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People's Reasons for Wanting to Complete Probation: Use and Predictive Validity in an e-Health Intervention

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1. Introduction

Historically, the US criminal justice system has emphasized external contingencies (e.g., fees, jail time, increased supervision) to motivate compliance (Andrews & Bonta, 2010b). However, people in the criminal justice system may have a broader set of reasons why they want to desist from criminal activity, such as family, employment, or improved quality of life (Laub & Sampson, 2001). For instance, people under community supervision may be required to fulfill requirements such as attending appointments and classes, finding/maintaining employment, and avoiding high-risk people or situations. These proximal requirements, often tailored to a person's level of criminal risk or need, predict distal outcomes such as substance use and criminal activity (Andrews & Bonta, 2010a; Wooditch, Tang, & Taxman, 2014). Improving people's motivation to complete probation may increase the probability of successfully completing both short and long-term goals (Walters, Clark, Gingerich, & Meltzer, 2007).

Motivational interviewing (MI) is one common treatment approach that targets motivation and commitment to change (McMurrin, 2009; Prochaska & Levesque, 2002; Walters et al., 2013). A basic tenet of MI is that client language predicts subsequent behavior change (Miller & Rollnick, 2002, 2012). For instance, when clients talk about their desire, ability, reasons, or need to change (i.e., "change talk"), they perceive that language to be indicative of internal motivation, which in turn increases commitment to change. Conversely, when clients argue against change (i.e., "sustain talk"), their verbalized support of the status quo tends to decrease commitment to change. Many studies use linguistic measures such as the Motivational Interviewing Skills Code (Rollnick, Miller, & Butler, 2008) to quantify client language during the course of a counseling session and to measure the relationship between client language and subsequent outcome (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003; Bem, 1967). In a landmark study, Amrhein et al. (2003) measured three categories of client

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change language expressed during a counseling session: 1) Commitment statements about intention to change a behavior, 2) Reason statements about the benefits of behavior change, and 3) Desire/Ability statements about willingness or self-efficacy to change a behavior. This study found that increased *commitment* language predicted reduced drinking at follow-up. Similarly, among problem gamblers, Hodgins, Ching, and McEwen (2009) found that commitment language expressed during a counseling session predicted subsequent gambling behavior.

Other studies have found that *preparatory* change talk (i.e., desire, ability, reasons, and need) can predict client outcome. For example, in a study of adolescents receiving a brief motivational intervention for substance use, a greater number of statements about reasons for change was associated with greater reductions in substance use, and desire/ability statements against change were associated with fewer abstinent days at follow-up (Baer et al., 2008). Contrary to other studies, commitment language was not associated with substance use outcomes. Similarly, Martin et al. (2011) found that client preparatory language predicted drinking outcomes. Gaume, Gmel, and Daeppen (2008) found that client ability statements, but not commitment statements, predicted drinking outcomes.

Consistent with these studies of natural language, there are several self-report measures that assess perceived desire and ability for change. Measures such as the University of Rhode Island Change Assessment (URICA; McConaughy, DiClemente, Prochaska, & Velicer, 1989), the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES; Miller & Tonigan, 1996), the Readiness to Change Questionnaire (RTCQ; Rollnick, Heather, Gold, & Hall, 1992), and the Change/Contemplation Ladders are common ways of asking about client *desire* for change. Other measures such as the Addiction Counseling Self-Efficacy Scale (ACES; Murdock, Wendler, & Nilsson, 2005) and Drug Avoidance Self-Efficacy Scale (DASES; G. W. Martin, Wilkinson, & Poulos, 1995) primarily focus on perceived self-efficacy or *ability* to change. Finally, measures such as the Change Questionnaire (Gaume, Bertholet, Daeppen, & Gmel, 2013) were designed to address multiple areas in a single questionnaire. Two factors on the Change Questionnaire—‘ability to change’ and ‘other change language’—have predicted changes in hazardous drinking and tobacco use (Gaume et al., 2013).

In sum, client statements about desire, ability, reasons, and need for change are common clinical targets and have been shown to predict clinical outcomes. However, relatively few studies have examined people’s stated *reasons* for change, either as a way to address motivation clinically or as a predictor of outcomes. One common clinical tool for discussing client reasons for change is the decisional balance scale, where clients identify the benefits and costs of change, relative to the benefits and costs of maintaining the status quo (Prochaska et al., 1994). Similarly, the Change Questionnaire includes a reasons subscale for use in substance abusing samples; however, after a principle components analysis the reasons subscale was collapsed into ‘Other change language’ (Miller, Moyers, & Amrhein, 2005). Previously validated motivational measures, such as the importance and confidence rulers, have been widely used to tailor web-based interventions (Hester, Squires, & Delaney, 2005; Walters, Vader, & Harris, 2007).

The purpose of this study was to evaluate the reliability and predictive validity of a brief survey about people's reasons for wanting to complete probation. First, we were interested which kinds of reasons would be endorsed most frequently overall. Second, given the contentious debate around the relevance of static, historical risk factors (Andrews & Bonta, 2010a), we were interested whether people's reasons would vary by gender, ethnicity, or criminal risk level. Finally, we were interested whether people's reasons for wanting to complete probation were related to subsequent outcome. To do this, we evaluated the factor structure of the questions through principal components factor analysis, assessed the reliability of the scale, and examined the relationship between the best fitting factor model and substance use and treatment initiation after two months.

2. Methods

2.1 Study and Intervention Overview

We used data from 113 drug-involved probationers in two metropolitan areas (Dallas, TX and Baltimore City, MD) who completed a web-based intervention as part of a randomized controlled trial (funded by a grant from the National Institute on Drug Abuse: R01 DA029010-01). The overall trial assessed the efficacy of two brief motivational interventions for reducing substance use and increasing treatment initiation: 1) two 45-minute Motivational Interviewing (MI) counseling sessions, or 2) two 45-minute motivational computer sessions (MAPIT). All participants were 18 years old or older, recently assigned to probation (i.e., within 30 days of their sentence date), and reported drug use or heavy alcohol use within the past 90 days. Participants completed a baseline assessment, and follow-up interviews at two and six months. Full trial details can be found elsewhere (Taxman, Walters, Sloas, Lerch, & Rodriguez, 2015).

The computerized MAPIT intervention addressed three areas of probation success: 1) substance abuse, including treatment initiation and engagement; 2) probation compliance and reduced criminal behavior; and 3) HIV testing and care. Full details on the development and content of MAPIT can be found elsewhere (Walters et al., 2013). Near the beginning of the first MAPIT session, the program asked clients to identify their most important reasons for wanting to complete probation. Motivational "themes" were generated from interviews with probationers (see Authors, 2013 on how the interviews and focus groups were conducted). Based on this preliminary work, we created items in seven areas: 1) Financial (e.g., "To have more money"); 2) Time (e.g., "So I can spend more time relaxing or doing what I want to do"); 3) Freedom (e.g., "To quit having to check in with others when I want to do something"); 4) Shame (e.g., "So people will quit judging me"); 5) Relationships (e.g., "To set an example for my children"); 6) Legal (e.g., "To avoid going to jail or prison"); and 7) Getting on with Life (e.g., "To make my life better"). The program posed two questions in each area, for a total of 14 items. People were instructed verbally (and visually) by a computer narrator to indicate whether each item was "Not at All," "Somewhat," or "Very Much" true for them. Participants' responses to these questions were used to tailor subsequent sections of the program. For instance, if a person endorsed relationships as a primary motivator, the program would include affirmations and reflections to reinforce that the person "wanted to set an example" and "wanted to make life better for others." Likewise,

if a person endorsed shame as a primary motivator, the program would stress that “many people are embarrassed about having to tell others they are on probation” and “finishing probation is a way to remove this label from your life.”

2.2 Outcome Variables

The primary clinical outcome consisted of the frequency of daily substance use and treatment attendance gathered from the timeline followback (TLFB; Sobell & Sobell, 1996) survey at the two-month follow-up. Substance use was defined as a self-reported heavy drinking episode (i.e., 5 or more drinks for men or 4 or more drinks for women) or any amount of illicit drug use (i.e., amphetamines, barbiturates, cocaine, hallucinogens, inhalants, marijuana, opiates, prescription pain pills, and sedatives/hypnotics) in the past two months. Data was also gathered on the frequency of attendance at various forms of substance use, mental health, or medical treatment facilities. We defined treatment attendance as self-reported attendance at a formal treatment session (i.e., inpatient/outpatient treatment, group or individual counseling sessions, or residential treatment) or anonymous/self-help group meeting. The TLFB method has been widely used to estimate substance use, treatment attendance, and substance use consequences (Kelly, Myers, & Brown, 2000; Robinson, Sobell, Sobell, & Leo, 2014; Schry & Norberg, 2013; Wooditch et al., 2014). Past studies have shown satisfactory test-retest reliability and convergent and discriminant validity compared to other objective measures (Carey, Carey, Maisto, & Henson, 2004; Fals-Stewart, O’Farrell, Freitas, McFarlin, & Rutigliano, 2000; Rice, 2007).

2.3 Analysis Plan

First, we used descriptive statistics to identify the most frequently endorsed reasons for completing probation. Any probationer who responded to both items in a reason domain as “Very Much” true was considered as endorsing that reason. Therefore, categories were not mutually exclusive as participants could endorse multiple reasons to complete probation. Independent samples t-tests were used to evaluate the type of probationers (i.e., gender, race, criminal risk level) who were more likely to respond positively to each of the seven domains. Bonferroni corrections were made for multiple comparisons; a p-value of < .007 was used. We evaluated the association between the seven reasons domains and subsequent substance use and treatment attendance using negative binomial Poisson regression. Themes were evaluated independently and all analyses controlled for participant age, gender, race, and criminal risk level (i.e., history of arrests, convictions, offenses, juvenile arrests, and supervision violations) (Taxman, Cropsey, Young, & Wexler, 2007).

Second, we conducted a principal components factor analysis to evaluate whether the seven motivational tracks created item subscales as expected. We chose varimax rotation because the underlying factors, reasons for change, were believed to be related to each other. We evaluated the Kaiser-Mayer-Olkin index (KMO) of sampling adequacy (values greater than 0.50 are deemed acceptable) and the Barlett’s Test for Sphericity to measure the factor analysis fit. Subscale inter-item reliability was assessed using Cronbach’s alpha. Individual participant factor scores were created and saved as part of the principal components analysis to be used in a predictive validity model testing.

Finally, we assessed the predictive validity of the items using generalized linear model (GLM) negative binomial Poisson regressions to evaluate the between individual rotated factor scores and 1) Frequency of substance use, and 2) Frequency of treatment attendance at the two-month follow-up. Negative binomial odds ratios are analyzed to account for over-dispersed count data derived from the large variance between days of substance use and days of treatment attendance among this sample of probationers. All analyses were conducted while controlling for participant gender, age, criminal risk, and baseline substance use. All analyses were conducted in SPSS Version 20.

3. Results

3.1 Participant Characteristics

A majority of participants were African American males (see Table 1 for participant characteristics). Ages ranged from 18 to 63 years ($M = 34.9$, $SD = 12.2$). Probationers were somewhat evenly distributed across criminal risk levels with slightly more medium risk participants. On average, this sample of probationers had nine previous arrests, with the first arrest occurring around age 21. At baseline, participants reported an average of 18.2 days of substance use in the past two months. At follow-up, the average number of days of substance use fell to 9.8 in the past two months. Probationers reported attending formal or informal treatment sessions on an average of 5.5 days during the two-month follow-up period.

3.2 Acceptability

Before initiating the clinical trial, we conducted a pilot test of the program among clients who would have qualified for the clinical trial. Each site recruited a group of subjects ($n=10$ for Baltimore, $n=11$ for Dallas) to ascertain the functionality and perceived usefulness of the program. After finishing the program, clients completed a 14-question Likert-style response form (1 = "Not at All," 5 = "Very Much") and were also asked to give their written impressions of the program. Overall, respondents were quite positive about the program. Respondents reported that the information they received was accurate (mean = 4.9/5.0) and respectful (mean = 5.0/5.0), and that they felt they could be honest with the program (mean = 4.9/5.0). In terms of perceived usefulness, respondents felt that the program would help them to be more successful on probation (mean = 4.6/5.0) and in treatment (mean = 4.7/5.0). Written comments most commonly praised the accuracy and usefulness of the program, such as "how the program knew what would work best for me," "how the program charted my drug use and problems," and "listening to [other] people's reasons" for completing probation. While the satisfaction questionnaire referenced the entire program rather than the reasons questions specifically, it demonstrates the utility and acceptability of this type of intervention for the target group.

3.3 Utility

In the clinical trial, the most highly endorsed reason for wanting to complete probation was "getting on with life" ($n = 86.7\%$ indicated "Very Much" true), followed by legal pressure (73.5%) and time (60.0%). Relationships and having greater freedom were important reasons for 55.8% of participants. Fifty percent of participants indicated that finances were

an important reason. Finally, shame was the least endorsed reason; only 31.0% of probationers selected shame as an important reason.

There were no statistically significant differences between genders in terms of their reasons for wanting to complete probation. Women rated the “getting on with life” reason as marginally more important than male participants ($t = 2.68, p = .009$). White participants rated financial reasons and legal reasons as more important when compared to minority probationers, ($t = 3.15, p < .005$) and ($t = 2.80, p < .007$) respectively. Additionally, there were no significant differences between criminal risk level and endorsements of the seven reasons themes.

We evaluated the association between the seven reasons and subsequent substance use and treatment attendance at two-month follow-up. Probationers who endorsed freedom, legal, relationships, and time as important reasons had significantly fewer days of substance use compared to those who did not rate these domains as highly, see Table 2. Additionally, probationers who endorsed financial reasons had significantly fewer days of treatment attendance compared to those who were less concerned about finances. Finally, probationers who endorsed relationships and shame as important reasons attended significantly more days of treatment compared to those who did not endorse these items.

3.4 Principal Components Factor Analysis

In a factor analysis, the reasons items loaded onto two distinct component factors (eigenvalues above 1.0), see Table 3. The two component factors explained a combined 46% of the variance in the model. Analysis of the KMO index (0.76) and Bartlett’s Test of Sphericity ($\chi^2 = 518.45, p < .001$) indicated a good model fit. The first extracted component included a set of items focused on external, present-focused, and quantifiable reasons to successfully complete probation (e.g., “So I don’t have to spend money on probation,” “To quit having to check in with people”), which we characterized as “Tangible Loss” ($\alpha = .79$). The second extracted component included a set of items focused on internal, future-focused, and qualitative reasons to successfully complete probation (e.g., “To make life better,” “To set an example for my family”), which we characterized as “Better Life” ($\alpha = .75$).

3.5 Predictive Validity

A GLM negative binomial Poisson regression model evaluating the relationship between individual rotated factor scores and frequency of substance use at the two-month follow-up showed a significant negative association between Better Life scores and days of substance use ($\beta = -0.31, SE = 0.13, p < .05$), while controlling for participant factors. Probationers with greater Better Life scores had significantly fewer days of substance use, compared to probationers with lower Better Life scores. We found no association between Tangible Loss scores and days of substance use at follow-up ($\beta = -0.18, SE = 0.13, p = .16$). No other participant factors, such as age, gender, and criminal risk level, were associated with substance use at two-month follow-up. Frequency of substance use at baseline was significantly positively associated with frequency of substance use at the two-month follow-up ($\beta = 0.02, SE = 0.01, p < .01$).

A GLM negative binomial Poisson regression model showed a significant positive association between Better Life scores and days of treatment attendance at two months ($\beta = 1.46$, $SE = 0.26$, $p < .001$), while controlling for participant factors. Probationers with higher Better Life scores attended significantly more days of treatment, compared to probationers with lower Better Life scores. However, we again found no association between Tangible Loss scores and days of treatment attendance at follow-up ($\beta = 0.12$, $SE = 0.13$, $p = .38$). Frequency of treatment attendance was significantly associated with participant age ($\beta = 0.06$, $SE = 0.01$, $p < .001$) and criminal risk level ($\beta = -1.45$, $SE = 0.29$, $p < .001$), in which older, higher risk participants were more likely to attend treatment than younger or lower risk participants. Participant gender was not associated with frequency of treatment attendance at two-month follow-up.

4. Discussion

The existing instruments for assessing motivation to change are primarily derived from the substance abuse literature with inadequate validation for justice-involved populations. In this study, we examined the acceptability and utility of a brief measure of people's reasons for wanting to complete probation. People's most common reasons for wanting to complete probation included "getting on with life," legal pressure, and time autonomy. We found significant differences between racial groups; White participants rated financial and legal reasons as more important when compared to minority probationers. We did not find significant differences in reasons between genders or criminal risk levels.

Six of the seven motivational tracks were significantly associated with either substance use and/or treatment attendance at the two-month follow-up. People who strongly endorsed reasons related to freedom, legal concerns, relationships, and time constraints had significantly fewer days of substance use. People who strongly endorsed relationships and shame had increased treatment attendance, while people who strongly endorsed financial reasons had significantly fewer days of treatment attendance. The relationship between finances and treatment was unexpected; it is possible that financial concerns could be serving as a barrier to treatment initiation for these probationers.

Additionally, we evaluated the factor structure and reliability of the questions through principal components factor analysis and assessed the relationship between those factor scores and substance use and treatment initiation after two months. The reasons items loaded onto two distinct factors demonstrating good model fit. Factor one, "Tangible Loss", focused on external, present-focused, and quantifiable reasons for probation success (e.g., "So I don't have to spend money on probation," "To quit having to check in with people"). Factor two, "Better Life", focused on internal, future-focused, and qualitative reasons for being successful on probation (e.g., "To make life better," "To set an example for my family"). It appears that these constructs represent different types of motivation for change with "Tangible Loss" referring more to resource-driven reasons to change as compared to "Better Life" which focuses on intrinsic recognition of the value of a better quality of life. Better Life scores predicted days of substance use and treatment attendance, while Tangible Loss scores were not associated with substance use or treatment attendance.

Our findings suggest that probationers' reasons are an important predictor of future behavior. To our knowledge this is the first instrument designed to capture people's reasons for making positive changes while under community supervision. It is possible that our findings could be used to predict and/or accelerate reductions in risk behaviors. For instance, probationers who were motivated by internal, qualitative reasons had better clinical outcomes on two key criminal justice outcomes. This is consistent with the desistance literature that finds that people who have a support system and pursue activities that discourage a criminal identity are more likely to be successful in the justice system (Maruna, 2002). In our sample, probationers who were motivated by external, immediate, and quantitative reasons did not show significant improvements in these short-term outcomes. This instrument may complement traditional motivation measures with an explicit focus on people's stated reasons to make positive changes. These reasons for change questions could be used alongside validated measures such as the URICA, RTCQ, and SOCRATES to assess preparatory change thoughts, particularly in the critical early stages of the probation process (T. Martin et al., 2011).

Our findings, derived from an e-health intervention, are also consistent with previous research on the importance of client language expressed during counseling sessions (Baer et al., 2008; Martin et al., 2011; Moyers et al., 2007; Amrhein et al., 2003). For instance, Baer et al., (2008) found that even a few stated reasons for change, expressed during a brief counseling session, predicted future risk reduction behaviors. Similarly, Martin et al. (2011) found that client preparatory talk, including desires, reasons, and need for change, was associated with reduced drinking behavior. However, it is important to note that these studies examined language expressed during in-person counseling sessions, and none specifically focused on criminal justice offenders.

Knowledge about clients' reasons for wanting to complete probation can be helpful to justice providers as they encourage probation and treatment efforts. Our findings show that probationers have a variety of reasons why they want to be successful on probation (e.g., family, employment, quality of life) beyond those that are traditionally targeted by the justice system (Andrews & Bonta, 2010b). Conversations with probationers can be framed to elicit and emphasize reasons that are internal and future-focused. At the same time, conversations that focus mainly on external, present-focused reasons may have limited ability to influence change. Individuals who focus on such reasons may be trapped in "condemnation scripts" that ignore personal agency in influencing future behavior. Rather, conversations should focus on constructing "redemption scripts" that imagine a different and meaningful future apart from criminal behavior (Maruna, 2002).

4.1 Limitations

This study had several limitations that should be considered. First, although the seven motivational tracks made practical sense in an e-health intervention, the resulting principal components factor structure was different than what we had intended. Additionally, we examined only two proximal substance use outcomes; we did not examine other distal probation goals, such as long-term substance use, criminal behavior or recidivism. However, MAPIT was designed to help offenders make changes early in the probation process in two

key areas—substance use and treatment initiation. Second, our primary outcomes (i.e., substance use and treatment initiation) were self-report as obtained from the TLFB, which may be subject to misrepresentation or recall bias. However, the TLFB is generally valid when compared to other biochemical and collateral measures (Fals-Stewart et al., 2000). Finally, compared to other studies, we had a smaller but acceptable sample size for exploratory factor analysis. Future research conducting a confirmatory factor analysis on this survey would typically need a sample size of at least 300 participants. Our analysis also included only substance-using probationers in two large metropolitan cities and thus needs further validation in order to generalize to other populations.

5. Conclusions

In this paper, we describe how we used a measure of probationers' reasons for wanting to successfully complete probation to structure an e-health intervention and to predict substance use outcomes. Although people's responses varied considerably, reasons such as moving on with life, legal consequences, and time constraints were commonly endorsed. Additionally, we evaluated the factor structure, reliability, and predictive validity of these questions. We found two distinct motivational tracks that could be used to accelerate reductions in risk behaviors. Probationers who were motivated by internal, qualitative, future-focused reasons were more likely to make changes in substance use, while probationers who were motivated by external, quantitative, and present-focused reasons were not more likely to make changes in these key areas. Our findings can contribute to the development of scales that explicitly focus on people's reasons to make positive changes while on probation.

6. Lessons Learned and Recommendations

In sum, we learned three key lessons that may be useful when planning and evaluating an e-health intervention.

1. People have a variety of reasons why they want to make changes. In our study, probationers indicated a number of reasons for completing probation beyond those that are traditionally targeted by the justice system.
2. People's reasons for change can be used to tailor an e-health intervention. We created motivational tracks that emphasized a person's reasons for wanting to complete probation. Respondents were quite positive about the perceived accuracy and helpfulness of the program.
3. People's reasons for change are important predictors of outcome. In our study, probationers who were motivated by internal, qualitative reasons were more likely to make changes in substance use. This information can be used by criminal justice systems to identify people who are at risk of a poor outcome. In future e-health programs, it may be advantageous to highlight these intrinsic reasons in order to stimulate change efforts early in the probation process.

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- There were two distinct motivational tracks for reasons to complete probation.
- Factor one, “Tangible Loss” focused on external and present-focused reasons.
- Factor two, “Better Life” focused on internal and future-focused reasons.
- High “Better Life” scores were associated with reduced substance use at follow-up.
- High “Better Life” scores were associated with treatment initiation at follow-up.

Table 1

Participant Characteristics.

	N (%) M (SD)
Male	72 (63.7%)
Race	
African American	71 (62.8%)
Caucasian	30 (26.6%)
Other	12 (10.6%)
Criminal Risk Level	
Low	27 (23.9%)
Medium	47 (41.6%)
High	39 (34.5%)
Number of Arrests	9.0 (9.0)
Age at First Arrest	21.3 (9.0)
Baseline Days of Substance Use	18.2 (20.3)
Days of Substance Use at FU	9.8 (18.8)
Days of Treatment Attendance at FU	5.5 (13.8)

Note: N=113. M = Mean, SD = Standard deviation, FU = Follow-up.

Table 2

Association of Reasons for Change Dimensions and Frequency of Substance Use and Treatment Attendance.

	Substance Use ^a		Treatment Attendance ^b	
	OR	95% CI	OR	95% CI
Financial	0.66	0.38, 1.07	0.50 [*]	0.29, 0.85
Freedom	0.33 ^{***}	0.22, 0.52	1.28	0.78, 2.06
Getting on with Life	1.49	0.68, 3.29	na ^c	na ^c
Legal	0.45 ^{**}	0.27, 0.76	1.39	0.76, 2.56
Relationships	0.41 ^{***}	0.26, 0.65	2.30 ^{**}	1.39, 3.81
Time	0.52 ^{**}	0.33, 0.82	0.83	0.50, 1.38
Shame	1.14	0.71, 1.82	2.84 ^{***}	1.65, 4.91

Note: N= 101. OR = Odds ratio.

^{*}
 $p < .05$,

^{**}
 $p < .01$,

^{***}
 $p < .001$. Model adjusts for participant demographics: age, gender, criminal risk level, and days of substance use at baseline.

^aSubstance use is defined as a daily count of heavy drinking episodes and/or illicit drug use.

^bTreatment attendance is defined as a daily count of formal treatment attendance or self-help meeting.

^cDue to little variation in responses parameter could not be estimated.

Table 3

Rotated Factor Loadings for Reasons to Complete Probation Items.

	M (SD)	Component 1 Tangible Loss	Component 2 Better Life
So I don't have to spend money on probation fees.	1.42 (.78)	.697	-.045
To have more money.	1.60 (.70)	.666	.266
To quit having to check in with others when I want to do something.	1.66 (.65)	.688	.202
So I don't have to tell people I'm on probation.	1.37 (.78)	.536	.343
So I don't have to spend so much time meeting with people about probation.	1.50 (.72)	.777	-.036
So I can spend more time doing what I want to do.	1.73 (.57)	.757	.126
To make my life better.	1.88 (.40)	-.138	.699
To leave my legal troubles behind me and get on with my life.	1.92 (.30)	.158	.601
To avoid going to jail or prison.	1.81 (.57)	.152	.559
To avoid making things worse for me legally.	1.74 (.55)	.234	.615
To set an example for my family or friends.	1.50 (.71)	.096	.747
To make my family proud.	1.58 (.69)	.036	.615
So people will quit judging me.	1.03 (.85)	.292	.570
To be able to travel.	1.56 (.67)	.392	.390
Eigenvalue		4.40	2.04
% of variance after rotation		23.14	22.87
Cronbach's alpha		0.79	0.75

Note: $N = 91$. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

Table 4

Model of Factor Scores and Frequency of Substance Use and Treatment Attendance.

	Substance Use ^a		Treatment Attendance ^b	
	OR	95% CI	OR	95% CI
Better Life	0.73 *	0.57, 0.94	4.30 ***	2.57, 7.18
Tangible Loss	0.84	0.65, 1.07	1.12	0.87, 1.46

Note: N= 101. OR = Odds ratio.

*
p < .05,

**
p < .01,

p < .001. Model adjusts for participant demographics: age, gender, criminal risk level, and days of substance use at baseline.

^aSubstance use is defined as a daily count of heavy drinking episodes and/or illicit drug use.

^bTreatment attendance is defined as a daily count of formal treatment attendance or self-help meeting.