

THE PENNSYLVANIA STATE UNIVERSITY  
SCHREYER HONORS COLLEGE

DEPARTMENT OF PSYCHOLOGY

APPEAL OF FOUR PSYCHOTHERAPIES FOR BORDERLINE PERSONALITY  
DISORDER

SHANNON McCARRICK  
SPRING 2013

A thesis  
submitted in partial fulfillment  
of the requirements  
for baccalaureate degrees  
in Psychology and Anthropology  
with honors in Psychology

Reviewed and approved\* by the following:

Kenneth N. Levy  
Associate Professor of Psychology  
Thesis Supervisor  
Honors Adviser

Peter Arnett  
Professor of Psychology  
Faculty Reader

\* Signatures are on file in the Schreyer Honors College.

## ABSTRACT

There is accumulating evidence that some treatments, despite diverse underlying constructs, result in similar outcomes. Patient preference can serve as a central determinant for recommending a specific treatment because when patients are assigned to the type of psychotherapy they prefer, they typically experience better outcomes. However, there is some debate regarding which aspects of different treatment methods are most appealing to clients, specifically regarding whether clients will choose treatments based on whether or not empirical evidence supports their effectiveness. Participants were presented with vignettes describing the four most common treatments for borderline personality disorder (BPD) and asked which treatment they found most appealing using widely accepted dimensional measures of treatment credibility, acceptability, and preferences. It was hypothesized that participants would demonstrate preference for a therapy that is described as empirically supported because treatments that have proven most effective for treating BPD are desirable for those seeking treatment. Participants were randomized into one of five conditions, four in which one of the therapies was described as most effective based on research findings and one in which the treatments are described as having equal efficacy. Data was analyzed using one-way analyses of variance (ANOVA). Results show that when the four treatments were presented as having equal empirical support, DBT rated significantly higher than the other treatments for expectations and MBT rated significantly higher for credibility. When one treatment was isolated as having the most empirical support of the four, only TFP was rated significantly higher for credibility than when it was

presented as having less empirical support than another treatment. Findings are discussed based on clinical, theoretical, research, and practical implications.

## TABLE OF CONTENTS

List of Figures.....	iv
List of Tables.....	v
Acknowledgements.....	vi
Chapter 1 Appeal of Four Psychotherapies for Borderline Personality Disorder .....	1
Chapter 2 Methods.....	7
Participants .....	7
Procedures .....	7
Chapter 3 Results.....	9
Chapter 4 Discussion.....	15
Appendix A Demographics.....	23
Appendix B Demographics Questionnaire.....	24
Appendix C TEI .....	30
Appendix D CEQ.....	34
Appendix E BPD Vignette.....	36
Appendix F Treatment Vignettes.....	38
Appendix G Informed Consent.....	43
REFERENCES.....	47

**LIST OF FIGURES**

- Figure 1-1. Expectancy Ratings for Treatments with “Equal Empirical Support” ....12
- Figure 1-2. Credibility Ratings for Treatments with “Equal Empirical Support”.....12
- Figure 1-3. Expectancy for Treatments According to Empirical Support Condition....15
- Figure 1-4. Credibility for Treatments According to Empirical Support Condition....15

**LIST OF TABLES**

Table 1-1. Differences Between Treatments with “Equal Empirical Support” ....	10
Table 1-2. Expectancy Ratings for Equal Efficacy Treatment Pairs.....	10
Table 1-3. Credibility Ratings for Equal Efficacy Treatment Pairs .....	11
Table 1-4. Empirical Support Condition by Treatment.....	14
Table 1-5. Demographics.....	23

## ACKNOWLEDGEMENTS

It is with immense gratitude that I acknowledge the support of my mentor, Dr. Kenneth Levy, who served as both my honors advisor and thesis supervisor for this project. His enthusiasm for research and scholarship has helped shape both my development as a student and my budding career in clinical psychology.

I am also indebted to Tracy Clouthier for the generous amount of time and effort that she contributed to this project. Her input was invaluable to me, particularly with regard to research procedures and data analysis. Without her support and advice, this thesis would not have been possible.

I would like to thank Samantha Bernecker for helping me develop the idea for this thesis as well as for her guidance during the infancy of this thesis and throughout its development.

I would also like to acknowledge Dr. Peter Arnett for agreeing to act as faculty reader and for his helpful feedback and suggestions on the final drafts of the thesis.

Finally, I would like to thank my parents for their love and encouragement all my life, but particularly the past year. I owe many of my accomplishments to their unwavering support of my academic pursuits. Without them, I would not be the person I am today and for that I am deeply grateful.

## **Appeal of Four Psychotherapies for Borderline Personality Disorder**

Much of psychotherapy research is focused on examining which treatments are related to the best outcomes for different psychological disorders (Fonagy & Roth, 1996). Despite a focus on specific techniques, a great deal of research suggests that common factors cutting across therapies may actually have a greater impact on outcomes (Frank, 1971). One such common factor is client preference for some treatment or aspect of a treatment. Clients' preferences and expectations for treatments not only affect their willingness to undergo a therapy but also the therapy's success (Swift & Callahan, 2009). Generally, when clients have high expectations for a treatment's success, that treatment is more likely to result in a better outcome (Constantino, Glass, Arnkoff, Ametrano, & Smith, 2011).

Expectations can take several forms, whether about the overall success of the treatment, what the process of a treatment will be like, or what the therapist's and the client's roles and responsibilities are in the therapy (Garfield, 1994). Each of these aspects may influence a patient's preference for a therapy, and the degree to which they are hopeful about the treatment's potential to help. According to Lipkin (1948), clients may have: high expectancies for treatment, believing that their symptoms will improve and they will be pleased with the outcome; low expectancies for treatment, feeling as though the treatment will have no effect or a negative effect on them; or ambivalent feelings, being uncertain about how treatment will go for them. Research has shown that the degree to which a client is hopeful about a treatment predicts outcome across different treatment modalities (Frank, 1973).



A great deal of psychotherapy research tends to focus on anxiety disorders and mood disorders. However, the current study focuses on a relatively understudied psychological disorder, borderline personality disorder (BPD). In the United States, 2-6% of adults are affected by BPD, making it one of the most common psychological disorders (Zanarini, 2009). Common symptoms include impulsivity, a pattern of unstable interpersonal relationships, identity disturbances, affective disturbances including inappropriate anger, frantic efforts to avoid real or imagined abandonment, and recurrent self-mutilating or suicidal behaviors. Individuals with BPD often experience significant psychological impairment, including high levels of suicidality (APA, 2000).

Psychotherapy is widely considered to be more effective than psychotropic medications for treating individuals with BPD (APA, 2000). Particularly with regard to outpatients with borderline personality disorder, pharmacotherapy resulted in low frequencies of reduction in target symptoms, such as identity disturbance, impulsivity, emotional instability, and suicidal or para-suicidal behaviors (Zanarini, Frankenburg, & Gunderson, 1988). However, psychotherapy clients presenting with a diagnosis of BPD can be particularly difficult to treat due to their tendency to utilize services haphazardly, to fail to comply with therapists' recommendations, or to terminate treatment prematurely.

Additionally, some clinicians experience apprehension in treating patients with BPD or little hope for a positive outcome (Magnavita, Levy, Critchfield, Lebow, 2010).

There are four treatments for borderline personality disorder that have shown efficacy in RCTs. Two of these, dialectical behavior therapy (DBT) and schema-focused therapy (SFT), derive from the cognitive-behavioral tradition. The others, transference-

focused psychotherapy (TFP) and mentalization-based therapy (MBT), derive from the psychodynamic tradition. Each of these treatments will be presented in the current study and examined for the preferences and expectations they elicit. The aims and methods of each therapy are discussed below.

According to Linehan (1993), dialectical behavior therapy was developed around the perspective that BPD symptoms are caused by emotion dysregulation stemming from a biological predisposition to emotion problems and an invalidating childhood environment. The treatment involves encouraging clients to accept themselves while motivating them to change undesirable behaviors. This includes helping the patient understand his or her own experiences and thought processes and changing ones that are harmful. Finally, the therapist provides the client with tools for managing stress and regulating emotions (Linehan, 1993).

Schema-focused therapy centers on that idea that individuals who are diagnosed with BPD are born with an emotionally sensitive temperament which is then exacerbated by negative experiences in childhood. These experiences include having an unstable family environment, being raised by neglectful parents, or experiencing harsh punishments or rejection. According to Kellogg and Young (2006), these experiences cause the individual to develop a negative view or “schema” of themselves and others, which, in turn, creates distress and a failure to appropriately regulate emotions. As with DBT, one of the goals of SFT is to change the patient’s negative cognitions about themselves and others. Therapists can help accomplish this goal by providing the client with support that meets their needs in an attempt to overthrow feelings of neglect that they may have experienced in childhood. Another tactic is to challenge the client’s negative schemas of themselves and others by

providing evidence against them. Finally, the therapist can help identify circumstances in which the client is most likely to engage in a behavior that reinforces their viewpoint and provide tools to allow them to avoid those behaviors (Kellogg & Young, 2006).

Transference-focused psychotherapy takes a different approach to treating borderline personality disorder. Like the other treatments, TFP is based on the idea that BPD stems from an innate tendency toward emotional instability that is reinforced by negative childhood experiences. These experiences cause the client to feel a great deal of anger towards themselves and others. This, in turn, creates a phenomenon within the client called “splitting,” or perceiving people as entirely good or entirely bad, rather than as possessing both good and bad qualities (Kernberg, Yeomans, Clarkin, & Levy, 2008, p. 602). Splitting creates an unstable sense of self within the patient and causes problems with intimate relationships. The goal of therapy is to help the patient combine the split good and bad images of themselves and others and replace these with a more integrated and complex view. The therapist also examines how the relationship between the client and the therapist might reflect aspects of the client’s relationship with others and to help the patient recognize inconsistencies in their assessment of these relationships (Kernberg et al., 2008).

Finally, mentalization-based therapy is based upon the idea that BPD is caused by parents’ failure to teach the child the difference between their own emotional states and reality. According to this model, individuals with BPD are likely to attribute others’ negative actions towards them as evidence that they actually deserve to be mistreated. The result is an unstable sense of self which causes them have emotional difficulties and to engage in self-harming behaviors. This treatment aims to correct the client’s perceptions of

his or her mental processes and to demonstrate that others' behaviors should not determine the individual's view of themselves or the world (Bateman & Fonagy, 2004).

Each of these treatments has shown to be efficacious for BPD in randomized control trials (RCTs) (See Bateman & Fonagy, 1999; Davidson et al., 2006; Giesen-Bloo et al, 2006; & Levy et al., 2006). However, all of these have shown limited effects such as symptom reduction or GAF scores and only a subset of patients, about 50%, got better. In addition, it appears that there are no differences in the effectiveness of these treatments. For each of the treatments, though patients showed some symptom improvement, they still experienced significant psychological impairment (Zanarini, 2009). Some consideration must be given to changing the overall quality of the patient's life rather than just reducing the symptoms of BPD. Given the limited outcomes, it is possible that different patients might do better in different treatments, particularly because borderline personality disorder is a heterogeneous disorder. This means that individuals with this disorder experience different presentations of symptoms and a variety of demographic characteristics, resulting in different treatment needs for different patients (Hoermann, Clarkin, Hull, & Levy, 2005). One thing to consider in this regard is that a focus on the mechanisms of change in therapy, rather than individual treatment techniques, may be related to producing a better quality of life for the client. A more complete understanding of these mechanisms might allow therapists to actually determine which treatments may better serve different patients (Levy, 2008).

Given these findings, the four aforementioned psychotherapies for borderline personality disorder are examined for their appeal. It was hypothesized that treatments that

were described as being the most empirically supported for BPD would have more appeal than treatments that were described as somewhat supported by research. That is, people were predicted to have higher expectations for treatments with more empirical support and to find them more credible. It was predicted that this effect would appear despite inherent differences between the descriptions of the four treatments.

## **Methods**

### **Participants**

Participants were 284 undergraduate students enrolled in a psychology class at a large northeastern university who volunteered to participate in exchange for course credit. Alternative options were provided for those students who did not wish to participate in studies. The only inclusion criterion was that the participants must have been 18 years of age or older. The mean and median age of study participants was 19 years. 71.8% of students were first-years, 14.4% were sophomores, 4.6% were juniors, and 6.3% were seniors. 72% of participants were female, and 76% were White. 86.6% of participants were born in the U.S., and 87.7% listed English as their first language. 34.5% of participants indicated that they were employed at the time of the study. 14.8% of participants had participated in treatment for emotional or personal difficulties before the study took place. Of those, the number of treatment sessions ranged from once to one hundred and length of treatment ranged from one hour to five years.

### **Procedures**

Measures were administered online. The study took approximately ninety minutes to complete. All measures in the present study were approved by an institutional review board for research involving human participants. All clients provided informed consent for study participation. Participants answered demographic questions concerning their age, marital status, race/ethnicity, religion, and socioeconomic status. They were also asked about their previous experience with mental health treatment.

In the experimental portion of the study, participants were randomly assigned to conditions. All participants read a description of borderline personality disorder and vignettes of four therapies for BPD: dialectical behavior therapy, schema-focused therapy, transference-focused therapy, and mentalization-based therapy. (See Appendices E and F). In some conditions, all therapies were described as having equal efficacy in empirical studies, while in others one therapy were described as having superior efficacy in empirical studies. The four therapies were presented in a random order to minimize order effects. After reading about each therapy, participants responded to two standard questionnaires to determine their preferences and expectations for each treatment:

The Credibility and Expectancy Questionnaire (CEQ; Devilly & Borkovec, 2000) is a 6-item measure with a 1 to 9 scale of how logical one finds a therapy and the degree to which one expects a therapy to be effective. It has been shown to have an internal consistency of  $r = .85$  (Devilly & Borkovich, 2000). This includes items inquiring how logical and useful the treatment seems to the participant and how confident they are for a positive outcome. They are also asked to rate how effective they believe each treatment will be in reducing the symptoms of BPD.

The Treatment Evaluation Inventory (TEI; Kazdin, 1980) is a 15-item measure with a 1 – 5 scale of treatment acceptability. It has been shown to have an internal consistency of  $r = .88$  and its validity is highly correlated with other measures of acceptability such as the Treatment Acceptability Questionnaire, [ $r(38) = .87, p < .001$ ] (Hunsley, 1992). It includes questions about how acceptable, ethical, and effective the treatment seems to be. The

participant is essentially asked to imagine himself or herself engaging in the treatment and to rate how likeable they find it.



## Results

### Expectation and Credibility Ratings of the Four Treatments

Table 1.1 shows the means and standard deviations from the one-way ANOVAs assessing differences in expectations and credibility as a function of treatment. When treatments were presented as having equal empirical support, DBT was rated significantly higher than TFP,  $t(132) = 6.05, p = .00$ ; MBT,  $t(132) = 3.70, p = .00$ ; and SFT,  $t(132) = 5.06, p = .00$  for expectations. MBT was also rated significantly higher than TFP for expectations,  $t(133) = -3.33, p = .00$ . For credibility, MBT was rated significantly higher than DBT,  $t(133) = -3.21, p = .00$ ; TFP,  $t(133) = -5.02, p = .00$ ; and SFT,  $t(133) = 3.23, p = .00$ .

Table 1.1

*Differences Between Treatments with “Equal Empirical Support”*

<b>Treatment</b>	<b>DBT</b>	<b>TFP</b>	<b>MBT</b>	<b>SFT</b>
Number of Subjects	N = 133	N = 133	N = 133	N = 133
Credibility	5.93 (1.70)	5.63 (1.73)	6.41 (1.50)	5.94 (1.63)
Expectations	3.84 (0.68)	3.39 (0.71)	3.62 (0.72)	3.53 (0.73)

Table 1.2

*Expectancy Ratings for Equal Empirical Support Treatment Pairs*

<b>Treatment Pair Comparison</b>	<b>t</b>	<b>df</b>	<b>p</b>
DBT-TFP	6.05	132	.00
DBT-MBT	3.70	132	.00
DBT-SFT	5.06	132	.00
TFP-MBT	3.33	133	.00
TFP-SFT	1.94	132	.06
MBT-SFT	1.35	132	.18

Table 1.3

*Credibility Ratings for Equal Empirical Support Treatment Pairs*

<b>Treatment Pair Comparison</b>	<b>t</b>	<b>df</b>	<b>p</b>
DBT-TFP	1.84	133	.07
DBT-MBT	-3.21	133	.00
DBT-SFT	-.04	133	.97
TFP-MBT	-5.02	133	.00
TFP-SFT	-1.81	133	.07
MBT-SFT	3.23	133	.00

Figure 1.1

*Expectancy Ratings for Treatments with “Equal Empirical Support”*

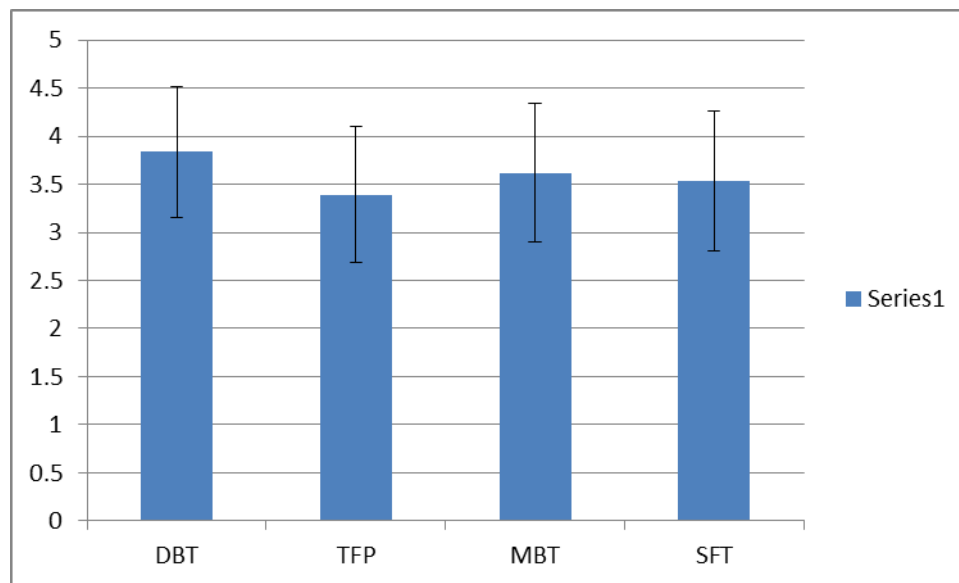
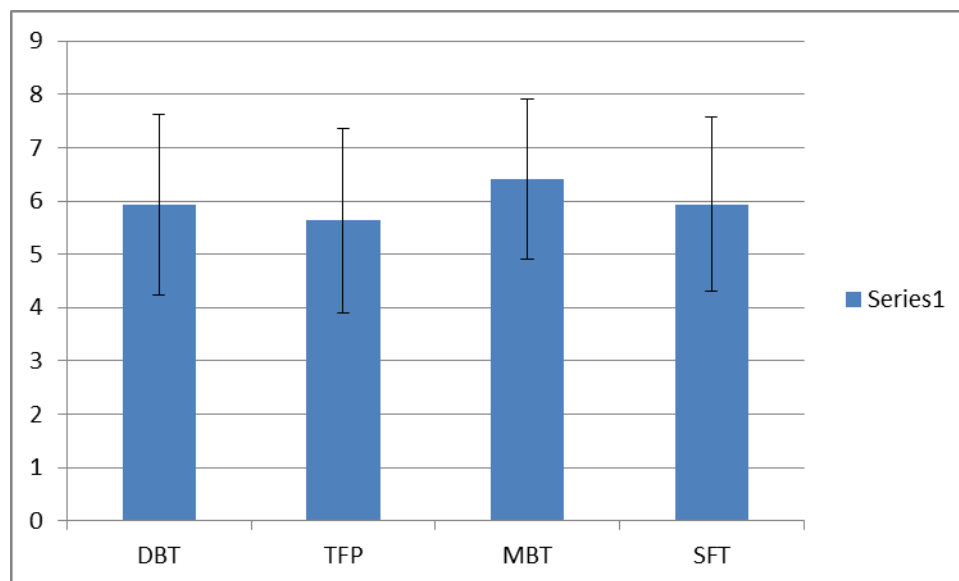


Figure 1.2

*Credibility Ratings for Treatments with “Equal Empirical Support”*



### **Impact of Empirical Support on Expectation and Credibility Ratings**

A series of one-way ANOVAs was conducted examining expectations and credibility as a function of level of empirical support for each of the four treatments. There was a significant effect of the empirical support condition on credibility ratings for DBT, [ $F(2, 264) = 5.26, p = .01$ ]. This “some empirical support” group was rated higher than the “equal empirical support” group. However, the differences in expectancy ratings for the empirical support conditions for DBT were not significant, [ $F(2, 264) = 1.10, p = .33$ ]. There was also a significant effect of the empirical support condition on credibility ratings for Transference-focused Psychotherapy, [ $F(2, 265) = 4.52, p = .01$ ]. The “most empirical support” group was rated higher for credibility than the “some empirical support” group. However, the effect for expectations for TFP was not significant, [ $F(2, 265) = 1.05, p = .35$ ].

There was no significant effect for expectations between empirical support conditions for MBT, [ $F(2, 264) = 0.39, p = 0.68$ ] nor for credibility, [ $F(2, 264) = 1.96, p = 0.14$ ]. There was no significant effect of empirical support condition for expectations for SFT, [ $F(2, 263) = 0.10, p = 0.90$ ] nor was there significance for credibility ratings, [ $F(2, 264) = 1.84, p = 0.16$ ].

Table 1.4

*Empirical Support Condition by Treatment*

Treatment	DBT			TFP			MBT			SFT		
	Effective	Somewhat	Most	Effective	Somewhat	Most	Effective	Somewhat	Most	Effective	Somewhat	Most
Empirical Support Condition	(N = 133)	effective (N = 103)	effective (N = 31)	(N = 134)	effective (N = 106)	effective (N = 28)	(N = 134)	effective (N = 103)	effective (N = 30)	(N = 133)	effective (N = 89)	effective (N = 44)
Credibility	5.93 (1.70)	6.53 (1.44)	6.64 (1.56)	5.63 (1.73)	5.48 (1.64)	6.55 (1.69)	6.41 (1.50)	6.04 (1.52)	6.48 (1.70)	5.94 (1.63)	5.82 (1.64)	6.38 (1.56)
Expectations	3.84 (0.68)	3.72 (0.73)	3.90 (0.61)	3.39 (0.71)	3.31 (0.70)	3.52 (0.77)	3.61 (0.73)	3.61 (0.59)	3.73 (0.72)	3.53 (0.73)	3.49 (0.78)	3.53 (0.75)

Figure 1.3

*Expectancy for Treatments According to Empirical Support Condition*

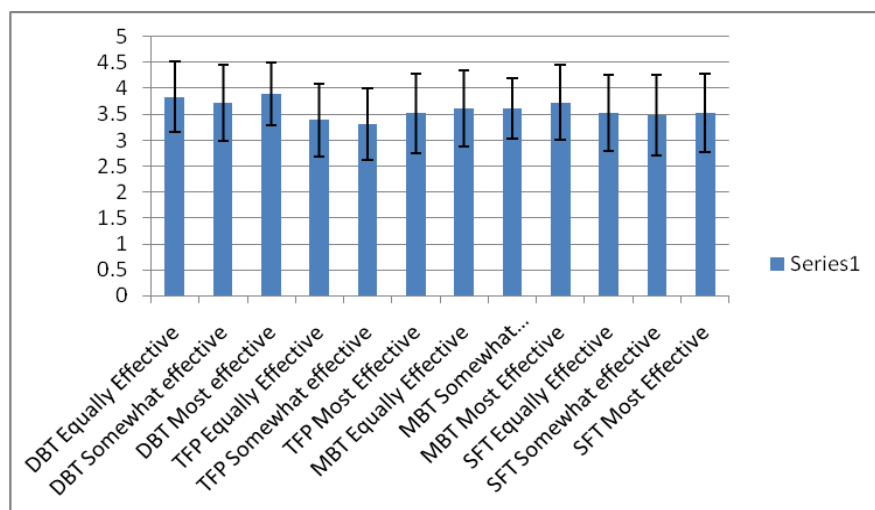
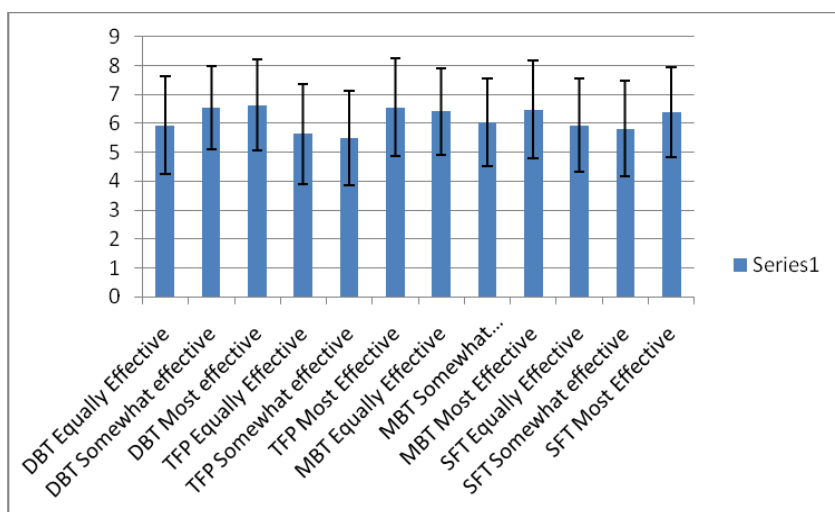


Figure 1.4

*Credibility for Treatments According to Empirical Support Condition*



## Discussion

Psychotherapy research for many disorders, including that for borderline personality disorder, often focuses mainly on the distinctions between different treatment techniques. Often, it is the factors common to many treatments that lead to an improved outcome, rather than some specific component of a particular treatment. Though there has been ample research on common factors as well, client expectations and credibility have been relatively under-explored. The intent of this study was to examine two particular common factors: expectations for positive outcome and treatment credibility. The present study examined expectations and credibility for four common and empirically supported treatments for BPD. Additionally, expectations and credibility were explored as a function of the level of empirical support for a particular treatment. In this regard, it was predicted that when clients were presented with descriptions of treatments, they would demonstrate higher expectations and preferences for treatments that are described as empirically supported for a specific disorder, regardless of the other aspects of the treatment description.

It was found that when the four treatments (DBT, TFP, MBT, and SFT) were presented as equally supported by empirical research, participants had significantly higher expectations for DBT than the other three treatments. Though participants had lower expectations for MBT than DBT, they had significantly higher expectations for MBT than for TFP. With regard to credibility, MBT was also rated significantly higher than the other three treatments when all were said to be equally empirically supported for treating BPD.

The findings were mixed with regard to the hypothesis that provision of increased empirical support would be related to higher expectations and increased credibility. The

effect was only present for TFP in terms of credibility when it was the most supported as opposed to having some support or equal support to the other treatments. No other treatment showed this effect. This finding suggests that for TFP only, the level of empirical evidence impacts ratings for credibility and expectations of its effectiveness. Also contrary to the hypothesis, dialectical behavior therapy was significantly more likely to be rated highly for credibility when it was one of the three treatments listed as having “some” empirical support than it was to be chosen when it was listed as being equally empirically supported as the other treatments. Because significant effects were found for only two of the treatments, it cannot be concluded that a description of a study’s effectiveness for treating BPD will cause participants to choose that treatment over others regardless of the treatments’ contents. Some aspects of the description of the treatment itself interact, and an empirical support condition only makes some treatments more credible to participants.

It was hypothesized that empirical support for a treatment would predict higher credibility and expectancy ratings despite the actual contents of the treatment. Instead, it was found that increased empirical support was only related to credibility ratings in two of the treatments, and increased empirical support had no significant influence on expectation ratings for any of the other treatments. It was also found that the differences in credibility and expectancy ratings between the treatments were more significant than the differences between the levels of empirical support. DBT was given the highest expectation ratings when all treatments were “equally supported.” This may be due to the fact that the undergraduates participating in this study may receive more information about DBT as a behavioral treatment through their coursework than the other treatments, particularly those



with a psychodynamic treatment orientation such as TFP and MBT. First, DBT has the longest history of empirical support (Linehan Armstrong, Suarez, & Allmon, 1991) as compared to MBT (Bateman & Fonagy, 1999) and TFP (Clarkin, Levy, Lenzenweger, & Kernberg, 2007). Therefore it is likely that DBT is more represented in college psychology textbooks than TFP and MBT. However, there is also evidence of bias against psychodynamic theories in textbooks (Bornstein, 1988). Finally, a large proportion of faculty in college psychology departments is cognitive-behavioral in their orientation (Levy & Anderson, in press) and therefore students may be more likely to have been exposed to CBT related treatments. Interestingly, the institution where the study was conducted tends to be more pluralistic (although still heavily CBT) which raises the possibility that the current findings may have been more pronounced at other institutions. However, this would not explain why MBT was rated as the most credible when all treatments were equally effective.

Two possible explanations for the MBT finding might be that MBT is not easily recognized as psychodynamic and that there may be specific aspects of MBT that enhance its credibility and expectancy value. Regarding the second explanation, a post hoc examination of individual items from the CEQ was conducted. When participants were asked how logical therapy seemed to them, MBT received significantly higher ratings than DBT,  $t(265) = 6.01, p = .00$ ; TFP,  $t(266) = 5.07, p = .00$ ; and SFT,  $t(265) = 3.00, p = .00$ . When participants were asked how much improvement in BPD symptoms would really occur with the treatment, MBT received significantly higher ratings than TFP,  $t(266) = 4.45, p = .00$  and SFT,  $t(267) = 4.18, p = .00$ . This might indicate that participants perceived the description of MBT to be more understandable and that they expected it would have the best

outcome in terms of symptom improvement. This could explain why it received an overall higher credibility rating. Also, there are some desirable aspects of the MBT vignette that the others are lacking, such as the goal of developing a more robust sense of self by allowing the patient to identify and explore his or her own emotions.

According to the literature, patients typically do better in treatments which they prefer (Swift & Callahan, 2009). In general, client preferences for treatments relate to better outcome (Constantino et al., 2011). Interestingly, the results of this study reflected discordance between which treatments were rated highly for expectancy, and which were rated highly for credibility. This may indicate that, despite a particular treatment seeming credible in theory, the client may not always have the highest expectations for it. Likewise, those treatments for which clients are most hopeful may not seem as credible to them from the description. This may have implications for the future practice of these treatments with regard to how therapists may present clients with treatment options.

Other factors that might impact a client's preference for a treatment in an actual therapy setting could have less to do with the actual techniques involved in the treatment and more to do with factors such as average length. For example, a client may feel less hopeful about a study that takes a longer stretch of time to complete, or feel that it is less credible than a treatment with a shorter duration. For patients with BPD, differing theories about the etiology of the disorder and its development may be appealing to different degrees. For example, a patient may find a treatment more credible if he or she agrees with its theory about the origins of the issues associated with BPD.

### **Strengths and Limitations**

This study is unique in its examination of client preferences for these particular treatments for borderline personality disorder. When writing the vignettes for both the description of BPD and the four treatments, care was taken to remain unbiased towards any one orientation. Treatment vignettes were matched on structure, length, and organization of content. Also unique to this study is the incorporation of the empirical support groups. Juxtaposing treatments that have “some” empirical support against those that have the “most” gives valuable insight about the way potential clients make decisions upon entering therapy.

There are a number of limitations that should be noted. First, the study was demographically narrow in scope: all of the participants were undergraduates at a large state university and most were young White females. Furthermore, only 15% of participants had undergone treatment before this study, which could make them different from the population of interest, clients seeking treatment for BPD. Therefore, the study may not be generalizable to the broader population such as those of non-majority backgrounds or to those with borderline personality. The findings may be more pronounced for BPD patients for whom these choices are most relevant. On the other hand, many patients will have had experience with one or more of these treatments which will be difficult to disentangle from the ratings. Developing baseline ratings in the general population provides a useful benchmark for clinical studies. The study was conducted online, which may have limited the amount of control exerted. However, research indicates that findings of online studies are similar to that of studies carried out in person (Fraley, 2007). Furthermore, when deciding to go for treatment, clients would probably not be presented with vignettes of treatments in the

manner in which they were in this study, so it may be difficult to extend the findings to “real life” scenarios.

The data analysis also did not account for shared variance, because a series of one-way ANOVAs were performed in place of a MANOVA. This choice was made in order to examine the relationship between the level of empirical support provided for a given treatment and ratings of expectations and credibility for that particular treatment. Given the structure of the data, using a MANOVA would have limited analyses to examining the relationship between the condition (e.g., when DBT was presented as most empirically supported as opposed to when TFP was presented as most empirically supported), which would have obscured the relationship between the level of empirical support presented for a treatment and ratings of that treatment. Since the primary goal of this study was to assess the impact of empirical support on the appeal of a treatment, it was decided that a series of one-way ANOVAs was more appropriate in spite of the lack of accounting for shared variance across an individual's expectation and credibility ratings of each of the four treatments.

### **Summary and Recommendations for Bridging the Science-Practice Gap**

In sum, in this study, it was found that level of empirical support for a treatment relates to greater credibility only for certain treatments and not others. Empirical support did not impact expectancy ratings for any treatment. Perhaps this indicates that certain treatments are the most appealing to clients if they have been supported by research. Because DBT was rated higher when all treatments were described as equally empirically supported, this may have reduced a potential impact for empirical support on expectancy ratings specifically. This pattern was not seen with regard to credibility ratings, which could

explain why those ratings were sensitive to the empirical support condition for DBT and TFP. Some possible reasons for this could be that the undergraduate participants have received discrediting information about psychodynamic methods from a largely CBT-oriented faculty. Perhaps the techniques involved were less familiar to them than those described in other treatments. That might explain the reluctance to find TFP credible unless it was shown to have empirical support.

Future research might expand on this study by first presenting descriptions like these and asking about client preferences and expectations, and then conducting a randomized control trial where the client was either placed in a preferred treatment or not. Various aspects of outcome could then be used to determine whether or not being in a preferred treatment has an impact on symptom reduction and overall improvement.

Overall, the field could benefit from a closer examination of the common factors in psychotherapy. Though this study juxtaposed four different treatments, its intent was to examine what aspects of treatment descriptions influence clients' preferences and hopes about treatment. Exploring these common factors might broaden our understanding of how change operates in psychotherapy not just for borderline personality disorder, but for other psychological problems as well.

## Appendix A

Table 1.5

### *Demographics*

<b>Characteristic</b>	<b>N (%)</b>
<b>Age</b>	
18-19	222 (78.2%)
20-29	49 (17.4%)
30-39	4 (1.5%)
40-49	2 (0.8%)
<b>Sex</b>	
Male	72 (25.4%)
Female	203 (71.5%)
Transgender	1 (0.4%)
<b>Race/Ethnicity</b>	
Hispanic/Latino(a)	12 (4.2%)
Chinese	10 (3.5%)
Korean	6 (2.1%)
Pacific Islander	2 (0.7%)
Indian	4 (1.4%)
African-American	11 (3.9%)
African-Caribbean	2 (0.7%)
African	2 (0.7%)
Native American	1 (0.4%)
Caucasian	215 (75.7%)
Arab	3 (1.1%)
Other	3 (1.1%)
Mixed	6 (2.1%)
<b>Treatment History</b>	
Yes	42 (15.79%)
No	224 (84.21%)

## Appendix B

### Demographic Information Questionnaire

Age \_\_\_\_\_ Date of birth: \_\_\_\_\_ Sex: \_\_\_\_\_ Male \_\_\_\_\_ Female  
 \_\_\_\_\_ Other

Race/Ethnicity:

Hispanic/Latino(a) \_\_\_\_\_ Chinese \_\_\_\_\_ Korean \_\_\_\_\_

Japanese \_\_\_\_\_ Pacific Islander \_\_\_\_\_ Indian \_\_\_\_\_ Pakistani \_\_\_\_\_

African American \_\_\_\_\_ African Caribbean \_\_\_\_\_ African Hispanic \_\_\_\_\_

African \_\_\_\_\_ Native American \_\_\_\_\_ Caucasian \_\_\_\_\_ Arab \_\_\_\_\_

Other (please specify) \_\_\_\_\_ Mixed (please specify) \_\_\_\_\_

What would you consider to be **your primary** ethnic or cultural identity?

\_\_\_\_\_

For the following questions about your parents, “Guardian 1” refers to your Guardian 1 or primary male guardian and “Guardian 2” refers to your Guardian 2 or primary female guardian; if you were raised by two people of the same sex, check here \_\_\_\_\_ and you may choose whom you will list as guardian 1 or 2. If you were raised by a single guardian, check here \_\_\_\_\_ but answer all questions to the best of your ability.

Guardian 1's Religion: Christian \_\_\_\_\_ Catholic \_\_\_\_\_ Protestant \_\_\_\_\_ Presbyterian \_\_\_\_\_

(check one) Baptist \_\_\_\_\_ Jewish \_\_\_\_\_ Muslim \_\_\_\_\_ Hindu \_\_\_\_\_ Sikh \_\_\_\_\_

Buddhist \_\_\_\_\_ Atheist/Agnostic \_\_\_\_\_ Other \_\_\_\_\_

Guardian 2's Religion: Christian \_\_\_\_\_ Catholic \_\_\_\_\_ Protestant \_\_\_\_\_ Presbyterian \_\_\_\_\_

(check one) Baptist \_\_\_\_\_ Jewish \_\_\_\_\_ Muslim \_\_\_\_\_ Hindu \_\_\_\_\_ Sikh \_\_\_\_\_

Buddhist \_\_\_\_\_ Atheist/Agnostic \_\_\_\_\_ Other \_\_\_\_\_

Your Religion: Christian \_\_\_\_\_ Catholic \_\_\_\_\_ Protestant \_\_\_\_\_ Presbyterian \_\_\_\_\_

(check one) Baptist \_\_\_\_\_ Jewish \_\_\_\_\_ Muslim \_\_\_\_\_ Hindu \_\_\_\_\_ Sikh \_\_\_\_\_

Buddhist \_\_\_\_\_ Atheist/Agnostic \_\_\_\_\_ Other \_\_\_\_\_

Are you practicing your religion? Yes \_\_\_\_\_ No \_\_\_\_\_

In which country was **Guardian 1** born? \_\_\_\_\_

If he was not born in the United States, how old was **Guardian 1** when he arrived here? \_\_\_\_\_



In which country was **Guardian 2** born? \_\_\_\_\_

If she was not born in the United States, how old was **Guardian 2** when she arrived here? \_\_\_\_\_

What was your country of birth? \_\_\_\_\_

If **not** United States, at what age did you move to this country? \_\_\_\_\_

Was **Guardian 2** living in the United States before you were born? \_\_\_\_\_ Yes  
 \_\_\_\_\_ No

If **No**, how old were you when **Guardian 2** arrived in the United States? \_\_\_\_\_

Was **Guardian 1** living in the United States before you were born? \_\_\_\_\_ Yes  
 \_\_\_\_\_ No

If **No**, how old were you when **Guardian 1** arrived in the United States? \_\_\_\_\_

How many siblings do you have? \_\_\_\_\_

If you

have siblings:

How many siblings are **older**?\_ How many siblings are **younger**? \_\_\_\_\_

Your first known language: \_\_\_\_\_ Your best known language:

\_\_\_\_\_

Do you work? (Circle one): Yes No

How many hours do you work a week on average? \_\_\_\_\_

Your occupation (in addition to being a student): \_\_\_\_\_

Class year: Freshman Sophomore Junior Senior

How many credit hours are you taking this semester? \_\_\_\_\_

Your parents' highest level of education (Please check ONE for EACH PARENT):

Guardian 1

Guardian 2

\_\_\_\_\_

\_\_\_\_\_

(1) Less than Junior HS

\_\_\_\_\_

\_\_\_\_\_

(2) Junior High School

\_\_\_\_\_

\_\_\_\_\_

(3) Partial High School

\_\_\_\_\_

\_\_\_\_\_

(4) GED

\_\_\_\_\_

\_\_\_\_\_

(5) High School Graduate

\_\_\_\_\_

\_\_\_\_\_

(6) Technical School

\_\_\_\_\_

\_\_\_\_\_

(7) Partial 2-year college

- |       |       |   |
|-------|-------|---|
| _____ | _____ | (8) Associate Degree                          |
| _____ | _____ | (9) Partial 4-year college                    |
| _____ | _____ | (10) Standard College (BA, BS, AB)            |
| _____ | _____ | (11) Masters level (MA, MS, MSW,<br>MBA, MPH) |
| _____ | _____ | (12) Doctoral level (PhD, MD, JD)             |

Guardian 1's occupation: \_\_\_\_\_ Guardian 2's occupation: \_\_\_\_\_

Please check ONE to describe your Guardian 1 and Guardian 2:

- \_\_\_\_\_ (1) They are married and still together.
- \_\_\_\_\_ (2) They are divorced or separated (your age at divorce/separation? \_\_\_\_\_).
- \_\_\_\_\_ (3) They never married, but are still together.
- \_\_\_\_\_ (4) They never married, and are no longer together.
- \_\_\_\_\_ (5) One or both my parents died (your age at death of: Guardian 1 \_\_\_\_\_  
Guardian 2 \_\_\_\_\_).
- \_\_\_\_\_ (6) Other (specify: \_\_\_\_\_)

Your marital status (Check one): Single \_\_\_ Married \_\_\_ Separated \_\_\_ Divorced

\_\_\_\_\_

If you are not married, are you currently involved in a romantic relationship? \_\_\_\_Yes

\_\_\_\_No

If you are married or in a relationship, approximately how long have you been married or involved in this relationship? \_\_\_\_\_ years, \_\_\_\_\_ months, \_\_\_\_\_ days

If you are NOT currently in a romantic relationship, have you *ever* been in one? \_\_\_\_Yes

\_\_\_\_No

## Appendix C

### TEI

1. How acceptable do you find this treatment to be for BPD?

1                    2                    3                    4                    5

Not at all acceptable-Moderately acceptable-Very acceptable

2. How willing would you be to carry out this procedure yourself if you had to administer therapy for BPD?

1                    2                    3                    4                    5

Not at all willing-Moderately willing-Very willing

3. How suitable is this procedure for people who might have other problems than those described in the explanation of BPD?

1                    2                    3                    4                    5

Not at all suitable-Moderately suitable-Very suitable

4. If people with BPD had to be assigned to treatment without their consent, how bad would it be to give them *this* treatment?

1                    2                    3                    4                    5

Very bad-Moderately-Not bad at all

5. How cruel or unfair do you find this treatment?

1                      2                      3                      4                      5

Very cruel-Moderately cruel-Not cruel at all

6. Would it be acceptable to apply this procedure to institutionalized people, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1                      2                      3                      4                      5

Not at all acceptable to apply this procedure-Moderately acceptable-Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1                      2                      3                      4                      5

Very different or inconsistent-Moderately consistent-Very consistent with everyday notions

8. To what extent does this procedure treat the patient humanely?

1                      2                      3                      4                      5

Does not treat humanely at all-Treats them moderately humanely-Treats them very humanely

9. To what extent do you think there might be risks in undergoing this kind of treatment?

1                      2                      3                      4                      5

Lots of risks are likely-Some risks are likely-No risks are likely

10. How much do you like the procedures used in this treatment?

1                      2                      3                      4                      5

Do not like them at all-Moderately like them-Like them very much

11. How effective is this treatment likely to be?

1                      2                      3                      4                      5

Not at all effective-Moderately effective-Very effective

12. How likely is this treatment to make permanent improvements in the patient?

1                      2                      3                      4                      5

Unlikely-Moderately-Very likely

13. To what extent are undesirable side effects likely to result from this treatment?

1                      2                      3                      4                      5

Many undesirable side effects-Some undesirable side effects-No undesirable side effects

14. How much discomfort is the patient likely to experience during the course of treatment?

1                      2                      3                      4                      5

Very much discomfort-Moderate discomfort-No discomfort at all

15. Overall, what is your general reaction to this form of treatment?

1                      2                      3                      4                      5

Very negative-Ambivalent-Very positive



## Appendix D

### CEQ

We would like you to indicate your beliefs about the helpfulness of the therapy just described. Belief usually has two aspects to it: (1) what one thinks will happen and (2) what one feels will happen. Sometimes these are similar; sometimes they are different. Please answer the questions below. In the first set, answer in terms of what you think. In the second set answer in terms of what you really and truly feel.

#### Set I

1. How logical does the therapy offered to you seem?

1      2      3      4      5      6      7      8      9  
not at all logical      somewhat logical      very logical

2. How successful do you think this treatment would be in reducing BPD symptoms?

1      2      3      4      5      6      7      8      9  
not at all useful      somewhat useful      very useful

3. How confident would you be in recommending this treatment to a friend who experienced similar problems to BPD?

1      2      3      4      5      6      7      8      9

not at all confident    somewhat confident    very confident

4. By the end of the therapy period, how much improvement in someone's BPD symptoms do you think would occur?

0%    10%    20%    30%    40%    50%    60%    70%    80%    90%    100%

## Set II

For this set, close your eyes for a few moments, and try to identify what you really feel about the therapy and its likely success. Then answer the following questions.

1. How much do you really feel that therapy would help to reduce BPD symptoms?

1    2    3    4    5    6    7    8    9

not at all                      somewhat                      very much

2. By the end of the therapy period, how much improvement in someone's BPD symptoms do you really feel would occur?

0%    10%    20%    30%    40%    50%    60%    70%    80%    90%    100%

## Appendix E

### Borderline Personality Disorder Vignette

In this study, you will be asked to reflect on four types of psychotherapy for borderline personality disorder, or BPD; therefore, it is important for you to first understand what BPD is. BPD is a personality disorder, which means that it involves personality traits that cause problems for the individual and for relationships, and that those traits are stable over time and consistent across situations.

The fourth edition of the Diagnostic and Statistical Manual, which is the book that mental health professionals use to diagnose disorders, lists the following nine symptoms of BPD. The symptoms are listed in order from those that are very common in people with BPD to those that are somewhat less common in people with BPD. To be diagnosed with BPD, a person must display at least five of these nine symptoms.

1. Frantic efforts to avoid real or imagined abandonment.
2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating).

5. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior.
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

## **Appendix F**

### **Vignettes of Treatments**

Treatment A is known as Dialectical Behavior Therapy.

In this therapy, BPD is viewed as the product of a biological tendency to emotional instability combined with an invalidating environment in childhood. The invalidating environment deprives the individual of opportunities to learn healthy emotion regulation strategies. The symptoms of BPD, including self-injury, are seen as attempts (conscious or unconscious) to regulate emotion; even if the patient does not initially intend these actions to regulate emotion, they begin to serve that function once they are reinforced by the environment.

The goal of this therapy is to help the patient stop engaging in harmful behaviors, including suicide attempts and self-injury as well as behaviors that interfere with quality of life, and to increase healthy behaviors.

This therapy's strategies include providing a supportive, collaborative relationship with the therapist that balances acceptance and motivation to change; helping the patient understand what elicits his or her problematic behaviors; helping the patient change thought patterns that are no longer helpful; and teaching the patient specific tools for tolerating

distress, regulating emotion, interacting effectively with other people, and managing his or her own behavior and thoughts.

This therapy has both individual and group components. Individual therapy is held once a week, usually for an hour. Group therapy meets once a week for 2-2.5 hours and is in the form of a class that trains patients in new skills. The patient can call the therapist for help in implementing skills and in times of crisis, but only within limits, on which the patient and therapist agree at the beginning of treatment. This therapy lasts at least one year and often longer.

---

Treatment B is known as Transference Focused Psychotherapy.

In this therapy, BPD is viewed as resulting from the interaction of inborn temperament and a predominance of negative experiences in childhood (which may include trauma) that leads to feelings of rage toward the self or others. The patient must “split off” these angry feelings by seeing the people as either “all bad” or “all good” and switching between these states, lest the anger contaminate the “good” image of a person. This “splitting” is the cause of the patient’s extreme behavior, troubled relationships, and unstable identity.

The goal of therapy is to help the patient integrate his or her “all good” and “all bad” images of self and others so that he or she can regard people as containing both good and bad qualities, which should lead to less impulsivity, improvement in emotion regulation, and a stable sense of self.

This therapy’s strategies involve using what is happening in-session in the relationship between the therapist and patient as an example of all the patient’s relationships. The therapist leads the patient to recognize contradictory or inaccurate perceptions of the relationship by pointing out inconsistencies evidenced in the patient’s verbal and nonverbal behaviors and helping the patient understand where those inconsistencies come from.

This therapy takes place with an individual therapist in two 45-minute sessions per week. Therapeutic work is intended to take place in session, and consequently patients should only call therapists in case of true emergency. This therapy lasts as long as is necessary to achieve the treatment goals.

---

Treatment C is known as Mentalization-Based Therapy.

In this therapy, BPD is viewed as resulting from caregivers’ failure to help the patient during childhood to develop the capacity to represent his or her thoughts and emotions as belonging to the self, and others’ thoughts and emotions and belonging to

others, as well as the capacity to understand that these internal states are neither completely accurate representations of reality nor completely separate from reality. These deficits prevent the patient from learning how to interpret behavior as motivated by thoughts, feelings, beliefs, and desires and from learning how to label and deal with emotions. As a result, these individuals have an unstable sense of self and require relationships to stabilize them. When maltreated, people with BPD may begin to see their abusers' behavior as reflective of reality and thus will internalize self-hatred, leading to self-harm.

The goal of therapy is to help the patient establish a more robust sense of self so that he or she can develop more secure relationships.

This therapy's strategies include focusing on events in the here-and-now rather than in the past, leading the patient to identify his or her own emotions for him or herself, exploring alternative explanations for the patient's and others' behavior in addition to the explanations the patient gives automatically, discussing the relations between people's beliefs, behaviors, and emotions, and pointing out patterns in the patient's perceptions of others and attending to the way those patterns play out with the therapist and in other current relationships.

This therapy has both individual and group components, usually consisting of 50 minutes of individual therapy and 1.5 hours of group therapy each week. Patients are



allowed to call treatment staff, but staff are encouraged to keep phone contact brief and should not conduct therapeutic work during the phone call. This therapy lasts 1.5 years.

---

Therapy D is known as Schema Therapy or Schema-Focused Therapy.

In this therapy, BPD is viewed as the result of being born with a highly emotional and sensitive temperament and having childhood experiences of instability and lack of safety, emotional deprivation, punishing and rejecting parenting, and/or home environments in which the child's needs are not as important as the parents'. These experiences lead to the development of global beliefs about oneself and others that become the lens through which the patient views the world even if they no longer are accurate in the current situation. To deal with the pain caused by holding these beliefs, people with BPD shift rapidly between many harmful coping strategies.

The goal of this therapy is to weaken the patient's rigid, global, negative beliefs and replace them with healthy ones.

This therapy's strategies include providing limited experiences in which the therapist meets the patient's emotional needs so that he or she learns they can be met, to help the patient identify evidence for and against his or her worldview and the distorted thoughts that stem from it, to encourage the patient to experience and explore the range of emotions

caused by his or her beliefs using techniques like role-playing and imagery, and to discuss situations in which the patient might engage in behaviors that reinforce his or her beliefs and to plan alternative behaviors.

This therapy takes place with an individual therapist in two 50-minute sessions each week. Patients are allowed to make phone calls to the therapist, but if this becomes excessive or violates the therapist's rights, the patient and therapist set limits on contact outside of sessions. Treatment often lasts 2-3 years.

---

Empirical support condition 1: One description includes the statement, "Research has shown that this therapy is the most effective treatment available for BPD." The other three include the statement, "Research has shown that this therapy is somewhat effective for treating BPD."

Empirical support condition 2: All descriptions include the statement, "Research has shown that this is an effective treatment for BPD."

**Appendix G**  
**Informed Consent Form**

**IMPLIED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH**  
**The Pennsylvania State University**

**Title of Project: Appeal of Four Psychotherapies for Borderline Personality Disorder**

**Principal Investigator:**  
**Kenneth N. Levy, Ph.D.**  
**Department of Psychology**  
**240 Moore Building, University Park, PA 16802**  
**[klevy@psu.edu](mailto:klevy@psu.edu); 814-865-5848**

- 1. Purpose of the Study: To examine the relationship between different measures and client's preferences and beliefs about credibility for different treatments.**
- 2. Procedures to be followed: You will be asked to fill out several self-report questionnaires online.**
- 3. Discomforts and Risks: There are no known risks associated with participation in this study. Although the procedures are relatively simple to do and should not pose any significant inconvenience or discomfort for you, there is a possibility of discomfort associated with some of the more personal questions. If you prefer, you may refuse to answer any particular question and you may withdraw completely from the study at any time without penalty. Some of the questionnaires in this study ask about feelings and behaviors that can sometimes cause people distress. If you become concerned during or after the study about feelings or behaviors you have, and you want to talk to someone about them, you can call or visit:**

**Center for Counseling and Psychological Services (CAPS)**  
**814-863-0395 (9 to 5, Monday to Friday)**  
**University Health Services Bld.**  
**University Park, PA 16802**

**Centre County CAN HELP line**

**800-643-5432 (24 hours/day)**

**The Psychological Clinic at Penn State  
814-865-2191 (9 to 8, Monday through Thursday; 9 to 5, Friday)  
3<sup>rd</sup> Floor, Moore Building  
University Park, PA 16802**

**4. Benefits:** Participation in this study provides no direct benefit. The results from this study may benefit society by contributing to the psychological knowledge base about psychotherapy for borderline personality disorder.

**5. Duration:** Participation in this project will take approximately 90 minutes of one day to complete.

**6. Statement of Confidentiality:** All information you provide on the questionnaires will be kept strictly confidential. Your data will be stored on the server of psychdata.com until data collection for this study is finished, then data will be retrieved from the server by the investigator. Psychdata.com will not use the information collected from you in any way. The only information linking you to your responses is the User ID that you will be asked to enter on the next page. Only the principal investigator will have access to both your name and your answers, for the purpose of giving credit. Your personal identifiers will be erased from the files after course credit has been given. If this research is published, no information that would identify you will be written. Confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties. The Office of Human Research Protections in the U.S. Department of Health and Human Services and The Pennsylvania State University's Institutional Review Board and Office for Research Protections may review records related to this project.

**7. Right to Ask Questions:** Please contact Dr. Kenneth Levy at 814-865-5848 with questions, complaints or concerns about this research. You can also call this number if you feel this study has harmed you. If you have any questions, concerns, problems about your rights as a research participant or would like to offer input, please contact The Pennsylvania State University's Office for Research Protections (ORP) at (814) 865-1775. The ORP cannot answer questions about research procedures. Questions about research procedures can be answered by the research team.

**8. Compensation:** You will receive course credit for participating as specified in the

**syllabus provided by your instructor. Alternative means for earning this course credit are available as specified in the syllabus.**

**9. Voluntary Participation: Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Withdrawing from the study or refusing to participate will involve no penalty or loss of benefits.**

**You must be 18 years of age or older to take part in this research study.**

**Completion and return of the survey implies that you have read the information in this form and consent to take part in the research.**

**Please print this form for your records or future reference.**

## REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). doi:10.1176/appi.books.9780890423349.
- Bateman, A., & Fonagy, P. (1999). Effectiveness of partial hospitalization in the treatment of borderline personality disorder: A randomized controlled trial. *The American Journal of Psychiatry*, *156*(10), 1563-1569
- Bateman, A. W., & Fonagy, P. (2004). Mentalization-based treatment of BPD. *Journal of Personality Disorders*, *18*(1), 36-51.
- Bornstein, R. F. (1988). Psychoanalysis in the undergraduate curriculum: The treatment of psychoanalytic theory in abnormal psychology texts. *Psychoanalytic Psychology*, *5*(1), 83-93. doi: <http://dx.doi.org/10.1037/h0085122>
- Clarkin, J. F., Levy, K. N., Lenzenweger, M. F., & Kernberg, O. F. (2007). Evaluating three treatments for borderline personality disorder: A multiwave study. *The American Journal of Psychiatry*, *164*(6), 922-928. doi: <http://dx.doi.org/10.1176/appi.ajp.164.6.922>
- Constantino, M. J., Arnkoff, D. B., Glass, C. R., Ametrano, R. M., & Smith, J. Z. (2011). Expectations. *Journal of Clinical Psychology*, *67*(2), 184-192. doi: <http://dx.doi.org/10.1002/jclp.20754>
- Davidson, K., Norrie, J., Tyrer, P., Gumley, A., Tata, P., Murray, H., & Palmer, S. (2006). The effectiveness of cognitive behavior therapy for borderline personality disorder: Results from the borderline personality disorder study of cognitive therapy

(BOSCOT) trial. *Journal of Personality Disorders*, 20(5), 450-465. doi:

<http://dx.doi.org/10.1521/pedi.2006.20.5.450>

- Devilley, G. J., & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*, 31(2), 73-86.
- Fraley, R. C. (2007). *Using the internet for personality research: What can be done, how to do it, and some concerns*. New York, NY, US: Guilford Press, New York, NY.
- Frank, J. D. (1971). Therapeutic factors in psychotherapy. *American Journal of Psychotherapy*, 25(3), 350-361.
- Frank, J. D. (1973). *Persuasion and healing: A comparative study of psychotherapy*. (reved). Oxford, England: Schocken, Oxford.
- Garfield, S. L. (1994). *Research on client variables in psychotherapy*. Oxford, England: John Wiley & Sons, Oxford.
- Giesen-Bloo J, van Dyck R, Spinhoven P, Van Tilberg, W., Dirksen, C., Van Asselt, T., Kremers, I., Nadort, M., & Arntz, A. (2006). Outpatient psychotherapy for borderline personality disorder: Randomized trial of schema-focused therapy vs transference-focused psychotherapy. *Archives of General Psychiatry*, 63(6): 649-658. doi:10.1001/archpsyc.63.6.649.
- Glass, C. R., Arnkoff, D. B., & Shapiro, S. J. (2001). Expectations and preferences. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 455-461. doi: <http://dx.doi.org/10.1037/0033-3204.38.4.455>

- Hoermann, S., Clarkin, J. F., Hull, J. W., & Levy, K. N. (2005). The construct of effortful control: An approach to borderline personality disorder heterogeneity. *Psychopathology, 38*(2), 82-6.
- Hunsley, J. (1992). Development of the treatment acceptability questionnaire. *Journal of Psychopathology and Behavioral Assessment, 14*(1), 55-64.
- Kellogg, S. H., & Young, J. E. (2006). Schema therapy for borderline personality disorder. *Journal of Clinical Psychology, 62*(4), 445-458. doi: <http://dx.doi.org/10.1002/jclp.20240>
- Kernberg, O. F., Yeomans, F. E., Clarkin, J. F., & Levy, K. N. (2008). Transference focused psychotherapy: Overview and update. *The International Journal of Psychoanalysis, 89*(3), 601-620. doi: <http://dx.doi.org/10.1111/j.1745-8315.2008.00046.x>
- Levy, K. N. (2008). Psychotherapies and lasting change. *The American Journal of Psychiatry, 165*(5), 556-559. doi: <http://dx.doi.org/10.1176/appi.ajp.2008.08020299>
- Levy, K. N., Meehan, K. B., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology, 74*(6), 1027-1040. doi: <http://dx.doi.org/10.1037/0022-006X.74.6.1027>
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY, US: Guilford Press, New York, NY.



- Linehan, M. M., Armstrong, H. E., Suarez, A., & Allmon, D. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48(12), 1060-1064.
- Lipkin, S. (1948). The client evaluates nondirective psychotherapy. *Journal of Consulting Psychology*, 12(3), 137-146. doi: <http://dx.doi.org/10.1037/h0060172>
- Magnavita, J., Levy, K. N., Critchfield, K. L., & Lebow, J. L. (2010). Ethical considerations in treatment of personality dysfunction: Using evidence, principles, and clinical judgement. *Professional Psychology: Research and Practice*, 41(1), 64-74.
- Roth, A., Fonagy, P., Parry, G., & Target, M. (1996). *What works for whom? A critical review of psychotherapy research*. New York, NY, US: Guilford Press, New York, NY.
- Swift, J. K., & Callahan, J. L. (2009). The impact of client treatment preferences on outcome: A meta-analysis. *Journal of Clinical Psychology*, 65(4), 368-381. doi: <http://dx.doi.org/10.1002/jclp.20553>
- Zanarini, M. C. (2009). Psychotherapy of borderline personality disorder. *Acta Psychiatrica Scandinavica*, 120(5), 373-377. doi: <http://dx.doi.org/10.1111/j.1600-0447.2009.01448.x>
- Zanarini, M. C., Frankenburg, F. R., & Gunderson, J. G. (1988). Pharmacotherapy of borderline outpatients. *Comprehensive Psychiatry*, 29(4), 372-378.

## **ACADEMIC VITA**

Shannon McCarrick

836U Bellaire Ave., Apt. 216 State College, PA 16801

smm5670@psu.edu

---

### **Education**

B.S., Psychology, 2013, Pennsylvania State University, University Park, PA

B.A., Anthropology, 2013, Pennsylvania State University, University Park, PA

### **Honors and Awards**

- 2013, Mona Shibley Bird Memorial Scholarship, The Pennsylvania State University
- 2010, The President's Freshman Award, The Pennsylvania State University
- 2009, 2010, Joseph J. Grano, Jr. Scholarship, UBS Financial Services
- 2009, 2010, Our Lady of Joy Scholarship, Our Lady of Joy Catholic church
- 2009, Kimberly R. Kenna Memorial Scholarship, Plum Senior High School
- 2009, Women in Engineering Scholarship, Plum Senior High School

### **Association Memberships/Activities**

- The Phi Beta Kappa Society
- Psi Chi: The International Honors Society in Psychology

### **Research Experience**

- Associate Lab Manager, Laboratory for Personality, Psychopathology, and Psychotherapy Research, Supervisor: Kenneth Levy, Ph.D.

- Research Assistant, Relationships and Stress Research Laboratory, Supervisor: Amy Marshall, Ph.D.

### **Research Interests**

Broadly, I am interested in improved psychotherapy. I hope to accomplish this through the examination of common factors such as the therapeutic alliance. I also hope to look at the effects of multicultural competency in therapy for individuals from different backgrounds who struggle with psychological disorders.