that time

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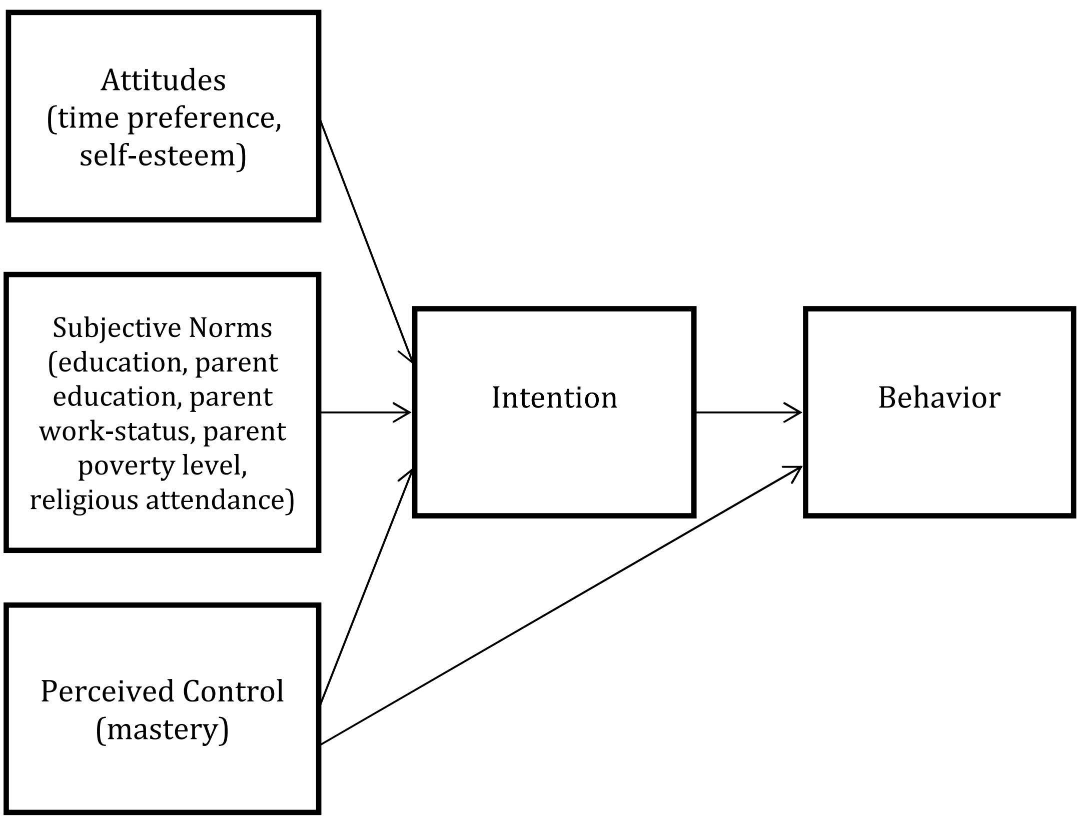
preference is invariant with different goods or services in different points of time (Manturuk et al., 2012). An individual's time preference has been linked to saving behavior and can be expressed as an attitude because the perception of time is strongly linked to our subjective well-being and varies considerably depending on emotional state (Wittman & Paulus, 2007). According to Manturuk and associates (2012), matched savings programs can significantly influence the propensity to save in low-income households by helping a long-term goal appear more quickly attainable. The impact of time preference on saving in matched savings programs such as IDA (Individual Development Accounts), was indicated by participants with lower discount rates saving more in the first year and were more likely to complete the program than those with a higher discount rate (Manturuk et al., 2012). Hershey and Mowen (2000) found that a strong future orientation positively impacted financial planning and retirement preparedness. These are both considerable aspects of improving one's financial status or an indication of financial self-sufficiency.

Figure 1. Theory of Planned Behavior



An EITC recipient's self-esteem is often affected by the emotional "costs" of receiving a government benefit. In a study using Survey of Income and Program Participation (SIPP) data, Manchester and Mumford (2010) identified the "welfare stigma" as having two components regarding receipt of government benefits: (a) the recipient's personal feelings (internal) and (b) societal or subjective norms (external). According to Manchester and Mumford, one effect of receiving public assistance is the "internal" or self-

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inflicted stigma usually represented by decreased self-esteem and self-efficacy due to the recipient's knowledge of their reliance on government assistance, even if others around them are unaware. Similar findings have been reported by Greene (2012) in a qualitative research survey of 194 EITC-eligible recipients. Greene (2012) found that respondents experienced a lack of independence when receiving welfare, in contrast to positive self-esteem when being employed and receiving the EITC payment.

Perceived Control. Ajzen (1991) defined perceived behavioral control as the ease or difficulty in performing a behavior taking into account past experiences and future obstacles that need to be overcome to perform the behavior. Belief in the ability to perform the behavior increases the likelihood that the behavior will be executed. Additionally, a belief in the ability to perform a behavior increases the likelihood that someone will exert the effort and persevere to execute a particular behavior (Ajzen, 2002; Bandura & Locke, 2003). Self-mastery is a common measure of the perceived control an individual has over their life as measured by Pearlin and Schooler's (1978) Personal Mastery Scale.

Summary

Family economic conditions in early childhood have the greatest impact on achievement especially in low income families (Duncan et al., 1998). It is expected that individuals who grew up in poverty will have a greater likelihood to continue qualifying for the EITC. It is also expected that individuals with future-oriented time preference will take the necessary steps to reduce their usage of the EITC, since they have higher attitude-intention consistency and a stronger attitude toward saving (Rabinovich, Morton, & Postmes, 2010). Individuals with higher self-esteem are associated with an increased likelihood of improved net worth (Chatterjee, Finke, & Harness, 2009), so it is expected that those with higher self-esteem would be more likely to transition off the EITC by no longer meeting the qualifications through increased income/assets. Finally, it is expected that individuals who demonstrate higher perceptions of control in life events, will be more likely to move beyond EITC qualification standards (Perry & Morris, 2005).

METHODS

Data

Data for this study was taken from the National Longitudinal Survey of Youth, 1979 cohort (NLSY79). The NLSY79 is a nationally representative sample of 12,686 young men and women who were interviewed on an annual basis from 1979 through 1994 and are currently interviewed on a biennial basis. The longitudinal nature of this survey allows for the information to be combined from both a respondent's childhood and more recent time periods.

Dependent Variable

In investigating the EITC, care must be taken to mitigate the effect of legislation and changes in EITC qualification standards when attempting to observe and compare

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individual's behavior over time. Of particular note are significant changes in the EITC qualification standards, which came into effect in 2003 (see Athreya et al., 2010). Therefore, the data that was utilized was related to receipt of the EITC in 2003 and 2007 in order to mitigate the impact of program changes on observed behavior.

Respondents must first have reported earned income and filed a tax return in 2003 and 2007 to be included in the sample. Furthermore, since the present study seeks to investigate an individual's ability to better their financial situation, as measured by moving past EITC qualification standards, the population and sample was limited to respondents who reported receiving the EITC in 2003. Next, respondents must have reported a dependent child in both 2003 and 2007 to help maintain consistent EITC qualification standards. The income qualification from no children to one child is quite significant (maximum earned income of $11,490 with no children in 2003 versus maximum earned income of $31,338 for one child), but not as large when moving from one child to two children (maximum earned income of $35,458 for more than one child in 2003). A final sample size of 178 was found to meet these eligibility requirements. Those who qualified in 2003, but not in 2007 were coded as 1 representing a positive event of loss of EITC qualification (i.e., they had an income improvement). Those who qualified in 2003 and 2007 were coded as 0 representing sustained use of EITC (i.e., no significant income improvement). While this final sample was reduced significantly from the original sample size, our population of interest is reflective of this small percentage.

The flow chart in Figure 2 illustrates the construction of the dependent variable. It should be noted that it is quite possible that an individual has improved their financial situations considerably, but not enough to exceed the qualification limits. The current study does not have the ability to recognize this success, and is driven by movement above the policy driven threshold of EITC qualification.

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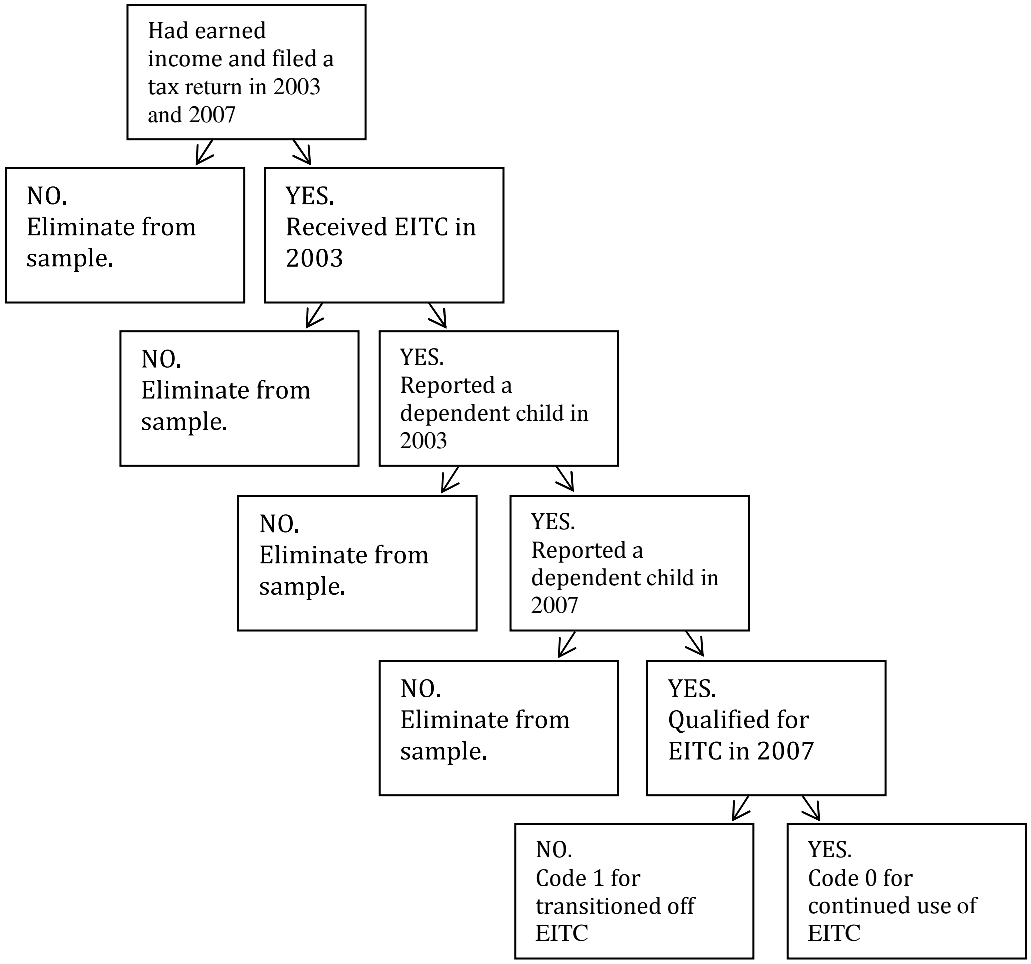
Figure 2. Construction of dependent variable



Independent Variables

The independent variables were designed to proxy the theoretical concepts of attitudes, subjective norms, and perceived control according to the Theory of Planned Behavior (Ajzen, 1991). There were limitations present due to the constraint of available data contained within the survey, but the following variables were identified to best proxy these concepts.

Attitudes. Conceptually, attitude is a measure of an individual's positive or negative feelings related to a behavior, with more favorable views associated with an increased likelihood of exhibiting a given behavior (Ajzen, 1991). Ideally, these measures are specific to the behavior investigated, but information related to attitudes towards the EITC was not directly gathered in the NLSY79. Therefore, two variables were identified in the literature review as attitudes associated with the likelihood of an individual's financial self-improvement to serve as proxies: time preference and self-esteem. Specifically, individuals with future-oriented time preference demonstrate higher attitude-intention consistency (Rabinovich et al., 2010) and individuals with higher self-esteem have an increased

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likelihood of financial improvement as measured by higher net worth (Chatterjee et al., 2009).

Time preference was measured utilizing a series of questions that investigated the premium, in terms of additional dollars a respondent would need to be willing to wait a year to receive a $1,000 payment. Respondents were asked to indicate a dollar amount to the following question:

> Suppose you have won a prize of $1,000, which you can claim immediately. However, you can choose to wait one year to claim the prize. If you do wait, you will receive more than $1,000. What is the smallest amount of money in addition to the $1,000 you would have to receive one year from now to convince you to wait rather than claim the prize now?

This premium was converted into an annual percentage return by dividing it by 1,000, with lower percentages associated with longer time preferences.

Self-esteem was measured using Rosenberg's self-esteem scale (Rosenberg, 1965). Respondents were asked to indicate how strongly they agreed with a list of 10 statements, such as (a) I feel that I'm a person of worth, (b) I am inclined to feel like a failure (reverse coded), and (c) I am satisfied with myself. Scores can range from 0 to 30. The reliability of the items as a scale was good with a Cronbach's alpha of .89. For purposes of this study, we were interested in respondents with very high self-esteem (which has been cited as a score of greater than 25; Norton, n.d.) compared to all other respondents.

Subjective Norms. Subjective norms are a measure of the social pressures associated with the performance of a behavior, indicating that individuals tend to do what those around them are doing (Ajzen, 1991). Our review of literature indicated that parental influences and an individual's financial situation in childhood were quite strong in influencing an individual's behavior through establishing subjective norms. Consequently, measures of the norms generated in an individual's childhood (parental educational level, work status, and poverty status) were used to proxy subjective norms towards financial self-sufficiency. Information related to individuals' childhood environment was found in the original 1979 survey of the NLSY79. Given concerns related to missing data, information from both sets of parents was synthesized to provide single measures of the highest educational attainment level (in years) and work status (parent worked full time). Lastly, an individual's poverty status in 1979 was included to proxy an individual's family financial environment, and hypothetical EITC qualification, as a child. Family economic conditions in early childhood have the greatest impact on achievement, especially in low income families (Duncan et al., 1998). It is expected that the combination of these measures will be representative of the norms established during a respondent's youth.

It should be noted that many of the factors often associated with socio-economic status that would serve as a proxy for subjective norms are inherently controlled for in the qualification standards of EITC, such as income and family status. Consequently, these measures could not be included, but an individual's educational attainment level was

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employed to serve as a proxy for an individual's socio-economic status. Lastly, a measure of an individual's religiosity was included, as our literature review indicated that religious beliefs play a large role in shaping an individual's perception of behaviors.

Perceived Behavioral Control. The Pearlin Mastery Scale was utilized to proxy perceived behavioral control (Pearlin, Lieberman, Menaghan, & Mullan, 1981). The specific items include the following: (a) there is really no way I can solve some of my problems (reverse coded), (b) I am being pushed around in my life (reverse coded), (c) I have little control over the things that happen to me (reverse coded), (d) I can do anything I set my mind to, (e), I am helpless in dealing with the problems of life (reverse coded), (f) What happens to me in the future depends on me, and (g) There is little that I can do to change the important things in my life (reverse coded). The responses options were (a) strongly disagree, (b) disagree, (c) agree, and (d) strongly agree with scores ranging from 7 to 28. It is expected that individuals who demonstrate higher perceptions of control in life events, as evidenced by higher Pearlin Mastery Scale scores, will be more likely to achieve financial self-sufficiency (Perry & Morris, 2005). The scale was reliable with this sample with a Cronbach's alpha of .82.

Control Variables

Several control variables were added to isolate the potential effects of differing qualification standards based on changes in a households composition between 2003 and 2007. Specifically, income caps for the EITC vary based on a households filing status (either head of household of married filing jointly) and the number of dependents (up to 3). Therefore, measures of changes in marital status and number of dependents were included. Lastly, respondents' gender was included as a control variable.

Statistical Analysis

Logistic regression analysis was used to identify the factors associated with an increased likelihood of financial self-sufficiency, as measured by moving beyond the qualification of the EITC. This model allows for investigation in accordance with the framework laid out by TPB.

RESULTS

Descriptive Results

The sample was slightly biased toward females (64%), but fairly evenly split between those who were married throughout the testing time frame (47%) and single throughout the time frame (44%). Slightly less than 4% of the sample was married in time 1 (2003), but single in time 2, and 5% was single in time 1, but married in time 2 (2007). Slightly over half of the sample (52%) did not have changes to their number of dependents, while 13% had more dependents in time 2 and 35% had fewer dependents in time 2.

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Approximately 38% of the sample was able to eliminate usage of the Earned Income Tax Credit (EITC) between 2003 and 2007. There was not a strong time preference division among the sample. One quarter of the sample expressed a very high level of self-esteem. Respondents had, on average, 12 years of formal education, while their parents had, on average, one year less of education. When respondents were living in the household, at least one parent was working full-time for 72% of the sample. Twenty-six percent of the sample grew up in a poverty status, according to state standards. Almost half, over 46% of the sample attends religious groups more than weekly (24%) or weekly (22%). Another quarter of the sample attends religious groups on a monthly basis (26%), almost 19% attend a few times a year, and 10% never attend religious groups. Respondents were slightly more oriented toward higher personal mastery (M = 21.35, Range = 10 to 28). See Table 1 for full descriptive results.

Regression Results

The results indicate that the Theory of Planned Behavior is only marginally useful in predicted reduced usage of the Earned Income Tax Credit (EITC) or improved financial status as shown in Table 2. Perceived control, as measured by mastery, was marginally significant with a p-value of .066 (B = 0.10, e^B = 1.11), although this may be a result of the small sample size. As respondents felt more control and confidence in their behavior, the more likely they were to improve their financial situation holding all else equal. The proxies used for attitudes and subjective norms were not statistically significant in predicting eliminated use of the EITC.

Males were more likely to reduce their use of the EITC (B = 0.80, p < .05, e^B = 2.22) as were respondents who were married in both time frames (B = 1.11, p < .01, e^B = 3.04) and respondents who were single in time 1, but married in time 2 (B = 1.97, p < .05, e^B = 7.15). In terms of contribution to the model (as measured by standardized beta), getting married and staying married are most influential in determining if respondents will eliminate their usage of the EITC, followed by being male and having higher personal mastery scores.

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Table 1
Characteristics as a percentage or mean (standard deviation) of the sample

Characteristic	Full Sample (*n* = 176)	Remained on EITC (*n* = 110)	Lost EITC eligibility (*n* = 66)
Attitudes			
Time preference	0.5 (0.2)	0.5 (0.3)	0.5 (0.2)
Have high self-esteem	25.3	23.4	28.4
Subjective Norms			
Years of education	12.0 (2.3)	11.86 (2.03)	12.3 (2.6)
Parental years of education	10.5 (3.6)	10.34(3.48)	10.8 (3.7)
Parent(s) worked full-time	72.5	71.17	74.6
Grew up in poverty	25.8	29.73	19.4
Attend religious group > weekly	24.2	26.13	20.9
Attend religious group weekly	21.9	20.72	23.9
Attend religious group monthly	25.8	25.13	25.4
Attend religious group few times/yr	18.5	18.92	17.9
Never attend religious group	9.6	8.11	11.9
Perceived Control			
Mastery	21.6 (3.3)	21.0 (3.4)	22.0 (3.0)
Control Variables			
Male	36.0	27.9	49.3
Married throughout	46.6	37.8	61.2
Single throughout	44.4	55.0	26.9
Was married; now single	3.9	4.5	3.0
Was single; now married	5.1	2.7	9.0
Same number of dependents in 2008	51.7	48.7	56.7
More dependents in 2008	12.9	13.5	11.9
Fewer dependents in 2008	35.4	37.8	31.3

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Table 2
Summary of logistic regression analysis for variables predicting loss of eligibility for EITC in 2008 (n = 178)

	Mother		
Predictor	*B*	*SE B*	e^B
Attitudes			
Time preference	-.77	-.10	.46
Have high self-esteem	-.27	-.07	.76
Subjective Norms			
Years of education	.09	.11	1.09
Parental years of education	.02	.03	1.02
Parent(s) worked full-time	.08	.02	1.08
Grew up in poverty	-0.49	-.12	.61
Religious attendance	0.02	.02	1.02
Perceived Control			
Mastery	.10†	.19	1.11
Control Variables			
Male	.80*	.21	2.22
Married throughout	1.11**	.31	3.04
Was married; now single	.45	.05	1.58
Was single; now married	1.97*	.24	7.15
More dependents in 2008	-.31	-.06	.73
Fewer dependents in 2008	-.34	-.06	.78
Constant	-1.05		
χ^2		29.52	
df		14	
% concordant		73.9	

Note: e^B = exponentiated B.
*†p < .10. *p < .05. **p < .01. ***p < .001.*

DISCUSSION

According to the Theory of Planned Behavior, the more individuals believe they possess the requisite resources to perform a behavior, the greater their perceived control over the behavior (Madden, Ellen, & Ajzen, 1992). If there is a low perceived control over the target behavior (financial self-sufficiency), then the intention to perform the behavior will be low even if individuals have favorable attitudes and subjective norms concerning the execution of the behavior. According to Bandura, Adams, Hardy, and Howells (1980), behavior is strongly influenced by confidence in individuals' ability to perform the behavior. While some evidence was generated, suggesting that individuals with low feelings of mastery were less likely to move above EITC qualification standards in accordance with theory, this relationship was only marginally significant with a p-value of .066. This lack of significance may be driven by a relatively small sample size, as well as the use of a more general measure of perceived behavior control as applied to a specific behavior. However, given the relatively small sample size, it may be appropriate to apply a

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90% confidence level standard. Additionally, given the directional hypothesis related to this test, it may be appropriate to employ a one-tailed t-test, which would provide a statistically significant p-value of .033.

No significant relationship was found between the transition beyond EITC qualification standards and any of the measures of attitude and subjective norms. No relationship was found between religiosity and ETIC qualification, but this might have been due to how religiosity was measured. While religiosity would be best measured as a magnitude of belief, the data available only provided for an indirect measure of belief through the number of religious groups attended. It was also expected that time preference would be significant predictor of financial self-sufficiency with a more future-oriented preference resulting in actions to avoid continued use of the EITC. The measure of how long one would be willing to wait to receive money may not be an optimal proxy for attitude towards EITC qualification. Lastly, those with higher levels of education were expected to be more likely to be able to transition beyond EITC qualification standards. However, no relationship was found between education attainment and movement beyond EITC standards. It should be noted that this could be due to the limited variation in education level of the sample.

A couple of additional factors were found to be associated with transitioning off the EITC including (a) getting married or staying married and (b) being male. Given the role that financial therapists often play in their clients' lives, it is interesting to note that marital status and gender are the best indicators of who is likely to transition off of the EITC.

Limitations and Future Directions

Ideally, measures of an individual's attitudes, subjective norms, and perceived behavior control as they specifically relate to EITC utilization would have been utilized. Given the data available, more general measures were utilized, which may have led to poor model performance. Furthermore, although movement above EITC qualification is a policy important shift, it is a somewhat arbitrary threshold upon which to measure success. It is quite possible that an individual improved their financial situations considerably, but that this improvement may not have yet brought them above the EITC qualification standards. Additionally, although the sample size was adequate to conduct the analyses presented, it was smaller than what would be optimally desired. A future investigation using a larger sample may allow the TPB to perform better in investigating EITC recipients' behavior.

Given these limitations, future research could employ a mixed-methods approach using qualitative research to gather more direct measures of these variables. This would provide for a more direct test of the Theory of Planned Behavior and provide the opportunity to include an evaluation of qualitative information.

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Implications

A high degree of mastery (feeling in control) was found to be influential in transitioning off of EITC usage, in alignment previous findings which demonstrate that higher perception of control over life events will more likely result in increased financial achievement (Perry & Morris, 2005). Giving clients the opportunity to demonstrate that they can be successful with their personal finances will help build mastery. This may be accomplished through The Ford Financial Empowerment Model (FFEM), which integrates financial education and skill building with relational therapies that can be used with individuals with financial empowerment issues (Ford, Baptist, & Archuleta, 2011). When individuals feel confident, motivated, and competent in dealing with their financial life, they become empowered and are more likely to take initiatives, feel accomplished, and successful (Ford et al., 2011). Another potential alternative is Collaborative Relational Financial Therapy (CRFT). Especially designed for low-income populations, CRFT is a five-step intervention model, involving a financial planner and family therapist who work together to address relational and financial issues (Seay, Goetz, & Gale, 2015). This process was well received initially by the male participants because the term financial therapy was less stigmatizing than therapy. This is an example that illustrates the transition from financial planning to financial therapy where the client's emotional and cognitive thoughts around money were addressed as in integral part of the financial planning process.

Evidence was also generated to suggest that marital status and gender are very important in the ability to achieve economic improvement, as measured by movement beyond EITC qualification standards. Respondents who were married consistently throughout the time period, or who got married, were more likely to transition off of the EITC. This may imply that a marital relationship is an important influencer of financial self-sufficiency and emphasizes the need for further research that focuses on the links between a marital union and financial management skills. Overall, this result clearly supports the principles of financial therapy and highlights the financial advantages of facilitating and supporting heathy marriages. Furthermore, given the limited success noted by single householders transitioning towards financial self-sufficiency, policymakers might consider future EITC program regulations that would provide increased incentives for single tax filers who qualify for the EITC.

CONCLUSION

Clients have a need for integrated services that incorporate mental health and financial issues (Archuleta et al., 2012). In a study by Aniol and Snyder (1997), one-third of couples seeking marital therapy identified financial difficulties as a problem in their relationship and one-third of couples seeking financial counseling were facing relationship issues. Finances can be the cause of disagreements in couples (Kim, Gale, Goetz, & Bermudez, 2011) and disagreements about money were more intense, more frequent, and longer lasting than arguments about other topics (Papp, Cummings, & Goeke-Morey, 2009). Additionally, Britt, Huston, and Durband (2010) found that communication deficiencies among couples were a greater predictor of money arguments than the level of available resources. This is especially important because people have difficulty communicating about

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money. People often marry without knowing about their spouse's debt or how much their partner is spending (Trachtman, 2015). Communication deficiencies among couples can be corrected by providing couples the proper skills and tools necessary to address their issues. This is especially relevant since being married and staying married depends on good communication skills and being married and staying married increases the likelihood that couples will successfully transition to financial self-sufficiency.

Aniol and Snyder (1997) suggested that financial counselors and marital therapists should possess basic understanding of both disciplines so that they can effectively help clients who present relational and financial issues. In addition, the role of the financial professional is changing. Dubofsky and Sussman (2009) found that 89% of financial planners participating in their study had engaged in coaching or counseling on non-financial topics. Kinder and Galvan (2007) emphasized the importance of being trained to deal with clients' emotional relationship with money to better help clients feel comfortable about sharing financial information. This is especially important because people still find that money is a forbidden topic that should be kept private. Financial therapists would be uniquely qualified to help clients open up about money, talk about their experiences with it, and identify any problematic issues that might be keeping them from dealing with money successfully (Archuleta et al., 2012).

Overall, this study provided a theoretically-based investigation of individuals' behavior related to the EITC, the largest tax credit available to assist low-income families in need. While results were limited, they serve to reinforce the need for financial therapists. Furthermore, evidence was generated to suggest that financial therapists can actively improve their client's financial outcomes, as related to the EITC, through working to build clients' personal mastery and sense of control.

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REFERENCES

Aniol, J. C., & Snyder, D. K. (1997). Differential assessment of financial and relationship distress: Implications for couples therapy. *Journal of Marital and Family Therapy*, *23*(3), 347-352.

Archuleta, K. L., Burr, E., Dale, A. K., Canale, A., Danford, D., Rasure, E.,…Horwitz, E. (2012). What is financial therapy? Discovering the mechanisms and aspects of an emerging field. *Journal of Financial Therapy, 3*(2), 57-78. http://dx.doi.org/10.4148/jft.v3i2.1807

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. http://dx.doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control and the theory of planned behavior. *Journal of Applied Social Psychology, 32*(4), 665-683. http://dx.doi.org/10.1111/j.1559-1816.2002.tb00236.x

Athreya, K. B., Reilly, D., & Simpson, N. B. (2010). Earned income tax credit recipients: Income, marginal tax rates, wealth, and credit constraints. *Economic Quarterly - Federal Reserve Bank of Richmond, 96*(3), 229-258.

Bandura, A., & Locke, E. A., (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology, 88*(1), 87-99. http://dx.doi.org/10.1037/0021-9010.88.1.87

Bandura, A., Adams, N.E., Hardy, A. B., & Howells, G. N. (1980). Tests of the generality of self-efficacy theory. *Cognitive Therapy and Research, 4,* 39-66.

Beverly, S., Tescher, J., Romich, J., & Marzahl, D. (2005). Linking tax refunds and low-cost bank accounts to bank the unbanked. In M. Sherraden (Ed.), *Inclusion in the American dream: Assets, poverty, and public policy* (pp.167-184). New York, NY: Oxford University Press.

Chatterjee, S., Finke, M., & Harness, N. (2009). Individual wealth management: Does self-esteem matter? *Journal of Applied Business and Economics*, *10*(2), 11-24.

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology, 19*(2), 294-304. http://dx.doi.org/10.1037/0893-3200.19.2.294

Dubofsky, D., & Sussman, L. (2009). The changing role of the financial planner part 1: From financial analytics to coaching and life planning. *Journal of Financial Planning*, 48-57.

Duncan, G. J., Brooks-Gunn, J., Yeung, W. J., & Smith, J. R. (1998). How much does childhood poverty affect the life chances of children? *American Sociological Review, 63*(2)*,* 406-423. http://dx.doi.org/10.2307/2657556

Ford, M. R., Baptist, J. A., & Archuleta, K. L. (2011). A theoretical approach to financial therapy: The development of the Ford Financial Empowerment Model. *Journal of Financial Therapy, 2*(2), 20-40. http://dx.doi.org/10.4148/jft.v2i2.1447

Greene, S. S. (2012). The broken safety net: A study of earned income tax credit recipients and a proposal for repair. *New York University Law Review*. Forthcoming. Available at SSRN: http://ssrn.com/abstract=2134578

Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist, 40*(6)*,* 687-697.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The

ISSN: 1945-7774

connection between knowledge and behavior. *Federal Reserve Bulletin,* July: 309-322.
Holden, K. (2010). Theories of human behavior and emotions: What they imply about the financial behavior of vulnerable populations. University of Wisconsin Center for Financial Security, CFS Issue Brief 2010-4, Madison, WI: University of Wisconsin Madison.
Hotz, V. J., & Scholz, J. K. (2003). The earned income tax credit. In R. A. Moffitt, *National Bureau of Economic Research means-tested transfer programs in the United States* (pp. 141-197). Chicago: University of Chicago Press. Retrieved from http://www.nber.org/chapters/c10256.pdf.
Internal Revenue Service. (2012). *EITC Statistics.* Retrieved from http://www.eitc.irs.gov/central/eitcstats/
Kahler, R. S. (2005). Financial integration: Connecting the client's past, present, and future. *Journal of Financial Planning*, *18*(5), 62-71.
Kim, J. H., Gale, J., Goetz, J., & Bermudez, J. M. (2011). Relational financial therapy: An innovative and collaborative treatment approach. *Contemporary Family Therapy*, *33*, 229-241.
Klontz, B., & Klontz, T. (2009). *Mind over money: Overcoming the money disorders that threaten our financial health*. New York, NY: Crown Business.
Lim, Y., DeJohn, T. V., & Murray, D. (2012). Free tax assistance and the earned income tax credit: Vital resources for social workers and low-income families. *Social Work, 57*(2)*,* 175-184. http://dx.doi.org/10.1093/sw/sws035
Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin 18*(1), 3-9.
Malka, A., Soto, C. J., Cohen, A. B., & Miller, D. T. (2011). Religiosity and social welfare: Competing influences of cultural conservatism and prosocial value orientation. *Journal of Personality, 79*(4), 763-792. http://dx.doi.org/10.1111/j.1467-6494.2011.00705.x
Manchester, C., & Mumford, K. (2010). Welfare stigma due to public disapproval. Working Paper. Retrieved from http://documents.apec.umn.edu/ApEcSemSp2010Manchester%20paper.pdf
Maton, C. C., Maton, M., & Martin, W. M. (2010). Collaborating with a financial therapist: The why, who, what, and how. *Journal of Financial Planning*, *23*(2), 62-70.
Manturuk, K., Dorrance, J., & Riley, S. (2012). Factors affecting completion of a matched saving program: Impacts of time preference, discount rate, and financial hardship. *The Journal Socio-Economics*. http://dx.doi.org/10.1016/j.socec.2012.08.006
McBride Murry, V., Brody, G. H., Brown, A., Wisenbaker, J., Cutrona, C. E., & Simons, R. L. (2002). Linking employment status, maternal psychological well-being, parenting, and children's attributions about poverty in families receiving government assistance. *Family Relations, 51*, 112-120.
Neustadt, I. (2011). Do religious beliefs explain preferences for income redistribution? Experimental evidence. *CESifo Economics Studies, 57*(4), 623-652. http://dx.doi.org/10.1093/cesifo/ifr002

ISSN: 1945-7774

Papp, L. M., Cummings, E. M., & Goeke-Morey, M. C. (2009). For richer, for poorer: Money as a topic of marital conflict in the home. *Family Relations*, 58, 91-103.
Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*(1), 2-21. http://dx.doi.org/10.2307/2136319
Pearlin, L. I., Liebernam, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22*(4), 337-356. http://dx.doi.org/10.2307/2136676
Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self perception, knowledge, and income in explaining consumer financial behavior. *The Journal of Consumer Affairs, 39*(2), 299-313. http://dx.doi.org/10.1111/j.1745-6606.2005.00016.x
Prawitz, A. D., Kalkowski, J. C., & Cohart, J. (2012). Responses to economic pressure by low-income families: Financial distress and hopefulness. *Journal of Family Economics*. http://dx.doi.org/10.1007/s10834-012-9288-1
Rabinovich, A., Morton, T., & Postmes, T. (2010). Time perspective and attitude-behaviour consistency in future-oriented behavior. *British Journal of Social Psychology, 49*(1), 69-89. http://dx.doi.org/10.1348/014466608X401875
Renneboog, L., & Spaenjers, C. (2011). Religion, economic attitudes, and household finance. *Oxford Economic Papers, 64*(1), 103-127. http://dx.doi.org/10.1093/oep/gpr025
Rosenberg, M. (1965). *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.
Scheve, K., & Stasavage, D. (2006). Religion and preferences for social insurance. *Quarterly Journal of Political Science, 1*(3), 255-286. http://dx.doi.org/10.1561/100.00005052
Seay, M. C., Goetz, J. W., & Gale, J. (2015). Collaborative relational model. In Klontz, Britt, & Archuleta (Eds.), *Financial Therapy Theory, Research, and Practice*. (pp. 161-172).
Simpson, N. B., Tiefenthaler, J., & Hyde, J. (2010). The impact of the earned income tax credit on economic well-being: A comparison across household types. *Population Research and Policy Review, 29*(6), 843-864. doi: 10.1007/s11113-009-9170-5
Smeeding, T. M., Phillips, K. R., & O'Connor, M. (2000). The EITC: Expectation, knowledge, use, and economic and social mobility. *National Tax Journal, 53*(4), 1187–1209. http://dx.doi.org/10.2139/ssrn.186690
Steensland, B. (2006). Cultural categories and the American welfare state: The case of guaranteed income policy. *American Journal of Sociology, 111*(5), 1273–1338. http://dx.doi.org/10.1086/499508
Trachtman, R. (2015). Psychodynamic financial therapy. In Klontz, Britt, & Archuleta (Eds.), *Financial Therapy Theory, Research, and Practice* (pp. 285-301).
Turnham, J. (2010). Attitudes to savings and financial education among low-income populations: Findings from the financial literacy focus groups. *Center for Financial Security WP 10*, 7.
U.S. Census Bureau. (2011). Income, Poverty, and Health Insurance Coverage: 2010. Retrieved from http://www.census.gov/prod/2011pubs/p60-239.pdf
U.S. Congress. House. Committee on Ways and Means. *Tax Reduction Act of 1975.* House Report No. 94-19. February 26, 1975. Washington, D.C.: GPO, 1975.
Ventry, Jr. D. J. (2000). The collision of tax and welfare politics: The political history of the Earned Income Tax Credit, 1969-1999. *National Tax Journal, 53*(4), 983-1026.
Wittman, M., & Paulus, M. P. (2007). Decision making, impulsivity, and time perception.

ISSN: 1945-7774

Trends in Cognitive Sciences, 12(1), 7-11.
Xiao, J. J. (2008). Applying behavior theories to financial behaviors. In J. J. Xiao (Ed.), *Handbook of Consumer Finance Research* (pp. 69-81). New York, NY: Springer.

ISSN: 1945-7774