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Psychodynamic Psychotherapy for Double Depression and Intermittent Explosive Disorder: A Case Study With Time-Series Analysis

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Abstract

This is a single case study utilizing time-series analysis for a young adult man with major depressive disorder and dysthymic disorder (i.e., double depression [DD]) and intermittent explosive disorder (IED). Treatment consisted of long-term psychodynamic psychotherapy (LTPP) with an emphasis on facilitating emotional expression and fostering autonomy. During 13 months of therapy, the patient completed daily measures related to his presenting complaint, including overall distress and episodes of rage. These data were examined for clinically significant change across baseline and two phases of treatment using Simulation Modeling Analysis for time-series data. Results indicated improvement in overall distress and in rage episodes. In addition to daily measures, the patient completed a measure of general psychological functioning at monthly intervals throughout treatment, the results of which indicated no reliable change. Complicating factors and implications of treatment are discussed, including the efficacy of LTPP in the treatment of DD and IED.

Keywords

time-series, psychotherapy outcome, psychodynamic psychotherapy, intermittent explosive disorder, double depression

1 Theoretical and Research Basis for Treatment

Mood disorders are among the most prevalent psychological disorders, with lifetime prevalence estimated at 20.8% (Kessler et al., 2005). Among mood disorders, major depressive disorder (MDD) is the most prevalent (16.6%), with approximately 20% of individuals with depression experiencing chronic depression (Hasin, Goodwin, Stinson, & Grant, 2005; Kessler et al., 2005). The lifetime prevalence of dysthymic disorder is estimated to be much lower (2.5%); however, more than 75% of individuals with dysthymic disorder experience periods of increased depression during which a MDD is superimposed onto existing dysthymia symptomatology (Kocsis, McCullough, & Miller, 1995). When an individual experiences symptoms of dysthymia for 2

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years, thus meeting criteria for dysthymic disorder, and then experiences a major depressive episode, an individual may be diagnosed with both MDD and dysthymic disorder, the occurrence of which is informally referred to as double depression (DD). Research indicates that DD may be distinct from MDD, as individuals with DD have been found to experience increased severity and quantity of depressive symptoms and increased intensity of suicidal ideation. Furthermore, as compared with individuals diagnosed with MDD, individuals with DD report lower quality of life, differing patterns of comorbidity, and increased anhedonic features, suggesting qualitative differences between those diagnosed with MDD alone and those who experience DD (Holm-Denoma, Berlim, Fleck, & Joiner, 2006).

The additive effects of MDD and dysthymic disorder present in DD prove particularly damaging (Leader & Klein, 1996). Keller and Shapiro (1982) reported that 26% of individuals who met criteria for MDD had and underlying "chronic depressive disorder"; these individuals were more likely to relapse immediately following recovery from a major depressive episode than individuals diagnosed with MDD alone. As compared with individuals with MDD, individuals with DD tend to have longer duration of depressive symptoms and increased likelihood of recurrence (Keller & Shapiro, 1982), as well as increased symptom severity and greater hopelessness (Joiner, Cook, Hersen, & Gordon, 2007). A follow-up study conducted by Keller and colleagues (Keller, Lavori, Endicott, Coryell, & Klerman, 1983) indicated that known predictors of recovery from MDD were weakened for individuals with DD and that the duration of an ongoing chronic depression following recovery from a major depressive episode was associated with relapse, such that risk for relapse increased with the duration of time an individual experienced symptoms of chronic minor depression after recovery from a major depressive episode. Furthermore, depression in men, in particular, may be met with avoidance behaviors, leading to increased expressions of anger, aggression, violence, and suicide (Brownhill, Wilhelm, Barclay, & Schmied, 2005). In fact, men are more likely than women to commit suicide, despite lower incidence of depression. Recent research suggests that depressed men more often experience decreased impulse control, including "anger attacks," irritability, and substance use, than women (Winkler, Pjrek, & Kasper, 2005). Anger attacks in men often occur suddenly and occur in contrast to the otherwise vegetative hypoarousal that is common among men with depression (Winkler, Pjrek, & Kasper, 2006). Often comorbid with mood disorders, intermittent explosive disorder (IED), is marked by discrete episodes of aggressive outbursts that are impulsive, disproportionate to precipitating factors, and cause distress, impairment in functioning, or negative consequences (American Psychiatric Association, 2013). Lifetime prevalence of IED is estimated at 7.3 %, with a mean cost of property damage estimated at $1,359 (Kessler et al., 2006).

Treatment of DD and IED

Whereas a wealth of research suggests that cognitive-behavioral therapies (CBT) and short-term psychodynamic psychotherapy (STPP) are effective treatments for many individuals suffering acute emotional distress, short-term psychotherapy is sometimes inadequate for individuals with more complex mental disorders (Leichsenring, 2001). A meta-analysis of long-term psychodynamic psychotherapy (LTPP) indicates that LTPP is associated with significantly increased social functioning, personality functioning, improved general psychiatric and specific targeted problems, and increased overall effectiveness when compared with short-term psychotherapy. Post-treatment, individuals with complex mental disorders (e.g., individuals with personality disorders, multiple disorders, chronic disorders, etc.) who received LTPP were functioning better, on average, than individuals who received short-term psychotherapies (Leichsenring & Rabung, 2008). Furthermore, research suggests that while short-term psychotherapies might initially be more effective than LTPP, LTPP might be more effective in producing sustained, long-term benefits (Knekt et al., 2008).

Additional research findings indicate that psychodynamic psychotherapy is effective treatment for depressive disorders (e.g., Gallagher-Thompson, Hanley-Peterson, & Thompson, 1990; Maina, Forner, & Bogetto, 2005). Psychodynamic psychotherapy for depression has demonstrated efficacy in improving both depressive symptoms and global symptomatology, including relational, occupational, and social functioning (Hilsenroth, Ackerman, Blagys, Baity, & Moony, 2003). Furthermore, research suggests that LTPP has been associated with symptom improvement, reduced distress, improved global functioning, and improvement in defense styles for individuals with depression (Bond & Perry, 2004); however, few studies have examined treatment for IED (e.g., McCloskey, Noblett, Deffenbacher, Gollan, & Coccaro, 2008). A review of the literature indicates that IED is often treated with psychiatric medication (e.g., Feder, 1999; Kant, Chalansani, Chengappa, & Dieringer, 2004); however, findings of McCloskey and colleagues (2008) suggest that IED might be effectively treated with psychotherapy.

As discussed by Leichsenring and Leibing (2007), psychodynamic psychotherapy functions on a continuum of supportive and interpretive techniques. Interpretations are utilized in an effort to increase insight regarding patterns that maintain emotional distress. Conversely, supportive interventions are intended to improve or develop temporarily unavailable abilities (i.e., ego functions). Supportive interventions are accomplished, in part, by building a strong working alliance (Leichsenring, Hiller, Weissberg, & Leibing, 2006); the working alliance and the transference each play a key role in psychodynamic psychotherapy. Transference is defined as the recurrence of past experiences in present relationships; such patterns are thought to arise from early childhood experiences and to impact interpersonal relationships (IR) in adulthood. Awareness, examination, and interpretation of the transference are considered an essential mechanism for increasing insight and bringing about change in psychodynamic psychotherapy. Similarly, Luborsky (1996) outlines seven hypothesized curative factors in psychodynamic psychotherapy, pointing to the quality of the working alliance as central to successful psychotherapy, along with correct transference formulation, accurate interpretations, change in transference pattern, self understanding, internalization of gains, and the level of mental health.

Thus, the current case study aimed to use the principles of psychodynamic psychotherapy to facilitate insight and produce lasting change in IED and double depressive symptomatology. Specifically, the current case aimed to examine the effectiveness of psychodynamic psychotherapy in treating an individual diagnosed with IED, MDD, and dysthymic disorder. It was hypothesized that using psychodynamic theory, with emphasis on the seven curative factors noted above, to increase insight and improve unconscious patterns would initially lead to a reduction in rage episodes associated with IED. In addition, it was hypothesized that treatment would lead to improvements in general functioning and to improvement in depressive symptomatology such that the client would no longer meet criteria for MDD or dysthymic disorder.

2 Case Introduction

Mr. R was a 29-year-old Caucasian man who sought individual psychotherapy at the University of Tennessee Psychological Clinic at the referral of his previous therapist, with whom he had attempted recommencement of care. Mr. R was residing with his maternal grandmother and sought psychotherapy for "rage episodes" at the request of concerned family members. The therapist was a 2nd-year clinical psychology student supervised by a licensed clinical psychologist.

3 Presenting Complaints

At intake, Mr. R described ongoing "episodes of uncontrollable rage" during which he reportedly damaged property (e.g., threw objects, punched walls, etc.) and berated those in his presence, the majority of whom were family members. These "episodes" occurred multiple times per week,

most frequently upon waking, and lasted up to 3 hr. Mr. R indicated that sleep disruption was an apparent trigger for his rage and that his berating of family members often centered on their religious beliefs, as Mr. R was resentful of his upbringing within a strict religious group. As Mr. R's anger was often directed at family members, Mr. R's family had issued several "harsh ultimatums" that were to be enforced if he were unable to modify his behavior. As such, Mr. R sought psychotherapy to gain insight regarding his outbursts of rage and to increase his ability to control his behavior.

In addition to outbursts of rage, Mr. R acknowledged many depressive symptoms. Mr. R described a problematic sleep pattern whereby Mr. R succumbed to sleep during early morning hours (i.e., 3:00 a.m. to 7:00 a.m.) and awoke mid- to late afternoon (i.e., 2:00 p.m. to 5:00 p.m.). Mr. R indicated a reluctance to initiate sleep due to increased anxiety and experience of troubling thoughts, and instead preferred to distract himself with, for example, television and video games until he "passed out." Mr. R's sleep difficulties were further complicated by untreated sleep apnea due to limited access to health care. In addition, Mr. R described feelings of worthlessness, passive suicidal ideation, inactivity, overeating, as well increased anxiety when in public places, intrusive thoughts, and brooding and worry. Mr. R was reluctant to describe his intrusive thoughts but acknowledged that they were often aggressive in nature.

Furthermore, at the time of intake, Mr. R acknowledged past and current suicidal ideation but denied having plans or intent. Moreover, Mr. R indicated ongoing, intermittently heavy marijuana use since late adolescence; however, Mr. R reported that he had abstained from marijuana use during the 2 days preceding his intake in an effort to seek employment. At the time of intake, Mr. R was unemployed and was financially supported by his grandmother.

4 History

Mr. R was raised by his mother in a middle socioeconomic status, single-parent household outside of a small southeastern city. Mr. R had one older brother who passed away due to a complicated heart condition when Mr. R was 7 years old. Although grieving the death of his brother, Mr. R attempted to comfort his mother, who was reportedly inconsolable, by appearing strong and tending to daily tasks of the home. Soon after the death of Mr. R's brother, Mr. R's grandfather passed away; Mr. R was in his grandparents' home at the time of his grandfather's death and recalled memories of his family members' attempted resuscitation of his grandfather. Mr. R described this loss as quite difficult for him as he had viewed his grandfather as a "father figure." Mr. R began psychotherapy under the care of a licensed clinical psychologist at age 7 to address these traumatic life events. Mr. R continued psychotherapy for 2 years and indicated that this service had been "extremely helpful."

Mr. R's immediate family and maternal relatives were members of a small Christian sect. Mr. R initially attended school at his local church, eventually transitioning to boarding school within the same denomination. Mr. R reportedly resented many of his teachers and other church members for what he viewed as "hypocrisy"; he recalled painful memories of ostracism, bullying by peers that often centered on Mr. R's weight and physical appearance, and harsh punishments administered by teachers. Mr. R acknowledged the existence of dysthymic symptoms (e.g., depressed mood, hypersomnia, low self-esteem, and difficulty concentrating) beginning in elementary school and described worsening of symptoms during high school. As Mr. R began to experience major depressive symptoms (e.g., intensified depressed mood and hypersomnia, feelings of worthlessness, loss of energy, and psychomotor retardation) superimposed on his preexisting dysthymic symptoms, it became increasingly difficult for Mr. R to manage his responsibilities (e.g., waking, attending class, and completing assignments), leading Mr. R to return home to attend public school. The transition to public school proved too great of an adjustment for Mr. R, resulting in Mr. R's early withdrawal from school. Mr. R later obtained a GED at age 27.

Mr. R's mother remarried while Mr. R was in high school. Following a verbal altercation with his stepfather at age 18, Mr. R was prohibited from living in his mother's home. As such, Mr. R began residing with his maternal grandmother. Mr. R acknowledged that this rejection by his mother "may have affected [him] more than [he] realized." In addition, Mr. R recalled first meeting his father when he was 18 years old. Mr. R explained that although his father pursued a relationship with him, he maintained limited contact with his father as he was not comfortable with the "traditional father–son relationship" his father sought.

Mr. R worked as a cashier at various convenience stores throughout early adulthood before incurring termination for damaging a wall at his place of employment. Mr. R described incidents of aggression throughout early adulthood, though his aggression was typically directed toward property (e.g., "getting in a fight with a car"). Mr. R acknowledged few physical altercations with others and reported that these physical altercations were typically in defense of himself or close friends. Mr. R indicated that he had not incurred criminal charges for his acts of aggression.

In regard to relationship history, Mr. R indicated that he had one significant romantic relationship during adulthood and his commitment to this relationship was apparently unreciprocated. Mr. R remained single throughout the course of treatment. Finally, Mr. R used cannabis regularly for 10 years. He reportedly used the substance to improve mood, reduce anxiety, and increase the clarity of his thoughts. Although Mr. R had abstained from cannabis use for 2 days prior to his intake and acknowledged that he had occasionally used more than he considered beneficial, Mr. R did not wish to abstain from cannabis use entirely and resumed his use of the substance shortly after treatment began.

5 Assessment

Mr. R completed an intake interview to identify symptoms to track daily throughout his treatment to provide data for the time-series analyses described below. With his intake therapist, Mr. R selected overall distress and episodes of rage upon waking for daily tracking. Mr. R rated these symptoms using a 9-point Likert-type scale, whereby 1 indicated "*none/not at all bothered by this problem*" and 9 indicated "*extreme/extremely bothered by this problem*."

Mr. R completed ratings for 16 days prior to the onset of psychotherapy for the two items he elected to track. These data points served as an assessment of his pretreatment functioning. Treatment consisted of 13 months of individual psychodynamic psychotherapy conducted weekly, during which Mr. R continued daily tracking of his two identified symptoms.

In addition, Mr. R completed the Outcome Questionnaire-45 (OQ-45) once prior to the onset of treatment and at monthly intervals throughout treatment. The OQ-45 is a 45-item valid and reliable questionnaire designed to assess client outcome regarding symptoms of anxiety, depression, somatic problems, stress, IR, social role (SR), and quality of life (Lambert et al., 1996). The OQ-45 is composed of three subscales: symptom distress (SD), SR functioning, and quality of IR. The patient responded using a 5-point scale ranging from "*never*" to "*always*," providing a possible total score ranging from 0 to 180, with higher scores indicating more distress and a score of 63 or greater indicating clinical significance. The SD, SR, and IR subscales produce scores ranging from 0 to 100, 0 to 36, and 0 to 44 with scores of 36, 12, and 15, respectively, indicating clinical significance. A 14-point change across time points represents reliable change on the OQ-45, with 10-point, 7-point, and 8-point change indicating reliable change on the SD, SR, and IR subscales, respectively. Mr. R's baseline report indicated functioning in the clinically significant range on the OQ-45 total scale and all subscales.

6 Case Conceptualization

Mr. R was conceptualized as a bright individual whose early-life experiences prevented him from successfully developing autonomy. The untimely death of his brother during childhood and the

subsequent shift in family dynamics tasked Mr. R with caring for and, in many ways, parenting his mother; this role reversal forced Mr. R to deny his needs for dependency and to assume an autonomous role exceeding his developmental maturity. The absence of Mr. R's father, the loss of his brother and grandfather, and the emotional withdrawal of his mother left Mr. R both fearful of independence and separation from his remaining family members and fearful of the impact that abandoning his parental role and developing independence might have on his mother. The eventual remarriage of his mother may have threatened the dependent nature of the relationship Mr. R and his mother shared, causing Mr. R to report feelings of resentment toward his stepfather. Mr. R's forced departure from his mother's home reportedly left Mr. R feeling deeply rejected by his mother's "replacing" him and contributed to a sense of worthlessness as his care-giving was no longer needed by his mother. This perceived rejection elicited feelings of vulnerability and distrust of others, seemingly leading Mr. R to seek comfort in his grandmother. Mr. R's simultaneous dependence on his grandmother and realistic fear of her mortality exacerbated his feelings of insecurity and vulnerability.

As Mr. R's mother was unable to be a secure attachment figure from whom Mr. R could seek comfort, Mr. R's early environment prevented Mr. R from recognizing, processing, and expressing his emotional experiences; in fact, Mr. R was careful not to burden his mother with his emotions, particularly his own grief regarding his brother's death. Mr. R's strategy for managing emotions included "bottling them up," as he believed this strategy would prevent his emotions from affecting him and would allow him to remain strong so as not to burden others with his experiences. He employed this strategy throughout his development in an effort to protect himself from painful feelings of inadequacy and shame related to perceived rejection by members of his religious community, bullying by peers, and, later, being "replaced" by his stepfather.

Mr. R's attempted avoidance of painful emotions and conflict regarding his own needs of autonomy and dependence gave way to anxiety and depressive symptoms. Mr. R suppressed feelings of his anger toward his family for failing to protect him from perceived rejection within his religious community, as well as toward his mother for her failure to meet his dependency needs as a child and her later assertion of her independence by remarrying and forcing Mr. R to leave the home. As Mr. R's anger "built up," Mr. R was unable to maintain this suppression of his anger, leading his anger to manifest through episodes of intense rage. Mr. R experienced this expression of rage as uncontrollable, likening the experience to being overtaken by a monster that must "get the rage out of its system." Mr. R recalled little of these episodes and relied on the reports of family members to ascertain his actions. Mr. R's expression of his rage and his inability to remember the events served to allow Mr. R to both express emotions without ownership and further disavow the painful emotions he wished to avoid.

Treatment was designed to address the expression of rage by increasing awareness and expression of underlying feelings of insecurity, inadequacy, and anger related to early-life experiences and the impairment of his development into an autonomous adulthood. Psychodynamic psychotherapy would be employed to interpret the meaning and function of his behavior and symptoms, as well as increase insight into the development of his symptoms and to foster a sense of agency related to his expression of anger.

7 Course of Treatment and Assessment of Progress

Overview

Mr. R participated in once-weekly, 1-hr psychotherapy sessions that were ongoing for 13 months at the time of this article. Treatment integrated both supportive and insight-oriented psychodynamic psychotherapy and initially sought to foster a strong therapeutic alliance. Given Mr. R's discomfort with feelings of vulnerability, difficulty developing trust for others, and his relative

unfamiliarity with emotional expression, the provision of a safe space that was warm, accepting, supportive, and not overly intrusive was essential in order for Mr. R to begin exploring his emotional interior. This was achieved by careful listening, recognition of his pain, and reflection of his desire to increase his autonomy and sense of achievement.

The content of psychotherapy initially explored Mr. R's experience of his rage episodes, including possible antecedents to and patterns across incidents, as well as factors that may have contributed to the development and maintenance of this behavior. Through exploration and the facilitation of insight, psychotherapy aimed to reintegrate the disavowed parts of Mr. R that were expressed exclusively during his episodes of rage. Following the development of a thorough understanding and conceptualization of Mr. R's rage episodes, psychotherapy sought to target this behavior indirectly through exploration of underlying emotions and reintegration of disavowed parts of the self.

As Mr. R's pattern of emotional inhibition had become deeply ingrained during childhood, Mr. R experienced marked difficulty in recognizing, labeling, processing, regulating, and expressing emotions. Given these difficulties, psychotherapy shifted to explore and foster insight into the development of this avoidance of emotions and ways in which this avoidance might have been advantageous for Mr. R, followed by exploration of fears associated with allowing himself to experience negative emotions. Mr. R acknowledged fear that he would be viewed as "weak" if he were to express emotions, as well as fears of being overwhelmed by these emotions.

Next, treatment sought to explore these emotions more directly. This exploration facilitated processing of traumatic events, increasing awareness of and insight into his emotional pain, and increasing acceptance of his emotional experiences. Exploration of these emotions in a supportive and accepting environment allowed Mr. R to begin accepting and reintegrating these parts of himself. As Mr. R worked through this process, his ability to recall his emotions and behaviors during his episodes of rage improved and his episodes of rage reduced in intensity and frequency, eventually ceasing entirely. This insight-oriented work continued until Mr. R's uncle became ill and died 9 months into Mr. R's psychotherapy, at which point psychotherapy shifted to become more supportive in nature.

The death of Mr. R's uncle exacerbated Mr. R's insecurity and fears of vulnerability. Mr. R expressed fears of impending doom and became increasingly paranoid that other individuals or the government might act to harm him or restrict his freedom. The therapist provided recognition of these fears, as well as reality testing. Increased family conflict followed the death of Mr. R's uncle and the therapist provided ongoing support and acceptance throughout this process. Mr. R's success in managing these difficult events without the occurrence of a single episode of rage was recognized.

The remainder of psychotherapy provided ongoing support for Mr. R and a safe place for Mr. R to explore his emotional experiences. Mr. R began closely examining his cannabis use and the ways in which his use might increase his sense of complacency. Mr. R began more thoroughly exploring his future aspirations and the ways in which he might achieve autonomy. Although Mr. R's overall distress remained elevated during this period of family conflict, Mr. R expressed pride in his ability to provide support for his family members during this difficult time.

Assessment of Progress

Time-series data were analyzed using Simulation Modeling Analysis (SMA; Borckardt, 2006) to examine phase change for both daily measures. SMA accounts for the inherent autocorrelation of the single-subject data stream and utilizes bootstrapping techniques to compare treatment phases (Borckardt et al., 2008). The mean scores of two treatment phases are compared, producing an effect size and significance level that represent the significance of change in symptoms of interest across treatment phases.

Table 1. Means, Standard Deviations, and Autocorrelations for Daily Measures.

	Phase									
	Baseline (n = 8)		Total treatment (n = 191)		Treatment Phase 1 (n = 113)		Treatment Phase 2 (n = 78)		Overall (n = 199)	
Daily measure	*M* (*SD*)	pAR (lag1)	*M* (*SD*)	pAR (lag1)	*M* (*SD*)	pAR (lag1)	*M* (*SD*)	pAR (lag1)	*M* (*SD*)	pAR (lag1)
Overall distress	2.25 (1.44)	.12	1.77 (1.08)	.46**	1.37 (.64)	−.01	2.36 (1.29)	.44**	1.79 (1.09)	.44**
Rage	1.69 (.92)	.29	1.07 (.32)	.04	1.12 (.40)	.00	1.00 (.00)	NaN**	1.10 (.37)	.24**

Note. pAR (lag1) = autocorrelation at lag 1. NaN = Not a number (due to no variation).
*p < .05. **p < .01.

Table 2. Autocorrelations for Original and Collapsed Data.

Daily measure	Original data (n = 399)	Collapsed data (n = 199)
Overall distress	.36	.44
Rage	.11	.24

Note. Paired-samples t test = −1.54; p = .26.

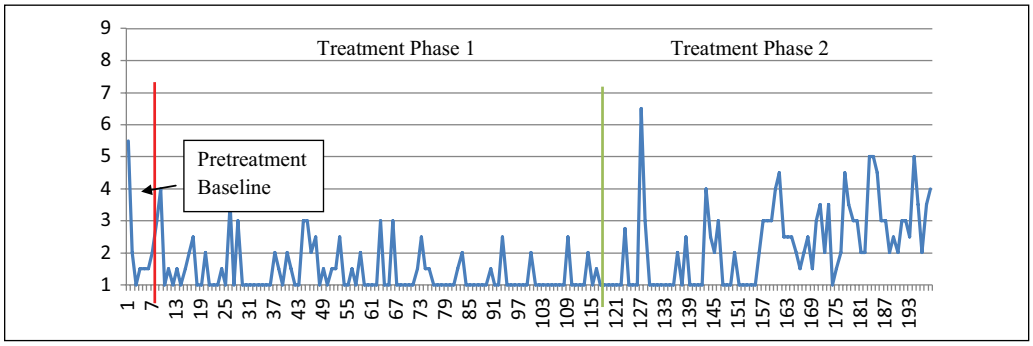

Figure 1. Overall distress across baseline and Treatment Phases 1 and 2.
Note. Red line indicates transition from pretreatment to Phase 1 of treatment; green line indicates transition from Phase 1 to Phase 2 of treatment.

For compatibility with the SMA program, which can analyze up to 200 data points, the original data streams for each of the two daily measures were collapsed into 2-day means of adjacent daily measures, reducing the data set from 399 data points to 199 data points for each daily measure, with 8 data points representing the pretreatment phase and 191 data points representing the treatment phase. This data truncation allowed for analysis of the full length of treatment. To ensure the integrity of the model was not compromised by utilizing the collapsed data points, a paired-samples t test was conducted to compare autocorrelations for the original and truncated data streams. The original and truncated sets of autocorrelations did not significantly differ, t = −1.54, p = .26 (see Table 1), suggesting the validity of simulation modeling analyses utilizing the truncated data streams; as such, all analyses utilized the truncated data streams. Descriptive statistics and autocorrelations for treatment phases are presented in Table 2 and Figures 1 and 2 present daily symptom measures graphically.

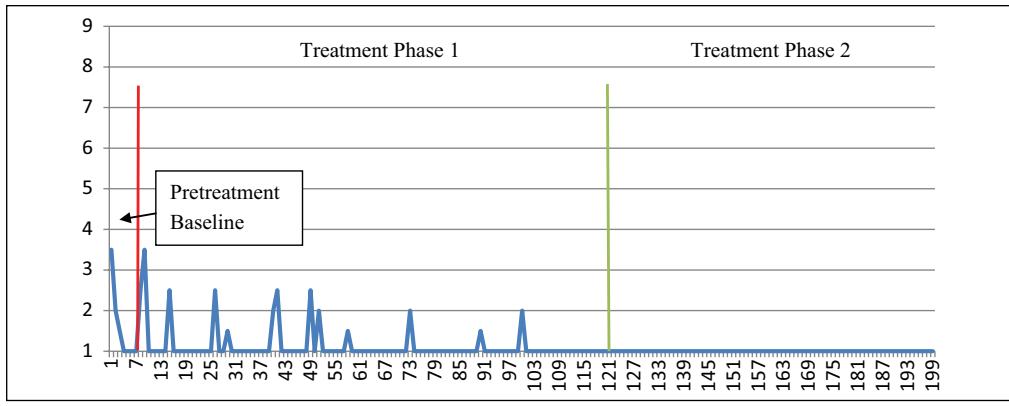

Figure 2. Severity of rage episodes across baseline and Treatment Phases 1 and 2.
Note. Red line indicates transition from pretreatment to Phase 1 of treatment; green line indicates transition from Phase 1 to Phase 2 of treatment.

Table 3. Phase-Effect Results for Daily Measures.

	Baseline to total treatment		Baseline to Phase 1		Phase 1 to Phase 2	
Daily measure	*r*	*p*	*r*	*p*	*r*	*p*
Overall distress	−.09	.40	−.29	.00*	.45	.00*
Rage	−.32	.00*	−.30	.01*	−.19	.01*

Note. Statistically significant change marked by the "*." *r* = Pearson's *R*.

Phase change was examined to determine significant change in symptom status from the pretreatment phase to the total treatment phase. In addition, phase change was analyzed from pretreatment to the first phase of treatment, and from the first treatment phase (Phase 1), which was more insight-oriented in nature, to the second treatment phase (Phase 2), which was more supportive in nature, for each of these measures.

Although no significant level change from pretreatment to total treatment for overall distress ($r = -.09$, $p = .40$) was indicated, results confirmed significant level change from pretreatment to total treatment for episodes of rage ($r = -.32$, $p < .01$). In addition, analyses of level change from pretreatment to Phase 1 of treatment indicated significant level change for overall distress ($r = -.29$, $p < .01$) and episodes of rage ($r = -.30$, $p = .01$) from pretreatment to Phase 1. Finally, results indicated a significant increase in overall distress from Phase 1 to Phase 2 of treatment ($r = .45$, $p < .01$) and a significant decrease in episodes of rage from Phase 1 to Phase 2 of treatment ($r = -.19$, $p = .01$). See Table 3 for a summary of these findings. Taken together, these findings suggest that Mr. R made significant and meaningful improvement in both overall distress and episodes of rage from baseline throughout Phase 1 of treatment. Following the death of Mr. R's uncle and the onset of family conflict, Mr. R's rage symptoms continued to improve despite an increase in overall distress during Phase 2 of treatment.

Despite this significant improvement on daily measures, there was no reliable change from baseline throughout treatment in Mr. R's report on the OQ-45, with the exception of the IR subscale score indicating reliable change from baseline exclusively during the 11th month of treatment. These findings suggest that Mr. R's symptoms related to depression, anxiety, somatic

complaints, and interpersonal and social functioning remained relatively stable throughout treatment.

8 Complicating Factors

Mr. R's untreated sleep apnea served as a complicating factor in this case as Mr. R's sleep apnea made it difficult to address his problematic sleep schedule. In addition, Mr. R's sleep schedule, along with his dependence on his mother for transportation to appointments, limited his availability for appointments and at times caused him to cancel appointments. Furthermore, Mr. R's limited financial resources hampered his ability to pay for parking; as such, Mr. R relied on his mother for transportation to appointments despite having a driver's license and his own vehicle. In addition, the death during treatment of Mr. R's uncle was followed by familial conflict by which Mr. R was quite troubled. Consequently, some aspects of treatment were slowed and Mr. R's overall distress increased.

Finally, Mr. R's cannabis use further complicated this case, as Mr. R often relied on cannabis as a method of avoidance. As Mr. R sought to make his life "tolerable" by using cannabis, his motivation for change was inhibited; however, Mr. R's cannabis use was difficult to address in therapy as Mr. R was an avid cannabis user. As such, this therapist relied on motivational interviewing techniques and, in an effort to foster autonomy, encouraged Mr. R to examine his use and make decisions accordingly.

9 Access and Barriers to Care

There were no managed care considerations in this case. The clinic where Mr. R was treated provides services using a sliding fee scale based on household income.

10 Follow-Up

As psychotherapy with Mr. R is ongoing, no posttreatment data have been obtained.

11 Treatment Implications of the Case

Mr. R's overall distress and episodes of rage both decreased significantly over Phase 1 of therapy and Mr. R's episodes of rage continued to improve across Phase 2 of therapy despite exacerbation of Mr. R's overall distress, apparently related to familial conflict and events. In fact, Mr. R's last reported episode of rage occurred 9 months into his 13-month treatment. This significant improvement suggests that LTPP is an effective treatment for IED. Through the work of emotional expression and the development of insight, Mr. R's IED was effectively treated without psychotropic medication.

As episodes of rage were Mr. R's primary concern at intake, these symptoms were tracked daily throughout his treatment. Consequently, symptoms of DD were not specifically tracked by Mr. R throughout treatment; however, results of the OQ-45 indicated no significant improvement in SD, which included symptoms of depression and anxiety. Although the OQ-45 is not a measure of DD per se, lack of significant improvement on this measure would likely be consistent with ongoing symptoms of DD. Furthermore, Mr. R remains in ongoing psychotherapy at the time of this article and he has not yet reached his goals of improving his sleep schedule, gaining employment, and living independently. Despite some perceived decline in the severity of depressive symptoms (e.g., improvement in self-worth and increased interest producing art), Mr. R continues to meet criteria for both MDD and dysthymic disorder at the time of this article. Given

Mr. R's lengthy history of depressive symptoms and the severity of his symptoms at intake, it is not entirely unexpected that Mr. R would require more than 1 year of therapy to fully address his DD. In addition, a referral for psychiatric consultation would likely be warranted in a case of this severity; however, Mr. R declined a referral for psychiatric services, stating that previous attempts with psychiatric medication made him "feel like a zombie."

Whereas the pressure from Mr. R's family that led him to seek treatment made ameliorating Mr. R's symptoms of IED a more pressing matter during the initial stages of treatment than addressing his symptoms of DD, Mr. R's symptoms of DD have proven over the course of therapy to be more debilitating and enduring than his symptoms of IED. Although portions of several early treatment sessions were devoted to discussion of Mr. R's rage episodes and assessment of progress was centered on these symptoms, a majority of treatment centered on emotional exploration and facilitation of insight in an effort to foster a sense of self-efficacy and autonomy that might serve to lift Mr. R from his double depressive symptoms. As treatment is ongoing at the time of this article, this therapist remains optimistic that LTPP will prove successful in reducing his depressive symptomatology.

12 Recommendations to Clinicians and Students

This study examined a single psychotherapy case of DD and IED using LTPP. The therapist received once-weekly supervision from a licensed psychologist. Time-series analyses were used to examine change throughout phases of psychotherapy. Single-subject time-series analysis offers a number of strengths (Borckardt et al., 2008) in that it allows for close tracking of targeted symptoms and for the quantification of progress in psychotherapy. Close examination of treatment in this manner might serve to improve awareness of change and the mechanisms that might facilitate change in psychotherapy. From a broader scope, time-series psychotherapy studies serve to bolster the extant psychotherapy literature and might point to improvements and future directions for evidence-based psychotherapy.

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