Published in final edited form as:

Drug Alcohol Depend. 2012 February 1; 121(1-2): 97–102. doi:10.1016/j.drugalcdep.2011.08.014.

The Impact of Borderline Personality Disorder on Residential Substance Abuse Treatment Dropout among Men

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Abstract

Background—Research is increasingly focusing on identifying factors distinguishing patients who complete versus dropout of residential substance abuse treatment. One potentially relevant factor that has received relatively little attention is borderline personality disorder (BPD).

Method—This study sought to examine the effect of BPD on residential substance abuse treatment dropout within a sample of 159 male patients with substance use disorders – a population often understudied with regard to BPD and at high-risk for treatment dropout. Patients were administered a structured diagnostic interview to establish BPD diagnoses. Patients were then followed throughout the course of residential substance abuse treatment to identify those who completed treatment and those who prematurely dropped out of treatment.

Results—Patients with BPD were significantly more likely to prematurely dropout of treatment, and this finding remained even when taking into account relevant covariates (i.e., court-ordered treatment status, contract duration, and major depressive disorder). Further, patients with BPD were more likely to experience center-initiated dropout as opposed to voluntary withdrawal from treatment.

Conclusions—These findings add to the literature on BPD-SUD co-occurrence, suggesting that the presence of co-occurring BPD among male SUD patients may increase the risk for dropout from residential substance abuse treatment, necessitating targeted interventions focused on decreasing dropout within this patient subgroup.

Keywords

Borderline Personality Disorder; Comorbidity; Personality Disorders; Substance Abuse Treatment; Substance Use Disorder; Treatment Retention

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Author Disclosures

Both authors were involved in study design and protocol development. The first author wrote the first draft of the manuscript and conducted the statistical analyses. The second author assisted in writing later drafts of the manuscript. All authors contributed to and have approved the final manuscript.

All authors declare that they have no conflicts of interest.

1. Introduction

Substance use disorders (SUDs) are a serious clinical concern, affecting 21.2% of the general population (Kessler et al., 2005) and associated with considerable economic, societal, and personal costs (Rehm et al., 2009). Despite the relative availability of substance abuse treatment programs, a substantial proportion (ranging from 13 to 31%) of individuals who seek treatment for a SUD do not complete treatment (e.g., Daughters et al., 2005, 2008; Lejuez et al., 2008; Simpson et al., 1999). Given evidence that patients who leave substance abuse treatment prematurely closely resemble those who never receive treatment (Stark, 1992), researchers have become increasingly interested in examining potential predictors of treatment dropout. Such research has the potential to identify particular patient sub-populations that may be at heightened risk for not completing substance abuse treatment, thereby informing the development of targeted dropout prevention programs for these patients.

Given the high frequency with which SUDs co-occur with other psychiatric disorders (Reiger et al., 1990), much of the research on substance abuse treatment dropout has explored the effects of co-occurring Axis I psychiatric disorders (e.g., major depression, anxiety disorders, schizophrenia) on dropout (e.g., Araujo et al., 1996; Hättenschwiler et al., 2001; Stark, 1992). Interestingly, however, little research has examined the impact of co-occurring personality disorders (with the exception of antisocial personality disorder [ASPD]; e.g., Cacciola et al., 1996; Daughters et al., 2008; Greenberg et al., 1994; Kokkevi et al., 1998) on substance abuse treatment completion, despite evidence for a number of negative outcomes associated with co-occurring personality disorders among patients with SUDs (see Greenberg et al., 1994; Powell and Peveler, 1996; Thomas et al., 1999; Wölwer et al., 2001; Zikos et al., 2010). One personality disorder that warrants particular consideration in this regard is borderline personality disorder (BPD).

BPD commonly co-occurs with SUDs, with reported rates of BPD among SUD patients ranging from 10% to 50% (e.g., Ball et al., 1997; Cacciola et al., 2001; Gratz et al., 2008; Morgenstern et al., 1997; Weiss et al., 1993) and averaging 19% across studies (Trull et al., 2000). Moreover, BPD-SUD co-occurrence has been found to be associated with greater impairment and a worse prognosis than either disorder alone (Links et al., 1995). For example, the presence (vs. absence) of co-occurring BPD among SUD patients has been found to be associated with higher levels of substance use (Darke et al., 2005), more severe SUD symptoms (Morgenstern et al., 1997), higher rates of risky drug use behaviors (e.g., needle sharing; Darke et al., 2004), and greater likelihood of overdose (Darke et al., 2005).

Despite evidence for worse clinical outcomes among SUD patients with (vs. without) BPD, few studies have examined the effect of BPD on substance abuse treatment dropout. Of those that have, most have focused on dropout from outpatient (Marlowe et al., 1997) or combined inpatient and outpatient (Kokkevi et al., 1998; Ravndal and Vaglum, 1995) substance abuse treatment programs. Almost no studies have examined dropout from residential substance abuse treatment programs in particular. Given evidence for higher rates of BPD among SUD patients in residential substance abuse treatment programs compared to outpatient or other SUD treatment programs (Darke et al., 2005; Verheul et al., 1995), research examining the impact of BPD on dropout from this type of treatment specifically is especially needed and may have particular clinical relevance.

Currently, only two studies known to the authors have examined the effect of BPD on dropout from residential substance abuse treatment programs, and the results of these studies are mixed. Specifically, whereas Martínez-Raga et al. (2002) found that SUD patients with BPD were more likely to have an unplanned discharge from inpatient alcohol detoxification

than SUD patients without BPD, Dingle and King (2009) failed to find any significant association between BPD and residential substance abuse treatment completion. One possible explanation for these inconsistent findings may be the wide variability in the gender distribution of these studies and lack of attention to the influence of gender on BPD-dropout relation.

Considering the higher rates of BPD among female versus male SUD patients (Brooner et al., 1997; Ravndal and Vaglum, 1995; Trull et al., 2000), rates of BPD in mixed-gender samples of SUD patients likely vary significantly across gender, thereby confounding the effects of gender and BPD on SUD treatment completion when examining mixed-gender samples. In light of evidence of higher rates of treatment dropout among male versus female SUD patients (Maglione et al., 2000), as well as evidence that men (vs. women) with BPD may present with more severe substance use, comorbid personality disorders (e.g., ASPD), and difficulties with anger (Johnson et al., 2003; Tadić et al., 2009), it may be particularly important to focus on men specifically when examining the impact of BPD on substance abuse treatment dropout.

Consequently, the goal of the present study was to examine the impact of BPD on residential substance abuse treatment dropout within a sample of male SUD patients. We expected that SUD patients with (vs. without) BPD would be more likely to drop out of treatment, and that BPD would remain a unique predictor of treatment dropout even when controlling for a variety of other factors found to be associated with dropout (e.g., court-ordered status, additional psychiatric comorbidity, demographic variables, etc.). We also examined the extent to which BPD is differentially associated with different types of treatment dropout (i.e., voluntary withdrawal of the patient against medical advice or center-initiated treatment dropout due to violation of treatment facility rules).

2. Method

2.1. Participants

Participants were 159 men consecutively admitted to a residential substance abuse treatment facility in the Jackson, Mississippi area. Participants ranged in age from 18 to 61, with an average age of 36 ($SD = 10.37$). In regard to their racial/ethnic background, 47% were White, 44% were Black/African-American, 4% were Native American, and 5% were of another racial/ethnic background. The majority of the participants were single (72.3%) and low-income ($< \$10,000$ income = 43%). With regard to their educational attainment, 28% had not completed high school or received a GED, 41% had completed high school or received a GED, 25% had attended at least some college or technical school, and 6% had completed college or beyond.

2.2. Setting

Standard treatment at this residential substance abuse treatment facility involves a mix of strategies from Alcoholics Anonymous and Narcotics Anonymous, as well as groups on relapse prevention and various coping skills. The center requires complete abstinence from drugs and alcohol, with the exception of nicotine and caffeine (methadone maintenance is not available). Regular drug testing is done, and any use results in immediate dismissal from the facility. Aside from scheduled activities, residents are not permitted to leave the treatment facility. Contract durations for the treatment facility range from approximately 30 to 45 days. Average contract duration for the present sample was 34.54 days ($SD = 6.06$).

2.3. Measures

All participants were interviewed using the current Axis I disorder modules of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-IV; First et al., 1996), the BPD module of the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV; Zanarini et al., 1996), and the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990). The CAPS was included specifically to provide a more thorough assessment of PTSD symptoms (vs. the PTSD module of the SCID-IV), as the larger study from which these data were drawn examined the predictors of negative clinical outcomes among SUD patients with and without PTSD. The DIPD-IV is a structured diagnostic interview of DSM-IV Axis II disorders. It has demonstrated good inter-rater and test-retest reliability (Zanarini et al., 2000), with inter-rater kappa coefficients ranging from .68 to .73 (based on 84 pairs of raters independently rating 27 videotaped assessments) and a test-retest kappa coefficient of .69 to .74. The CAPS is a structured PTSD diagnostic interview and the most widely used PTSD measure (Elhai et al., 2005). The CAPS has adequate interrater reliability (.92–.99), internal consistency (.73–.85), and convergent validity with the SCID-IV (First et al., 1996) and other established measures of PTSD (Weathers et al., 2001). The robust psychometric properties of the CAPS have also been supported in a variety of different populations (e.g., Blake et al., 1990; Brown et al., 1996; Shalev et al., 1997; Weathers et al., 2001).

All interviews were administered by post-baccalaureate or doctoral-level clinical assessors trained to reliability with the principal investigator (MTT). All interviews were reviewed by a Ph.D. level clinician (MTT or KLG), with diagnoses confirmed in consensus meetings.

All participants also completed a demographics form assessing age, racial/ethnic background, marital status, education, income in the past year, the current use of psychotropic medications, and whether or not their current treatment was court-ordered. Items were examined as potential covariates.

Treatment dropout data were collected from administrative staff at the treatment facility with the consent of the participants. Consistent with past studies (Daughters et al., 2005; Lejuez et al., 2008), treatment dropout was operationalized as: (a) the patient voluntarily leaving treatment against treatment center staff's recommendations; or (b) being asked to leave treatment due to engagement in treatment-interfering behaviors (including using substances, breaking rules at the treatment facility, violent or aggressive behavior, selling of substances, or having sexual relations with other patients).

2.4. Procedure

All procedures were reviewed and approved by the university's Institutional Review Board. To be eligible for inclusion in the study, participants were required to have: 1) obtained a Mini-Mental Status Exam (Folstein et al., 1975) score of ≥ 24 ; and 2) exhibited no current psychotic disorders (as determined by the SCID-IV). Eligible participants were recruited for this study no sooner than 72 hours after entry in the facility (to limit the possible interference of withdrawal symptoms on study engagement). Those who met inclusion criteria were provided with information about study procedures and associated risks, following which written informed consent was obtained. All participants took part in this study within their first two weeks of treatment. To reduce participant burden, the study protocol was conducted across two different sessions and participants were paid \$15 per session.

3. Results

3.1. Preliminary Analyses

Across all contract durations, 20.8% ($n = 33$) of participants dropped out of treatment, a rate consistent with previous studies examining residential substance abuse treatment dropout (i.e., 25.3%; Lejuez et al., 2008). Of the participants who dropped out of treatment, 48.5% ($n = 16$) voluntarily left treatment against medical advice and 51.5% ($n = 17$) had their treatment terminated by center staff due to violation of treatment facility rules. A total of 34 participants (21.4%) met criteria for BPD. Additional clinical characteristics of the sample are presented in Table 1.

Prior to conducting primary analyses testing our hypothesis, a series of analyses were conducted to identify potential covariates (i.e., variables demonstrating a significant association with treatment dropout status; Tabachnick and Fidell, 1996). Given the small number of participants in several of the income, education, and racial/ethnic categories, income, education, and racial/ethnic background were collapsed into dichotomous variables of (a) over (57.1%) versus under (42.9%) \$10,000 per year; (b) a high school degree or less (68.6%) versus some college or more (31.4%); and (c) White (46.5%) versus Non-White (53.5%). No significant associations were found between treatment dropout status and age, income, racial/ethnic background, education, marital status, and current use of psychotropic medications ($rs < .15$, $ps > .05$). Court-ordered treatment status also was not found to be significantly associated with treatment dropout, $\chi^2(1) = 0.84$, $p > .05$; however, given the theoretical relevance of this variable to treatment completion, we decided to include this variable as a covariate in subsequent analyses. Further, the presence of a current diagnosis of major depressive disorder was associated with treatment dropout, $\chi^2(1) = 6.83$, $p < .01$. No other diagnoses were found to be associated with treatment dropout, $\chi^2s(1) < 3.04$, $ps > .05$. Finally, given that participants who dropped out of treatment had shorter contract durations ($mean = 32.58$, $SD = 5.50$) than those who completed treatment ($mean = 35.02$, $SD = 6.11$), $t(157) = 2.08$, $p < .05$, this variable was also included as a covariate in subsequent analyses.

3.2. Primary Analyses

As predicted, patients with BPD were significantly more likely to dropout of treatment than those without BPD (38.2% vs. 16%), $\chi^2(1) = 8.04$, $p < .01$. Next, we conducted a hierarchical logistic regression to determine whether BPD significantly predicted treatment dropout above and beyond relevant covariates. In the first step of the model, court-ordered treatment status, contract duration, and the presence of a current diagnosis of major depressive disorder were entered as independent variables. In the second step of the model, BPD status was entered as the independent variable. Treatment dropout (yes vs. no) served as the dependent variable. The overall model was significant, $\chi^2(4) = 15.42$, $p < .01$, accounting for 14% of the variance in treatment dropout. Furthermore, BPD emerged as a significant predictor of treatment dropout status above and beyond the covariates and significantly improved the model, accounting for an additional 4% of the variance in treatment dropout status, $\chi^2(1) = 4.44$, $p < .05$ (see Table 2).

Next, we examined whether patients with BPD were more likely to experience voluntary or center-initiated treatment dropout than those without BPD. Results indicate that patients with (vs. without) BPD were significantly more likely to experience center-initiated treatment dropout (26.5% vs. 6.4%, respectively), $\chi^2(2) = 11.86$, $p < .01$, whereas rates of voluntary withdrawal from treatment were relatively consistent across patients with and without BPD (11.8% vs. 9.6%). To further explore this question, we conducted a multinomial logistic regression examining the extent to which BPD status predicted the specific type of treatment dropout, controlling for court-ordered treatment status, contract

duration, and current major depressive disorder. The three-level categorical treatment dropout variable (i.e., no dropout, voluntary withdrawal, center-initiated dropout) served as the dependent variable, with no dropout serving as the reference group. Again, the overall model was significant, $\chi^2(8) = 24.76, p < .01$, accounting for 20% of the variance in treatment dropout status. BPD status was not found to significantly predict voluntary withdrawal relative to no dropout above and beyond the covariates. However, BPD status did significantly predict center-initiated dropout relative to no dropout above and beyond the covariates (see Table 3), demonstrating the relevance of a diagnosis of BPD to center-initiated treatment dropout in particular within this sample of male patients.

Given that patients with (vs. without) BPD had significantly higher rates of current opioid, sedative, cocaine, and marijuana dependence, we reran primary analyses controlling for these diagnoses to ensure that results could not be better accounted for by elevated levels of substance dependence among SUD patients with BPD. Findings remained the same when these additional covariates were included. Specifically, in both the binomial and multinomial models, BPD significantly predicted both treatment dropout in general ($B = 1.03, Wald = 4.14, OR = 2.80, 95\% CI = 1.04-7.56, p < .05$) and center-initiated dropout in particular ($B = 1.81, Wald = 7.38, OR = 0.16, 95\% CI = 0.04-0.60, p < .01$) above and beyond the covariates.

4. Discussion

The present study sought to examine the extent to which the presence of co-occurring BPD among male SUD patients predicts dropout from residential substance abuse treatment. Consistent with hypotheses, patients with a diagnosis of BPD were found to dropout of treatment at higher rates than those without BPD. Furthermore, this finding remained even when taking into account other covariates relevant to treatment dropout, including court-ordered treatment status, major depressive disorder, and contract duration. These findings add to the literature on BPD-SUD co-occurrence, suggesting that the presence of co-occurring BPD among male SUD patients may increase the risk for dropout from residential substance abuse treatment, necessitating targeted interventions focused on decreasing dropout within this patient subgroup. The results of this study also extend the extant research in this area, providing support for the relevance of BPD to center-initiated dropout in particular. Indeed, findings suggest that although SUD patients with (vs. without) BPD exhibit comparable rates of voluntary treatment withdrawal, the presence of co-occurring BPD is associated with higher rates of center-initiated dropout in particular.

Given findings that the presence of BPD among men (vs. women) is associated with more antisocial personality features (Johnson et al., 2003; Tadić et al., 2009) and greater difficulties regulating anger (Tadić et al., 2009), male SUD patients with (vs. without) co-occurring BPD may experience greater difficulties controlling their behaviors when distressed in treatment (see Kruegelbach et al., 1993), resulting in a greater likelihood of violating treatment facility rules. Indeed, although we do not know the specific reason why patients were prematurely discharged from the treatment center, the display of violent or aggressive behavior toward other patients or treatment staff is grounds for discharge from the facility where participants were recruited. Of course, it is also possible that the higher rates of treatment dropout among male patients with BPD simply reflect the more severe substance use profiles that have been found among men with BPD (Johnson et al., 2003), which may make it more difficult to remain engaged in treatment, especially in its early stages. Alternatively, patients with BPD may pose a greater challenge to treatment facility staff (most of whom are unlikely to have specialized training in the treatment of BPD), interfering with effective behavior management. Regardless, results of the present study demonstrate that the presence of BPD among male patients with a SUD is uniquely

associated with heightened risk for center-initiated dropout from residential substance abuse treatment.

Although the results of this study add to the small body of literature on the effect of BPD on residential substance abuse treatment completion, findings must be considered in light of limitations present. First, although we controlled for the effects of additional Axis I diagnoses on treatment dropout within our analyses (providing some support for the unique effect of BPD on treatment dropout), we did not collect data on additional Axis II diagnoses. BPD has been found to co-occur frequently with other Axis II disorders (Zanarini et al., 2004), with the highest rates of co-occurrence among men in particular found with schizotypal personality disorder, narcissistic personality disorder, and ASPD (Johnson et al., 2003). Consequently, it is possible that our findings were not due to the presence of BPD per se, but the presence of another personality disorder or simply greater severity of personality pathology. It is important to note, however, that Ross et al. (2003) failed to find any differences between patients with a combined BPD-ASPD diagnosis and patients with BPD or another personality disorder on substance abuse treatment dropout. Furthermore, following an investigation of the additive and unique effects of BPD and ASPD on clinical outcomes among SUD patients, as well as findings that SUD patients with versus without ASPD did not differ on any clinical outcomes, Darke et al. (2004) concluded that an additional co-occurring diagnosis of ASPD provides no additive risk above and beyond BPD. Likewise, Hernandez-Avila et al. (2000) found that BPD was the only PD significantly associated with post-treatment outcomes among SUD patients. Nonetheless, it will be important for future studies to assess for the presence of other personality disorders in order to establish the unique effect of BPD in particular on residential substance abuse treatment dropout among men.

In addition, as our sample was primarily composed of patients with alcohol or cocaine dependence, the extent to which our findings generalize to other SUD populations is unclear. Given that high rates of BPD have also been found among patients dependent on opioids (DeJong et al., 1993; Kosten et al., 1989; Sansone et al., 2008), future studies should examine the extent to which findings apply to patients with opioid dependence in particular. Future research should also examine these relationships among patients dependent on other substances less often explored in relation to BPD, such as marijuana or stimulants (e.g., methamphetamines). Research is also needed to examine whether dependence on certain substances (e.g., cocaine) or combination of substances (cocaine vs. alcohol and cocaine) moderate the effects of BPD on treatment dropout.

Likewise, although our focus on male SUD patients may be considered an asset of this study (given the relative dearth of research on BPD among male patients), it is possible that findings may not generalize to female SUD patients with co-occurring BPD. Consequently, it will be important for future studies to replicate these findings with samples of female SUD patients, as well as large mixed-gender samples wherein the moderating role of gender on the BPD-dropout relation may be examined. Finally, our study did not explore potential mechanisms that may underlie the association between BPD and treatment dropout. Previous studies examining individual difference variables that may underlie residential substance abuse treatment dropout have highlighted the relevance of both low distress tolerance (Daughters et al., 2005) and anxiety sensitivity (Lejuez et al., 2008). There is evidence that patients with BPD exhibit lower levels of distress tolerance (Bornovalova et al., 2008; Gratz et al., 2006) and heightened levels of anxiety sensitivity (Gratz et al., 2008) than those without the diagnosis. Consequently, distress tolerance and anxiety sensitivity may be two potential mechanisms worth investigating in future studies.

Despite limitations, findings of the present study speak to the importance of continuing to examine the impact of BPD on clinical outcomes among male SUD patients, as well as the role of BPD in residential substance abuse treatment dropout. Such research has the potential to improve our understanding of the factors that may interfere with substance abuse treatment retention, as well as facilitate the development of novel, targeted dropout prevention programs for specific patient populations. For example, literature suggests that the incorporation of skills from dialectical behavior therapy (DBT; Linehan, 1993) into substance abuse treatment may improve treatment retention (Bornoalova and Daughters, 2007). Considering that male SUD patients with BPD exhibit greater difficulties regulating emotions than those without BPD (Kruegelbach et al., 1993), the incorporation of DBT emotion regulation and distress tolerance skills in particular may be especially useful in targeting dropout within this population. Indeed, the focus of these skills on controlling behaviors and acting effectively in the context of emotional distress would likely have direct relevance to reducing treatment dropout among male SUD patients with BPD. The integration of such protocols into standard residential substance abuse treatment may enhance treatment retention rates for patients at risk for leaving treatment prematurely.

Acknowledgments

Support for this study was provided by R21 DA022383 from the National Institute on Drug Abuse of the National Institutes of Health, awarded to the first author (MTT); the NIDA had no further role in study design; in the collection, analysis and interpretation of data; in the writing of the report; or in the decision to submit the paper for publication.

The authors would like to thank Michael McDermott, Nicole Weiss, Jessica Fulton, Rachel Brooks, Melissa Soenke, and Sarah Anne Moore for their assistance with data collection.

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Table 1
Clinical Characteristics of Participants and Differences as a Function of BPD Status

<i>Variable^a</i>	<i>Overall (N = 159)</i>		<i>BPD (n = 34)</i>		<i>No BPD (n = 125)</i>		<i>χ² (1)</i>
	<i>N</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
Court-ordered Treatment Status (yes)	49	30.8%	15	44.1%	34	27.2%	3.59
Psychotropic Medication Use (yes)	50	31.4%	16	47.1%	34	27.2%	4.89*
Major Depressive Disorder	32	20.1%	14	41.2%	18	14.4%	11.92**
Specific Phobia	18	11.3%	6	17.6%	12	9.6%	1.72
Panic Disorder	27	17.0%	8	23.5%	19	15.2%	1.32
Social Anxiety Disorder	17	10.7%	5	14.7%	12	9.6%	0.73
Generalized Anxiety Disorder	46	28.9%	16	47.1%	30	24.0%	6.91**
Posttraumatic Stress Disorder	34	21.4%	13	38.2%	21	16.8%	7.31**
Obsessive-Compulsive Disorder	3	1.9%	1	2.9%	2	1.6%	0.26
Alcohol Dependence	62	39.0%	18	52.9%	44	35.2%	3.54
Cocaine Dependence	54	34.0%	18	52.9%	36	28.8%	6.95**
Opioid Dependence	16	10.1%	7	20.6%	9	7.2%	5.29*
Sedative Dependence	13	8.2%	7	20.6%	6	4.8%	8.88**
Stimulant Dependence	13	8.2%	4	11.8%	9	7.2%	0.74
Marijuana Dependence	36	22.6%	12	35.3%	24	19.2%	3.95*
Hallucinogen Dependence	2	1.3%	0	0.0%	2	1.6%	0.55

^a All data presented reflect the presence of the disorder.

* $p < .05$.

** $p < .01$.

Table 2

Binomial Logistic Regression Examining BPD as a Predictor of Treatment Dropout

	B	Wald	OR	95% CI
<i>Step 1</i>				
Court-ordered Treatment Status	−0.40	0.73	0.67	0.27–1.67
Contract Duration	−0.08	3.66	0.92	0.85–1.00
Major Depressive Disorder	1.00	4.99*	2.72	1.13–6.54
<i>Step 2</i>				
Court-ordered Treatment Status	−0.56	1.37	0.57	0.22–1.46
Contract Duration	−0.07	3.06	0.93	0.86–1.01
Major Depressive Disorder	0.71	2.19	2.03	0.86–1.01
BPD	1.01	4.56*	2.74	1.09–6.92

Note. BPD = Borderline Personality Disorder; OR = Odds Ratio; CI = Confidence Interval.

* $p < .05$.

Table 3
Multinomial Logistic Regression Examining BPD as a Predictor of Treatment Dropout Type Relative to Treatment Completion

	Likelihood of Treatment Dropout Relative To Treatment Completion			
	Voluntary Withdrawal		Center-Initiated	
	B	Wald	OR	95% CI
Court-ordered Status	-1.97	3.45	0.14	0.02–1.11
Contract Duration	-0.08	2.04	0.92	0.82–1.03
MDD	1.15	3.55	3.16	0.96–10.48
BPD	0.18	0.07	0.83	0.21–3.36
			1.59	7.53*

Note. MDD = Major Depressive Disorder; BPD = Borderline Personality Disorder; OR = Odds Ratio; CI = Confidence Interval.
* $p < .01$.