

Post-Release Financial Behavioral Intentions of Transitional Center Participants

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There are numerous factors associated with successful reentry, but one that has not yet been addressed is financial behavior after release. This study used a primary data set collected in the fall of 2017. The theory of planned behavior was applied to investigate post-release financial behavioral intentions of men and women approaching return to society via a work release program in Georgia. Support for the theory of planned behavior was identified; attitude, subjective norms, and perceptions of behavioral control are significant predictors of financial intentions for this sample. Length of incarceration was the most important aspect of incarceration history. Innovative use of a control variable indicated that socially desirable response patterns about key variables were not confounding. This research is valuable to practitioners and policy makers in that it provides insight into planned financial behaviors that could affect the success of the individual's reentry back into society, and it fortifies prior evidence that the theory of planned behavior is a useful analytical framework.

Keywords: financial intentions, financial knowledge, incarcerated, reentry, social desirability, theory of planned behavior

Introduction

Crimes are committed for numerous reasons. Many of those who commit crime are found guilty and incarcerated. In most situations, the offenders will complete their sentences and subsequently be released back into society. Then arises the question, is the offender prepared to return to society? There is a fairly large literature base concerning factors that influence recidivism, but the role of financial management has rarely been considered. This study obtains evidence that the broad patterns of influence from attitudes, subjective norms, and perceptions of control on financial intentions among the general population also apply to the special population investigated here, which solidifies the value of a widely used theoretical framework. Furthermore, the study innovates by accounting for the potential confounding influence of socially desirable survey responses about financial behavior intentions.

The research question “How do aspects of incarceration history influence financial intentions?” guided this study. Key independent variables included individuals’

total years of incarceration, the type of crime, and the number of incarcerations to understand their associations with post-release financial intentions. Other independent variables were selected on the basis of the theory of planned behavior (TPB). The constructs of this theory are attitudes, norms, and perceived behavioral control (PBC).

TPB suggest one’s attitudes—the positive or negative way one feels about a certain behavior, subjective norms one derives based on interactions with friends and family about whether they would be supportive of the behavior, and PBC all influence intentions to conduct such behavior (Ajzen, 1991). TPB has the potential to guide research that will assist educators and corrections professionals to understand what training and which types of offenders to target to facilitate successful reentry into society. Georgia Transitional Center Participants (TCP) provided survey responses to questions about their demographics, incarceration history, financial intentions, attitudes, norms, and perceptions of behavioral control.

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Over 2.1 million people were incarcerated in American state and federal prisons as of the end of 2016 (Kaeble & Cowhig, 2018). Incarcerated individuals are unable to have regular contact with their bank or credit union, loans, and savings and investment products. If they have money on their accounts, prisoners can use those funds for telephone calls, vending machines, and the “commissary” where purchases of letter writing materials, hygiene items, and other miscellaneous purchases can be made (Prison Pro, n.d.). Cell phones are forbidden in prisons around the country (Roose & Harshaw, 2015) and very few incarcerated men and women are allowed any internet access (Branstetter, 2015). The lack of ease in connecting with the outside world severely detracts from one’s ability to remain up-to-date on available financial products and services.

Prison sentences range in length from 1 year to more than 30 years. Time spent incarcerated may detract from one’s perception of control over their own life due to having little control within the prison walls. Additionally, sentences served reflect time in which prisoners are away from family and friends as well as financial products and services. As financial products and services expand and change, the day-to-day understanding of what to do and how to do it may decrease due to lack of exposure. This lack of exposure may also impact an offender’s attitudes, subjective norms, and self-efficacy and self-control regarding financial matters.

Recent research indicates that offenders with more serious offense histories had a more distinct attitude change on the Criminal Sentiments Scale—Modified (CSS-M), a self-report instrument that measures attitudes related to criminal activity Simourd et al., 2016. Their study found that after participating in a criminal attitude treatment program (CAP), there were statistically significant mean changes in criminal attitudes, more specifically, a reduction in criminal attitude. Additionally, Simourd et al. (2016) determined that the CAP was effective in increasing an offender’s willingness to change. Exposure to varying types of education while incarcerated may also influence attitude. For example, financial attitudes of TCP changed positively after a financial education course (Mielitz, MacDonald, & Lurtz, 2018b). The number of times one has been incarcerated may, in particular, influence subjective norms due to time away from nonincarcerated friends and family and the offender expanding their social circle within the prison walls. Perceptions of control may also be influenced, due to

the lack of control experienced time and time again while incarcerated. Thus, the experience of incarceration itself may have an impact on attitudes, subjective norms, perceptions of control, and intentions.

Intentions are accurate predictors of behavior when control of personal behavior is not a serious concern (Ajzen, 1991). TPB has been used in studies regarding criminal behavior intentions, including a recent study on post-release behavioral intentions of the incarcerated (e.g., Forste et al., 2011; Kiriakidis, 2006; Pogarsky, 2004; Tolman et al., 1996). TPB has also been used in studies on college student financial behavior (e.g., Robb, 2011; Robb & Woodyard, 2011; Shim et al., 2009; Xiao et al., 2011) and in other contexts (e.g., Ameer & Khan, 2020; Kimiyagahlam et al., 2019). This research is the first to use TPB to investigate post-release financial intentions of the incarcerated. Furthermore, this study considers aspects of incarceration which may influence attitudes, subjective norms, and perceptions of control. Intentions, as opposed to behavior, are appropriate at this incarcerated-to-society transitional stage because the variables under study (saving and using a written budget) can be controlled by the person who holds the money.

Literature Review

Studies of incarcerated populations are often designed to determine ways to prevent crime and decrease recidivism. Using multiple theories including TPB, Forste et al. (2011) predicted recidivistic behavior of young offenders in England. The study found that one-fifth of respondents believed it would be difficult to stay out of trouble after release. Behavioral control was measured using scores on perceived life control (1 = low to 4 = high) and self-efficacy; the offenders had an average of 1.7 for perceived life control. The study found perceptions of control was a key association of a young offender’s intent to stay out of trouble.

An investigation into future offending behaviors of current offenders in Scotland (Kiriakidis, 2006) highlighted the need to expand the TPB to include factors external to the standard TPB model. External factors (such as maternal care) measured in the Kiriakidis (2006) study were found to be significantly related to the mediating factors of attitude and PBC. Additionally, external factors including maternal care, were significantly associated with intent to reoffend in the future.

As for recidivism, if it is assumed the offender's *intention* is to be more successful, then aspects of incarceration history may be used to assist in understanding how the primary tenets of the TPB—attitudes, subjective norms, and PBC— influence the offender's financial intentions as release is imminent. PBC may also be directly connected to the financial behavior itself. When one feels little control over personal financial behavior because of a lack of resources, intention to conduct the appropriate financial behavior may be low even if attitude and subjective norms toward financial behaviors are favorable (Madden et al., 1992). Additionally, recent research suggests increased feelings of control are associated with increased financial wellness (Prawitz & Cohart, 2016). This study predicted intentions about positive financial management by saving and using a budget. Intentions about these behaviors are important because secure savings and financial management behaviors are of particular importance to low and moderate-income households (Lyons et al., 2006; Perry & Morris, 2005; Zhan et al., 2006).

Financial Knowledge and Behavior

Increased financial complexity may account for low knowledge levels. Basic check writing and cash withdrawals at the teller window have been replaced, in many cases, by the development of Automated Teller Machines (ATM). ATM cards have given way to debit cards and online banking. The basic bill paying with personal checks of the 80s and 90s has been redirected to electronic payments that can be immediately deducted from accounts, rather than waiting for an item to clear. "Not having contact with new and developing financial products can stunt and even reverse growth because the new replaces the old, the old becomes obsolete, and then what knowledge there was, has for all intents and purposes, just disappeared" (Mielitz, MacDonald, & Lurtz, 2018b, p. 316). When access to banking and other financial services is restricted, such as during incarceration, knowledge and capability may wane over time.

The specific degree to which financial knowledge influences financial behavior (and prior intentions) has not yet been determined. Among the general population, as evidenced by Robb (2011) and Seay et al. (2017), a positive relationship between financial knowledge and financial behavior exists. One recent study using TPB investigated the connection between subjective and objective financial knowledge and risky credit card behavior (Xiao et al., 2011).

Financial knowledge variables were found to be positively related to attitude, subjective norms, and perceived behavior control (Xiao et al., 2011).

In studies about financial well-being in young adulthood, positive associations were found between financial knowledge and financial attitudes; financial knowledge and financial behavioral intentions; and between financial attitudes and financial behavioral intentions (Moreland, 2018; Shim et al., 2010; Shim et al., 2009). Also, social support has been found to decrease perceived financial stress (Park et al., 2017) and social support is particularly influential with the current population of interest (Mielitz, Lurtz, et al., 2018a). Though the prison population is quite different from that of college students, the connection between financial knowledge and behavioral intention is worth noting due to overall low financial knowledge levels throughout the country. Shim et al. (2009) acknowledged a need for further investigation of variables which may influence PBC. Additionally, as people attempt to begin asserting their financial independence, this may be a "crucial developmental period for mastering critical life tasks related to financial behaviors" (Shim et al., 2009, p.721).

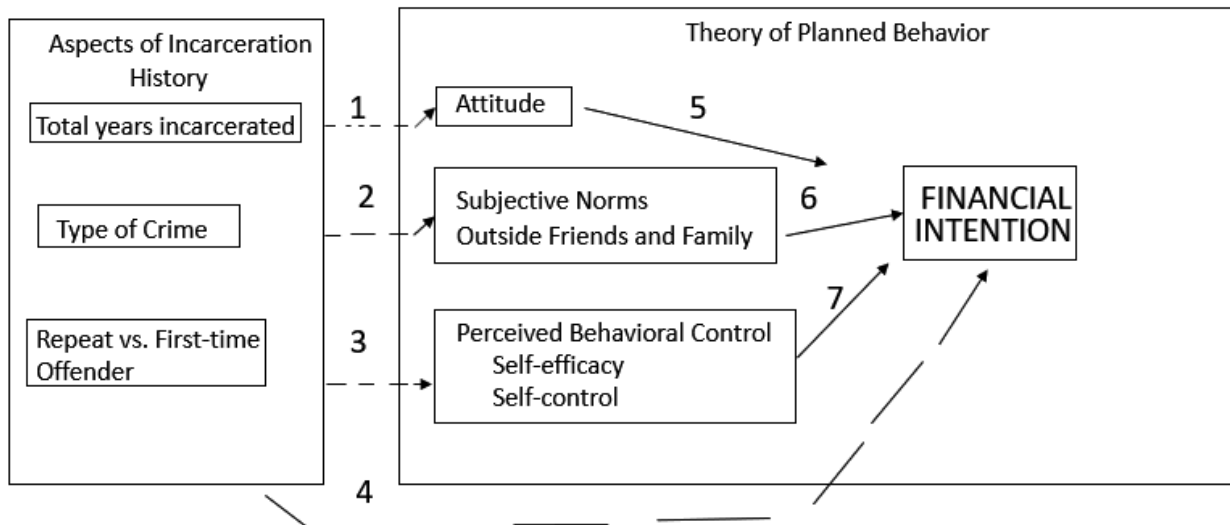
Financial Knowledge and the Incarcerated

To the extent that anything has been written on financial matters and prisoners, it has been directed toward identifying financial literacy levels and/or preparing inmates to return to society with "Just-in-Time" financial literacy courses (Galchus 2014, 2015; Koenig, 2007; Mielitz, MacDonald, & Lurtz, 2018b). Incarcerated individuals may be particularly sensitive about the use of banks due to a lack of trust (Call et al., 2013). Not developing a working relationship with a federally-insured financial institution can lead to the use of other, more unsavory financial services and products. Only in the past year has research begun to investigate how the lived financial experiences of TCPs may influence financial behaviors, in particular working with federally-insured financial institutions (Mielitz et al., 2019; Mielitz, Lurtz, et al., 2018a).

Summary

Through the lens of TPB and including aspects of incarceration history, this study investigated TCP financial intentions for after release. Aspects under investigation included the type of crime committed, number of years incarcerated, and whether or not the TCP was a repeat offender. Attitude, subjective norm, and PBC variables have been found on

Figure 1. Conceptual model with hypothesis groupings (Adapted from Xiao et al., 2011).



numerous occasions to predict intention (e.g., Madden et al., 1992, Rutherford & DeVaney, 2009; Shim et al., 2010; Shim et al., 2009; Xiao et al., 2011, Xiao & Wu, 2008). The overarching research question for this project is: How do aspects of incarceration history influence financial intentions?

Methodology

Hypotheses

H1: Aspects of incarceration history are associated with post-release financial intentions.

Specific sub-hypotheses:

H1a. Total time incarcerated is associated with post-release financial intent to save and budget.

H1b. Number of times incarcerated is associated with post-release financial intent to save and budget.

H1c. Financial crime is associated with post-release financial intent to save and budget.

H2: Financial attitudes, financial subjective norms, and perceptions of financial behavioral control are associated with post-release financial intentions.

Specific sub-hypotheses:

H2a. Financial attitudes are associated with post-release intent to save and budget.

H2b. Financial subjective norms are associated with post-release intent to save and budget.

H2c. Perceptions of financial behavioral control are associated with post-release intent to save and budget.

Sample. The sample for this study was drawn from six work-release community corrections centers in Georgia; it is not generalizable to inmates outside the State. To make the study feasible, not all centers were included. Of the 13 total Transitional Centers (TCs), the six selected were determined based on gender of inmates as well as location convenient to the researcher. The two TCs that house women were selected in an attempt to recruit a representative number of female TC inmates. The four TCs that house men were selected based on geographic location.

Data collection using surveys occurred over a 10-day period at the six TCs in mid to late September 2017, as approved by the Internal Review Board at Kansas State University. Each TC was visited once. The work-release residents were within approximately 6 months of their Tentative Parole Month (TPM) or Max Release dates. At each location, time ranging from 3 to 8 hours was spent meeting with available (e.g., not at work) residents who met the 180-day requirement. One respondent participated on his release date while he waited for his transportation from the TC to the bus station.

Data were collected from 211 TC residents of whom 141 provided sufficient information to create the variables required to be included in the analysis sample using list-wise deletion. Table 1 compares known characteristics for the most complete demographics of 186 of the 211 residents to the same characteristics of the 141 members of the analysis sample to demonstrate what was found regarding selection into the analysis sample. The difference between the 186 and the original 211 is related to missing demographic data in education, marital status, and length of time incarcerated among others specific to the respondent. The largest reason for the decrease between the 186 and the final 141 for analysis was due to 27 cases who were missing the Parent's Education variable; other missing values

involved 18 cases regarding subjective norms, or perceptions of behavioral control. Regarding comparable characteristics, the frequency distributions in Table 1 demonstrate some, but not unreasonable, selectivity into the final analysis sample. Specifically, the members of the analysis sample were slightly more educated and had 3% more who had been incarcerated more than once as compared to the total sample. However, there were only small differences for age, gender, marital status, total time incarcerated, prior employment, and financial crime.

Measures. Due to the specialized nature of the population in question, specific aspects of incarceration history were

TABLE 1. Most Complete Demographic Sample Comparison (n = 186) and Final Analysis Sample (n = 141)

Variable	Sample Proportion (%)	Sample Mean	Final Analysis Proportion (%)	Final Analysis Mean
Age		35.64 years old		35.34 years old
Male	81.18		80.14	
Black	58.06		58.16	
Marital Status				
Married	11.29		11.35	
Not Married	72.59		74.47	
Divorced	14.52		12.77	
Education				
Less than High School Diploma/GED	16.67		12.77	
High School Diploma/GED	59.14		60.28	
More than High School Diploma/GED	24.19		26.95	
Total Time Incarcerated		7.644 years		7.633 years
Number of Times Incarcerated				
Once	34.95		38.30	
Twice	20.43		15.60	
Three Times	19.89		20.57	
Four Times	10.75		9.22	
Five or more	13.98		16.31	
Employment Prior to Incarceration				
Full-time	51.08		53.19	
Part-time	9.68		9.22	
Unemployed	39.25		37.59	
Financial Crime	35.48		33.33	

identified to explore how TPB could be used in research involving TCPs approaching release. Aspects of incarceration history for this project included type of crime, total time incarcerated, and number of times incarcerated. Given the topic of the study overall, specific attention was directed to whether the respondent had committed a crime which could be deemed financial in nature—including theft, burglary, robbery, larceny, embezzlement, fraud, identity theft, and included any financial crimes listed under “other” which allowed the respondent to fill in any nonsurvey identified crime. Other variables of interest included gender, race, socio-economic status (SES), subjective and objective financial knowledge, and whether the offender had a mainstream financial institution account prior to the current incarceration.

Dependent Variables. Based on the literature review, the survey collected information about post-release financial intentions including likelihood of using an alternative financial service within 1 year of release, intent to save money each month, intent to use a written budget each month, and intent to open a bank or credit union account after release. This article focuses on intent to save and budget (Financial Management) after release.

The financial management dependent variable was developed from analysis that identified strong factor loadings for two of three financial behaviors, intent to use a written budget each month after release and intent to save money each month after release. The rotated factor loadings of interest were 0.8630 and 0.8480, for budgeting, and savings, respectively.

The dependent variable was constructed by adding the scores from the two budgeting and savings Likert-type scale questions. The scores ranged from 1 (very unlikely) to 7 (very likely). The summated scales ranged from 2 to 14, where lower scores indicated less likelihood to use positive financial management skills after release.

Independent Variables.

Aspects of Incarceration History. Total years incarcerated was collected as a fill-in-the-blank response and was used as a continuous variable in year form. Response options for number of times incarcerated included “once,” “twice,” “three times,” “four times,” or “five or more times”

incarcerated. The respondents were instructed to include Juvenile Detention if they were under lock and key, Jail, or Prison as incarceration. Type of crime was divided into two categories, financial crime (1) versus nonfinancial crime (0), based on the specific crime selected, or filled in, by the respondent.

Attitude. Financial attitudes were measured using questions from prior research (see Ajzen, 2013, n.d.; Xiao et al., 2011). The continuous attitude variable was measured by adding the individual scores of six attitude-specific inquiries measured with Likert-type scales. Each inquiry ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Two of the attitude questions were reverse coded. “Using a written budget is not worth my time” and “After I am released, it will be pointless to save for emergencies because I won’t be making enough money.” The other four statements measured attitude regarding the importance of credit reports in understanding financial status, the importance of paying bills on time, the importance of having money for fun, and whether helping others financially is important. The summated scales ranged from 6 to 42, where lower scores indicated a negative financial attitude. Prior literature (Xiao et al., 2011) reported a strong Cronbach’s alpha ($\alpha = .795$) for a scale similar to the one used in this study. The scale used in this study has a much lower alpha score ($\alpha = .336$). This difference in alpha could be attributed to the disadvantaged status of the population of interest.

Subjective Norms. The financial subjective norms of the TC residents were measured with six Likert-type scale questions drawn from theoretical literature and prior research (see Ajzen, 2013, n.d.; Xiao et al., 2011). Subjective norms, a continuous variable, was measured by adding the individual scores of six subjective norms questions. The questions concerned friends’ and family perceptions regarding the respondent using a bank or credit union account after release, will it matter to friends/family whether or not the respondent pays their bills on time after release as well as whether it will matter to family/friends that the respondent uses a written budget. The Cronbach’s alpha for the scale was $\alpha = .805$.

Perceived Behavioral Control. PBC, a continuous variable, was constructed from nine Likert-type scale questions where “1” represented strong disagreement and “7” represented strong agreement. The questions used for measuring

PBC were also based on prior literature and included items which measured self-efficacy to ensure attention was paid to the respondent's perceived ability to perform a behavior, and also that they perceived that they had control over particular behaviors (see Ajzen, 2002, 2013, n.d.; Xiao et al., 2011). The statements included confidence in ability to handle finances (i.e., set money aside in savings, reach financial goals, and use a written budget) as well as ability to spend less than what is earned and whether putting money in savings is within the direct control of the respondent, among others. Lower scores indicated lesser perceived control and lesser self-confidence in ability regarding financial matters after release. The Cronbach's alpha for the scale was $\alpha = .849$.

(Preincarceration) SES. Preincarceration SES was measured based on prior literature (Coleman, 1983; Xiao et al., 2011). For this study, employment status prior to incarceration and gross income prior to incarceration were combined in order to categorize the income aspect. $Monthly\ income = (EmploymentHours * HourlyWage * 52) / 12$ where full-time employment hours were averaged at 35 and part-time employment hours were averaged at 25.

Income reporting was not precise enough to support use of a continuous variable, therefore income categories were coded and scored. No income was scored -1, \$1 to \$2,000 per month was scored 0, and \$2,001+ per month was scored 1.

Respondent education was the other component of the SES variable. Education was collected as Highest Level of Education Completed Prior to Incarceration with a follow-up question "Have you completed any additional education while incarcerated?" The highest level of education identified was used in the analysis. Values assigned to score education were 1 for Less than High School Diploma or General Equivalency Diploma (GED), 2 for High School Diploma or GED, and 3 for More than High School Diploma or GED. Then the income scores and the education scores were added to create the SES variable values. SES summed values ranged from 0 to 4 and SES was used as a continuous variable in the regression procedures.

Demographics and Financial Knowledge

Race was collected as a categorical variable. Race categories included White, Black/African American, Asian, Hispanic,

and Other. Due to the racial composition of respondents, the respondent categories for this project were Black and Not Black (reference). Gender was defined by the researcher based on the TC where the resident was housed. It was sufficient to code Gender based on TC assignment. Whether the offender had a bank account prior to incarceration for the current sentence was a dichotomous variable. Not having had an account prior to incarceration was the reference group.

Subjective financial knowledge was measured with inquiries regarding the respondent's perceived financial knowledge compared to others who were incarcerated and compared to people that were not incarcerated. There was a positive Cronbach alpha ($\alpha = .564$) for the summated subjective financial knowledge scale.

Objective financial knowledge was measured using a 5-item scale of questions drawn from a shortened and modified version of the Jump\$tart Coalition Financial Knowledge Survey (Jumpstart.org, n.d.). The modifications included the addition of the option "Don't Know" as an answer and the budgeting question was modified to make the dollar figures more relevant to the population under observation (survey available upon request to primary author). The financial knowledge questions covered gross versus net income, budgeting, finance charges, inflation, and purchasing power. Each question received a score of 1 (correct) or 0 (incorrect). The answer of "Don't Know" was included in the incorrect scores. Total scores for the financial knowledge questions ranged from 0 to 5, where higher scores indicated greater financial knowledge. The Cronbach's alpha for this scale was $\alpha = .525$.

Social Desirability

Social desirability scales are designed to "assess the impact of social desirability on self-report measures specific to the primary purpose of the investigation" (Reynolds, 1982, p. 119). Crowne and Marlowe (1960) developed their social desirability scale based on their belief that, "nontest-relevant determinants" (p. 394), (i.e., responses to questions that may be appropriate though not necessarily accurate) influence survey results. This project used the M-C Form C short-form Social Desirability Scale, which has 13 true/false questions to determine how likely it is that the respondents are providing accurate, and not socially desirable, answers. The responses were coded (1) for socially desirable, and (0) for

nonsocially desirable answers and then summed. The Cronbach's alpha for the social desirability scale was $\alpha = .617$.

Though originally intended to serve solely as a general response-validity check, SD was also included as a predictor variable for multivariate analysis to learn how its influence might affect interpretations of the main findings. A positive, statistically significant relationship between SD and financial intentions would indicate that respondents were reporting in ways that they perceived the researcher would find desirable and thus potentially misleading. However, SD was not a statistically significant predictor variable. Because this was somewhat of a surprise, a sensitivity analysis interacted SD with PBC to predict intentions. (In preliminary multivariate analysis, there was a significant relationship between PBC and SD.) As reported in an unpublished manuscript (available from the authors upon request), there was still no evidence that the main findings were affected by social desirability bias. Respondents who had high SD scores and high PBC were no more likely to have better financial management intentions than those with low SD scores and high PBC.

Results

Descriptive Statistics

The average age of the respondents was 35.34 years ($SD = 9.47$); the youngest respondent was 19 years of age, the oldest 64 years old. Over three-quarters of the respondents were male. Approximately 58% of the sample was Black. Average preincarceration income was almost \$1,207 per month ($SD = \$1,367.52$). About 13% of respondents had less than a high school diploma or GED, about two-thirds of respondents had completed high school education, and just over 25% reported having education higher than high school. The average total time incarcerated (for all sentences served) was 7.63 years ($SD = 6.44$ years). Approximately 38% of respondents were first time offenders and one-third of respondents committed a financial crime. Over half of respondents had a bank or credit union account prior to incarceration. Respondents reported low subjective financial knowledge, $M = 5.72$ out of a total of 14 ($SD = 3.21$). On financial knowledge, out of five total points available, respondents averaged just over two questions correct ($SD = 1.45$). Almost 20 respondents answered all questions incorrectly and only 10 respondents answered all five questions correctly. Similar to prior research with this kind of population, financial knowledge scores were low (Koenig,

2007; Mielitz & MacDonald, 2016; Mielitz, MacDonald, & Lurtz, 2018b).

The mean financial attitude was 33.43 ($SD = 4.54$) on a summative scale which ranged from 20 to 42. The mean subjective norms score was 33.91 ($SD = 7.66$) on a summative scale which ranged from 9 to 42. This score suggests, that upon release, the respondent perceives friends and family will likely support positive financial behaviors. The mean perception of behavioral control was 52.25 ($SD = 9.88$) on a summative scale which ranged from 18 to 63. This score indicates that respondents believe they have a good amount of control over their financial behaviors. Descriptive statistics can be found in Table 2.

OLS Regression Results

The Financial Management intention variable, a composite of intent to use a written budget after release and an intent to save monthly after release, was investigated in a hierarchical fashion using Ordinary Least Squares (OLS) regression. The first step used the aspects of incarceration history and demographic variables as the primary predictors. The demographic variables included at this step all had significant bivariate relationships to Financial Management. Then SES was added to the multivariate model. Next, subjective and objective financial knowledge, having had a bank account prior to incarceration, and social desirability variables were added to the model. Finally, the intervening variables of attitude, subjective norms, and perceptions of behavioral control were included to complete the multivariate investigation of post-release positive financial intentions.

Total time incarcerated was significantly associated with one's intention to practice financial management after release. For every 1-year increase in total time incarcerated, there was a standardized corresponding increase of intent to practice positive financial management ($\beta = .167, p < .05$). Number of times incarcerated did not have a significant predictive relationship with financial management intentions, nor did whether the respondent committed a financial crime. Therefore, H1 was partially supported; only sub-hypothesis H1a was fully supported.

Some of the other significant variables for explaining financial management accord directly with TPB. These significant, positive relationships provide support for the theory as

TABLE 2. Descriptive Statistics (n = 141)

Variable	Proportion (%)	Mean
Age		35.34 years
Up to 27 years old	25.53	
28–34 years old	24.82	
35–41 years old	26.95	
Greater than 41 years old	22.70	
Male	80.14	
Black	58.16	
Marital Status		
Married	11.35	
Not Married	74.47	
Divorced	12.77	
Income Prior to Incarceration (range 0–\$7,500)		\$1,206.91/month
Education		
Less than High School Diploma/GED	12.77	
High School Diploma/GED	60.28	
More than High School Diploma/GED	26.95	
Supported Self/Family with Illegal Money	52.48	
Total Time Incarcerated		7.633 years
First Time Offender	38.30	
Financial Crime	33.33	
Account Prior to Incarceration	51.77	
Subjective Financial Knowledge (range 2–14)		5.72
Objective Financial Knowledge (range 0–5)		2.30
Attitude (range 20–42)		33.43
Subjective Norms (range 9–42)		33.91
Perceptions of Behavioral Control (range 18–63)		52.25
Intent: Open Account	85.82	
Intent: Positive Financial Management (range 2–14)		11.65

expanded in this project to predict post-release TCP financial management intentions. Hypothesis 2 was supported; all the sub-hypotheses were fully supported. Attitude and Subjective Norms have similarly sized standardized coefficients ($\beta = .165, p < .05$; $\beta = .190, p < .05$) respectively. However, PBC had the strongest standardized coefficient of this model, ($\beta = .423, p < .001$) which indicates that of the variables measured and for this population, perceptions of control have the strongest relationship with post-release financial management intentions. The final financial management intentions model exhibited an improvement over the null model ($R^2 = .3226, p < .001$).

Discussions, Limitations, and Implications

Though transition and offender reentry has been thoroughly investigated, researchers have neglected post-release financial intentions as an area of interest. The TPB has been used in prior research regarding financial intentions (Shim et al., 2009; Xiao et al., 2011); but this is the first time TPB has been used to investigate the post-release financial intentions of TCP.

The finding that gender and race are not related to financial intentions is informative as these demographic variables often affect financial behaviors or financial knowledge. For

TABLE 3. Predicting Financial Management Intentions ($n = 141$)

Variable	Stage 1		Stage 2		Stage 3		β
	B	seB	B	seB	B	seB	
Intercept	11.283***	.477	12.163***	.970	-0.086	1.959	-
Total Time Incarcerated	0.014	.036	0.016	.039	0.068*	0.033	0.167
First Time Offender	-0.177	.481	-0.298	.490	0.277	0.421	0.051
Financial Crime	0.979*	.472	1.143*	.482	0.191	0.425	0.034
Black			0.028	.546	-0.084	0.456	-0.016
Male			0.153	.636	0.053	0.545	0.008
Socio-economic Status			-0.085	.253	-0.062	0.211	-0.024
Subjective Financial Knowledge			-0.157*	.074	-0.023	0.067	-0.028
Objective Financial Knowledge			0.141	.175	-0.031	0.150	-0.017
Social Desirability Attitude			-0.062	.092	0.017	0.081	0.016
Subjective Norms					0.095*	0.047	0.165
Perceptions of Behavioral Control					0.065*	0.029	0.190
					0.113***	0.024	0.423
<i>Adjusted R</i> ² =		.013		.023		.323	

* $p < .05$. ** $p < .01$. *** $p < .001$.

example, race was a substantially important variable in work that evaluated how TC participants benefited from a financial education intervention (Mielitz, MacDonald, & Lurtz, 2018b). Due to this unexpected finding, extensive bivariate testing and evaluation was conducted to confirm the lack of significance of these demographic variables. Regarding age, it was omitted because being older was positively correlated ($r = .501, p < .001$) with total time incarcerated, and it is important to restrict the number of predictors given sample size.

The model for financial management intentions was generally quite supportive of TPB. However, in predicting Financial Management after release, total time incarcerated was the only aspect of incarceration directly useful in this model. Total time incarcerated was positively associated with TCP's intent to practice savings and budgeting behaviors after release. The more time the individual had spent behind bars the more likely they indicated they would attend to savings and budgeting practices after their release. No other background factors were useful in directly predicting post-release financial management intentions. All three TPB intervening variables (attitude, subjective norms, and perceptions of behavioral control) had a significant effect

on the outcome variable. As in prior research (see Kirikidis, 2006), background factors specific to the incarcerated were useful in predicting intervening factors of the TPB model (results not shown) and also in predicting financial intentions. These results suggest that background factors specific to the population of interest should be considered, if not included in the model, when framing research with TPB. Furthermore, the influence of aspects of incarceration on attitude, subjective norms, and perceptions of control expands the use of TPB for post-release intentions of the incarcerated.

The effects of the aspects of incarceration, in particular total time incarcerated on the prediction of the budgeting and savings behaviors is new to the literature. Greater lengths of incarceration somehow produce better post-release financial management intentions. Perhaps greater time incarcerated encourages more attention to factors that may inhibit successful reentry such as poor financial management. This finding supports the expansion of the TPB to include pertinent background factors. Additionally, as discussed below, the effects of aspects of incarceration may be used in guiding practice and policy for reentry training.

This research expanded the use of TPB by using it to investigate financial intentions of men and women who were within 180 days of TPM or Max Out from a large Southern State's TC system. Furthermore, the careful attention to how background factors of aspects of incarceration history influenced TPB expands the literature. The use of TPB to investigate financial intentions is not new (Shim et al., 2009; Xiao et al., 2011) but it is new for the use of investigating financial intentions of TCPs who are approaching release.

Prior literature suggests financial intention is significantly associated with financial behavior (Shim et al., 2009; Xiao et al., 2011) which indicates that studying financial intentions without behavioral outcomes is still useful. In their 2009 study, Shim et al. address the concept of economizing—changing of financial habits in response to a financial hardship. Economizing addresses budgeting and savings behaviors, as does this study, which further supports focus on intentions as a valuable topic for future research.

Limitations

This area of investigation is in its infancy. To date there is no statewide representative data set of TCPs to address the questions posed in this research. A data set collected as the new TCP enters the TC and longitudinally connects with data as the TCP approaches their release date would allow research such as this to comprehensively influence policy, including but not limited to financial education and preparation for release which should be beneficial to men and women who are preparing to reenter society after serving time for a conviction. A longitudinally collected data set would furthermore allow for an understanding of any changes that took place over the TCP's time at the TC—specifically if they had financial education, which is not provided at all TCs in the state where the data were collected. Such data would be informative about whether, and perhaps how, a financial education class affected financial intentions after release.

In literature regarding recidivism, financial behavior is a neglected factor. A primary reason for research in the cross-discipline of financial planning and criminal justice is to gain insight about how financial knowledge and financial behavior may influence recidivistic behavior. Further research is needed so that researchers and policy makers can

grow an understanding of how personal resources, financial behaviors, financial knowledge, other personal financial planning variables, and recidivism are connected.

A few of the Cronbach alpha values (attitude, objective financial knowledge, and social desirability) were not as high as are typically preferred. The alpha value for attitude ($\alpha = .336$) is quite low. This low value may be attributed to the disadvantaged status of the population of interest and bears further investigation. Objective financial knowledge ($\alpha = .525$) has been used in similar research (Mielitz et al., 2019) and was used to further investigate the appropriateness of the scale for this population of interest. Currently no objective financial knowledge measure meets the standardized $\alpha = .70$. The current objective financial knowledge measure may need to be reevaluated for use in future studies. The social desirability alpha score ($\alpha = .617$), though under the preferred standard, held true to prior investigations (e.g., Andrews & Meyer, 2003; Johnson et al., 2012).

Implications for Policy and Practice

The findings regarding aspects of incarceration clearly demonstrate that those with lengthier incarcerations may be the most receptive to financial education efforts, which suggests special targeting of programs for them. More generally, the results suggest an opportunity for state Department of Corrections to employ an Accredited Financial Counselor (AFC) to train and educate all transitioning inmates on communicating about money and using financial resources. Additionally, the AFC could be used to cross-train Department of Corrections (DOC) counselors to have more in-depth discussions with the counselor's assigned inmates as the DOC counselors prepare the men and women to return to society. The AFC could work with the inmates to develop ways to discuss budgeting and savings with appropriate family members and then report back to the counselor regarding the discussion and what kind of support the TCP perceives they have after the conversation.

Additionally, though self-control and self-efficacy may be more difficult to teach, helping TCPs who have been incarcerated for a greater number of years develop the confidence that they can find ways to budget, save, and make financial decisions is imperative to financial success after release. The DOC counselor, again, may be a useful resource in generating some of the needed confidence simply through encouraging the TCP to ask questions.

Though national financial knowledge is low (Lusardi & Mitchell, 2014), it is higher than that of offenders (Galchus, 2014, 2015). From a policy standpoint, implementing financial literacy education classes throughout all TCs may be beneficial. Financial education classes may positively influence self-efficacy and behavior change regarding financial matters such as budgeting and saving. Furthermore, financial education can be useful in changing behavior, in particular behaviors that can be changed in the short term (Lyons et al., 2006). With appropriate timing, providing financial education and investigating financial behavior change even while in the TC would be possible. This type of change could be measured at the TC by investigating how spending habits of the TCPs, who qualify for weekly spending money, may change after financial education. As was noted in the Lyons et al. (2006) study, further investigation is needed regarding how financial knowledge impacts financial behavior in low-income populations—this specialized prison-based population meets the low-income classification and would be an opportunity to expand the existing literature base.

Financial attitude, subjective norms, and perceptions of control regarding financial behaviors all influence financial intentions in this study. Though not generalizable, this study has identified that, at least for these inmates, the TPB holds true. When adding in appropriate background characteristics, TPB is expanded and continues to hold true. This exploration's results enhance understanding about what may be influencing attitudes, norms, and perceptions of control for transitioning inmates.

This article highlights the need to prioritize financial training for transitioning inmates. In particular, the need to increase financial knowledge exists and beyond that more research is needed to understand how transitioning inmates' financial attitudes, norms, and perceptions of control are associated with financial success during and after incarceration. Additionally, further investigation is needed to identify if there is a connection between post-release success and financial knowledge.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi: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. doi:10.1111/j.1559-1816.2002.tb00236.x

Ajzen, I. (2013). Theory of planned behavior questionnaire. *Measurement Instrument Database for the Social Science*. www.midss.ie

Ajzen, I. (n.d.). *Constructing a theory of planned behavior questionnaire*. <https://people.umass.edu/aizen/tpb.html>

Ameer, R., & Khan, R. (2020). Financial socialization, financial literacy, and financial behavior of adults in New Zealand. *Journal of Financial Counseling and Planning*, 31(1). doi:10.1891/JFCP-18-00042

Andrews, P., & Meyer, R. G. (2003). Marlowe-Crowne social desirability scale and short form c: Forensic norms. *Journal of Clinical Psychology*, 59(4), 483–492. doi:10.1002/jclp.10136

Branstetter, B. (2015). The case for internet access in prisons. *The Washington Post*. <https://www.washingtonpost.com/news/the-intersect/wp/2015/02/09/the-case-for-internet-access-in-prisons/>

Call, L. L., Dyer, W. J., Wiley, A. R., & Day, R. D. (2013). Inmate perceptions of financial education needs: Suggestions for financial educators. *Journal of Financial Counseling and Planning*, 24(1), 45–60.

Coleman, R. P. (1983). The continuing significance of social class to marketing. *Journal of Consumer Research*, 10(3), 265–280. doi:10.1086/208966

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4), 349–354. doi:10.1037/h0047358

Forste, R., Clarke, L., & Bahr, S. (2011). Staying out of trouble: Intentions of young male offenders. *International Journal of Offender Therapy and Comparative Criminology*, 55(3), 430–444. doi:10.1177/0306624X09359649

Galchus, K. (2014). The case for financial literacy training in correctional institutions. *International Research Journal of Applied Finance*, 5(2), 781–788. https://irjaf.com/View_Articles.html

Galchus, K. (2015). Why state and federal officials should consider offering financial literacy training to those about to be released from correctional institutions. *International Journal of Financial Research*, 6(4), 60–67. doi:10.5430/ijfr.v6n4p60

Johnson, T. P., Fendrich, M., & Mackesy-Amiti, M. E. (2012). An evaluation of the validity of the Crowne–

- Marlowe need for approval scale. *Quality & Quantity*, 46(6), 1883–1896. doi:10.1007/s11135-011-9563-5
- jumpstart.org. (n.d.). *JumpStart Coalition Survey*. <http://www.jumpstart.org/survey.html>
- Kaeble, D., & Cowhig, M. (2018). Correctional Populations in the United States, 2016 (Bulletin NCJ 251211). *Bureau of Justice Statistics*. <https://www.bjs.gov/content/pub/pdf/cpus16.pdf>
- Kimiyagahlam, F., Safari, M., & Mansori, S. (2019). Influential behavioral factors on retirement planning behavior: The case of Malaysia. *Journal of Financial Counseling and Planning*, 30(2), 244–261. doi:10.1891/1052-3073.30.2.244
- Kiriakidis, S. P. (2006). Perceived parental care and supervision: Relations with cognitive representations of future offending in a sample of young offenders. *International Journal of Offender Therapy and Comparative Criminology*, 50(2), 187–203. doi:10.1177/0306624X05278517
- Koenig, L. A. (2007). Financial literacy curriculum: The effect on offender money management skills. *Journal of Correctional Education*, 58(1), 43–56.
- Lusardi, A., & Mitchell, O. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi/10.1257/jel.52.1.5>
- Lyons, A. C., Chang, Y., & Scherpf, E. M. (2006). Translating financial education into behavior change for low-income populations. *Journal of Financial Counseling and Planning*, 17(2), 27–45.
- 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(3), 3–9. doi:10.1177/0146167292181001
- Mielitz, K. S., Clady, J., Lurtz, M., & Archuleta, K. (2019). Barriers to banking: A mixed methods investigation of previously incarcerated individuals' banking perceptions and financial knowledge. *Journal of Consumer Affairs*, 53(4), 1748–1774. doi:10.1111/joca.12260
- Mielitz, K. S., Lurtz, M., Clady, J., & Archuleta, K. (2018a). After release: A qualitative investigation into the financial lives of former offenders. *Corrections*, 3(1), 56–71. doi:10.1080/23774657.2017.1383215
- Mielitz, K. S., & MacDonald, M. (2016). *Ready for release? Financial knowledge of inmates in a transitional center program*. In Proceedings of the Annual Symposium of the Association for Financial Counseling and Planning Education, Louisville, KY.
- Mielitz, K. S., MacDonald, M., & Lurtz, M. (2018b). Financial literacy education in a work-release program for an incarcerated sample. *Journal of Financial Counseling and Planning*, 29(2), 316–327. doi:10.1891/1052-3073.29.2.316
- Moreland, K. A. (2018). Seeking financial advice and other desirable financial behaviors. *Journal of Financial Counseling and Planning*, 29(2), 198–207. doi:10.1891/1052-3073.29.2.198
- Park, N., Heo, W., Ruiz-Menjivar, J., & Grable, J. E. (2017). Financial hardship, social support, and perceived stress. *Journal of Financial Counseling and Planning*, 28(2), 322–332. doi:10.1891/1052-3073.28.2.322
- Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299–313. doi:10.1111/j.1745-6606.2005.00016.x
- Pogarsky, G. (2004). Projected offending and contemporaneous rule-violation: Implications for heterotypic continuity. *Criminology*, 42(1), 111–136. doi:10.1111/j.1745-9125.2004.tb00515.x
- Prawitz, A. D., & Cohart, J. (2016). Financial management competency, financial resources, locus of control, and financial wellness. *Journal of Financial Counseling and Planning*, 27(2), 142–157. doi:10.1891/1052-3073.27.2.142
- Prison Pro. (n.d.). <https://www.prisonpro.com/content/sending-money-inmate>
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology*, 38(1), 119–125.
- Robb, C. A. (2011). Financial knowledge and credit card behavior of college students. *Journal of Family Economic Issues*, 32(4), 690–698. doi:10.1007/s10834-011-9259-y
- Robb, C. A., & Woodyard, A. S. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning*, 22(1), 60–70. doi:10.4148/jft.v3i1.1453
- Roose, K., & Harshaw, P. (2015). Part 1: Inside the prison system's illicit digital world. *Tech Behind Bars*. http://fusion.net/story/41931/inside-the-prison-systems-illicit_digital-world/

- Rutherford, L., & DeVaney, S. A. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards. *Journal of Financial Counseling and Planning, 20*(2), 48–63.
- Seay, M. C., Preece, G. L., & Le, V. C. (2017). Financial literacy and the use of interest-only mortgages. *Journal of Financial Counseling and Planning, 28*(2), 168–180. doi:10.1891/1052-3073.28.2.168
- Shim, S., L, Barber., B., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence, 39*(12), 1457–1470. doi:10.1007/s10964-009-9432-x
- Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology, 30*(6), 708–723. doi:10.1016/j.appdev.2009.02.003
- Simourd, D. J., Olver, M. E., & Brandenburg, B. (2016). Changing criminal attitudes among incarcerated offenders: Initial examination of a structured treatment program. *International Journal of Offender Therapy and Comparative Criminology, 60*(12), 1425–1445. doi:10.1177/0306624X15579257
- Tolman, R. M., Edleson, J. L., & Fendrich, M. (1996). The applicability of the theory of planned behavior to abusive men's cessation of violent behavior. *Violence and Victims, 11*(4), 341–354. doi:10.1891/0886-6708.11.4.341
- Xiao, J. J., Tang, C., Serido, J., & Shim, S. (2011). Antecedents and consequences of risky credit behavior among college students: Application and extension of the Theory of Planned Behavior. *Journal of Public Policy & Marketing, 30*(2), 239–245. doi:10.1509/jppm.30.2.239
- Xiao, J. J., & Wu, G. J. (2008). Completing debt management plans in credit counseling: An application of the theory of planned behavior. *Journal of Financial Counseling and Planning, 19*(2), 29–45.
- Zhan, M., Anderson, S. G., & Scott, J. (2006). Financial knowledge of the low-income population: Effects of a financial education program. *Journal of Sociology and Social Welfare, 33*(1), 53–74. doi:10.1300/J079v33n01_09
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