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The Moderating effects of Cluster B Personality Traits on Violence Reduction Training: A Mixed-Model Analysis

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Abstract

Cognitive behavioral therapies have positive effects on anger and aggression; however, individuals differ in their response to treatment. The authors previously found that dynamic factors, such as increases in readiness to change, are associated with enhanced outcomes for violence reduction training. This study investigated how less dynamic factors, specifically Cluster B personality traits, moderate the effects of violence reduction training. The authors used mixed modeling to fit growth curves to 14 weeks of anger strategies data and evaluated whether the presence of Cluster B traits affected pretreatment anger levels and rates of change. As expected, overall levels of negative anger strategies decreased across the 14-week treatment. Participants with antisocial, borderline, and histrionic personality features reported higher rates of negative anger strategies, whereas those with narcissistic personality features reported fewer negative anger strategies. Those with antisocial personality features improved at a rate similar to the overall trend of those without Cluster B traits. Those with borderline and histrionic features improved at an accelerated rate.

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Unregulated anger impairs health, decreases quality of life, and is costly to society when it leads to violent behavior (Chang, Ford, Meoni, Wang, & Klag, 2002; Gates, Fitzwater, & Succup, 2003). Meta analyses indicate that cognitive behavioral treatments have been generally effective for reducing unhealthy anger and aggression, but outcomes vary from study to study (Beck & Fernandez, 1998; Saini, 2009). From the perspective of the Risk-Need-Responsivity (RNR) model of offender assessment and treatment, current treatments are associated with general responsivity, meaning that cognitive and social learning techniques are effectively used to reduce anger, aggressive ideation, and violence in a wide range of offenders (Andrews, Bonta, & Wormith, 2011). RNR suggests that outcomes can be improved by developing treatments that are also associated with specific responsivity, such that the intervention is tailored to the specific learning styles and personalities of individual offenders.

Personality disorders are defined by long-standing and inflexible patterns of thinking, emotion, behavior, and interpersonal problems. These maladaptive patterns play an important role in anger and aggression. Ten personality disorders (plus a not otherwise specified diagnosis) are organized into three clusters. Cluster A is typified by odd and eccentric beliefs and behaviors; Cluster B is typified by dramatic, emotional, and erratic behavior; and Cluster C is typified by anxiety, fear, and avoidance. In comparison to other disorders, the personality disorders tend to be overlearned and more resistant to change. The Cluster B diagnoses of antisocial, borderline, narcissistic, and histrionic personality disorders are of particular interest for understanding response to anger management and violence reduction because high levels of anger, impulsivity, and disregard for others are core features of these disorders (APA, 2000). Antisocial traits are marked by a disregard for laws and the rights of others and are predictive of interpersonal violence (Taft et al., 2010). Borderline personality disorder is marked by an unstable sense of self and severe fluctuations in mood and emotion. Women with borderline traits have been shown to experience longer anger responses to anger primes (Jacob et al., 2008). Narcissistic personality disorder is marked by grandiose attitudes that function to mask low-self esteem. Persons diagnosed with narcissism are prone to greater anger reactivity in response to failure and social rejection (Rhodewalt & Morf, 1998; Twenge & Campbell, 2003). Histrionic personality disorder is

marked by rapidly shifting and exaggerated emotional expressions and, like other Cluster B disorders, has been linked to anger attacks (Fava, 1997).

People with Cluster B traits tend to develop interpersonal styles that make it difficult for them to engage effectively in psychotherapy. Antisocial traits have been found to interfere with anger treatment for veterans diagnosed with Posttraumatic Stress Disorder (Marshall et al., 2010). In clients with psychopathic traits, low levels of distress in response to problems combined with excessive self-esteem can interfere with the ability to recognize their own problematic behavior, and deceitfulness toward others can preclude full participation in therapy (Howells & Day, 2003). Narcissistic clients tend to experience and elicit anger during treatment (Betan, Heim, Zittel, & Westen, 2005; Gabbard, 1998). It is also common for clients who have developed personality disorders from exposure to trauma to present with higher levels of mistrust and skepticism for the goals of treatment and to react with greater anger toward treatment providers (Taft & Murphy, 2007).

Clients with Cluster B traits also tend to express more anger toward the treatment provider and the therapeutic process than patients with other personality disorders (Bradley, Heim, & Westen, 2005). This anger can impair motivation to change and degrade the working alliance. These interpersonal problems may be particularly problematic for cognitive and behaviorally oriented interventions designed to decrease violent responding (Ronan, Gerhart, Bannister, & Udell, 2010) and are associated with higher rates of treatment drop-out (Cadsky, Hanson, Crawford, & Lalonde, 1996; Hamberger, Lohr, & Gottlieb, 2000; Jewell & Wormith, 2010).

What remains unclear is the mechanism through which patients fail to engage with treatments designed to reduce anger, aggressive ideation, and violent behavior. We address this question in the current study. We investigated the mechanisms by which participants with Cluster B personality traits respond to a social problem-solving-based violence reduction intervention. We began by fitting session-to-session conflict management strategies data to growth curves and investigated how Cluster B traits related to baseline conflict management strategies and trajectories of change across treatment. Because characteristics of these diagnoses are associated with higher anger, we expected those with probable Cluster B traits to report higher rates of negative anger at pretreatment. Furthermore, we expected that characteristics of these disorders would interfere with treatment compliance, resulting in shallower slopes across treatment. Finally, we probed potential mechanisms of change by evaluating how Cluster B traits predicted posttreatment problem-solving components after controlling for pretreatment levels. By identifying

these mechanisms, we hoped to identify components of problem solving that required additional intervention following standard treatment.

Method

Participants

A total of 186 participants gave consent to participate in a 14-week group-based cognitive behavioral violence reduction program. Sixty-nine percent were male. The average age was 29 years (SD = 10). Eighty seven percent were court referred, and the remaining 13% were self-referred. Twenty-three percent were unemployed, 50% held blue-collar jobs, 19% were students, and 8% worked as professionals.

Measures

A Demographic Questionnaire assessed demographic characteristics described earlier.

Anger Strategies Scale. The Anger Strategies Scale was modified from Sonkin, Martin, and Walker's (1985) Anger Inventory. Participants endorsed whether which of the 34 strategies (17 positive and 17 negative) they used to resolve conflict in the preceding week. Items were weighted from 1, 2, or 3 with highly positive and negative strategies being weighted as 3. An example of a positive strategy is, "I took time to think through the situation before acting." An example of a negative strategy is, "I screamed at the other person." Both the positive and negative strategies scales are internally consistent (α = .87, and α = .89). In the current sample, the average 1 week test–retest reliability was .68 for negative strategies and .73 for positive strategies.

Social Problem-Solving Inventory— Revised—Short Form (SPSI-R-SF; D'Zurilla, Nezu, & Maydeu-Olivares, 1996) measured social problem solving, the cognitive behavioral process whereby individuals remedy life problems. Components of social problem solving include certain attitude sets about problems, problem-solving skills, and behavioral dispositions such as positive problem orientation, negative problem orientation, rational problem solving, impulsiveness/carelessness, and avoidance. The measure is internally consistent, with Cronbach's alpha values ranging from .79 to .83.

The Structured Clinical Interview for DSM-IV-TR Axis II Personality Disorders (SCID-II; *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., text rev., American Psychiatric Association [APA], 2000; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) measured personality

pathology. The SCID-II is a semistructured diagnostic interview in which the interviewer inquires about the *DSM-IV-TR* personality disorder symptoms. The SCID-II has shown good reliability Ball, Rounsaville, Tennen, & Kranzler, H. R. (2001) and validity in previous studies (Oldham et al., 1992). For the purposes of this article, participants rated in the clinical range on enough SCID-II items to meet the threshold for a personality disorder were categorized as having the relevant personality trait.

Procedures

The university IRB gave approval for this study. Participants were enrolled in violence reduction training on a voluntary basis. Risks and benefits of participation were described, and all participants enrolled in the study gave informed consent. Participants underwent a structured clinical interview that included the SCID-II as well as an assessment of violent history. Participants then underwent 14 weeks of group-based cognitive-behavioral treatment for violence reduction. The treatment protocol is informed by the frustration- aggression hypothesis, and principles of social problem solving. Figure 1 provides an outline of the focus of each session. At each of the 14 sessions, participants provided responses to the Anger Strategies Questionnaire. The SPSI-R-SF was completed at pre- and post-treatment. For details of the treatment protocol see Ronan, Gerhart, Bannister, and Udell (2010).

Analyses

Descriptive statistics, including means, standard deviations, and frequencies, were tabulated. Data from the 14 sessions of Anger Strategies were fitted to growth models using hierarchical linear modeling (HLM). HLM offers several advantages for analysis of the current data set. HLM is well adapted to studying how individual factors predict differences in treatment outcome. It also manages error related to repeated measurements nested within the same individual and can adjust estimates of between-group variability when grouping variable sizes are small (Gelman & Hill, 2007). An overall growth model was calculated to describe the overall group such that

Level 1: Anger Strategies = Intercept + Slope (Time) + Residual

A second level was calculated to adjust for individual differences in intercept and slope, which was then combined with Level 1:

Week	Content
1	Informed consent, introductions, pre-treatment evaluations
2	Exploring readiness to change
3	Psychoeducation on anger
4	Overview of social problem-solving and stress
5	Reducing high arousal with deep breathing
6	Identifying problems and goal setting
7	Generating solutions, and implementing plans
8	Relaxation training, lifestyle change, and positive addictions.
9	Identifying and correcting faulty thinking
10	Effective listening skills
11	Assertiveness training
12	Managing confrontation, and fair fighting
13	Program review
14	First follow-up and post-treatment evaluation

Figure 1. Protocol schedule

Level 2: Intercept = Overall intercept + Individual Deviation from Intercept
Level 2: Slope = Overall slope + individual Deviation from Slope

For the present analysis, significant variability in the deviations from the overall intercept indicated that individuals began treatment with different levels of anger strategy use. Significant variability in the deviations from the overall slopes indicated that participants differed in their level of response to treatment. Finally, HLM was used to calculate how differences in intercept and slope related to covariates of interest. In this study, we assessed how the four Cluster B diagnoses predicted differences in baseline anger strategies and whether Cluster B diagnoses were associated with different rates of change during treatment. For further reading in HLM and growth modeling, we recommend Peugh and Enders (2005) and Gelman and Hill (2007).

We fit growth curves in SPSS version 17 following recommendations provided by Peugh and Enders (2005). Separate analyses were conducted on positive strategies and negative strategies to better delineate mechanisms of behavior change. We first fit unconditional growth models to the data to identify slopes and intercepts for the entire sample and to determine whether intercepts and slopes were sufficiently variable to warrant further analysis.

Table 1. Growth Curve Parameter Estimates for Positive Conflict Management Strategies

Parameter	Estimate	*SE*	*df*	*t*	Wald *z*	Significance	95% confidence interval	
							Lower bound	Upper bound
Intercept	10.34	0.51	182.54	20.08	—	.00	9.32	11.35
Slope	0.05	0.04	156.60	1.27	—	.21	–0.03	0.13
Residual	18.02	0.65	—	—	27.58	.00	16.78	19.35
Intercept + slope (co)variances								
UN (1,1)	40.70	5.11	—	—	7.97	.00	31.82	52.05
UN (2,1)	–0.70	0.30	—	—	–2.31	.02	–1.29	–0.11
UN (2,2)	0.17	0.03	—	—	5.45	.00	0.12	0.24

Note: UN = unstructured covariance matrix.

We next entered all four Cluster B traits in order to control for the effects of comorbidity.

We also investigated whether social problem-solving deficits varied by diagnosis. This was done by regressing posttreatment problem solving on Cluster B traits, controlling for pretreatment scores. As with the mixed models, we entered all four Cluster B traits simultaneously to control for comorbidity. These steps were conducted for overall problem-solving skills and its five components.

Results

Thirty-eight (20%) participants met criteria for borderline personality traits, 32 (17%) met criteria for antisocial personality traits, 24 (13%) met criteria for narcissistic personality traits, and 5 (3%) met criteria for histrionic personality traits. Twenty-four percent had met criteria for one Cluster B diagnosis, 10% had two diagnoses, 3% had three diagnoses, and 1% met criteria for all four diagnoses.

Growth Modeling of Anger Strategies

Table 1 contains parameters from the unconditional growth model for positive anger strategies.

Table 2. Growth Curve Parameter Estimates for Negative Conflict Management Strategies

							95% confidence interval	
Parameter	Estimate	*SE*	*df*	*t*	Wald *z*	Significance	Lower bound	Upper bound
Intercept	3.30	0.28	184.44	11.65	—	.00	2.74	3.85
Slope	–0.09	0.02	177.26	–5.20	—	.00	–0.13	–0.06
Residual	5.42	0.20	—	—	27.78	.00	5.06	5.82
Intercept + slope (co)variances								
UN (1,1)	12.34	1.54	—	—	8.03	.00	9.72	15.86
UN (2,1)	–0.44	0.08	—	—	–5.24	.00	–0.61	–0.28
UN (2,2)	0.03	0.01	—	—	4.24	.00	0.02	0.04

Note: UN = unstructured covariance matrix.

On average, participants entered treatment reporting 10 positive strategies for resolving conflicts during the previous week. Overall, there was no significant trend for the number of positive strategies across treatment. The bottom portion of the table contains an unstructured covariance matrix with intercept variance designated UN (1, 1), slope and intercept covariance designated UN (2, 1), and slope variance designated UN (2, 2). Review of residual covariance estimates suggested significant variability across intercepts ($z = 7.95$) and slopes ($z = –5.47$) and significant covariance between intercepts and slopes ($z = –2.32$).

Table 2 contains parameters from the unconditional growth model for negative conflict management strategies. On average, participants entered treatment reporting 3.30 negative conflict management strategies on the Anger Strategies Scale in the previous week. Overall, negative anger strategies showed a significant rate of decline over the course of treatment, with approximately one less negative strategy by the final week of treatment. Review of residual estimates suggested significant variability across intercepts ($z = 8.02$) and slopes ($z = 4.26$) and significant covariance between intercepts and slopes ($z = 5.24$). The significant variability in intercepts permitted further investigation into individual differences at baseline, and the significant covariance between intercepts and slopes permitted further investigation into individual response to treatment.

Tables 3 and 4 contain growth curve analyses for positive and negative strategies with personality traits included as predictors. Intercepts and slopes

Table 3. Growth Curve Parameter Estimates for Positive Conflict Management Strategies

Parameter	Estimate	*SE*	*df*	*t*	Wald *z*	Significance	95% confidence interval	
							Lower bound	Upper bound
Intercept	9.96	0.61	181.40	16.32	—	.00	8.77	11.14
Antisocial	3.22	1.39	182.07	2.31	—	.02	0.47	5.97
Borderline	0.31	1.33	179.38	0.23	—	.82	–2.32	2.93
Narcissistic	–2.83	1.60	186.75	–1.77	—	.08	–5.98	0.32
Histrionic	4.31	3.19	182.40	1.35	—	.18	–1.98	10.62
Slope	0.01	0.05	156.27	0.28	—	.78	–0.08	0.11
Antisocial slope	0.10	0.11	156.29	0.89	—	.38	–0.12	0.33
Borderline slope	0.10	0.11	158.67	0.96	—	.34	–0.11	0.32
Narcissistic slope	–0.03	0.13	164.26	–0.23	—	.82	–0.30	0.24
Histrionic slope	0.32	0.28	158.17	1.17	—	.24	–0.22	–0.87
Residual	18.02	0.65	—	—	27.57	.00	16.79	19.36
Intercept + slope (co)variances								
UN (1,1)	38.36	4.87	—	—	7.87	.00	29.91	49.21
UN (2,1)	–0.83	0.30	—	—	–2.74	.01	–1.42	–0.24
UN (2,2)	0.17	0.03	—	—	5.41	.00	0.12	0.24

Note: UN = unstructured covariance matrix.

were allowed to vary with each personality trait. Therefore, intercepts and slopes for each specific personality trait are obtained by adding the group parameter (INTERCEPT, SLOPE) with each personality trait deviance term. For example, the positive conflict management intercept for those with a probable antisocial diagnosis would be 13.17 (9.95 for the overall intercept + 3.22 for the antisocial intercept deviance term).

The inclusion of all probable *DSM-IV-TR* Cluster B traits into the growth model of positive strategies indicated that participants with antisocial personality traits reported significantly more positive strategies for a total of 13 positive strategies in the week prior to treatment. There was a trend for those with narcissistic traits to report fewer positive strategies, with seven positive strategies in the week prior to treatment. Levels of positive strategies remained stable throughout treatment across for all four personality traits.

Table 4. Growth Curve Parameter Estimates for Negative Conflict Management Strategies

							95% confidence interval	
Parameter	Estimate	*SE*	*df*	*t*	Wald *z*	Significance	Lower bound	Upper bound
Intercept	2.53	0.31	182.42	8.09	—	.00	1.90	3.15
Antisocial	1.98	0.73	182.34	2.71	—	.01	0.56	3.41
Borderline	2.17	0.60	179.61	3.15	—	.00	0.81	3.53
Narcissistic	–1.12	0.83	187.43	–1.36	—	.18	–2.76	0.51
Histrionic	4.54	1.66	182.16	2.74	—	.01	1.27	7.81
Slope	–0.07	0.02	171.85	–3.14	—	.00	–0.11	–0.02
Antisocial slope	–0.01	0.05	173.54	–0.24	—	.82	–0.11	0.08
Borderline slope	–0.13	0.05	175.60	–2.91	—	.01	–0.23	–0.04
Narcissistic slope	0.07	0.06	186.41	1.29	—	.20	–0.04	0.19
Histrionic slope	–0.25	0.12	170.88	–2.15	—	.03	–0.47	–0.02
Residual	5.43	0.20	—	—	27.76	.00	5.06	5.83
Intercept + slope (co)variances								
UN (1,1)	10.12	1.31	—	—	7.72	.00	7.85	13.05
UN (2,1)	–0.35	0.08	—	—	–4.71	.00	–0.50	–0.21
UN (2,2)	0.02	0.01	—	—	3.74	.00	0.01	0.04

Note: UN = unstructured covariance matrix.

The overall number of negative strategies reported at pretreatment by participants who did not meet SCID-II criteria was 2.53. Participants who met criteria for antisocial, borderline, and histrionic personality traits endorsed significantly more than 2.53 negative conflict management strategies at pretreatment. Participants with histrionic personality traits reported the highest number of negative conflict management strategies, approximately seven in the week before treatment. Participants with antisocial personality traits and borderline personality traits were similar at pretreatment, reporting approximately five negative strategies in the week prior to treatment. Histrionic personality traits and borderline personality traits were also associated with greater treatment response in comparison to the overall trend. Participants

with borderline personality traits showed a decrease of 0.20 negative strategies per session, whereas those with histrionic personality traits demonstrated a decrease of 0.31 negative strategies per session.

Posttreatment Problem-Solving Skills

We conducted five hierarchical multiple regressions using posttreatment social problem-solving skills, including total problem-solving skills, positive problem orientation, negative problem orientation, rational problem solving, impulsiveness-carelessness, and avoidance. After controlling for pretreatment social problem-solving skills, no Cluster B traits were associated with total problem solving, impulsiveness-carelessness, or avoidance. Controlling for other personality traits, participants with borderline personality traits endorsed higher negative problem orientation, $\beta = .22$, $p < .01$, and a trend for higher positive problem orientation, $\beta = .12$, $p = .10$, at posttreatment, suggesting these individuals continued to perceive higher levels of life problems to which they responded with mixed attitudes. Controlling for other personality traits, participants with narcissistic personality traits obtained lower scores for positive problem orientation, $\beta = –.18$, $p < .01$, suggesting these individuals struggle to frame problems in a proactive, solution-focused manner.

Discussion

Results of this study are consistent with previous work on cognitive behavioral therapies that not only documents improvements in anger and aggression but also significant variability in response to treatment (Beck & Fernandez, 1998; Saini, 2009). Building on previous work on personality disorders, anger, and aggressive ideation, this study used HLM to investigate the specific responsivity of participants with Cluster B personality traits to a cognitive-behavioral treatment for anger, aggressive ideation, and violence.

Overall, we found a reduction in negative conflict management strategies over 14 sessions of treatment; however, no significant slope emerged for positive conflict management strategies. This suggests that short-term violence reduction programs might be effective at reducing aggressive strategies used for resolving conflicts, without increasing positive strategies. As with all null findings, the lack of change in positive strategies is difficult to explain and could be accounted for by many possibilities. Future studies should investigate the possibility that participants experience fewer objective problems across the course of treatment.

As expected, pretreatment positive and negative strategies for resolving conflicts differed across personality typologies. Those with antisocial personality traits reported significantly more positive and negative strategies, suggesting they experienced greater overall conflict. Consistent with the fluctuating emotional states that characterize these disorders, those with histrionic and borderline personality traits also reported more negative strategies at pretreatment than those without Cluster B traits. There was a trend for those with narcissistic personality traits to report fewer positive strategies at pretreatment. The narcissistic group also reported fewer negative strategies, although the difference did not reach significance. More data are needed, but these findings imply that those with narcissistic personality traits may underreport personal conflicts, perhaps as a way to preserve grandiose self-perceptions. This is consistent with research showing that narcissistic anger can be generated as a reaction to feelings of shame (Campbell, Foster, & Brunell, 2004), which may make anger particularly difficult to self-report.

With regard to treatment response, the slope of participants with antisocial personality traits and narcissistic personality traits did not diverge from the overall decrease in negative conflict management strategies reported by those reported without significant Cluster B traits. The lack of difference indicates that participants with antisocial and narcissistic traits are similarly amenable to aspects of violence reduction treatment. Those with borderline personality traits reported a rate of change nearly 3 times greater than those without Cluster B traits, and those with histrionic personality traits reported a rate of change as much as 4 times greater than those without Cluster B traits, suggesting that violence reduction may be especially helpful for these traits. The difference between participants with antisocial or narcissistic personality traits and participants with borderline or histrionic personality traits might be explained by the function of anger. For example, those with antisocial or narcissistic traits might be likely to see a berated coworker as the problem, whereas those with borderline or histrionic traits might attribute a similar conflict to their own difficulties managing anger.

It is also possible that the steeper declines in negative anger strategies for borderline and histrionic traits can be accounted for by regression to the mean, as borderline and histrionic traits were also associated with higher levels of negative conflict strategies at pretreatment. Although comparison to a control group would provide the best test of this hypothesis, it should be noted that the antisocial group also reported higher levels of anger at pretreatment but did not show accelerated change compared to non–Cluster B participants. If regression to the mean was the sole explanation of higher rates of treatment response, we would anticipate a similar pattern among antisocial participants.

With regard to posttreatment social problem skills, participants with borderline traits reported higher positive and negative problem orientations at posttreatment. We suspect that this finding may be due to this group increasing their problem awareness and experiencing more vacillation between hopeful and pessimistic attitudes. Narcissistic personality traits were also associated with more negative problem orientation at posttreatment. One possibility is that these participants increased their overall awareness of life problems and experienced greater disappointment and doubts about resolving them once ineffective defenses gave way.

Strengths and Limitations

Confidence in the findings that negative conflict management strategies decreased is bolstered by several methodological and statistical strengths. For instance, we incorporated numerous measurements of both positive and negative conflict management strategies. This large data set enabled us to use mixed-modeling procedures to model growth over the entire course of treatment, thus providing a robust method for managing longitudinal data and minimizing error associated with repeated measurements. We also investigated the role of several personality traits in predicting response to treatment. By modeling separate growth rates, we were able to address the significant problem of comorbidity that arises when evaluating the differential function of personality characteristics.

Despite these strengths, more research is needed to address areas of weakness in the current study. Most notably, the study lacked a control condition, and it is uncertain whether common legal and social contingencies (e.g., arrest, increased interpersonal distress) played a role in punishing anger-related behavior even in the absence of violence reduction training. This weakness could be overcome by incorporating a longer baseline measurement period to assess for downward trends prior to treatment. The findings are also based heavily on self-report, and perpetrators and victims of interpersonal violence frequently disagree on reporting interpersonal violence (e.g., Marshall, Panuzio, Makin-Byrd, Taft, & Holtzworth-Munroe, 2011). Future studies on violence reduction training could incorporate partner and family reports of changes in anger strategies to gain an additional perspective on the week-to-week effects of violence reduction.

Implications

This study represents an expansion of research on cognitive-behavioral therapy for anger and aggression, which assessed the specific responsivity of

participants with Cluster B personality traits. The current study provides support for the notion that cognitive-behavioral therapy is associated with general responsivity such that anger management strategies were reduced in the overall group. Moreover, the study provides support for the specific responsivity of participants with Cluster B traits. On the whole, participants with antisocial and borderline traits indicated greater need for services as evidenced by their higher rates of personal conflict at pretreatment but still showed significant reductions in the use of negative strategies over the course of treatment. Future research should address whether these groups need additional attention to aspects of their conflict about which they might be less aware (Gabbard, 1998).

Several aspects of the current treatment protocol may make this treatment particularly helpful for those with borderline and histrionic traits. Similar to effective treatments for borderline personality disorder (Linehan, 1993), violence reduction training provides a host of interventions designed to help participants increase self-awareness, regulate powerful emotions, and improve interpersonal skills. White and Gondolf (2000) have argued that similar programming that emphasizes affect regulation and the development of more effective social skills may be beneficial to men with borderline traits involved in male batterer programming.

Overall, our findings suggest that this challenging population is responsive to intervention and amenable to change through anger management. Clients with Cluster B traits showed higher rates of negative conflict management strategies at pretreatment that declined at rates comparable, if not more so, than non–Cluster B counterparts. This suggests that, given the high level of disruption and pain that anger causes in these patient's lives, anger management can be an effective component of an empirically based treatment approach for clients with Cluster B traits.

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