

**Emotion-Focused Group Psychotherapy for Bulimia Nervosa**

by

Jennifer E. Bartlett

A thesis submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Counselling Psychology

Department of Educational Psychology

University of Alberta

## **Abstract**

Bulimia nervosa is a complex disorder characterized by binge-eating, purging, secrecy, and an abundance of painful emotions among the most prevalent of which is shame. Our most popular approaches to treatment have shown only moderate success, thus necessitating the search for alternative treatment options. The purpose of this study was to examine the process of change in eating disorder symptomology and shame in bulimia nervosa using emotion-focused group therapy (EFT-G). Ten participants from two trials of group psychotherapy were repeatedly evaluated on outcome measures for bulimia symptomology, internal shame, and external shame prior to, during and following treatment using a single subject withdrawal design (A-B-A), supplemented by ratings and written formal feedback describing helpful aspects of therapy. Repeated measures data were analyzed via visual inspection for changes in level, trend, variability, immediacy, and overlap from baseline to treatment, and from baseline to follow-up, to examine change in outcome variables for each participant. Participants were also measured on outcomes for low self-esteem, interpersonal alienation, depression, and emotion dysregulation in a pretest-posttest format, which was analyzed by examining participants' change scores to determine whether a clinically significant change had occurred, based on existing literature. Findings demonstrated a clinically significant improvement for the majority of participants on measures of bulimia symptomology and half of participants on internal shame, with a minority of participants improving on external shame during treatment and/or follow-up. Half of participants also exhibited a clinically significant improvement on a measure of depression symptomology, with a minority of participants improving on interpersonal alienation, low self-esteem, and emotion dysregulation post-treatment. These findings suggest that EFT-G shows great promise and may be a viable treatment alternative for bulimia nervosa.

## **Preface**

This thesis is an original work by Jennifer Bartlett. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “Emotion-Focused Group Psychotherapy for Bulimia Nervosa”, No. Pro00060559, 2018.

## **Acknowledgements**

This project is the result of four years worth of long, hard work which would not have been possible without the contributions and support of a number of people.

First and foremost, I would like to thank Dr. Bill Whelton, my dissertation supervisor. I am so thankful for the amount of time and energy you put into helping me get this study off the ground. There were a number of hurdles that had to be overcome in making this project a reality, and you went to bat for me so many times in so many ways that I have lost count. Without your support, guidance, encouragement and persistence I would not have had the tenacity to see this study through. For that, I am eternally grateful.

To my co-therapist Dr. Amanda Stillar, without your dedication this study would have been impossible. Thank you for investing your time and energy to make this endeavour happen. Your expertise and knowledge were integral to running these groups, and I could not have done it without your hard work and support.

Clinical supervision for this group was provided by Dr. Michelle Emmerling, who volunteered her time to make this group all it could be. I am so appreciative for the opportunity to benefit from your therapeutic genius and your brilliant insights. Your feedback throughout this process was invaluable, and I am a better clinician for it.

To the members of my supervisory committee, Dr. George Buck and Dr. Jacqueline Pei, your feedback helped mould this document into what it is today. Thank you so much for your support and your insights throughout this process.

I would like to thank Doug Gross for his significant methodological contributions to this project. Your expertise was absolutely essential to this study, and you helped me make meaning

from a small data set where other methods could not. Your patience in fielding my numerous questions and your willingness to help and teach me was invaluable.

To my partner and best friend Cody, your never-ending support throughout this journey was so essential to my success that words cannot do it justice. You have supported and encouraged me through every step of this process, kept me grounded, and always managed to find a way to make me laugh even when I didn't think I could.

I would like to thank my mom, dad and sister for their unwavering support of me throughout this process. It has been a long and arduous journey, and I wouldn't have made it to the end without them.

To my two best friends, Rachel and Kristy, your friendship and support has been a saving grace throughout this process. I am so honored to know you, and to have shared this journey with you. Taking this final step would simply not have been the same without the two of you.

Last but not least, I would like to extend my deepest thanks to the ten women who entrusted me with a piece of their journey. Running these groups is an experience that I will never forget. I learned so much from each and every one of you, and I am honored to have been a part of your process.

## Table of Contents

Introduction.....	1
Literature Review.....	6
Etiology of Eating Disorders.....	7
Eating Disorders.....	9
Anorexia nervosa.....	9
Binge-eating disorder.....	11
Bulimia nervosa.....	12
Heterogeneity.....	13
Shame.....	17
Models of Bulimia Nervosa.....	21
Cognitive-behavioural model.....	21
Interpersonal model.....	23
Emotion regulation model.....	24
Treatments for Bulimia Nervosa.....	26
Cognitive-behavioural therapy.....	26
Interpersonal therapy.....	28
Emotion-focused therapy.....	29
Fundamental Principles of Emotion-Focused Therapy.....	30
Evolutionary Model of Emotion.....	34

Emotional Dysfunction .....	35
Principles of Emotional Change.....	37
Emotional awareness .....	37
Emotion regulation .....	38
Changing emotion with emotion .....	39
Group Therapy .....	40
Factors for change in group therapy .....	44
Group therapy for eating disorders.....	46
Emotion-focused group therapy for eating disorders.....	46
Rationale for the Proposed Study .....	49
Purpose.....	53
Method .....	54
Participants .....	54
Therapists .....	54
Procedures .....	55
Participant eligibility.....	55
Recruitment .....	56
Treatment preparation.....	59
Therapy Tasks .....	59
Self-evaluative conflict split.....	60

Symptom split.....	61
Unfinished business.....	61
Self-interruptive split.....	62
Treatment Protocol.....	64
Single Subject Design.....	70
Measures.....	74
Screening Measures.....	74
Bulimia nervosa.....	74
Personality disorders.....	76
Substance abuse.....	76
Psychosis.....	77
Repeated Measures.....	78
Eating disorder psychopathology.....	78
Internal shame.....	79
External shame.....	80
Pre-Post Measures.....	81
Depression.....	81
Emotion regulation.....	81
Low Self-Esteem and Interpersonal Alienation.....	82
Helpful Aspects of Therapy.....	83



Data Analyses.....	83
Results.....	87
Presentation of Data .....	87
Quantitative Data.....	88
Analysis for case 1.....	93
Analysis for case 2.....	99
Analysis for case 3.....	105
Analysis for case 4.....	111
Analysis for case 5.....	117
Analysis for case 6.....	123
Analysis for case 7.....	129
Analysis for case 8.....	136
Analysis for case 9.....	142
Analysis for case 10.....	148
Participant Feedback .....	154
Therapists Reflections .....	157
Discussion.....	162
Summary of Findings .....	162
Bulimia Symptomology .....	164
Shame .....	166

Depression.....	167
Self-Esteem and Interpersonal Functioning .....	168
Emotion Regulation.....	169
Clinical Relevance of an Idiographic Approach .....	170
Patterns of Change .....	172
Heterogeneity of Psychological Outcomes .....	175
Treatment Length .....	178
Participant Feedback .....	185
Clinical Implications .....	187
Limitations .....	193
Future Directions.....	197
Conclusion .....	200
References.....	202
Appendix A. Eating Disorder Diagnostic Scale (EDDS) – DSM 5 Version .....	238
Appendix B. Self-Report Standardized Assessment of Personality – Abbreviated Scale (SAPAS-SR).....	239
Appendix C. Leeds Dependence Questionnaire (LDQ) .....	240
Appendix D. BASIS-24 .....	241
Appendix E. Eating Disorder Inventory-3 (EDI-3) .....	242
Appendix F. Internalized Shame Scale (ISS) .....	243

Appendix G. Other As Shamer (OAS) Scale .....	244
Appendix H. Depression, Anxiety and Stress Scale (DASS-21).....	245
Appendix I. Difficulties in Emotion Regulation Scale (DERS) .....	246
Appendix J. Helpful Aspects of Therapy Form .....	247
Appendix K. Screening Information Letter: Group One .....	248
Appendix L. Screening Information Letter: Group Two .....	252
Appendix M. Consent Form for Screening Questionnaires.....	256
Appendix N. Recruitment Flyer for 12-week Group .....	258
Appendix O. Group Therapy Information Letter: Group One.....	259
Appendix P. Group Therapy Information Letter: Group Two.....	264
Appendix Q. Consent Form to Participate in Group Therapy Research.....	269
Appendix R. Participant Demographic Form .....	271
Appendix S. Experiential activity .....	274
Appendix T. Emotion-Focused Group Therapy Manual (Sample) .....	275
Appendix U. Visual Analysis for Case 1 .....	284
Appendix V. Visual Analysis for Case 2 .....	287
Appendix W. Visual Analysis for Case 3 .....	290
Appendix X. Visual Analysis for Case 4 .....	293
Appendix Y. Visual Analysis for Case 5 .....	296
Appendix Z. Visual Analysis for Case 6 .....	299

Appendix AA. Visual Analysis for Case 7 .....	302
Appendix BB. Visual Analysis for Case 8.....	305
Appendix CC. Visual Analysis for Case 9.....	308
Appendix DD. Visual Analysis for Case 10 .....	311

## List of Tables

Table 1. Criteria for Visual Analysis of Repeated Measures.....	86
Table 2. Summary of Psychological Outcomes for Repeated and Pre-Post Measures.....	88
Table 3. Repeated Measures Data for Case 1 .....	95
Table 4. Pre-Post Measures Data for Case 1.....	96
Table 5. Repeated Measures Data for Case 2 .....	101
Table 6. Pre-Post Measures Data for Case 2.....	102
Table 7. Repeated Measures Data for Case 3 .....	107
Table 8. Pre-Post Measures Data for Case 3.....	108
Table 9. Repeated Measures Data for Case 4 .....	113
Table 10. Pre-Post Measures Data for Case 4.....	114
Table 11. Repeated Measures Data for Case 5 .....	119
Table 12. Pre-Post Measures Data for Case 5.....	120
Table 13. Repeated Measures Data for Case 6 .....	125
Table 14. Pre-Post Measures Data for Case 6.....	126
Table 15. Repeated Measures Data for Case 7 .....	132
Table 16. Pre-Post Measures Data for Case 7.....	133
Table 17. Repeated Measures Data for Case 8 .....	138
Table 18. Pre-Post Measures Data for Case 8.....	139
Table 19. Repeated Measures Data for Case 9 .....	144
Table 20. Pre-Post Measures Data for Case 9.....	145
Table 21. Repeated Measures Data for Case 10 .....	150
Table 22. Pre-Post Measures Data for Case 10.....	151

## List of Figures

Figure 1. Case 1: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	97
Figure 2. Case 1: Internalized Shame Scale (ISS) .....	97
Figure 3. Case 1: Other As Shamer (OAS).....	98
Figure 4. Case 2: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	103
Figure 5. Case 2: Internalized Shame Scale (ISS) .....	103
Figure 6. Case 2: Other As Shamer (OAS).....	104
Figure 7. Case 3: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	109
Figure 8. Case 3: Internalized Shame Scale (ISS) .....	109
Figure 9. Case 3: Other As Shamer (OAS).....	110
Figure 10. Case 4: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	115
Figure 11. Case 4: Internalized Shame Scale (ISS) .....	115
Figure 12. Case 4: Other As Shamer (OAS).....	116
Figure 13. Case 5: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	121
Figure 14. Case 5: Internalized Shame Scale (ISS) .....	121
Figure 15. Case 5: Other As Shamer (OAS).....	122
Figure 16. Case 6: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	127
Figure 17. Case 6: Internalized Shame Scale (ISS) .....	127
Figure 18. Case 6: Other As Shamer (OAS).....	128
Figure 19. Case 7: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	134
Figure 20. Case 7: Internalized Shame Scale (ISS) .....	134
Figure 21. Case 7: Other As Shamer (OAS).....	135
Figure 22. Case 8: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	140

Figure 23. Case 8: Internalized Shame Scale (ISS) .....	140
Figure 24. Case 8: Other As Shamer (OAS).....	141
Figure 25. Case 9: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	146
Figure 26. Case 9: Internalized Shame Scale (ISS) .....	146
Figure 27. Case 9: Other As Shamer (OAS).....	147
Figure 28. Case 10: Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale.....	152
Figure 29. Case 10: Internalized Shame Scale (ISS) .....	152
Figure 30. Case 10: Other As Shamer (OAS).....	153

## Introduction

Eating disorders, the most prevalent of which are anorexia nervosa, bulimia nervosa, and binge-eating disorder, are a growing, wide-spread problem that primarily affect women between the ages of 15 to 24 (American Psychiatric Association, 2013; Hudson, Hiripi, Pope & Kessler, 2007; Streigel-Moore & Franko, 2003; Wade, Keski-Rahkonen & Hudson, 2011; Hoek & van Hoeken, 2003). During the period of time between adolescence to early adulthood, the prevalence of eating disorders spikes, placing girls and women within this age range at an elevated risk for developing these disorders (Hoek, 2007). Eating disorders are emotionally, cognitively, and physically damaging; they are collectively associated with an increased risk of suicide, a negative self-concept and an abundance of negative affect, and can also produce a multitude of complex medical issues (American Psychiatric Association, 2013). Binge-eating disorder is a recent addition to the *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition*, and is cited as having a prevalence rate of 1.6%, making it the most commonly diagnosed of all the eating disorders. Anorexia nervosa is the least prevalent of the eating disorders at a rate of 0.4%, but is also the most fatal of these disorders (American Psychiatric Association, 2013). It is estimated that 10% of individuals with this disorder will die within 10 years of onset (Sullivan, 2002), and the annual death rate for women with anorexia nervosa is more than 12 times higher than the annual death rate due to all other causes combined for women between the ages of 15 to 24 (Cavanaugh & Lemberg, 1999). Bulimia nervosa is the second most commonly diagnosed eating disorder after binge-eating disorder, with a prevalence rate of 1-1.5% (American Psychiatric Association, 2013), and is the sole diagnostic focus of this dissertation.



One of the defining features of bulimia nervosa is the presence of negative, maladaptive emotions which tend to dominate the lives of these individuals (Dolhanty, 2006; Dolhanty & Greenberg, 2007). Among the most predominant of these maladaptive emotions is the experience of shame, an emotion that partially characterizes the presentation of bulimia nervosa (American Psychiatric Association, 2013; Dolhanty & Greenberg, 2007; Goss & Allan, 2009). While shame can be found across many forms of mental illness and is not unique to eating disorders, it is particularly problematic in the presence of an eating disorder as higher levels of shame are significantly associated with higher levels of eating disorder symptomology (Sanftner, Barlow, Marschall, & Tangney, 1995; Troop, Allan, Serpall & Treasure, 2008). There are a number of factors that are thought to contribute to the manifestation of shame among eating disordered individuals, including social isolation, negative self-beliefs (Keith, Gillanders, & Simpson, 2009), and negative evaluation of weight or size (Troop & Redshaw, 2012). It has been theorized that within the eating disordered population, shame may initially arise from early negative life experiences, such as a lack of maternal care (Keith et al., 2009). This shame is then thought to be maintained and intensified by the disordered eating behaviours themselves, which have been identified as one of the primary sources of shame among individuals with bulimia nervosa (Keith et al., 2009; Weiss, Katzman, & Wolchik, 1994).

Shame has also been identified as a key factor in the treatment of eating disorder pathology. Evidence suggests that, during treatment, achieving a reduction in shame is associated with a faster reduction in eating disorder symptomology (Kelly, Carter and Borairi, 2014), indicating the importance of this emotion in recovery. Interestingly, further evidence indicates that women who have achieved remission from an eating disorder may continue to exhibit feelings of shame, despite the resolution of their symptoms (Keith et al., 2009; Troop et al.,

2008). This suggests that our existing methods of treatment may not be targeting the core issue of shame, and raises the question as to their true efficacy and long-term impact on this population.

Currently, the most popular approaches in the treatment of eating disorders are cognitive-behavioural therapy and interpersonal therapy (Shapiro et al., 2007; Wilson, Grilo, & Vitousek, 2007; Carter et al., 2011; Mitchell et al., 2002). Although these approaches are empirically supported and have shown success in the treatment of eating disorders, it is also true that current treatments promote recovery in only half of all cases (Carter et al., 2011; Shapiro et al., 2007; Smink, van Hoeken, & Hoek, 2012; Polnay et al., 2014; Mitchell et al., 2002; Wilson et al., 2007). Furthermore, relapse rates following treatment tend to be moderate, where between 20-50% of patients either return to behaviours characteristic of bulimia nervosa, or exhibit diagnostic crossover such that they meet criteria for another eating disorder (Bøgh, Rokkedal, & Valbak, 2005; Fichter & Quadflieg, 2004; Keel, Mitchell, Miller, Davis & Crow, 1999; Keller, Herzog, Lavori, Bradburn, & Mahoney, 1991; Olmsted, Kaplan, & Rockert, 2005; Richard, Bauer, & Kordy, 2005; Steinhausen & Weber, 2009; Yu, Agras, & Bryson, 2013). There is also evidence to suggest that bulimia nervosa can adopt a chronic, protracted course such that recovery can be a slow process (Bøgh et al., 2005; Fairburn, Stice, et al., 2003; Fichter & Quadflieg, 2004; Keel et al., 1999; Keller et al., 1991; Steinhausen & Weber, 2009). As such, there continues to be conflicting evidence as to best practices when working with this population. These findings suggest that there are large gaps in our understanding and conceptualization of eating disorders, and highlights the need to develop more efficacious forms of treatment, particularly for those for whom traditional methods of treatment have failed (Carter et al., 2011).

While existing treatments tend to focus on the cognitive, behavioural and interpersonal aspects of these disorders (American Psychiatric Association, 2006), there is evidence to suggest that emotions also play an important role in the development and maintenance of eating disorders (Dolhanty, 2006; Dolhanty & Greenberg, 2007; Dolhanty & Greenberg, 2009). In addition to the abundance of negative affect and shame that characterizes bulimia nervosa, individuals often struggle to cope with their negative emotions in an adaptive, healthy manner, opting to avoid or suppress them rather than experience them. In fact, there is evidence to suggest that in the absence of adaptive emotion regulation skills, the eating disorder symptoms in and of themselves serve as a mechanism to cope with these unwanted negative emotions. As such, numerous studies have suggested and supported the implementation of an emotion-focused approach to the treatment of eating disorders (Speranza, Loas, Wallier & Corcos, 2007; Wildes, Marcus, Bright & Dapelo, 2012; Gianini, White & Masheb, 2013; Zander & De Young, 2014). Taken with the fact that our existing methods of treatment are only moderately successful, these findings suggest that emotion-focused therapy (EFT) may be an important alternative treatment.

EFT is an experiential approach to treatment that targets emotional dysfunction by altering maladaptive or unhealthy emotions, such as shame, that so often govern the lives of individuals suffering from bulimia nervosa (Elliott, Watson, Goldman & Greenberg, 2004b; Greenberg, 2015). Indeed, EFT has been gaining increasing attention over the last several years, and has shown promising results in the treatment of eating disorders (Brennan, Emmerling, & Whelton, 2015; Ivanova, 2013; Ivanova & Watson, 2014; Wnuk, 2009; Wnuk, Greenberg & Dolhanty, 2015). However, EFT as applied to this population continues to be largely underrepresented in the literature and, as such, the empirical evidence supporting the efficacy of this treatment is limited. Furthermore, the construct of shame remains entirely unexamined in the

context of EFT and bulimia nervosa, despite its integral role in the pathology of this disorder. My study will aim to bridge these gaps in the literature by delivering emotion-focused therapy in a group format for women with bulimia nervosa, with the intent to: (a) extend the existing knowledge base by examining if this intervention is effective in reducing shame over the course of treatment, (b) examine how levels of shame correspond to levels of eating disorder symptomology, and (c) further validate existing research by examining the effectiveness of EFT in treating bulimia nervosa as measured by the degree of change over the course of treatment on measures of eating disorder symptomology, depression, self-esteem, interpersonal alienation and emotion regulation.

## Literature Review

Eating disorders have been of increasing concern over the last several decades (Hudson et al., 2007; Streigel-Moore & Franko, 2003; Wade et al., 2011; Hoek & van Hoeken, 2003). An eating disorder can be loosely defined as a clinically significant disturbance to one's eating or eating-related behaviours, which ultimately impairs physical, psychological or social functioning. These disturbances involve over-consumption or under-consumption of food, the desire to control or reduce one's weight, and negative self-evaluations based on weight and appearance. While they can be found in both males and females, eating disorders most commonly affect women, and are particularly pervasive between the ages of 15 to 24 (Cavanaugh & Lemberg, 1999; Government of Canada, 2006; Smink et al., 2012).

While most eating disorders are detected and studied during the period of late adolescence to early adulthood, it should be noted that these disorders can develop even earlier in childhood, and have been found in children as young as ten (Cavanaugh & Lemberg, 1999). Furthermore, children as young as eight years old have been found to exhibit concerns about weight, expressing fears of becoming fat and the desire to be thinner (Collins, 1991; Mellin et al., 1997). As an extension of this phenomenon, a startling proportion of adolescent girls demonstrate concerns about weight and body image, and many engage in early dieting practices (Boyce, 2004; Boyce, King, & Roche, 2008). For example, approximately half of adolescent girls engage in unhealthy and pathological weight control behaviours, including skipping meals, fasting, smoking, diet pills, self-induced vomiting, and the use of laxatives (Boutelle, Neumark-Sztainer, Story, & Resnick, 2002; Neumark-Sztainer & Hannan, 2001; Wertheim, Paxton & Blaney, 2009).

## **Etiology of Eating Disorders**

The etiology of eating disorders is complex and multifaceted, as is evidenced by the multitude of risk factors that are thought to contribute to their development. The most influential of these include cultural, cognitive, interpersonal, genetic, familial, and emotional factors (Davis & Katzman, 1999; Dolhanty & Greenberg, 2007; Hawkins, Richards, Granley, & Stein, 2004; Haworth-Hoeppner, 2000; Polivy & Herman, 2002; Striegel-Moore & Cachelin, 2001).

Although there are many contributing factors to the development of eating disorders, culture is an undeniably important one. Current cultural values, particularly those of the Western world, emphasize the importance and value of thinness among women. Women and adolescent girls are constantly bombarded with images from the media depicting the highly sought-after image of the thin-body ideal, which results in very restrictive standards and views of beauty (Davis & Katzman, 1999). However, research shows that exposure to this thin ideal is associated with increased body dissatisfaction, negative mood, reduced self-esteem, and can ultimately lead to the development of eating disordered behaviours (Hawkins et al., 2004). Given the increasing pressure that women and girls face to meet these unrealistic standards of an ever-shrinking thin-body ideal, it is unsurprising that eating disorders have been on the rise since the 1950s (Hudson et al., 2007; Streigel-Moore & Franko, 2003; Wade et al., 2011; Hoek & van Hoeken, 2003), nor is it surprising that young girls are developing these disorders much earlier in development (Cavanaugh & Lemberg, 1999; Collins, 1991; Mellin et al., 1997).

Cognitive pathology is thought to be a major contributor to the development of eating disorders, as these disorders are in part characterized by disordered or distorted thoughts including obsessive thoughts about food, weight and body image, perfectionism, all-or-none thinking, and impulsivity. These disordered cognitions are ultimately thought to create a

significant vulnerability for the development of these illnesses (Polivy & Herman, 2002).

Another contributing factor is negative or traumatic interpersonal experiences, particularly those that have involved emotional abuse, trauma, or teasing about one's weight or body shape. Such experiences can lead to negative or intolerable emotions, such as low self-esteem, depression, anxiety, and irritability, which can in turn lead to the development of eating disorder pathology (Polivy & Herman, 2002).

While there continues to be conflicting evidence about the role of genetics in the development of eating disorders, a number of studies, through the use of twin-based cohorts, have suggested that genetics and heritability do play an important part in the development of these disorders. The importance of genetic factors is further supported by the fact that eating disorders tend to aggregate in families (Striegel-Moore & Cachelin, 2001). However, it remains difficult if not impossible to separate genetic factors from environmental factors, and as such, the true role of genetics in these disorders has yet to be discovered (Striegel-Moore & Cachelin, 2001).

Families can inadvertently and unknowingly contribute to the development of an eating disorder by engaging in certain behaviours or practices within the home. For example, a highly critical and controlling home environment (Haworth-Hoepfner, 2000), an authoritarian parenting style (Bowles, Kurlender, & Hellings, 2011), and a familial focus on food, weight, appearance or dieting (Haworth-Hoepfner, 2000) are linked to the development of eating disorders.

More recently, an additional etiological factor has emerged: the role of emotion. Eating disordered individuals often experience an excess of negative affect and emotional distress, which is perceived as intolerable. However, individuals with eating disorders often lack healthy coping mechanisms with which they can regulate their emotions. The presence of negative

affect, which can include depression, anxiety, rage, self-hatred, and shame (Bydlowski et al., 2005; Davis & Jamieson, 2005; Dolhanty, 2006; Dolhanty & Greenberg, 2007; Haedt-Matt & Keel, 2011; Robinson, Dolhanty & Greenberg, 2013), has been identified as a trigger for disordered eating behaviours, including binge-eating, purging, and food restriction. It is thought that these behaviours are in fact a mechanism that eating disordered individuals use to cope with their negative emotions in the absence of adaptive emotion regulation skills (Dolhanty, 2006; Dolhanty & Greenberg, 2007; Dolhanty & Greenberg, 2009). More specifically, it is hypothesized that starvation is used as a means to numb negative affect, binge-eating is an attempt to soothe oneself, and purging is a method through which unwanted feelings can be released (Dolhanty, 2006). While these factors are among the most commonly cited and discussed in the literature, it is important to note that the development of an eating disorder does not definitively stem from any single factor, but rather the interaction or accumulation of numerous factors.

## **Eating Disorders**

Among the most prevalent of the eating disorders are anorexia nervosa, bulimia nervosa, and binge-eating disorder.

**Anorexia nervosa.** Anorexia nervosa tends to develop during adolescence or young adulthood, and rarely begins before puberty or after the age of 40. While this illness can affect both men and women, it is ten times as common among females as it is among males. Among young females, anorexia has a 12-month prevalence rate of 0.4%. Prevalence rates for men are unknown (American Psychiatric Association, 2013).

Anorexia nervosa is characterized by an intense and persistent fear of becoming fat. In this disorder one's body weight is perceived inaccurately resulting in a harsh and detrimental



self-evaluation. Individuals with this disorder maintain a significantly low body weight, which is defined as weight that is less than what would be considered minimally normal or expected based on the individual's age, sex, and stage of development. There are two subtypes of anorexia, restricting type and binge-eating/purging type, which differentiate between two means of achieving a low body weight. Restricting type is characterized by weight loss that is primarily achieved through food restriction (i.e., dieting, fasting) and excessive exercise. Binge-eating/purging type is characterized by recurrent episodes of binge eating or purging behaviours, including self-induced vomiting, diuretic and laxative misuse, or enemas. Some individuals with this subtype do not engage in binge eating, but will purge after consuming a small or typical amount of food. In addition to the eating disorder symptoms, individuals with anorexia may also exhibit other psychological concerns, including depression, obsessions and compulsions, social isolation, insomnia, highly rigid thinking, and over-control of emotions (American Psychiatric Association, 2013).

Anorexia nervosa can result in a number of serious and sometimes life-threatening medical concerns, including loss of menstruation (American Psychiatric Association, 2013), reduced bone density (American Psychiatric Association, 2013), slowed gastric emptying and bloating during food consumption (Benini et al., 2004), a myriad of cardiac complications including sudden cardiac death (Facchini et al., 2006; Westmoreland, Krantz, & Mehler, 2016; Yahalom et al., 2013), anemia (Hütter, Ganepola & Hofmann, 2009; Westmoreland et al., 2016), and brain atrophy (Roberto et al., 2011; Westmoreland et al., 2016). Despite the low prevalence rate, it is unsurprising that anorexia has the highest mortality rate of any psychiatric illness, and is therefore the most deadly of all the eating disorders (American Psychiatric Association, 2013; Sullivan, 2002).

**Binge-eating disorder.** Binge-eating disorder is primarily characterized by recurrent episodes of binge-eating in which an excessive amount of food is consumed, accompanied by a sense of lack of control. Although individuals with binge-eating disorder tend to engage in dieting, this tends to follow rather than precede the development of binge-eating. A distinct feature of this disorder is the absence of compensatory behaviours meant to prevent weight gain, such as excessive exercise, diuretic or laxative misuse, or self-induced vomiting. Although binge eating disorder predominately affects women, the gender ratio is less skewed than in the other eating disorders. The 12-month prevalence rate for adult females is 1.6%, and for adult males is 0.8% (American Psychiatric Association, 2013).

As a recent edition to the *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition* (DSM 5), not much is known about the development and trajectory for those with binge-eating disorder. Binge-eating disorder typically begins during adolescence or young adulthood but can also have a later onset. This illness is more commonly found among individuals seeking weight-loss treatment and is associated with being overweight or obese. Interestingly, remission rates after treatment are higher for binge-eating disorder than they are for bulimia nervosa or anorexia nervosa. Binge-eating disorder is often accompanied by additional psychological concerns including impaired life satisfaction, affective disorders including depression and bipolar disorders, anxiety, and occasionally substance use disorders. Although results are somewhat mixed, this disorder has also been associated with an increased likelihood of developing facets of metabolic syndrome, including glucose dysregulation and type II diabetes (Mitchell, 2016).

While both anorexia nervosa and binge-eating disorder have significant implications for the well-being of women, the diagnostic focus of this dissertation was bulimia nervosa.

**Bulimia nervosa.** Bulimia nervosa most commonly develops during the time between adolescence and young adulthood and is a disorder that can affect both men and women. While prevalence rates among men are unclear, this disorder has a 12-month prevalence rate of 1-1.5% among women and affects women approximately ten times more than it does men. The term “eating disorder” tends to conjure up an image of an underweight, malnourished woman on the verge of starvation. However, in stark contrast to this prototypical view, rooted in anorexia and commonly held by society, the physical presentation of bulimia nervosa is quite different as individuals with this disorder tend to be of normal weight or overweight. Bulimia nervosa can also occur among individuals who are obese, although it is relatively rare. Additionally, it is not uncommon that individuals with this disorder will experience additional comorbid mental health issues, the most common of which include depression, anxiety, low self-esteem, and substance abuse (American Psychiatric Association, 2013).

Bulimia nervosa is classified in the DSM 5 according to five core criteria: (A) recurrent episodes of binge-eating in which an excessive amount of food is consumed, accompanied by a sense of lack of control; (B) the recurrent use of compensatory behaviours to counter weight gain; (C) the binge-eating and compensatory behaviours both occur, on average, at least once a week for three months; (D) self-evaluation is unduly influenced by weight and shape; and (E) the disturbance does not occur exclusively during episodes of anorexia nervosa (American Psychiatric Association, 2013; Steinhausen & Weber, 2009).

Bulimia nervosa is primarily characterized by a recurrent cycle of binge-eating and purging. Binge-eating is defined as the consumption of an inordinately large amount of food within a finite period of time (i.e., 2 hours), and is accompanied by a sense of a lack of control over the amount or type of food that is consumed (Criterion A). Individuals with this disorder

may feel they cannot refrain from eating or may have great difficulty stopping once they have started. An episode of binge-eating will typically continue until the individual has become uncomfortably full, which may result in physical pain. Following a binge, individuals will then engage in inappropriate compensatory, or purging, behaviours in an attempt to prevent weight-gain (Criterion B). There are a number of behaviours that individuals can use to accomplish this goal, the most common of which is self-induced vomiting. However, other methods may include the abuse of laxatives or diuretics, medication, excessive exercise, and fasting. Between episodes of bingeing, individuals with bulimia nervosa tend to restrict their caloric intake or avoid foods that they consider to be fattening. However, dietary restraint has been identified as an antecedent to binge-eating, and may in fact trigger additional episodes (American Psychiatric Association, 2013). Much like anorexia nervosa, individuals with bulimia nervosa often exhibit a fear of gaining weight, express a desire to lose weight, and place a great deal of emphasis on body weight and shape in their self-evaluations (Criterion D). Individuals with bulimia nervosa also tend to experience an abundance of shame around their disorder and so they tend to employ secrecy to hide or mask their eating behaviours from others (American Psychiatric Association, 2013).

### **Heterogeneity**

There is ample research documenting the heterogeneity among individuals with eating disorders across anorexia nervosa (Hopwood, Ansell, Fehon & Grilo, 2010; Westen & Harnden-Fischer, 2001), bulimia nervosa (Hopwood et al., 2010; Stice, Bohon, Marti, & Fischer, 2008; Westen & Harnden-Fischer, 2001; Wonderlich et al., 2005) and binge eating disorder (Grilo et al., 2008; Grilo, Masheb & Wilson, 2001; Stice et al., 2001; Utzinger et al., 2015). Different subtypes or subgroups for each diagnostic category have been proposed based upon a variety of

variables including personality traits (Hopwood et al., 2010; Westen & Harnden-Fischer, 2001; Wonderlich et al., 2005), comorbid psychopathology (Utzinger et al., 2015), negative affect (Grilo, Masheb, & Berman, 2001; Stice et al., 2008; Sysko, Hildebrandt, Wilson & Wilfley, 2010), body weight (Sysko et al., 2010) and eating disorder symptomology (Grilo, Masheb, & Berman, 2001; Stice et al., 2008; Sysko et al., 2010; Utzinger et al., 2015).

It has been argued that bulimia nervosa, much like the other eating disorders, is not a homogenous disorder (Fairburn, 1991). While people within this diagnostic category will exhibit the core features of the diagnosis, the surrounding features or details of the diagnosis can vary, such as frequency of behaviours (i.e., bingeing and purging), severity and duration of the illness, and psychiatric comorbidities (Fairburn, 1991). Different subgroupings or subtypes of bulimia have been proposed on the basis of a number of variables, including personality traits (Goldner, Srikameswaran, Schroeder, Livesley & Birmingham, 1999; Westen & Harnden-Fischer, 2001), prior history of anorexia nervosa (Bardone-Cone et al., 2008), psychological comorbidities (Wonderlich et al., 2005), and negative affect and dietary restriction (Stice et al., 2008; Chen and LeGrange, 2007; Grilo, Masheb, & Berman, 2001; Stice & Agras, 1999; Stice & Fairburn, 2003; Stice et al., 2008).

A limited body of research has consistently identified two subtypes of bulimia nervosa: pure dietary and dietary-negative affect (Chen and LeGrange, 2007; Grilo, Masheb, & Berman, 2001; Stice & Agras, 1999; Stice & Fairburn, 2003; Stice et al., 2008). The pure dietary subtype is largely characterized by dieting practices, whereas the dietary-negative affect subtype is characterized by both dieting practices and mood disturbances (Stice et al., 2001). These two subtypes stem from the dietary and negative affect models of bulimia nervosa, which reiterate existing research that both dieting and negative affect play an important role in maintaining this

disorder (Stice & Agras, 1999). However, some research has produced mixed findings about the role of these variables, highlighting that dieting and negative affect both independently predict bulimia symptomology in some, but not all, individuals (Fairburn, Cooper & Shafran, 2003; Stice & Agras, 1998). Interestingly, bulimic individuals of the dietary-negative affect subtype tend to exhibit heightened emotional distress, greater eating pathology, increased psychiatric comorbidity, poorer social adjustment, and greater functional impairment. They also tend to exhibit more chronicity in their illness and respond more poorly to treatment (Stice & Agras, 1999; Stice et al., 2008).

Heterogeneity may have significant clinical implications as there is likely to be variability in how people respond to different forms of treatment (Fairburn, 1991). According to Fairburn & Peveler (1990), in order to be effective in treating this population, a range of treatment options must be explored as it is unlikely that a single approach to treatment will work for such a diverse group of individuals.

Related to heterogeneity is the complicating issue of diagnostic crossover. Diagnostic crossover among eating disorders is a well documented phenomenon where individuals will initially meet the criteria for one eating disorder diagnosis, but will later meet the criteria for a different eating disorder diagnosis (Schaumberg et al., 2018). The rates of diagnostic crossover vary across studies and depend on the direction of the change observed.

For example, one study showed that across a seven-year time frame the majority of eating disordered women experienced diagnostic crossover. Over 50% of them exhibited crossover between the two subtypes of anorexia, restricting type and binge-eating/purging type (Eddy et al., 2007). Another study showed that six years post-treatment, 28% of women who initially sought help for a diagnosis of bulimia nervosa had crossed over into the *Diagnostic and*

*Statistical Manual of Mental Disorders-Fourth Edition, Text Revision* (DSM-IV-TR; 2000) diagnosis of Eating Disorder Not Otherwise Specified (EDNOS) (Bøgh et al., 2005). Similarly, another study demonstrated that ten years post treatment 18.5% of women who initially sought help for a diagnosis of bulimia nervosa met the diagnostic criteria for EDNOS (Keel et al., 1999). In contrast, people with binge-eating disorder rarely cross over into anorexia nervosa, and people with anorexia nervosa rarely cross over into binge-eating disorder (Fichter & Quadflieg, 2007). Diagnostic crossover from bulimia nervosa to anorexia nervosa is also reported as being relatively uncommon (Eddy et al., 2007; Tozzi et al., 2005), with some studies citing rates as low as 0.6% (Keel et al., 1999) and as high as 6% (Milos, Spindler, Schnyder & Fairburn, 2005).

It is consistently reported that the most common diagnostic crossover is from anorexia nervosa to bulimia nervosa (Fichter & Quadflieg, 2007; Schaumberg et al., 2018; Tozzi et al., 2005). One study demonstrated that approximately 19% of patients with anorexia nervosa crossed over to bulimia nervosa, with higher rates of crossover occurring for anorexics with binge-eating/purging subtype as compared to restricting subtype (Monteleone, Di Genio, Monteleone & Di Filippo, 2011). Similarly, Milos et al. (2005) reported that 23% of women with a diagnosis of anorexia nervosa later met criteria for bulimia nervosa. Another study showed that approximately one-third of women with anorexia nervosa migrated over to bulimia nervosa. However, they also found that these women were likely to eventually relapse back into anorexia at some point (Eddy et al., 2007).

There are many similarities among bulimics with and without a history of anorexia nervosa. However, there are also some key differences that have been identified. Although findings are somewhat muddled, there is evidence that bulimics with a history of anorexia nervosa tend to exhibit a lower weight or BMI (Fairburn & Cooper, 1984; Goldschmidt et al.,

2013; Sullivan, Bulik, Carter, Gendall & Joyce, 1996; Vaz, Guisado & Penas-Lledo, 2003; White, 2000), and a higher degree of obsessive-compulsiveness and impulsive behaviours. There has also been some debate about differences in the degree of dietary restraint, rates of vomiting and use of laxatives between bulimics with and without a history of anorexia (Laessle, Wittchen, Fichter & Pirke, 1989; Sullivan et al., 1996; White, 2000). For example, according to White (2000), bulimic women with a history of anorexia tend to be more rigidly entrenched in their rules and rituals regarding food restriction and tend to have a lower BMI. White (2000) also noted that bulimic women with a history of anorexia do not respond as quickly to treatment as do women without a history of anorexia. Similarly, Vaz-Leal, Rodriguez Santos, García-Herráiz, Monge-Bautista & López-Vinuesa (2011) found that bulimic individuals with a history of anorexia tend to retain some of the core traits of anorexia, including heightened perfectionism, greater impulsivity, and more severe eating disorder symptoms (i.e., purging behaviours). There is also evidence that bulimics with a history of anorexia are likely to return to their original diagnosis of anorexia nervosa at some point, and that they are less likely to recover from their eating disorder as compared to bulimics without a history of anorexia (Eddy et al., 2007). However, findings are somewhat conflictual regarding the differences between these two subgroups and are therefore inconclusive (Laessle et al., 1989; Sullivan et al., 1996; White, 2000).

## **Shame**

One of the defining features of bulimia nervosa is an excess of negative affect. While there are a number of negative emotions these individuals may experience, shame is among the most painful and destructive (Gilbert, 1998; Tangney & Dearing, 2004). Generally speaking, shame is a shared experience among eating disordered women. It has been shown that women



with eating disorders exhibit significantly higher levels of shame than non-eating disordered women (Sanftner et al., 1995; Swan & Andrews, 2003; Troop et al., 2008). Furthermore, shame, and negative affect in general, have been identified as a potential trigger for bingeing and purging (American Psychiatric Association, 2013; Goss & Gilbert, 2002). However, these behaviours can in turn produce further feelings of shame, which can result in the maintenance and concealment of this disorder (Goss & Allan, 2009; Goss & Gilbert, 2002; Keith et al., 2009).

Shame can be categorized as a self-conscious emotion. Other self-conscious emotions include guilt, pride, embarrassment and humiliation. Self-conscious emotions are largely rooted in social relationships and are evoked by self-reflection, self-evaluation and a heightened sense of awareness about the self (Tangney & Dearing, 2004; Tangney, Stuewig, & Mashek, 2007). Of all the self-conscious emotions, shame is arguably the most painful to experience and the most elusive to define (Gilbert, 1998). Shame is a highly self-focused emotion that revolves around a negative evaluation of the self. It is often accompanied by a sense of worthlessness, powerlessness, and feeling small or diminished. In essence, shame is based on an awareness of the self as being flawed, defective or unworthy, and is associated with the desire to hide or escape from a given situation (Tangney & Dearing, 2004).

Two types of shame have been identified as important and distinct in eating disorder pathology: internal shame and external shame. Internal shame refers to one's own evaluations about the self, in which one perceives oneself to be flawed, inferior, or inadequate. The focus of internal shame is directed inward, and is often associated with high levels of self-criticism and self-hatred (Gilbert, 1998; Gilbert, 2002; Goss & Allan, 2009). In contrast, external shame is based on the negative beliefs that one perceives others to hold about oneself. It is based on the perception that others view the self as being flawed, inferior, or inadequate (Gilbert, 2002; Goss

& Allan, 2009). Although evidence is limited, some research suggests that bulimia nervosa in particular is associated with the presence of internal shame, whereas anorexia nervosa is more commonly associated with the presence of external shame (Troop et al., 2008; Troop & Redshaw, 2012).

Although shame is a highly undesirable emotion, it is not inherently maladaptive. Adaptive shame can provide helpful information about an individual's actions; it can inform them that their behaviours may not be supported by those around them, and that they have violated important social standards or values. In contrast, maladaptive shame can stem from past experiences, such as trauma or inadequate care during childhood, or may be generated by contempt, disgust, or criticism directed at the self. Early experiences that produce shame can be internalized and integrated into one's core sense of self, which leads to the perception of the self as being worthless, inferior, or unlovable. These internalized experiences may then be repeatedly activated during adulthood producing further experiences of shame (Greenberg & Iwakabe, 2011).

Shame often contributes to and is implicated in various forms of psychopathology outside the scope of eating disorders. There is strong evidence linking the tendency to experience shame with overall psychological maladjustment. In particular, proneness to shame has been linked to a number of psychological issues, including depressive and bipolar disorders, anxiety, spousal abuse, low self-esteem, narcissism, social phobia, and eating disorders (Tangney, Burggraf, & Wagner, 1995; Tangney & Dearing, 2004; Tangney, Wagner, & Gramzow, 1992; Tantam, 1998).

It is important to distinguish shame from other self-conscious emotions with which it shares many features, namely guilt, embarrassment, and humiliation. Guilt is characterized by

feelings of remorse and regret over some behaviour or transgression (Tangney & Dearing, 2004). Shame and guilt are often confused as they both involve a negative evaluation about the self and can be evoked by similar situations. However, these emotions can be distinguished in two key ways. The first distinction is rooted in the focus on self versus behaviour. Whereas shame involves a negative evaluation about the core self, guilt involves a negative evaluation of one's actions or behaviours, which are considered to be somewhat separate from the self (Tantam, 1998). In other words, the self is not the focus of the negative evaluation being made. Therefore, guilt does not directly affect an individual's core identity. Guilt is also distinct from shame in terms of their associated action tendencies. Guilt tends to promote efforts towards reparation and apology in an attempt to reconcile a wrong-doing, which is in stark contrast to the desire to escape or conceal oneself as is typical of shame (Tangney & Dearing, 2004).

Embarrassment is yet another emotion that can be difficult to differentiate from shame as they are highly related. At its core, embarrassment can stem from feelings of exposure and mild negative self-evaluation, and is generally considered to be a less intense and disruptive emotion than shame. Embarrassment by exposure occurs when an individual feels they are under observation or when some aspect of the self (i.e., beliefs, thoughts) has been uncovered. Embarrassment can also arise from negative self-evaluation, and can in fact be considered a mild form of shame. Here, the primary differences between self-evaluative embarrassment and shame is the intensity of the experience and the importance of the standard or value that has been violated. Shame is based on transgressions of standards or values that are important to an individual's core identity, whereas embarrassment is elicited by violations of little or less importance to an individual's sense of self (Lewis, 1995).

Lastly, shame and humiliation are often used interchangeably, and are therefore commonly thought to be a singular construct. Humiliation is an emotion that is elicited when one is revealed to have had aspirations and beliefs that are beyond one's station in society. It is associated with feelings of unfairness or injustice, and is directly related to one's social status in relation to others. Humiliation occurs when one has been degraded or put into a position of powerlessness by someone who is, at that particular moment, in a position of greater authority. Humiliation is more often associated with viewing others negatively rather than viewing the self negatively, and therefore tends to be associated with the desire for revenge (Gilbert, 1998).

Given the role that shame plays in eating disorder pathology, it is unsurprising that shame is also related to treatment outcomes. Kelly et al. (2014) demonstrated that eating disordered patients who experienced a significant reduction in their levels of shame within the first four weeks of treatment ultimately exhibited a faster decrease in their eating disorder symptomology. However, there is evidence to suggest that individuals in remission from an eating disorder may continue to struggle with residual feelings of shame, despite the overall reduction in eating disorder symptomology (Keith et al., 2009; Troop et al., 2008), which suggests that our existing methods of treatment may be failing to adequately target this core issue.

### **Models of Bulimia Nervosa**

A number of researchers have used the etiology of eating disorders to create models that explain the development and maintenance of bulimia nervosa. The most prominent of these models include the cognitive-behavioural model, the interpersonal model, and the emotion regulation model.

**Cognitive-behavioural model.** At the heart of the cognitive-behavioural model of bulimia nervosa is a dysfunctional system of cognitions and behaviours centered around self-

evaluation. The evaluation of self-worth is based on an over-valuation of eating, weight and shape (Byrne & McLean, 2002; Decaluwé & Braet, 2005; Williamson, White, York-Crowe & Stewart, 2004). Individuals with bulimia are thought to exhibit biased interpretations of stimuli relating to body, weight, or food. These biases may include an overestimation of one's body weight or size, negative interpretations of ambiguous comments from others, or a tendency to selectively attend to specific aspects of eating or the body. Cognitive biases of this nature can produce negative emotions and problematic behaviours, such as dietary restriction (Fairburn, Cooper, et al., 2003; Williamson et al., 2004) and compensatory behaviours (Williamson et al., 2004). However, dietary restriction and negative emotions can increase the likelihood of engaging in binge-eating (Fairburn, Cooper, et al., 2003; Williamson et al., 2004). When strict dietary rules are inevitably broken, efforts to control eating are often temporarily abandoned which can lead to a binge (Decaluwé & Braet, 2005). Additionally, binge-eating may be triggered by negative affect as it is thought to represent an effort to regulate emotion (Stice, 2001; Williamson et al., 2004). Binge-eating in turn leads to further dietary restriction and/or compensatory behaviours, thus perpetuating the binge-purge cycle (Decaluwé & Braet, 2005; Lampard, Byrne, McLean, & Fursland, 2011; Williamson et al., 2004). It is postulated that restrictive and compensatory behaviours allow people to escape or avoid the aversive state of their negative emotions, and it is this reduction in or avoidance of negative emotion that strengthens the individuals resolve to continue engaging in these behaviours. The continued use of these behaviours then, in turn, confirms the beliefs that fatness should be feared and avoided, or that they should continue to fret about body weight and strive for thinness. This interplay between cognitions and behaviours thereby creates a feedback loop that allows for the maintenance of bulimia nervosa (Williamson et al., 2004).

The cognitive-behavioural model has been recently expanded to include additional external factors, among which are low self-esteem, perfectionism, mood intolerance, and interpersonal problems. These additional factors may interact with and effect the cognitive-behavioural pathway, contributing to the development of eating disorder pathology (Fairburn, Cooper, et al., 2003; Lampard et al., 2011). According to this updated model, low self-esteem and clinical levels of perfectionism may lead to increased motivation and striving to reach a desired range of weight or shape. If a woman fails to achieve this desired level, further negative self-evaluation is activated. This pattern ultimately perpetuates the central importance of weight and body shape, thus maintaining eating disorder symptomology (Fairburn, Cooper, et al., 2003; Lampard et al., 2011).

**Interpersonal model.** The interpersonal model postulates that psychological issues and emotional distress can develop when an individual's need for attachment goes unmet (Stuart & Robertson, 2003). Interpersonal theory views issues with interpersonal or social functioning as being directly related to the development and maintenance of psychopathology (Rieger et al., 2010; Tantleff-Dunn, Gokee-LaRose, & Peterson, 2004; Wilfley, Stein, & Welch, 2003). In keeping with this view, the interpersonal model of eating disorder pathology posits that these disorders stem from the presence of inadequate or maladaptive social interactions, a negative perception of the social world, and subsequent disturbances to the sense of self (Rieger et al., 2010).

According to this model, individuals with eating disorders tend to experience difficulties in their interpersonal and social interactions with others. The presence of interpersonal dysfunction is thought to be driven by negative social evaluation, in which an individual is faced with negative feedback, either real or perceived, or a lack of positive feedback regarding their

value or worth to others (Rieger et al., 2010; Wood & Wilson, 2003). In turn, negative social evaluation can create a disturbance of self by triggering negative beliefs about the self (Rieger et al., 2010). In the context of an eating disorder, a disturbance to one's sense of self is often characterized by negative self-evaluation (Tesser, 2003), poor self-esteem (Rieger et al., 2010) and limited or ineffective strategies for regulating one's mood (Baumeister & Vohs, 2003).

As a result, individuals will engage in eating disorder behaviours, such as dietary restriction, binge-eating, and purging in an attempt to reduce negative beliefs and increase positive self-esteem and positive affect, which they have been unable to obtain through social interaction. However, the interpersonal model theorizes that eating disorder behaviours can exacerbate interpersonal dysfunction by further propagating negative social evaluation, which can in turn intensify the symptoms themselves (Rieger et al., 2010). There are a number of ways in which eating disorder symptoms may lead to negative social evaluation, such as caregivers becoming resentful of the disordered individual as the eating disorder dominates family life (Eisler, 2005), criticism from caregivers or health professionals when failing to improve (Vitousek, Watson, & Wilson, 1998), or the elicitation of negative reactions from others as a result of the behaviours, physical presentation, or negative affect of the disordered individual (Schmidt & Treasure, 2006). Therefore, the interpersonal model proposes that social interactions characterized by negative evaluation or rejection can both trigger, and be triggered by, eating disorder symptoms (Rieger et al., 2010).

**Emotion regulation model.** Models highlighting the interpersonal and cognitive behavioural aspects of the developmental course of eating disorders have primarily dominated the existing body of research on this topic. However, it remains difficult to draw definitive conclusions about whether one or the other of these models best explains the developmental

course of bulimia nervosa. This highlights the current limits of our understanding of eating disorder pathology. More recently, an emotion regulation model of bulimia nervosa has been developed, offering a new perspective on the developmental trajectory of this disorder.

It is well documented that individuals suffering from bulimia nervosa experience an abundance of negative affect, including anxiety and depression (Bydlowski et al., 2005; Davis & Jamieson, 2005; Haedt-Matt & Keel, 2011), as well as the more self-diminishing feelings of shame, self-loathing, despair, and anger (Dolhanty, 2006; Dolhanty & Greenberg, 2007; Robinson et al., 2013). However, individuals with bulimia nervosa often lack the necessary skills to adaptively cope with these emotions and, as such, emotions are treated as entities to be feared and avoided (Corstorphine, Mountford, Tomlinson, Waller, & Meyer, 2007; Dolhanty & Greenberg, 2007, 2009; Dolhanty, 2006; Svaldi, Griepenstroh, Tuschen-Caffier, & Ehring, 2012).

The emotion-regulation model posits that bulimia nervosa is a method for individuals to cope with their unwanted feelings by suppressing, avoiding, or interrupting their emotional experiences (Dolhanty, 2006; Dolhanty & Greenberg, 2007). When unwanted negative emotions are activated, individuals who lack adaptive emotion regulation skills may turn to the disordered behaviours that characterize bulimia nervosa, namely the binge-purge cycle, in an attempt to regulate their affect (Davis & Jamieson, 2005; Dolhanty & Greenberg, 2007; Haedt-Matt & Keel, 2011).

In the moments leading up to an episode of binge-eating, women with bulimia nervosa reportedly experience an abundance of negative emotion, including feelings of anxiety, depression, frustration, helplessness, loneliness, and a lack of control (Davis & Jamieson, 2005; Haedt-Matt & Keel, 2011). There is further evidence to suggest that during an episode of binge-



eating, negative emotional and physical experiences are temporarily reduced, accompanied by a brief increase in positive affect (Davis & Jamieson, 2005). However, immediately following a binge the level of negative affect experienced by women increases yet again, which is then reduced through compensatory purging behaviours (Haedt-Matt & Keel, 2011). The binge-purge cycle ultimately results in the emotional lability of negative affect, making it an ineffective and maladaptive method of emotion regulation (Davis & Jamieson, 2005; Haedt-Matt & Keel, 2011). This cycle tends to result in the under-regulation of emotion in which affective experiences are chaotic, leaving individuals feeling “out of control” of their emotions (Dolhanty, 2006).

### **Treatments for Bulimia Nervosa**

Based on the existing models of bulimia nervosa, the most commonly researched and utilized treatments for this disorder are cognitive-behavioural therapy, interpersonal therapy and, a more novel approach to eating disorders, emotion-focused therapy.

**Cognitive-behavioural therapy.** Cognitive-behavioural therapy (CBT) is considered the gold standard in the treatment of eating disorders and is often the first line of defence in treating bulimia nervosa (American Psychiatric Association, 2006). Of all the psychosocial interventions for bulimia nervosa, CBT has been studied the most extensively, and has been identified as the most effective form of treatment for this disorder (Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000; American Psychiatric Association, 2006). It has demonstrated success, both in individual and group formats, in reducing the frequency of binge-eating and purging behaviours, as well as improving a number of secondary symptoms, including depression, anxiety, concerns about weight and shape, body dissatisfaction, self-concept, and self-esteem (Agras et al., 2000; Bailer et al., 2004; Chen et al., 2003; Jacobi, Dahme, & Dittmann, 2002; Nevenon & Broberg, 2005; Tasca & Bone, 2007). As such, some studies have declared CBT the preferred treatment for

bulimia nervosa, citing its superiority in reducing binge-eating, self-induced vomiting, and dietary restraint as compared to other therapies immediately following treatment (Agras et al., 2000; American Psychiatric Association, 2006). However, despite these positive outcomes, CBT continues to be only moderately successful in treating bulimia nervosa as it is only effective for approximately half of individuals who seek help. In other words, there are a great number of people who fail to respond to our gold standard treatment for this illness (American Psychiatric Association, 2006; Bailer et al., 2004; Carter et al., 2011; Jacobi et al., 2002; Mitchell et al., 2002; Polnay et al., 2014; Shapiro et al., 2007; Smink et al., 2012; Wilson et al., 2007).

Further, there is some conflict as to whether CBT is truly superior to other forms of therapy. For example, Jacobi et al. (2002) found that CBT was more effective in reducing the frequency of vomiting as compared to pharmacotherapy and a combined regimen of CBT and pharmacotherapy. However, CBT outcomes were comparable to pharmacotherapy and the combined regimen in reducing binge-eating, body dissatisfaction, restrained eating, depression, negative self-concept, and general psychopathology. These gains were also maintained one-year post-treatment (Jacobi et al., 2002).

Similarly, Bailer et al. (2004) demonstrated that CBT was superior to a self-help group by producing a greater rate of recovery from bulimia nervosa immediately following treatment. However, Bailer et al. (2004) also showed that at one-year follow-up, the self-help group had actually surpassed the CBT group in terms of recovered participants.

Together, these findings suggest that while CBT does demonstrate some degree of treatment superiority, there are other approaches that produce similar if not equal or superior outcomes. In short, while CBT promotes positive outcomes and is currently the preferred mode of treatment for bulimia nervosa, it leaves us wanting for alternative treatment options.

**Interpersonal therapy.** It has been suggested that clients who do not respond to CBT may instead respond to alternative types of treatment, such as interpersonal therapy (American Psychiatric Association, 2006). Interpersonal therapy (IPT) is less studied, less understood, and less frequently employed than CBT. However, it has been shown to produce substantial changes in eating disorder pathology, both in the short-term and the long-term for patients with bulimia nervosa (Fairburn et al., 1991). It is effective in relieving the core symptoms (i.e., binge-eating and purging) of bulimia nervosa, reducing the loss of control over eating, and improving depressive symptoms, social functioning and overall psychological distress (Agras et al., 2000; Fairburn, Jones, Peveler, Hope, & O'Connor, 1993; Fairburn et al., 1991; Miniati, Callari, Maglio, & Calugi, 2018).

However, while there is ample evidence to support the use of IPT in treating eating disorders, some research indicates it may not be the most effective form of treatment. For example, one study showed that IPT was less effective than CBT in reducing dieting behaviours, vomiting, and altering eating disordered attitudes towards weight and shape (Fairburn et al., 1991). Furthermore, IPT appears to demonstrate inferior outcomes as compared to CBT immediately following treatment. However, while IPT does not necessarily lead to immediate improvement, it has shown long-term treatment outcomes equivalent to those achieved with CBT. Together, this suggests that outcomes using IPT may be comparable to CBT in treating bulimia nervosa, but that it requires a longer period of time to achieve the same results (Agras et al., 2000; Fairburn et al., 2015; Fairburn et al., 1993; Miniati et al., 2018).

Interestingly, while there is ample research highlighting the utility of CBT and IPT in an individual and group format for bulimia nervosa, the research comparing and contrasting these two modalities is surprisingly limited. A limited body of research has investigated group versus

individual treatments, and produced relatively unclear findings (Polnay et al., 2014). Some studies suggest that individual and group treatments using CBT or IPT are comparable (Nevonen & Broberg, 2005; Tasca & Bone, 2007), whereas others do not (Chen et al., 2003). One study demonstrated that individual and group CBT are equivalent on outcomes of self-esteem, social adjustment and overall psychopathology (Chen et al., 2003). This study also demonstrated that individual CBT proved more effective than group CBT in promoting remission from bulimia symptomology. However, these findings were not maintained at follow-up (Chen et al., 2003; Polnay et al., 2014).

**Emotion-focused therapy.** An emerging approach to the treatment of bulimia nervosa that may serve as an alternative treatment option is emotion-focused therapy (EFT). Emotion-focused therapy is an established form of therapy that has been shown to be effective in treating a number of different populations and issues, including depression (Goldman, Greenberg & Angus, 2006; Goldman, Watson & Greenberg, 2011; Greenberg & Watson, 2010; Robinson, McCague, & Whissell, 2012; Watson, Gordon, Stermac, Kalogerakos, & Steckley, 2003), child abuse, trauma (Paivio, Jarry, Chagigiorgis, Hall, & Ralston, 2010; Paivio & Nieuwenhuis, 2001), couples in distress (Halchuk, Makinen, & Johnson, 2010), and relationship issues with significant others (Elliott, Watson, Goldman, & Greenberg, 2004a; Field & Horowitz, 2015; Greenberg & Watson, 2006; Paivio & Greenberg, 1995). More recently, emotion-focused therapy has been adapted and applied to the treatment of eating disorders (Brennan et al., 2015; Dolhanty & Greenberg, 2007, 2009; Ivanova, 2013; Ivanova & Watson, 2014; Wnuk, 2009) with promising results. Across the eating disorder spectrum, EFT has led to improved body weight, emotional awareness, an enhanced tolerance for negative affect, and an overall reduction in

eating disorder symptomology (Brennan et al., 2015; Compare et al., 2013; Dolhanty and Greenberg, 2009; Wnuk, 2009; Wnuk et al., 2015).

In a single-case investigation, Dolhanty and Greenberg (2009) demonstrated the efficacy of emotion-focused therapy in the treatment of anorexia nervosa by helping a client maintain an appropriate weight, improve their ability to identify and understand emotions, enhance their emotional tolerance, and reduce depressive symptomology. Another study conducted by Compare et al. (2013) showed that emotion-focused therapy delivered independently, as well as in conjunction with psychoeducation focusing on dietary and nutritional information, was more effective in the treatment of clients with binge-eating disorder than was psychoeducation alone. More specifically, both of the emotion-focused approaches to treatment were shown to reduce body weight, reduce eating disorder symptomology, and improve clients' overall quality of life (Compare et al., 2013). In short, while currently in its infancy, this novel approach has shown promise in reducing the core symptomology of eating disorders, and therefore warrants further investigation. Emotion-focused therapy was a substantial focus of my dissertation in the treatment of women with symptoms of bulimia nervosa.

### **Fundamental Principles of Emotion-Focused Therapy**

Emotion-focused therapy is a humanistic experiential approach to psychotherapy. Humanistic and experiential therapies are often fundamentally rooted in the principles of Rogers' client centered theory and Perls' gestalt theory. EFT is also deeply grounded in basic scientific research on emotion (Greenberg, Rice, & Elliott, 1993; Watson, 2011; Watson & Pos, 2017).

Rogers (1959) client centered therapy viewed healthy functioning as stemming from an inborn need to strive for personal growth and development, which he termed a tendency for self-actualization. He posited that optimal functioning occurred when people were in contact with and

guided by their sensory and emotional experiences (Greenberg et al., 1993; Watson & Pos, 2017; Rogers, 1959). Rogers (1959) asserted that a person's inner experiencing influences their perception of the world. Therefore, a central focus of client centered therapy is to help client's access and explore their feelings (Greenberg et al., 1993). Through open interactions and experiences with their inner and outer environments, people develop an authentic sense of self, often referred to as the real self. However, an ideal self also develops which stems from the introjected values of others. When there are discrepancies between a person's experience (real self) and their ideal self, this can create distress and incongruence resulting in the distortion or suppression of the persons experiences. As a result, these experiences are denied and fail to be integrated into the individual's self-concept. The goal of client centered therapy is to eliminate the discrepancy between the real and ideal self, and to develop a self-concept that is congruent with a person's experiences. In order to achieve this, Rogers (1957) described three necessary conditions that must characterize the therapeutic relationship, which included an empathic understanding of the client's experiences, acceptance or unconditional positive regard for the client, and adopting a genuine and congruent stance. Rogers posited that these three conditions were essential agents of change in helping clients to explore their feelings and achieve change (Greenberg et al., 1993; Rogers, 1951, 1957, 1959).

Perls' and colleagues (1951, 1969) gestalt therapy also emphasized the concept of self-actualization. According to the principles of gestalt therapy, people are capable of growth and self-regulation through an awareness of their needs. A well-functioning person was thought to be in contact with their environment and has an awareness of both internal and external information, thus allowing them to find creative ways to meet their needs. The awareness of emotion is particularly important in understanding ones needs, and is thus a central tenet of healthy

functioning. Conversely, dysfunction hinged on a lack of awareness. A major focal point of gestalt therapy is to help clients increase their awareness of their emotional experiences and associated needs through the exploration and articulation of emotional experiencing (Greenberg et al., 1993; Perls, 1969; Perls, Hefferline, & Goodman, 1951).

Three central tenets of humanistic and experiential therapies stem from the guiding principles of Rogers (1951) client centered therapy and Perls' et al.'s (1951) gestalt therapy. The first is the view that clients are the experts on their own experiences (Greenberg et al., 1993; Rice & Greenberg, 1992). Through an active process of exploration and discovery, clients can become aware of, symbolize, and expand upon their experiences. The second is the view that people are generally motivated towards growth and development (Rice & Greenberg, 1992). Growth and the choices people make are thought to be enhanced when an individual is more fully aware of their experiences, emotions and needs (Greenberg et al., 1993). The third is the role of the therapeutic relationship, specifically that it be characterized by genuineness, congruence, empathy, and acceptance. This relationship is viewed as potentially curative for the client and is thought to help the client develop a more authentic self (Greenberg et al., 1993). The necessity of a positive therapeutic relationship characterized by congruence, empathy and acceptance in creating change is undeniable (Bohart, Elliott, Greenberg, & Watson, 2002; Norcross, 2002; Zuroff et al., 2000). These principles are essential not only for humanistic and experiential therapies broadly, but to the practice of emotion-focused therapy specifically.

Emotion-focused therapy uses some gestalt interventions (e.g., two-chair work) under Rogerian conditions. In EFT, the therapist must be empathically attuned to the client's moment-to-moment experiences to identify and guide relevant interventions. Change is facilitated when the therapist conveys positive regard, acceptance, and an accurate empathic understanding for the

client's experiences (Greenberg et al., 1993; Watson & Greenberg, 1994; Watson, 2007). In addition to guiding interventions, empathic attunement is thought to serve as a mechanism for change in psychotherapy. It facilitates the development of a strong therapeutic relationship and increases the likelihood of achieving positive outcomes in therapy (Watson, 2018; Watson & Geller, 2005; Watson, Steckley, & McMullen, 2014).

Watson (2011) postulated that the way in which a client's experiences are responded to can have a profound impact. Empathic responding may produce positive therapeutic outcomes through a number of mechanisms (Watson, 2011, 2018). Empathy can help clients to access their emotions and associated needs (Paivio & Laurent, 2001; Watson, 2002, 2011), improve their ability to regulate their emotions more effectively (Paivio & Laurent, 2001; Watson 2002, 2011, 2018), accept their internal experiences, internalize the therapists attitudes and act in a more supportive and nurturing manner towards themselves (Barrett-Lennard, 1997; Watson, 2011, 2015; Watson & Greenberg, 2017), and to increase the client's sense of agency and self-efficacy (Barrett-Lennard, 1997; Watson, 2015; Watson & Greenberg, 2017). This suggests that while empathy is an important component of all therapeutic approaches, it is especially critical in the application of EFT.

Rooted in the outlined principles of client centered and gestalt therapy, emotion-focused therapy is an experiential approach to treatment that helps clients learn how to access, identify, experience, and regulate their emotions. EFT operates according to an evolutionary model of emotion. It emphasizes the importance and fundamentally adaptive nature of emotions, viewing them as rich sources of information that guide action and behaviour (Elliott et al., 2004b; Greenberg, 2015). From an emotion-focused perspective, psychopathology stems in part from an individual's inability to integrate, accept, and cope with their underlying emotions, which can



result in maladaptive emotional responses (Elliott et al., 2004b; Greenberg, 2015). Emotion-focused therapy allows clients to consciously explore, experience and process their unaccessed adaptive emotions in order to restructure or replace emotional responses that are maladaptive (Greenberg, 2015). Through this process, clients can begin to construct new meaning from their experiences of themselves in relation to the world (Dolhanty & Greenberg, 2007; Greenberg et al., 1993). Emotion-focused therapists facilitate this process by acting as emotion-coaches for their clients, providing guidance and suggestions for intervention as needed (Elliott et al., 2004b; Greenberg, 2015).

### **Evolutionary Model of Emotion**

There are a number of theories that endeavor to explain the nature and purpose of emotions. The evolutionary model was first developed by Charles Darwin and recognized emotion as common to all mammals and as an evolutionary adaptation that long preceded cognition (Darwin, 1872). Emotion-focused therapy operates according to the evolutionary model of emotions, which postulates that emotions are fundamentally adaptive responses to our environment that prepare us to take action and provide a wealth of information about our thoughts, beliefs, values, goals, needs and desires (Mennin & Fresco, 2010; Werner & Gross, 2010). Adaptive emotions are immediate emotional reactions that occur in response to, and are consistent with, a given situation or event (Elliott et al., 2004b). In essence, when people attend to their emotional experiences and bring them into awareness, they are able to process them, draw meaning from them, and use them to guide their beliefs and views of the self in relation to the world (Greenberg, 2015; Greenberg et al., 1993).

During the early years of development, a child's interactions with caregivers plays a crucial role in the construction of core emotion schemes based on the individual's experiences

and satisfaction of needs (Greenberg et al., 1993; Dolhanty & Greenberg, 2007). A caregiver's emotional reactions, behaviours, or actions in response to a child's needs and emotional experiences are integrated and internalized, shaping an individual's beliefs about emotion, the self, and the world (Greenberg et al., 1993). These internal representations become our emotion schemes, which then become the foundation for future emotional experiences (Greenberg et al., 1993).

Emotional responses are produced by emotion schemes, which are mentally-constructed models based on core experiences garnered throughout development that guide our perceptions, experiences and behaviours (Greenberg et al., 1993). These schemes provide an internal representation of objects or events, representing what one considers to be generally true (Greenberg et al., 1993). Emotion schemes ultimately organize the experiences one has and influence the way one views and experiences the world and the self (Elliott et al., 2004b; Greenberg, 2015). The development of healthy and adaptive emotion schemes occurs when caregivers provide soothing, validating responses to a child's adaptive emotional experiences, and help the child learn how to cope with their emotions (Dolhanty & Greenberg, 2007). When a caretaker is able to recognize and appropriately respond to a child's emotional needs, the child's inner experience is confirmed and validated, and they are able to develop a secure sense of self (Greenberg et al., 1993).

### **Emotional Dysfunction**

Although EFT views emotions as being fundamentally adaptive, emotions are shaped by learning and experience and can also be maladaptive. Maladaptive emotions are those that are excessive in duration or intensity, occur at inappropriate times, or that are highly labile (Mennin & Fresco, 2010; Werner & Gross, 2010). It is often the case that maladaptive emotions were at

one time adaptive in a particular situation or environment, but no longer serve an adaptive purpose in an individual's current environment (Greenberg et al., 1993).

There are two categories into which maladaptive emotions can be classified: primary maladaptive emotions and secondary maladaptive emotions. Much like adaptive emotions, primary maladaptive emotions are a direct and immediate reaction to a given situation based on previous learning and past experiences. Secondary emotions are emotional reactions to having certain emotions (Elliott et al., 2004b). They lead to maladaptive self-organizations like feeling helpless or like a loser. Secondary emotions often mask or disrupt the experience and expression of the primary emotion because they are easier to experience, or have been deemed more acceptable (Elliott et al., 2004b; Greenberg et al., 1993). They can lead to behaviours or actions that are inappropriate for, or inconsistent with, a given situation (Elliott et al., 2004b).

Just as adaptive emotion schemes are shaped by interactions and experiences with caregivers, so too are maladaptive emotion schemes. At a young age people learn from and internalize how caregivers respond both to them and to their emotions, which influences the development of emotion schemes and future behaviours (Greenberg et al., 1993; Watson, 2011). For example, maladaptive emotion schemes can develop when a child's emotional needs go unmet. If a child expresses an adaptive emotion to a caregiver who repeatedly fails to respond, over- or under-responds, responds in an invalidating manner, or provides inconsistent responses to their emotions, the child's emotional needs will be unmet. Based on the caregiver's style of response, the child may learn that this emotion will likely continue to be met with a problematic response by others (Greenberg et al., 1993; Dolhanty & Greenberg, 2007). This can lead to the development of a core maladaptive emotion scheme in which certain primary adaptive emotions are deemed unacceptable or inappropriate (Greenberg et al., 1993; Dolhanty & Greenberg,

2007). Once present, maladaptive emotion schemes can then continually be activated throughout the lifespan, creating problematic emotional responses for that individual (Greenberg et al., 1993). Emotion schemes, while enduring, are not fixed or static states; they can be re-constructed through new experiences that allow the incorporation of new information from the environment (Foa & Kozak, 1986). It is the reconstruction of these maladaptive emotion schemes that is at the core of emotion-focused therapy (Elliott et al., 2004b).

### **Principles of Emotional Change**

Emotion-focused therapy necessitates that the therapist be emotionally attuned and responsive to the client's experiences. As an emotion coach, the therapist helps the client to first become aware of and accept their feelings, followed by a transformation of maladaptive emotions. In the context of a genuine and empathic therapeutic relationship, validation of a client's experiences and needs creates the opportunity for acceptance, emotional transformation, and emotion regulation. This also provides the client with a corrective emotional experience. Through the process of empathic attunement and validation, clients are able to move towards expressing their needs more readily and accepting their right to having their needs met. This allows a healthier, more assertive sense of self to emerge which in turn promotes the transformation of maladaptive emotions. The emotion-focused therapist relies on three core principles to help clients enact emotional change: (1) increasing emotional awareness, (2) enhancing emotion regulation, and (3) changing emotion with emotion (Greenberg, 2015).

**Emotional awareness.** Emotional awareness refers to the process by which an individual actively attends to an emotion (Greenberg, 2015). A key element of emotional dysfunction is seen as stemming from the inability to access one's adaptive emotional experiences in conscious awareness. Emotion-focused therapy helps individuals overcome these blocks by helping them to

recognize their adaptive emotions and unmet needs that were previously suppressed, ignored or blocked by automatic maladaptive emotions (Greenberg et al., 1993; Greenberg, 2015). In order to bring the adaptive emotion into awareness, the therapist helps the client shift their attention to this unacknowledged, unfamiliar feeling to help them focus and elaborate on it. As clients gain access to their adaptive emotions, the therapist helps them to identify any unmet needs that are associated with that feeling, which they then validate and strengthen (Greenberg, 2015; Watson, 2002, 2011). By acknowledging these emotions and needs, the client is able to symbolize their experience in words, reflect on that experience, and draw new meaning from it, which can then be integrated into their existing understanding of the self and the world (Greenberg, 2015; Greenberg & Bolger, 2001; Kennedy-Moore & Watson, 2001; Watson, 2011, 2018). Through this process, clients can begin to change their maladaptive emotion schemes by adopting a more agentic role in their emotional experiences (Greenberg, 2015).

**Emotion regulation.** Emotion regulation is the ability to manage or tolerate a feeling by increasing, decreasing, or maintaining the various aspects of the emotion such that one can experience an emotion without becoming overwhelmed by it (Elliott et al., 2004b; Greenberg, 2015; Werner & Gross, 2010). The ability to regulate one's emotions stems from interactions and experiences with early attachment figures and significant others (Watson, 2011). This is an important part of adaptive functioning and is crucial in creating emotional change (Elliott et al., 2004b). Consequently, the inability to regulate emotion, or the use of regulation strategies in rigid or maladaptive ways, can create emotional dysregulation (Elliott et al., 2004b; Werner & Gross, 2010). Emotion regulation can be either intrinsic or extrinsic. Intrinsic emotion regulation is when an individual is able to regulate their own emotions by using different skills and strategies, such as identifying and labelling emotions, actively increasing positive affect, and

self-soothing techniques such as deep breathing, relaxation, positive self-talk, self-compassion, and self-acceptance (Greenberg, 2015; Werner & Gross, 2010). In contrast, extrinsic emotion regulation is when an individual's emotions are regulated through another person (Werner & Gross, 2010). In EFT, the therapist is an empathic other who is attuned to the client's affective experiences and provides acceptance and validation of their emotions. This helps to regulate the client's internal distress and allows them to gradually develop the ability to engage in self-soothing behaviours (Greenberg, 2015; Greenberg et al., 1993; Watson & Greenberg, 1994; Watson, 2007, 2011).

**Changing emotion with emotion.** The most fundamental principle in enacting emotional change is changing emotion with emotion. This refers to the process by which maladaptive emotion schemes are evoked, processed, and transformed by replacing the maladaptive emotions with primary adaptive emotions. Pascual-Leone and Greenberg (2007) described a model outlining the moment-to-moment processing of emotional distress, and how change occurs. This model highlights that clients first begin at an undifferentiated, highly aroused emotional state that lacks meaning. Through emotional exploration and processing, clients are able to move towards more specific emotional states with associated needs and meaning.

A maladaptive emotion, such as pain, hopelessness or despair, can be processed and transformed when it is activated in conscious awareness, allowing it to be explored and understood. In the presence of this maladaptive emotion, the therapist helps the client to gradually access the underlying adaptive emotions that were previously suppressed or interrupted (Greenberg, 2015; Pascual-Leone & Greenberg, 2007). The client is then able to re-experience, or process, their emotions in a supportive environment, allowing them to derive new meaning from their experiences (Greenberg et al., 1993). Accessing and re-experiencing adaptive

emotions, such as grief or assertive anger, that were previously avoided or feared in a supportive, accepting environment are essential to creating change. Accessing these emotions allows the client to construct new meaning from their experiences, particularly in relation to the self, and to access and assert their needs. These experiences ultimately prompt the transformation and re-organization of their maladaptive emotion schemes (Elliott et al., 2004b; Greenberg et al., 1993). This transformation allows clients to engage in more adaptive actions or responses moving forward, resolves the unmet needs associated with the underlying adaptive emotion, and creates a sense of acceptance or letting go (Greenberg, 2015; Pascual-Leone & Greenberg, 2007).

It is essential to note that the trajectory of emotional processing is distinctly non-linear. Pascual-Leone (2009) demonstrated that effective emotional processing within sessions is associated with steady improvements across therapy. However, he also demonstrated that emotional processing occurs in a 2-steps-forward, 1-step-back fashion. In other words, while there is an overall pattern of progress that occurs as a result of emotional processing, change does not occur in a linear fashion. Instead, change is often punctuated with periods of increased emotional distress. When effective emotional processing occurs, the duration of these periods of emotional distress gradually shortens over time.

### **Group Therapy**

While different therapy groups may vary on a number of factors, the majority of groups used in the present day tend to focus on a specific treatment orientation (i.e., cognitive-behavioural therapy, psychodynamic) or diagnostic population (Burlingame, Kircher, & Taylor, 1994). The dynamics of group therapy are complex and multifaceted. These dynamics, and the success or failure of the group as a whole, revolve around a number of therapeutic factors that operate in the context of three relational alliances: the group members' relationship with the

therapist (member-therapist), group members' relationships with one another (member-member), and group members' relationship with the group as a whole (member-group) (Bernard et al., 2008; Fuhriman & Burlingame, 1994; Johnson, Burlingame, Olsen, Davies, & Gleave, 2005; Yalom & Leszcz, 2005). The success of a group is ultimately determined by these relationships in conjunction with a number of organizational and process-oriented factors (Fuhriman & Burlingame, 1994).

The organizational factors that form the structural foundation of a psychotherapy group include size, duration, member composition, and the type of group being operated (Corey, Corey, & Corey, 2010; Yalom & Leszcz, 2005). One factor in which groups can vary greatly is size; some groups are as small as five members, whereas others may be upwards of sixteen members. Groups can also vary in duration. Many groups are designed to provide short-term treatment and may therefore only span the course of several weeks, whereas others are geared towards long-term treatment and may run for several months or even years (Yalom & Leszcz, 2005).

The characteristics of the members that compose a group is referred to as group member composition. Member composition can be either homogenous or heterogeneous. A homogenous group is one that is composed of members who all share certain characteristics, such as a diagnosis, and these groups are most commonly used to target specific issues or populations. In contrast, heterogeneous groups are those that are composed of members that may exhibit non-uniform characteristics. Members of heterogeneous groups may too share some characteristics, such as age or general concerns, but may not, for example, share the same diagnosis (Yalom & Leszcz, 2005). According to Yalom and Leszcz (2005) composition can influence the development of group cohesion. A homogenous group make-up in particular can facilitate the development of cohesion. However, heterogeneous groups can be uniquely useful in helping



members to acquire a certain set of skills needed to cope with a variety of interpersonal challenges in their real lives (Yalom & Leszcz, 2005). Composition may also be influenced by the group's goals or topics of focus (e.g., enhancing self-esteem or treating depression), as this will limit the applicability of the group to certain people (Brabender, Fallon, & Smolar, 2004). There is no clear evidence that heterogeneous or homogenous groups produce better therapeutic outcomes. As such, Yalom and Leszcz (2005) suggest that decision making around group composition be largely guided by the goal of cohesion.

Lastly, groups can be categorized according to their foci and the framework within which they operate. There are different types of therapy groups, with the two most common types being psychoeducational groups and psychotherapy groups. Psychoeducational groups are a highly structured form of treatment designed to address an information deficit which may pertain to a particular psychological disorder. They specialize in providing, discussing, and integrating fact-based information, which is cemented through the development and use of skills, behavioural rehearsal, and an exploration of cognitive processes. Although psychoeducational groups are highly structured, these groups also tend to have a degree of emotional or interpersonal processing where group members can share experiences and confront or support one another (Corey et al., 2010).

At the other end of the spectrum are psychotherapy groups. In psychotherapy groups, interactions among group members are the primary mechanism of change. Group members provide support, warmth, and the opportunity for constructive confrontation, while the therapist promotes the development of an understanding and exploratory environment. Psychotherapy groups are generally focused on specific psychological issues and may utilize a number of different techniques or approaches in order to alleviate target symptoms (Corey et al., 2010). One

type of psychotherapy group that is in stark contrast to psychoeducational groups is what is known as an encounter group. Encounter groups, as described by Yalom and Leszcz (2005), are largely unstructured with a focus on the experiences of group members. The goals of encounter groups are often vague, but there is generally an emphasis on growth and change. Encounter groups rely on interpersonal exchanges between group members to promote growth. These groups value exploration, self-disclosure, emotional expression, and confrontation to achieve this (Yalom & Leszcz, 2005).

Emotion-focused therapy groups (EFT-G) are a complex blend of group factors and emotion-focused principles. The work in these groups is based on the core principles of EFT as described elsewhere (Elliott et al., 2004b; Greenberg, 2015) and focuses on emotional awareness, emotion regulation, chair work interventions, and post-chair work processing. They tend to be moderately structured with therapists playing a directive role in the use of chair work interventions (Brennan et al., 2015; Compare et al., 2013; Ivanova, 2013; Maxwell et al., 2018; Robinson et al., 2012, 2014; Wnuk, 2009). However, the structure of these groups is flexible in that the specific type of chair work used is not pre-determined, but instead is based on the client's identified concerns and emotional experiences, and their readiness to address them. Much like other types of groups, interpersonal connection and support play a significant role in EFT groups. The effectiveness of these groups seems to depend, in part, upon a supportive group environment, and the development of empathic relationships with therapists and group members (Brennan, et al., 2015; Ivanova, 2013; Wnuk, 2009). Similar to psychotherapy and encounter groups, exploration and emotional expression are highly valued in EFT and EFT-G (Elliott et al., 2004b; Greenberg, 2015; Greenberg et al., 1993; Pascual-Leone, 2009; Pascual-Leone & Greenberg, 2007). However, unlike encounter groups, the goals of EFT groups are more clearly

defined with an emphasis on emotional processing and alleviating the symptoms of the target diagnosis. Many of the EFT groups that have been developed and studied have also included some element of psychoeducation about emotions, the target diagnosis, or the rationale for EFT (Brennan et al., 2015; Ivanova, 2013; Robinson et al., 2012, 2014; Wnuk, 2009).

**Factors for change in group therapy.** Regardless of the therapeutic modality or population of focus, there are a number of factors that contribute to the successful execution of group therapy. Yalom and Leszcz (2005) have extensively studied and subsequently identified 11 therapeutic factors that are thought to be an integral part of the change process, including: hope, universality, imparting information, altruism, the corrective recapitulation of the primary family group, development of socializing techniques, imitative behaviour, interpersonal learning, group cohesiveness, catharsis, and existential factors (Yalom & Leszcz, 2005).

Universality is the shared experience of relating to group members by identifying similarities between one's own issues, concerns and experiences, and the experiences of others. This is an important therapeutic factor for populations that experience shame, stigma, secrecy, and isolation, and is therefore important in the treatment of bulimia nervosa. Self-understanding promotes change by encouraging individuals to recognize, integrate, and express parts of themselves that were previously concealed, which are highly valued experiences in group therapy. Existential factors refers to a variety of issues that humans must inherently face and that they may confront in group therapy, including responsibility, isolation, recognition of their mortality, and the search for meaning in life. Imparting information or psychoeducation is an integral part of group therapy, and may be implicitly embedded within the therapeutic process, or explicitly offered in the form of didactic instruction. Altruism is the process through which group members can benefit one another by both receiving and giving help in the form of support or

advice. Imitative behaviour refers to the fact that group members often learn and change by watching one another work through their issues. Group members may subsequently base their behaviours on the therapist's actions or the actions of other group members. Catharsis involves the experiencing and expression of emotions which, when combined with cognitive learning and personal reflection, can create therapeutic change. The corrective recapitulation of the primary family group refers to the way in which the structure and roles of a therapy group may resemble that of a family, allowing for corrective experiences to occur that may help to resolve past unsatisfactory family experiences. The development of socializing techniques is a process inherent to all groups; social skills may covertly develop through members interactions with one another, or they may be an explicit focus of the group, using various skill-development strategies and techniques. Interpersonal learning refers to the fact that the group acts as a social microcosm for each member, where the group represents the real world and each members' social interactions within that world. This allows members to both give and receive feedback about their interpersonal interactions and styles of relating to others.

Lastly, group cohesion can be broadly defined as the level of attractiveness a group holds for its members based on the strength of three relational alliances: group members' relationship with the therapist, group members' relationships with one another, and group members' relationship with the group as a whole (Bernard et al., 2008; Johnson et al., 2005; Yalom & Leszcz, 2005). It is arguably the most significant and influential of the therapeutic factors as it is a core mechanism of change in group therapy, and serves to facilitate the action of the other therapeutic factors (Bernard et al., 2008; Burlingame, McClendon, & Alonso, 2011; Yalom & Leszcz, 2005).

**Group therapy for eating disorders.** There is considerable evidence to suggest that group therapy is an empirically supported form of treatment delivery for eating disorders, and has in fact been used with various theoretical modalities (Burlingame, Fuhriman, & Anderson, 1995; Burlingame, Strauss, & Joyce, 2013). Much like individual therapy, the majority of group therapy research has focused on employing either a cognitive-behavioural or an interpersonal approach in the treatment of eating disorders with moderate success (Jacobi et al., 2002; Bailer et al., 2004; Chen et al., 2003; Mitchell et al., 2002; Nevenon & Broberg, 2005; Nevenon & Broberg, 2006). As previously identified, emotion-focused therapy is an alternative form of treatment for eating disorders that has been gaining increasing amounts of attention. More recently, the application of this modality has been further expanded as it has been adapted for use in a group therapy format with eating disordered individuals (Brennan et al., 2015; Compare et al., 2013; Ivanova, 2013; Wnuk et al., 2015). Although there is limited research on this new approach to the treatment of eating disorders, the research that does exist has primarily involved individuals suffering from bulimic disorders (i.e., bulimia nervosa and binge-eating disorder), and has demonstrated success in working with this population (Brennan et al., 2015; Ivanova, 2013; Wnuk et al., 2015).

**Emotion-focused group therapy for eating disorders.** To date, much of the research on the application of EFT in the treatment of eating disorders has been delivered in a group format, having been successfully employed in treating bulimia nervosa, anorexia nervosa, and binge-eating disorder (Brennan et al., 2015; Compare et al., 2013; Ivanova, 2013; Wnuk et al., 2015). Brennan and colleagues (2015) showed that two-chair work targeting the inner critic was effective in helping eating disordered clients to recognize and work through their internal self-criticisms, develop an emotional awareness and a tolerance for experiencing difficult or painful

emotions, and helped them develop the ability to identify and acknowledge their unmet needs. In addition to these changes in symptomology, group members reported valuing the opportunity to witness the work of other group members, and to observe the impact of the self-critic on others (Brennan et al., 2015). Wnuk (2009) further demonstrated the efficacy of emotion-focused group therapy in the treatment of bulimia nervosa and binge-eating disorder. Among this population, emotion-focused group therapy led to a significant reduction in the frequency of binge episodes, with some participants having ceased binging entirely, and improvements in eating disorder symptomology, depression, emotion regulation, overall level of psychiatric distress, and self-efficacy in terms of eating disorder symptoms and coping with emotion (Wnuk, 2009; Wnuk et al., 2015).

Ivanova (2013) extended our understanding of the application of emotion-focused therapy in the treatment of bulimia nervosa by examining in-session processes of change, showing that in-session emotional arousal was associated with higher levels of insight, and that insight was in turn associated with a strong therapeutic alliance. There is also evidence to suggest that clients, whether actively engaged in emotional processing through chair work, or simply observing the work of other group members, exhibit high levels of emotional arousal and change following group sessions. Group members who were active participants in the chair work experienced higher levels of emotional arousal and post-session changes as compared to participants who were observing. However, clients who were in an observer role also exhibited post-session changes. This suggests that being an observer as well as an active participant in emotion-focused group therapy can result in positive therapeutic change (Ivanova, 2013). Furthermore, consistent with the findings of Brennan et al. (2015), participants from this study emphasised the importance of being able to observe the emotional processing of other group

members, particularly when the issue being worked on was one that they themselves could relate to (Ivanova, 2013).

## **Rationale for the Proposed Study**

It is generally acknowledged that existing methods of treatment for eating disorders, while moderately successful, are only effective for half of those who seek help (American Psychiatric Association, 2006; Bailer et al., 2004; Carter et al., 2011; Jacobi et al., 2002; Mitchell et al., 2002; Polnay et al., 2014; Shapiro et al., 2007; Smink et al., 2012; Wilson et al., 2007). This means that for about fifty percent of eating disordered individuals, these methods, which focus on the cognitive-behavioural and interpersonal aspects of these disorders, are largely unsuccessful, creating the need for alternative approaches. This fact, in conjunction with the growing body of evidence supporting the importance of emotional dysfunction in eating disorder pathology, suggests that treatment for some individuals should adopt a more emotion-focused approach. Yet despite the numerous studies supporting an emotion-focused approach to eating disorder treatment, these calls have largely gone unheeded (Speranza et al., 2007; Wildes et al., 2012; Gianini et al., 2013; Zander & De Young, 2014).

Although there is an abundance of evidence to support the use of EFT as an empirically supported therapeutic modality (e.g., Field & Horowitz, 2015; Halchuk et al., 2010; Robinson et al., 2012; Watson et al., 2003; Goldman et al., 2006; Paivio et al., 2010; Paivio & Nieuwenhuis, 2001), there is limited research on the use of EFT when working with an eating disordered population. Among the first to adapt and apply EFT to eating disorders were Dolhanty and Greenberg (2007, 2009). Using a single-case investigation, they showed that a client with anorexia nervosa who underwent EFT made significant gains in the domains of depression, emotional awareness, and maintaining a healthy weight (Dolhanty & Greenberg, 2007, 2009).

Furthermore, only a handful of studies have investigated the application of EFT in a group format for the treatment of eating disorders. As an illustrative example, Wnuk (2009)



demonstrated the effectiveness of emotion-focused group therapy among individuals suffering from bulimia nervosa and binge-eating disorder. This treatment produced significant improvements in eating disorder symptomology, significantly reducing the frequency of binge-eating and, in some cases, resulting in the cessation of bingeing entirely. Furthermore, emotion-focused group therapy led to significant changes in depression, emotion regulation, and clients' overall levels of psychiatric distress (Wnuk, 2009; Wnuk et al., 2015). To date, the studies that have employed emotion-focused group therapy have included or focused on bulimia nervosa, creating a foundational knowledge base on which future research can build. Therefore, bulimia nervosa was the population of focus in this study so as to expand and deepen our understanding of this particular topic.

Additionally, there is a lack of clarity regarding the role of shame in eating disorders, despite it being a prominent feature of these disorders. While there are numerous studies that have documented the presence of shame in eating disorders, very few have investigated the relationship between shame and treatment. What research has been done suggests that a decrease in shame is associated with a reduction in eating disorder symptomology, but has also indicated that, among eating disordered individuals, even following remission their levels of shame are significantly greater compared to non-eating disordered individuals (Keith et al., 2009; Kelly et al., 2014; Troop et al., 2008). This suggests that our existing methods of treatment may not be adequately targeting the core construct of shame. This also supports the search for alternative modes of treatment that might effectively alter the burden of shame that women with bulimia carry. While the application of EFT as an effective therapeutic modality in the transformation of shame has been theoretically modeled, it has yet to be examined in practical application (Elliott et al., 2004b; Greenberg, 2015; Pascual-Leone & Greenberg, 2007).

Given the role that negative affect plays in eating disorder pathology, the limited yet promising evidence to support the use of EFT with this population, and the poorly understood role of shame in eating disorder pathology and treatment, further investigation regarding the application of EFT in targeting shame in bulimia nervosa was warranted. Furthermore, emotion-focused group therapy is particularly well suited to target the core construct of shame in bulimia nervosa for a number of reasons. Firstly, one of the core maladaptive emotion schemes that EFT purports to target and transform is the construct of maladaptive shame. Given that maladaptive shame has been documented as contributing to eating disorder severity and the symptom presentation of bulimia nervosa, it makes intuitive sense to apply EFT with this particular population.

Secondly, group treatment can arouse the experience of shame while also offering a unique opportunity for resolution. Accompanying the experience of shame is the fear of revealing that shame, and its source, to others. However, it is exactly this exposure that can lead to healing. In the context of a supportive and empathic environment, revealing an imperfect or defective self and having the experience of being accepted and affirmed by a group of people can hold more power and meaning than the acceptance that would otherwise be provided by the therapist. Internalizing the acceptance and empathy that is provided by the group can in turn help to transform shame (Sanftner & Tantillo, 2011; Shapiro & Powers, 2011).

Lastly, in addition to the act of exposing one's shame to others, the interpersonal aspects of a group setting can also offer unique opportunities for healing. One such opportunity exists in the vicarious learning and experiencing that inevitably occurs in a group setting. The ability to witness other members confront, expose and experience their shame can serve as a source of learning and exposure for group members who may be more reluctant to do so. The process of

sharing and witnessing group members' issues and experiences can help reduce the sense of isolation and secrecy that often accompanies shame, and may ready other members to confront their own pain (Sanftner & Tantillo, 2011; Shapiro & Powers, 2011).

For all of these reasons, a further in-depth examination of the effectiveness of EFT-G for bulimia nervosa, with a particular focus on the transformation of shame, was timely and warranted.

## **Purpose**

The purpose of this study was to examine the effectiveness of EFT in a group format (EFT-G) in the treatment of bulimia nervosa. A particular focus of the study was to test the effectiveness of EFT-G in addressing shame in this treatment.

The hypotheses of this study were:

- (1) That EFT-G would prove effective in treating bulimia nervosa as measured by a reduction from a pre-treatment baseline in bulimia nervosa symptomology.
- (2) That EFT-G would lead to a reduction in internal and external shame compared to a pre-treatment baseline.
- (3) That EFT-G would produce a gradual reduction in symptoms of bulimia nervosa and internal and external shame.
- (4) That there would be a reduction in depression, interpersonal alienation, low self-esteem, and emotion dysregulation scores from pre-treatment to post-treatment.
- (5) That the gains made by participants would be maintained at one month follow-up.

## **Method**

### **Participants**

The participants in this study originally included 11 women exhibiting symptoms of bulimia nervosa. Due to attrition, a total of 10 participants completed the study. One participant dropped out from the second group and reported that she believed she was not getting as much benefit from the group as she would from individual therapy, and expressed a desire and intention to pursue that avenue in lieu of group. She also stated that she found working in a group difficult and did not want to engage with others.

Participants ranged in age from 18 to 36 years old with a mean age of 25.6 years ( $SD = 5.71$ ). The sample was predominantly Caucasian (8 participants), and a minority of the participants identified as Asian/Pacific Islander (2 participants). Three participants reported having a partial college/university education, 5 reported having a college/university degree, and 1 reported having a certificate in trade/technology. In terms of occupation, 6 participants were university students, including all participants who identified as having a partial college/university education, 2 participants were employed within a health care profession, and 2 were employed as office administrators. At the time of screening 8 participants met the diagnostic criteria for bulimia nervosa and 2 participants exhibited sub-clinical symptoms of bulimia nervosa with a predominant feature of binge-eating.

### **Therapists**

Both EFT groups were co-facilitated by two doctoral students in Counselling Psychology with formal training in emotion-focused therapy. One of the therapists was the principal investigator of this study. At the outset of the first group the principal investigator had completed level one EFT training, and towards the end of the second group obtained level two EFT training. The

second therapist was very experienced in EFT and had completed EFT training at level one, two and three. The second therapist also had formal training in emotion-focused family therapy (EFFT), a distinct but related treatment approach. Groups were equally facilitated by both therapists, with each therapist leading one intervention (i.e., chair work) per session. The therapists received formal supervision from a Registered Psychologist within the community. The clinical supervisor had level one and two EFT training, and had extensive experience and expertise in treating eating disorders using an EFT approach. She had been registered as a psychologist for approximately five years at the outset of the first group. Additionally, the supervisor had formal training in EFFT and frequently led EFFT workshops and trainings, alongside the second therapist, within the community. Supervision occurred once every two weeks and involved a combination of watching video recordings of group chair work interventions and discussions about case conceptualization and challenges in group.

## **Procedures**

**Participant eligibility.** Prospective participants underwent a screening process to determine eligibility for inclusion in this study. Eligibility and exclusionary criteria were developed and selected based on existing research on this topic and to ensure that participants sufficiently exhibited symptoms of the targeted diagnosis. In order to be eligible for participation in this study, participants were required to: (a) be female, (b) be at least 18 years old, and (c) meet the diagnostic criteria for bulimia nervosa according to the DSM 5 as determined by the Eating Disorder Diagnostic Scale (EDDS). A set of exclusionary criteria were also established in order to screen for co-morbid psychiatric disorders that may have otherwise interfered with our ability to target the eating disorder in treatment, and to minimize the risk of harm to participants. Participants were excluded from this study if they: (a) had been diagnosed with a psychotic

disorder and/or a psychiatric condition with features of psychosis, or may qualify for such a diagnosis as determined by the Psychosis subscale of the BASIS-24; (b) were an imminent suicide risk, as defined by self-harm with the intent to die within the last three months, and/or had a current and imminent suicide plan; (c) had been diagnosed with a personality disorder, or if they exhibited symptomology associated with personality disorders as identified by the Self-Report Standardized Assessment of Personality – Abbreviated Scale (SAPAS-SR); (d) had been diagnosed with a substance abuse disorder, or reported significant problems with substance abuse such that the substance abuse was the primary psychiatric concern, as identified by the Leeds Dependence Questionnaire (LDQ); and (e) were enrolled in another treatment program or were receiving psychotherapy elsewhere during the course of the group.

To determine eligibility, prospective participants were given an information letter (see Appendices K and L), provided informed consent electronically (see Appendix M), and completed a battery of screening questionnaires online using online survey software, LimeSurvey, for ease of completion and accessibility. This software was password protected and the collected data could not be accessed by anyone other than the principal investigator unless access was explicitly granted through the software itself. Questionnaires were administered to ensure they met the inclusionary criteria, and to screen for and subsequently eliminate individuals who meet the exclusionary criteria. Participants who were deemed ineligible to participate in the study were provided with a list of alternative counselling resources within the city of Edmonton so they could seek mental health services elsewhere at their discretion.

**Recruitment.** Participants were primarily recruited by posting advertisement flyers (see Appendix N) at various counselling sites throughout the city of Edmonton, as well as across the

University of Alberta campus. Social media was also used to distribute the advertisement flyers as an adjunct method of recruitment.

There were significant challenges throughout the recruitment process that warrant mention. The recruitment of the ten participants who completed the study spanned a period of 22 months. Over the course of these 22 months, 78 prospective participants contacted the primary researcher expressing interest in the study. Some of these prospective participants were identified as being unsuitable for the study as they failed to meet inclusionary criteria (i.e., did not meet criteria for bulimia nervosa), met exclusionary criteria, or otherwise did not complete the initial screening surveys which prevented the researcher from evaluating their appropriateness for the group. In terms of inclusionary and exclusionary criteria, approximately 22 participants were deemed ineligible for the study on this basis. Of these 22 participants, 10 failed to meet the diagnostic criteria for bulimia nervosa, 7 were removed due to their high scores on the SAPAS-SR (i.e., personality screener), 2 had a diagnosed personality disorder, 1 had a diagnosed psychotic disorder, and 5 had concurrent therapy they were unwilling to cease for the duration of the study. It should be noted that some participants fell into more than one category deeming them ineligible. Furthermore, a number of prospective participants who were deemed eligible for the study dropped out following their completion of the screening questionnaires or after meeting with the principal investigator to discuss the group in greater depth. It is unclear as to why there was such a high drop-out rate prior to beginning group, although there were several possible explanations for this. One possibility was that the magnitude of the time-commitment required to participate in this study was too great for some of the prospective participants. Secondly, given the emotionally-restrictive nature of eating disorders, it is possible that prospective participants found the concept of emotion-focused therapy, and the interventions involved, to be highly



daunting. Related to this, it is also possible that prospective participants were apprehensive about exploring their emotions in a group setting. Lastly, given that certain aspects of eating disorders can be congruent with ones values, needs or identity (i.e., ego-syntonic), prospective participants may have experienced both a desire for, and an ambivalence about, receiving treatment. In other words, it is possible that they were not ready for treatment despite their initial interest in doing so. Additional barriers that created challenges throughout the recruitment process were the Christmas holidays and the spring and summer months spanning from May to August. This was a notable challenge as many of the prospective participants were students at the University of Alberta who were absent from the city during these times, thus preventing them from participating in the study. Additionally, there were notable lulls in recruitment during these times.

At the outset of this study, the intention was to run one group with nine women who met the diagnostic criteria for bulimia nervosa. However, the aforementioned challenges with recruitment necessitated running two groups with five women each. The first group ran for 12 weeks and consisted of five women who met the diagnostic criteria for bulimia nervosa. The second group, which ran for 16 weeks, consisted of three women who met the diagnostic criteria for bulimia nervosa, and two women who exhibited sub-clinical symptoms of bulimia nervosa.

Following the completion of the first group, the rigidity of certain inclusionary and exclusionary criteria were relaxed in an effort to facilitate recruitment. The most notable of these changes were to allow women with sub-clinical bulimia nervosa (i.e., did not meet all diagnostic criteria) to participate in the study, and to increase the cut-off score of the SAPAS-SR screening measure from a four to a five. The latter decision was made based on the fact that many participants were exceeding the cut-off score of four due to the overlap between symptoms of

bulimia nervosa and items on the SAPAS-SR. A further change was that if participants scored above a five on the SAPAS-SR they were required to complete an additional screening interview with the principal investigator to determine whether or not they were appropriate for the group. With the exception of the difference in duration, both groups ran according to the same format and structure.

**Treatment preparation.** Pre-treatment preparation was crucial to helping participants understand the utility of the treatment, to ensure accuracy of expectations, and to avoid drop-outs. Therefore, once participants were deemed eligible for the study, they were required to have a meeting with the researcher (in person or via telephone) lasting approximately one hour to discuss the group in greater detail. During this meeting, an additional information letter was provided to all participants (see Appendices O and P), and the principal investigator reviewed the potential risks and benefits of the study, explained limits to confidentiality (i.e., imminent risk of harm to self or others, suspected abuse or neglect of children, court subpoena), obtained informed consent for participation (see Appendix Q), and prepared participants for the group process. Upon providing written informed consent, participants also completed a basic demographic information form (see Appendix R). The principal investigator also offered an overview of the theoretical underpinnings and rationale for the treatment, discussed interventions to be used, and explored participant's expectations and goals for the group.

### **Therapy Tasks**

The type of interventions that were used throughout the group were guided by markers of emotion processing difficulties. A marker is an outwardly visible sign that an individual is experiencing emotional distress or conflict that they are ready and willing to work on. The type of marker that arises and the nature of the emotional distress then guides the therapeutic task or

intervention that is employed to help clients move to a stage of resolution. The four EFT interventions that were used targeted self-evaluative conflict splits, symptom splits, self-interruptive splits, and unresolved or unfinished business (Elliott et al., 2004b; Wnuk, 2009).

**Self-evaluative conflict split.** A verbal expression of a negative self-evaluation or an internal conflict between two aspects of the self is an indicator of a self-evaluative conflict split. In a self-evaluative conflict split, the adaptive aspect of the self, also known as the experiencing self, is obscured or blocked by the critical aspect of the self, often referred to as the inner critic. The inner critic represents the part of the self that negatively evaluates the adaptive or experiencing self, offering unhelpful criticisms. When a self-evaluative conflict split surfaces, two-chair work is initiated by asking the client to imagine both aspects of the self separately, each embodied in its own chair, so that a dialogue can take place between the experiencing self and the critical self. Dialogue ensues when the client can strongly identify with one aspect of the self, which is most often the inner critic, and can then speak from that perspective. It is important that the therapist does not align or side with one aspect of the self over the other, as resolution is achieved by both aspects of the self working together (Elliott et al., 2004b). Two-chair work with a self-evaluative split helps bring the client's internal criticisms and negative self-evaluations into awareness so that clients can fully understand and experience exactly how they control and criticize themselves. A fundamental principle behind this intervention is that the two aspects of the self are separated, but remain in contact with one another through the two-chair dialogue. Through this process, the therapist helps the client to develop a heightened awareness of their internal conflict, which allows them to give voice to the adaptive aspect of the self, and identify their underlying or unacknowledged feelings and unmet needs (Elliott et al., 2004b). Resolution of conflict begins when the client has a new emotional experience in the experiencing chair in

which primary adaptive emotions begin to surface, and the associated unmet needs are acknowledged and asserted. The presence of this new, assertive experience tends to lead to the softening of the critic, at which point the critic may adopt a more protective or benevolent stance. Once the critic has softened, the critical self and the adaptive, experiencing self become more compassionate towards one another, and are able to move towards integration (Elliott et al., 2004b).

**Symptom split.** A symptom split greatly resembles a self-evaluative conflict split. It is similarly characterized by an internal conflict between the adaptive aspect of the self (experiencing self) and the part of the self that promotes the eating disordered behaviours such as bingeing, purging, or restricting (Wnuk, 2009). A symptom split can be viewed as a type of self-evaluative conflict split that is highly focused on providing harsh criticism regarding one's body weight, shape, or appearance. Symptom split work was designed to focus on the reality of living with an eating disorder. It helps to identify and clarify the client's internal processes as they relate to their eating disorder symptomology, and draws attention to the underlying critical processes and maladaptive emotion schemes that contribute to the development of these symptoms.

**Unfinished business.** Empty chair work is used in the resolution of unfinished business with a significant other on the basis that unmet needs continue to exist in awareness, which can intrude upon and create difficulties in current relationships. When specific emotion schemes associated with significant others are triggered, an individual may re-experience an unresolved emotional experience. Empty chair work allows clients to confront and work through their unfinished business or unresolved emotions through the use of imagination. A marker for unfinished business is when a client expresses lingering, unresolved feelings of hurt or

resentment towards a significant other; this tends to involve the expression of a secondary maladaptive emotion, and is often characterized by complaints, blame, longing or hurt towards a significant other (Elliott et al., 2004b).

Empty chair work is initiated by having the client imagine the significant other with whom they have unfinished business in an empty chair. Once they have evoked the presence of the significant other and are actively experiencing that presence, the client can then begin to express their unresolved feelings to the empty chair. The therapist facilitates this process by helping the client to differentiate and express their underlying primary adaptive emotions towards the other. In order to trigger and deepen the emotional experience, the client must then adopt the role of the significant other, enacting the other's negative behaviours that contributed to the existing issue. In working towards resolution, the client must express and assert their unmet needs that were never expressed in the original relationship with the significant other, and determine if and how those needs can be met now. Through the process of emotional expression and validation of needs, clients can begin to shift their view of the significant other. Often times, the view of the other will shift such that they are now seen in a more positive light; they are viewed as having their own separate issues, and as having both positive and negative qualities. Full resolution is achieved in empty chair work when the client is able to let go of the unfinished business and the associated negative feelings. Clients are able to accomplish this when the significant other is held accountable for some violation by obtaining an increased understanding of the other, or through forgiveness for the other's wrongdoing (Elliott et al., 2004b).

**Self-interruptive split.** A self-interruptive split is when one part of the self blocks or interferes with the expression of primary emotions or needs. That is, a part of the self attempts to suppress the emotional expression of the experiencing self. Individuals experiencing a self-

interruptive split are either unable to access, or prevent the expression of, their emotions and needs. Self-interruptions can occur independently, or may arise during two-chair or empty chair work when a client is attempting to openly express their emotions or needs. Self-interruptive splits tend to develop early in life as a learned response to an environment in which the full expression of one's emotions and needs was deemed unacceptable, leading them to be subsequently avoided or denied. Individuals who experience self-interruptions may also avoid expressing their emotions because they believe they will inevitably lose control of them, or because they fear their needs will not be met. These self-interruptive processes that were once adaptive in childhood then extend into adulthood, despite the fact that they no longer serve an adaptive purpose (Elliott et al., 2004b).

A marker of a self-interruptive split is when the client is unable to fully express an emotion or a need, resulting in emotional or physical discontent or distress. The interruption may be explicitly identified and described by the client in somatic form, such as a headache or a choking sensation, or may be described simply as "feeling blocked". However, clients are often unaware that an interruptive split has occurred, and their inability to experience or express an emotion may simply be evident to the therapist within the session (Elliott et al., 2004b). Chair work can be used to heighten the client's awareness of the self-interruption, and to help them gain access to the blocked internal experience. The aspect of the self that is causing the interruption is placed in an empty chair. The client is then asked to come into contact with the blocked sensation by enacting or embodying the interruptive aspect of the self, which helps to evoke the associated emotion schemes underlying the self-interruptive split. This task allows clients to learn how they block their emotions, what they say to themselves to do this, and the negative toll that this emotional interruption can have. Enacting the part of the self that is

interruptive allows clients to obtain agency and control over their emotions in showing them that they can exert change over how they feel (Elliott et al., 2004b).

### **Treatment Protocol**

This section will detail the general structure of the group and the treatment plan, which was based on an existing treatment protocol developed for using EFT with an eating disordered population (Wnuk, 2009), as well as the core principles of EFT as described elsewhere (Elliott et al., 2004b; Greenberg, 2015). Additionally, any differences between the two groups with respect to participant composition and protocol will also be outlined. The same general format was adhered to in both groups, regardless of differences in treatment length.

The groups ran once a week every week in the evenings, with the exception of statutory holidays, for two hours. The first group ran for 12 weeks and was composed of five women. The second group ran for 16 weeks and was initially composed of six women. However, only five women completed the study due to attrition. Both groups were co-facilitated by two clinicians with EFT training, one of whom was the principal investigator of the study, and the other whom was an experienced EFT-trained clinician in the Edmonton area. Both therapists received clinical supervision approximately once every two weeks from a registered psychologist in the community with an expertise in both EFT and eating disorders. Supervision sessions consisted of either watching video recordings of the interventions used in group, or discussing case conceptualization and challenges encountered during treatment.

The first session of each group began with introductions and an ice-breaker activity. The remainder of the session primarily focused on delivering psychoeducational information in a lecture-style format about eating disorders and emotions. Information was provided about the importance of balanced eating, the cyclical nature of the symptoms of bulimia nervosa, and the

use of strategies for symptom control. The discussion then shifted to a review of the functional and adaptive nature of emotions, the information they can provide, and a discussion about the link between emotions and eating disorder symptoms. Once this information was disseminated, a group discussion was initiated about the possible functions of an eating disorder, and what risks participants might face by letting go of the illness. This discussion was intended to identify and acknowledge the well-intentioned, but maladaptive, function that each individual's eating disorder might be serving, and to acknowledge the fear that may subsequently exist around treatment. The group then engaged in an experiential activity lasting approximately five minutes in which participants were instructed to make contact with, and subsequently distance themselves from, a difficult or painful emotion (Appendix S). The intention of this activity was to introduce participants to the process of experiencing and sitting with a painful emotion, and to demonstrate the transformative power of emotion. The group concluded with a check-out where participants shared how they were feeling about the first session, and their feelings about group moving forward. Participants were provided with a treatment manual during the first session which provided an abundance of information about the topics discussed during the first session, additional readings that were deemed useful and informative, and optional homework sheets that participants could complete independent of group. The homework worksheets asked questions designed to engage participants in thinking further about their self-evaluative conflict splits, symptom splits, unfinished business and self-interruptive splits. However, homework was never assigned and the completion of worksheets was never required as a part of group. This treatment manual was developed by Wnuk (2009) and was adapted for the purposes of this study. A sample of the treatment manual can be found in Appendix T, which includes the first several



pages of the document. The full treatment manual can be obtained by contacting the principal investigator.

The second session began with a check-in lasting approximately 10 minutes where participants shared how their week went and any experiences of relevance to treatment. A group discussion was initiated about eating disorder symptom splits, which was referred to as the eating disorder voice, and self-evaluative conflict splits, which was referred to as the inner critic. Participants were asked to consider and discuss their eating disorder voices and self-criticisms. They shared the messages that their own critics and eating disorders offered them (i.e., unlovable, worthless, fat, ugly, etc.), which served to externalize an otherwise internal dialogue, normalized the experience of having such harsh internal criticisms, and initiated the beginnings of group cohesion. This discussion facilitated the transition into the first piece of chair work where a participant volunteered to engage in a dialogue with their self-critic or eating disorder, with the support of one of the group therapists. Following the completion of the first piece of chair work, approximately ten minutes was spent debriefing the experience wherein participants shared their personal experience of either being in the chair, or of observing the chair work. Throughout the debrief, the group therapists would offer prompts or ask probing questions to further encourage participants to reflect on their own emotional experiences and reflect on what was most salient for them. Following the first piece of chair work, the group took a ten minute break after which the second piece of chair work was initiated, and the same procedures were followed. The session concluded with a check-out lasting approximately 10 minutes wherein participants shared their experience of the session's proceedings and anything they took away from the work that was done.

All subsequent sessions adhered to the same general structure and format as outlined for session two, with the exception of the final session in each group which will be described in further detail. Within individual sessions the exact timing of each chair work intervention varied somewhat; however, the first intervention was typically 30-40 minutes in duration, and the second intervention was typically 20-30 minutes in duration. While both groups introduced the chair work using a self-evaluative conflict or symptom split intervention, the types of chair work used in subsequent sessions did not follow a scripted trajectory. Instead, this varied across the two groups, and from one session to the next, depending on what was emotionally salient for each participant and their readiness to address it. All forms of chair work (i.e., self-evaluative conflicts, symptom splits, self-interruptive splits, and unfinished business) were used numerous times in both groups as warranted. Within both groups there were also periodic and spontaneous discussions about topics relevant to participant's eating disorders or therapy interventions that took place during treatment. For example, when a new therapy task was introduced in group, there were often subsequent discussions about the rationale for the use of that task and how participants viewed it as being relevant for them. Other topics that were discussed at length included the role of emotions in eating disorder symptomology, the rules and guidelines governing participant's lives according to their illness, and the importance of balance in eating and nutrition. These discussions tended to stem from questions participants had about such topics, or else arose from an aspect of chair work that struck participants as particularly important.

The final session in each group was dedicated to termination. The final group session began with a check-in, after which a group discussion was initiated about group member's thoughts and feelings around group ending. There was a particular focus on participant's fears

about leaving the group and the next steps in their journey to recovery. Chair work of a shorter duration was utilized for each participant in the final session to allow them to address their symptom splits and self-evaluative conflicts one last time before leaving group, and process the emotions they were experiencing around this. The final session ended with a check out lasting approximately 20 minutes where participants shared their thoughts and feelings about their overall experience in group, and had the opportunity to say goodbye to one another.

A number of changes were made to the second group based on experiences and lessons learned in running the first group. The first group ran for 12 weeks as planned. However, the decision was made to extend the length of treatment for the second group after a review of the preliminary data from the first group, which revealed that participants had exhibited a trend towards improvement by the twelfth week but had not made substantial progress. It was concluded that while participants exhibited signs of progress, 12 weeks did not appear to be a sufficient amount of time to treat the eating disorder. While all participants in the first group were determined to have met the diagnostic criteria for bulimia nervosa, it was subsequently discovered that two of these individuals had a historical diagnosis of anorexia nervosa. As the group progressed, the therapists observed that while these two participants exhibited symptoms of bulimia nervosa, they appeared to continue to demonstrate some of the prototypical components of anorexia, such as a particularly harsh internal critic, rigidity, and significant suppression and avoidance of emotion. These two participants appeared to exhibit greater difficulty in accessing, processing, and moving through their maladaptive emotion schemes as compared to other participants. The group therapists observed that these participants' self-evaluative conflict and symptom splits were particularly rigid, and as such the process of recovery and emotional processing for these two individuals appeared to move more slowly as

compared to that of other group members. Based on these anecdotal observations, the decision was also made to screen for and eliminate prospective participants who met diagnostic criteria for anorexia nervosa, either presently or in the past, for the second group. Finally, during the first group's termination session, participants provided informal feedback about why they valued the group and what they found helpful. While not an intended component of this study, the informal feedback provided during the first group proved helpful in further understanding how participants benefited from treatment. This was particularly true given that the individual participants from the first group varied in terms of type and magnitude of change on psychological outcomes. As such, the decision was also made to collect formal feedback following the completion of the second group.

The second group ran for 16 weeks, and included five women who either met the diagnostic criteria for, or exhibited subclinical symptoms of, bulimia nervosa. It should be noted that during the second group, the last few sessions took place in April during which time two participants were unavailable. Therefore, one participant completed treatment at 13 sessions and one participant completed treatment at 14 sessions. It was observed that the participants in the second group exhibited a greater desire and/or need for information and discussions about certain topics, such as nutrition, balanced eating and dieting, the role of emotions in eating disorder symptomology, and etiological factors that may contribute to the development of an eating disorder. As such, more time was dedicated to having discussions about these topics in the second group as compared to the first group. Additionally, most participants in the second group requested or expressed an interest in receiving additional information about and resources for emotion regulation. Therefore, handouts highlighting a variety of emotion regulation skills were provided for participants to use at their discretion as an adjunct to the group. However, group

time was not spent discussing or teaching these skills as EFT interventions continued to be the primary focus of treatment. These resources were not provided in the first group as it was not a part of the treatment plan and because the participants did not request it.

### **Single Subject Design**

This study employed a quasi-experimental single subject withdrawal (A-B-A) design in which each participant served as their own control (Kerlinger, 2000). Single subject design is a method used to exert experimental control by manipulating an independent variable (i.e., the application or withdrawal of an intervention) and evaluating the impact of that variable within a single individual through repeated measurement (Ray, 2015). The independent variable in this study was the intervention, and the dependent variables were the scores on outcome measures of bulimia, internal shame, and external shame. These three outcomes were repeatedly measured over the course of three phases, including: (1) a pre-treatment phase to establish a baseline (i.e. observe trends in clinical symptomatology prior to undertaking treatment) in which outcomes were measured for four consecutive weeks prior to treatment; (2) an intervention phase in which outcomes were measured after every second session throughout treatment; and (3) a follow-up period during which outcomes were measured at one month post-treatment to examine the short-term sustainability of treatment effects.

A single subject research design was chosen as the ideal method for this study for a number of reasons. Firstly, single subject designs are useful for determining whether a treatment exhibits validity for a given population in a real-life, clinically applicable setting prior to studying that treatment on a larger scale, as in a randomized controlled trial (RCT) (Byiers, Reichle, & Symons, 2012). Given the limited research examining outcomes of EFT for bulimia

nervosa, this study employed a single subject design in order to provide further evidence of the utility of this intervention.

While RCTs are often viewed as the gold standard for research methodology when studying the utility of a given intervention (Byiers et al., 2012), there were several factors that prevented the use of a RCT in this study. The primary limiting factor was resources. Firstly, the financial resources required to run a RCT or compare multiple groups under different treatment conditions are significant, and were unavailable during the tenure of this study. Additional resources that were limiting included the availability of psychologists with the necessary training to conduct the therapy of interest, clinical supervisors to oversee the work, and the space required to run multiple therapy groups. A second limiting factor was the population of interest. A RCT would have required a large sample to allow for inferential statistics (Janosky, Leininger, Hoerger, & Libkuman, 2009; Byiers et al., 2012). This was a limiting factor given the low prevalence rate of the clinical population of interest, bulimia nervosa. As such, it was not feasible to recruit enough participants to fill multiple treatment groups. This is particularly true given the time-limited nature of the study, which was conducted for the purposes of a doctoral dissertation. Additionally, there would have been significant ethical implications for comparing a treatment group to a control group, given the severe nature of eating disorders and the plethora of psychological issues that tend to accompany them. The ethical implications of temporarily withholding treatment from individuals in order to establish a baseline were minimal in comparison.

The fact that our current modes of treatment for eating disorders are only moderately effective for half of those who seek help (American Psychiatric Association, 2006; Bailer et al., 2004; Carter et al., 2011; Jacobi et al., 2002; Mitchell et al., 2002; Polnay et al., 2014; Shapiro et

al., 2007; Smink et al., 2012; Wilson et al., 2007) is indicative of significant disparities in treatment responses, and highlights the need for a closer examination of what works, how it works, and why. Single subject design was an ideal method to begin to answer these questions and was developed for this very task. Single subject design has the ability to outline treatment effects at the individual level and to distinguish treatment responders from non-responders, which has direct relevance for clinical practice (Byiers et al., 2012). Furthermore, researching outcomes at the individual level allows the researcher to understand how a treatment works for individuals of the same clinical population, but who may differ on a variety of other variables such as age, ethnicity, additional mental health concerns, life experiences (e.g., trauma, treatment history, suicidal ideation), and the specific cluster of diagnostic symptoms displayed. The latter variable is particularly important as a group of individuals who fall within a given diagnostic category can differ not only in terms of demographic and background variables, but also in terms of the types of behaviours engaged in (i.e., over exercise, vomiting, laxative use, and medication abuse), the frequency of those behaviours, and the overall severity of the eating disorder. This is an advantage that would otherwise be lost using a RCT approach. While some background data was gathered for each participant, this study did not contain the statistical capability or a large enough sample size to systematically examine the relationship between these variables and treatment outcomes. However, while this information was not used to predict or model treatment response, it was used to contextualize treatment response at the individual level in consideration of participant's backgrounds and symptomology where possible. Thus, the single subject approach provided the advantage of being able to examine the nuances and patterns of change that occurred for each individual participant.

An additional benefit of studying treatment effects at the individual level was that the researcher could engage in response-guided experimentation by observing how participants responded to the treatment of choice, and modifying it as needed such that most, if not all, participants were more likely to benefit from that treatment (Janosky et al., 2009).

In short, single subject design allowed for an individualized and in-depth examination of the process of change that occurred within a given individual through the use of repeated measurements taken over time, and allowed for discernment of both convergent and divergent patterns of change across many individuals (Gallo, Comer, and Barlow, 2013; Ray, 2015). The A-B-A or withdrawal single subject design was specifically chosen for this study as it allowed for an examination of whether or not the effects of an intervention would persist when treatment was withdrawn.

Typically, withdrawal designs are implemented when the dependent variable is reversible. In other words, it is a useful methodology when the targeted behaviour is expected to return to baseline levels following the removal of the intervention (Byiers et al., 2012). However, in the field of counselling, this assumption is not applicable as the goal of counselling is to create a lasting behavioural change that is intended to extend beyond the termination of treatment. The effect of the intervention on the withdrawal phase, also known as a carryover effect, is a complicating factor when using a withdrawal design in counselling research (Ray, 2015). Therefore, for the purposes of this study, a demonstration of continued improvement or the maintenance of gains on relevant psychological outcomes would be indicative of an effective intervention. Despite this drawback, withdrawal designs are appealing for counselling clinicians as they allow for documentation of patterns of clinical change, and closely resemble what occurs in daily clinical practice wherein treatment is offered for a pre-determined period of time after



which it is subsequently withdrawn under the assumption that lasting changes have been obtained (Graham, Karmarkar and Ottenbacher, 2012).

## **Measures**

The measures used in this study were chosen based on a review of the literature as well as their psychometric properties, length, and relevance to the constructs of interest. Cronbach alpha values are provided for each measure as an index of reliability and internal consistency. A sample of each measure used can be found in the appendices for reference (Appendices A to J).

### **Screening Measures**

The following self-report measures were used to screen for and eliminate participants who met the exclusionary criteria, and to ensure participants met the inclusionary criteria.

**Bulimia nervosa.** The Eating Disorder Diagnostic Scale (EDDS) is a 22-item self-report measure used to measure and diagnose eating disorders, including anorexia nervosa, bulimia nervosa, and binge-eating disorder, based on DSM-IV criteria. The items on this scale are a combination of Likert scales, dichotomous scores, frequency scores and open-ended questions (i.e., weight and height) that measure attitudes about weight and shape, the consumption of food, and compensatory behaviours. The EDDS consists of two scales: the diagnostic scale, which is used to diagnose the type of eating disorder, and the symptom composite scale, which broadly measures a participants' overall level of eating pathology. The diagnostic scale is scored using an algorithm with specific items being relevant for specific diagnostic categories, and was used to determine whether or not participants met the criteria for bulimia nervosa for this study. This algorithm parallels that used for the Eating Disorder Examination (EDE), a gold standard instrument in the diagnosis of eating disorders (Krabbenborg et al., 2012; Stice, Telch, & Rizvi, 2000). The scoring guide for the diagnostic scale can be found elsewhere (Stice et al., 2000).

The EDDS has demonstrated good criterion and convergent validity (Krabbenborg et al., 2012; Stice et al., 2000; Stice, Fisher, & Martinez, 2004). and diagnoses made based on the EDDS displayed an overall accuracy rate of 0.94 (Krabbenborg et al., 2012). Criterion validity for the EDDS ranged from 0.78 (Stice et al., 2004) to 0.89 (Krabbenborg et al., 2012), with a particularly high kappa value of 0.91 for the diagnostic category of bulimia nervosa (Krabbenborg et al., 2012). The EDDS has also demonstrated good internal consistency with scores of 0.86 among clinical populations and 0.87 among non-clinical populations, and an overall internal reliability score ranging from 0.89 to 0.94 (Krabbenborg et al., 2012; Stice et al., 2004). Test-retest reliability revealed an almost perfect agreement of diagnoses across a two-week time frame with an accuracy rate of 0.95 (Krabbenborg et al., 2012).

Additionally, the EDDS exhibited an overall diagnostic accuracy ranging from 0.94 (Krabbenborg et al., 2012) to 0.96 (Stice et al., 2004) for eating disorders, with an even higher accuracy of 0.98 for the correct diagnosis of bulimia nervosa (Krabbenborg et al., 2012). The EDDS also has a diagnostic sensitivity of 0.88 and a specificity of 0.98 (Stice et al., 2004). Further, the EDDS has a particularly high sensitivity and specificity for bulimia nervosa, with a sensitivity of 1.00 and a specificity of 0.97 (Krabbenborg et al., 2012). In summary, the EDDS has been identified as a useful tool for both clinical and research applications (Stice et al., 2004).

A recently updated version of the EDDS was developed based on DSM 5 criteria in which the wording of certain items was altered slightly to match the current diagnostic criteria for bulimia nervosa (see Appendix A). Although this tool has not yet been empirically validated, the updated version of the EDDS was used for the purposes of this study as the diagnostic criteria of bulimia nervosa were a primary focus of this project.

**Personality disorders.** The Self-Report Standardized Assessment of Personality – Abbreviated Scale (SAPAS-SR) is an 8-item self-report measure that identifies individuals who are at-risk of having a personality disorder (see Appendix B). The items are directly related to the DSM-IV diagnostic criteria for at least one of the three clusters of personality disorders: A, B and C. Each item is a descriptive statement about the respondent, to which they must indicate the relevance or applicability of that descriptor by rating it a 0 (“absent”) or a 1 (“present”) (Germans, van Heck, Moran, & Hodiament, 2008; Moran et al., 2003). Among a Dutch sample of psychiatric outpatients, the SAPAS-SR demonstrated relatively low internal consistency at 0.45, but exhibited good test-retest reliability at 0.89. When using a cut-off score of 4, the SAPAS-SR demonstrated the best balance of sensitivity (0.83) and specificity (0.80), and could correctly identify the presence of a personality disorder in 81% of patients (Germans et al., 2008; Germans, van Heck, & Hodiament, 2012). When the cut-off score was increased to 5, the SAPAS-SR lost sensitivity (0.56) but gained specificity (0.89). The low internal reliability of this measure does not necessarily indicate poor psychometric properties, but may instead reflect the fact that personality disorders are multifaceted and unidimensional constructs (Germans et al., 2008). The SAPAS-SR has been shown to demonstrate superiority in its sensitivity, specificity, and its ability to correctly classify outpatients as having personality disorders as compared to other psychometrically established measures of personality disorders. In short, there was strong evidence to support the use of the SAPAS-SR as a screening tool for personality disorders (Germans et al., 2008; Germans et al., 2012; Germans et al., 2013).

**Substance abuse.** The Leeds Dependence Questionnaire (LDQ) is a brief, 10-item self-report questionnaire that is used to measure an individual’s dependence on and addiction to substances (i.e., drugs and alcohol) (see Appendix C). The LDQ is a suitable tool for measuring

dependence and addiction during periods of active substance use as well as periods of abstinence. Each item is a question about the importance of drugs and alcohol in an individual's life over the last four weeks, to which the respondent must answer on a scale of 0 ("never") to 3 ("nearly always"). Raw scores can range from 0 to 30, where a score of less than 10 indicates "low dependence", a score between 10 and 22 indicates "medium dependence", and a score greater than 22 indicates "high dependence" (Raistrick et al., 1994). The LDQ has demonstrated good internal consistency among substance-dependent populations, including both alcohol and drug users, with Cronbach alpha coefficients ranging from 0.93 (Kelly, Magill, Slaymaker, & Kahler, 2010) to 0.94 (Raistrick et al., 1994), and good test-retest reliability at 0.95 (Raistrick et al., 1994). Furthermore, there is evidence of satisfactory concurrent, convergent, and discriminant validities for this measure (Kelly et al., 2010; Raistrick et al., 1994).

**Psychosis.** The BASIS-24 is a 24-item self-report measure that assesses six domains of psychological functioning: (1) depression/functioning, (2) interpersonal relationships, (3) self-harm, (4) emotional lability, (5) psychosis, and (6) substance abuse (Eisen, Normand, Belanger, Spiro, & Esch, 2004) (see Appendix D). Each item is a question that corresponds to one of these six domains regarding the level of difficulty the respondent experienced in the last week, to which they must rate on a scale of 0 ("none of the time") to 4 ("all of the time") (McLean Hospital, 2006). This instrument was chosen based on the fact that it possesses a subscale designed to identify psychosis, and could therefore be used as a screening tool for this issue. The BASIS-24 has demonstrated good internal consistency, with scores ranging from 0.75 to 0.91 across the six dimensions within a clinical population (Cameron et al., 2007; Eisen et al., 2004), with an internal consistency of 0.79 for the psychosis subscale (Cameron et al., 2007). It has also

demonstrated good construct, criterion, and discriminant validity (Cameron et al., 2007; Eisen et al., 2006), and has test-retest reliability scores ranging from 0.81 to 0.96 (Eisen et al., 2004).

### **Repeated Measures**

Repeated measures data were collected on three outcome measures in three phases. The first phase was the baseline phase in which measures were given once a week for four weeks (i.e., four time points) prior to beginning treatment. The second phase was the intervention phase in which measures were administered every second session over the course of treatment. The third phase was the follow-up period where outcome measures were administered one month following the completion of treatment.

**Eating disorder psychopathology.** The Eating Disorder Inventory 3 (EDI-3) is a 91-item self-report scale that is used to assess the various symptoms and psychological features of eating disorders for females between the ages of 13 to 53 (see Appendix E). Each item is a statement pertaining to the various psychological traits and symptoms of eating disorders to which the respondent must indicate the degree to which they agree or disagree on a scale ranging from 0 (“never”) to 4 (“always”). The items comprise 12 primary scales: Drive for Thinness, Bulimia, Body Dissatisfaction, Low Self-Esteem, Personal Alienation, Interpersonal Insecurity, Interpersonal Alienation, Interoceptive Deficits, Emotional Dysregulation, Perfectionism, Asceticism, and Maturity Fears (Garner, 2004). The EDI-3 has demonstrated good internal consistency across all 12 scales for both clinical and non-clinical populations, with the majority of scales demonstrating an alpha value above 0.80, and several scales ranging from 0.75 to 0.79 (Clausen, Rosenvinge, Friberg, & Rokkedal, 2011; Espelage et al., 2003). It has also exhibited good test-retest values among eating disordered patients, ranging from 0.93 to 0.98 (Cumella, 2006; Garner, 2004). Furthermore, the EDI-3 shows acceptable convergent and discriminant

validity (Clausen et al., 2011; Cumella, 2006; Espelage et al., 2003; Garner, 2004), and demonstrated good sensitivity and specificity, with the bulimia scale serving as an excellent predictor of a bulimia nervosa diagnosis (Clausen et al., 2011). For the purposes of this study only one of the EDI-3 scales, Bulimia, was measured repeatedly and analyzed. The Bulimia scale in particular has a high internal consistency of 0.92 with an eating disordered population, and 0.87 with a non-clinical population (Clausen et al., 2011). This scale was chosen for repeated measurement based on identified constructs of interest and its relevance to bulimia nervosa.

**Internal shame.** The Internalized Shame Scale (ISS) is a 30-item self-report instrument that measures enduring feelings of shame about the self (see Appendix F). The ISS consists of two scales: the Shame scale and the Self-Esteem scale. The whole Shame scale consists of 24 negatively-worded items that reflect intense feelings of shame, whereas the Self-Esteem scale consists of 6 positive-worded items about self-esteem. Respondents must indicate on a scale of 0 (“never”) to 4 (“almost always”) the frequency with which they experience these feelings (Cook, 1991; del Rosario & White, 2006; Rybak & Brown, 1996). The Self-Esteem scale is primarily used to offset a response set bias (Cook, 1994, 2001; del Rosario & White, 2006). The ISS has demonstrated good internal reliability at 0.95 among non-clinical populations (Cook, 1988; Cook, 1991), and ranging from 0.93 (Cook, 1988) to 0.96 among clinical populations (Cook, 1991). Internal consistencies were also identified for both the Shame and Self-Esteem scales separately. Among a non-clinical sample, the internal consistency was 0.88 for the Shame scale and 0.96 for the Self-Esteem scale (del Rosario & White, 2006). Within a mixed clinical and non-clinical population, internal consistencies were found for the Shame and Self-Esteem scales at 0.97 and 0.90, respectively. Test-retest values were also high, with an overall value of 0.81 for the ISS, and values of 0.81 for the Shame scale and 0.75 for the Self-Esteem scale among non-

clinical populations (Cook, 1988; del Rosario & White, 2006). Additionally, the ISS demonstrated good concurrent and construct validity (Cook, 1991; Rybak & Brown, 1996). The ISS has been identified as useful in both research and clinical settings, and has been used as a screening and treatment-monitoring tool (Cook, 1994; 2001). This instrument has commonly been used to measure shame in both research articles and doctoral dissertations (del Rosario & White, 2006).

**External shame.** The Other as Shamer Scale (OAS) is an 18-item self-report questionnaire that measures global judgments or expectations about how the self is evaluated by others (see Appendix G). Each item is a statement embodying an external judgment about the self, to which respondents must indicate on a scale from 0 (“never”) to 4 (“almost always”) the frequency with which they endorse these evaluations. The OAS is a modification of the ISS; items from the shame subscale of the ISS were selected and modified to shift the focus externally rather than internally. The OAS provides a total score, as well as scores for each of three subscales: (1) inferiority, (2) emptiness, and (3) mistakes (Goss, Gilbert, & Allan, 1994). The OAS has demonstrated good internal reliability among non-clinical populations with a Cronbach alpha of 0.92 (Matos, Pinto-Gouveia, Gilbert, Duarte, & Figueiredo, 2015), as well as good convergent validity (Goss et al., 1994; Matos et al., 2015). Furthermore, the Italian version of the OAS has supported these findings with an internal reliability of 0.87, and a test-retest reliability of 0.82 spanning a period of ten days (Balsamo et al., 2015). To date, there is limited research on the psychometric properties of OAS. However, it is the only empirically supported measure of external shame and has been widely used in research, particularly in the study of eating disorders (Goss & Allan, 2009; Troop et al., 2008; Troop & Redshaw, 2012). Additionally, external shame has been shown to be an important construct in eating disorder pathology, and is distinct from

the construct of internal shame, which further warranted the use of this measure (Gilbert, 2002; Goss & Allan, 2009; Troop et al., 2008).

### **Pre-Post Measures**

Data were also collected on the following four outcome measures prior to, and following the completion of, treatment.

**Depression.** The Depression Anxiety Stress Scale 21 (DASS 21) is a 21-item self-report questionnaire that measures the severity of symptoms of anxiety, stress and depression, and can be used to track an individual's response to treatment (see Appendix H). Each item is a statement about the self regarding one of these three symptom domains. Respondents are required to rate the degree to which each statement applies to them over a period of the last week on a scale of 0 (“did not apply to me at all over the last week”) to 3 (“applied to me very much or most of the time over the past week”). The DASS-21 provides an overall score, as well as scores on three scales: (1) depression, (2) anxiety, and (3) stress (Lovibond & Lovibond, 1995). For the purposes of this study, only the depression scale was administered as it was the only construct of interest within this measure. The depression scale is composed of seven items that assess dysphoria, low self-esteem, and lack of incentive (Gomez, Summers, Summers, Wolf, & Summers, 2014). The depression scale demonstrates good internal consistency, with values of 0.87 to 0.88 (Gomez et al., 2014; Henry & Crawford, 2005) among non-clinical populations, and 0.94 (Antony, Bieling, Cox, Enns, & Swinson, 1998) among clinical populations. Furthermore, the DASS-21 has also been found to exhibit evidence of convergent, concurrent, and discriminant validity (Antony et al., 1998; Henry & Crawford, 2005).

**Emotion regulation.** The Difficulties in Emotion Regulation Scale (DERS) is a 36-item self-report inventory that measures difficulties with emotion regulation in four core areas:



awareness and understanding of emotions, acceptance of emotions, the ability to engage in goal-directed behaviour and refrain from impulsive behaviours when experiencing negative emotions, and access to emotion regulation strategies perceived as effective (see Appendix I). Each item is a statement pertaining to one of these four domains, and respondents are required to rate each statement on a scale from 1 (“almost never”) to 5 (“almost always”) indicating how often each statement applies to them. In addition to providing an overall score, the DERS provides a score for each of six different subscales: (1) nonacceptance of emotional responses, (2) difficulty engaging in goal-directed behaviour, (3) impulse control difficulties, (4) lack of emotional awareness, (5) limited access to emotion regulation strategies, and (6) lack of emotional clarity (Gratz & Roemer, 2004). The DERS as a whole has demonstrated a high internal consistency of 0.95 in clinical populations (Fowler et al., 2014) and 0.93 within non-clinical populations (Gratz & Roemer, 2004). Furthermore, while the internal consistency of each individual subscale has not been examined within a clinical population, it has been studied in the context of a non-clinical population, with each subscale demonstrating alpha values above 0.80 indicating adequate internal consistency. Additionally, the DERS has demonstrated strong test-retest reliability at 0.88 (Gratz & Roemer, 2004), and preliminary findings have identified the DERS as having adequate construct validity (Fowler et al., 2014; Gratz & Roemer, 2004).

**Low Self-Esteem and Interpersonal Alienation.** Two additional subscales were used from The Eating Disorder Inventory 3 (EDI-3) for pre-post measurement: Low Self-Esteem and Interpersonal Alienation (see Appendix E). These two scales were chosen based on identified constructs of interest and their relevance to bulimia nervosa. The EDI-3 demonstrates good internal consistency across all 12 scales for both clinical and non-clinical populations. The Low Self-Esteem scale has an internal consistency of 0.86 for an eating disordered population and

0.89 for a non-clinical population (Clausen et al., 2011). The Interpersonal Alienation scale has an internal consistency of 0.75 for an eating disordered population and 0.79 for a non-clinical population (Clausen et al., 2011).

**Helpful Aspects of Therapy.** Formal feedback data was collected using the Helpful Aspects of Therapy Form (HAT; see Appendix J) from the participants in the second group following the completion of treatment. Support for the validity of events reported on the HAT has been demonstrated through convergence ( $r = 0.60$ ) for scale ratings with session outcome (Elliott, 1986). While the HAT was originally developed for use after each therapy session, the form was modified for the purposes of this study, following the format used in Holowaty and Paivio (2012), to assess post-treatment aspects of therapy that participants deemed helpful. In its modified format, participants were asked to provide brief written responses describing which three events they found most helpful over the course of therapy, what made the event helpful, which therapy session the event took place during, and to provide a numerical rating ranging from 1 (extremely hindering) to 9 (extremely helpful) for each identified event.

### **Data Analyses**

Repeated measures data were analyzed using the visual analysis protocol for single subject designs which involved graphing each participant's outcome scores within each phase, followed by a visual inspection of the graphs to examine for the presence of or changes in level, trend, overlap, immediacy, variability, and consistency when comparing intervention and follow-up phases to baseline (Byiers et al., 2012; Kerlinger, 2000; Ray, 2015). An explanation of each level of analysis can be found in Table 1.

Additionally, treatment effect sizes were calculated for each of the repeated measures for differences observed between the baseline phase and the intervention and follow-up phases.

While there are many methods that can be used to calculate effect size for single subject designs, those involving regression-based or parametric statistical procedures were eliminated given that our data did not meet the necessary parametric assumptions, as is the case for most single-subject studies. Instead, a non-parametric visual index was chosen for this study. The percentage of data points exceeding the median (PEM) was used, which calculates effect size by computing the percentage of treatment measurements on the therapeutic side of the baseline phase median (i.e., lower than the baseline median). An instructional guide on how to calculate PEM can be found elsewhere in the literature (Manolov, Solanas, & Leiva, 2010; Parker, Vannest, & Davis, 2011). The three most commonly used visual effect size indices in single subject designs include the percentage of all non-overlapping data (PAND), the percentage of non-overlapping data (PND), and PEM. The PEM was chosen as it presented the best balance of advantages and limitations for this study. Most notably, PEM is less effected by trends, variability, outliers, and serial dependence among data as compared to other indices, and has high sensitivity (Lenz, 2013; Manolov et al., 2010). In terms of limitations, the effect sizes provided by PEM tend to be higher than some other indices, and PEM is known to have low power and low specificity (Manolov et al., 2010). PEM effect sizes can be categorized, according to Scruggs and Mastropieri (1998), as follows: effect sizes of .90 and greater are indicative of a very effective treatment, those ranging from .70 to .89 are identified as moderately effective, those between .50 to .69 are indicative of a debatably effective treatment, and scores lower than .50 indicate that treatment was not effective. It has been noted that when using visual effect size indices, the index should supplement rather than replace visual inspection of the data when evaluating the overall effect of intervention (Manolov et al., 2010).

Pre-test and post-test data were also collected for an additional four dependent variables, which were outcome measures of low self-esteem, interpersonal alienation, depression, and emotion dysregulation. Data were analyzed by examining participants' change scores to determine clinical significance of improvements observed. To determine clinical significance for self-esteem, interpersonal alienation and emotion regulation, post-treatment scores were examined to determine whether they fell within one standard deviation of non-clinical normative data. Clinical significance for depression was measured by examining the change score and determining whether it met the standard for a minimally important difference (MID) which, based on the literature, was identified as a change of at least four points.

Formal feedback including numerical ratings were also collected from the second group using a self-report questionnaire about what aspects of the treatment were helpful. This questionnaire served as an adjunct source of information to supplement single subject data.

Table 1

*Criteria for Visual Analysis of Repeated Measures*

<b>Criterion</b>	<b>Definition</b>	<b>Explanation</b>	<b>Decision</b>
Trend	Direction of the slope within each phase as compared to slope in the baseline phase	Trend that is decreasing suggests a cause-effect relationship. The greater the slope, the stronger the suggested effect.	Increasing
			Absent
			Decreasing
Level	The mean score within a given phase	A change in level relative to baseline suggests a cause-effect relationship.	Increased
			Unchanged
			Decreased
Overlap	The proportion of data from one phase that overlaps with data from the baseline phase.	The smaller the proportion of overlapping data points, the more compelling the demonstration of an effect.	Percentage of overlap will be provided for each phase of each measure.
Immediacy	Change in level and/or slope between the last 3 data points of the preceding phase and the first 3 data points in the next phase.	Presence of immediacy suggests a cause-effect relationship. However, it should be noted that a lack of immediacy does not necessarily suggest an absence of cause-effect.	Present
			Absent
Variability	Based on the difference between the trend and each individual data point within a phase, the standard deviation within a phase, and the range of data within a phase.	Less variability within a phase suggests a cause-effect relationship.	Stable
			Variable
Consistency of data in similar phases	A subjective examination of data from the same phases (i.e., baseline, intervention, follow-up) for each outcome measure to identify consistency in data patterns across participants.	The greater the consistency, the more likely the data represent a cause-effect relationship.	Consistent
			Discrepant
Clinical Significance	Examine whether at least two consecutive data points at the end of the intervention phase, or one data point in the follow-up phase, fall outside the range of 2 standard deviations around the baseline mean.	Data points that depart at least 2 standard deviations from the baseline mean are determined to be clinically significant.	Significant
			Non-significant

*Note.* Levels of analysis and criteria were derived from the literature (Byiers et al., 2012; Kazdin, 2011; Kratochwill et al., 2010).

## **Results**

### **Presentation of Data**

A summary of repeated measures and pre-post measures data is provided in Table 2, which addresses the hypotheses of this study and highlights overarching trends and patterns within the data set. Data are then presented and analyzed for each individual case across all measures. For each individual analysis, representative graphs for bulimia symptomology, internal shame and external shame are provided. Supplemental graphs for each participant are provided in the appendices (Appendices U to DD). Please note that for the purposes of the individual analysis, certain biographical details were changed in the description of each case to protect the participant's identities. However, the essential clinical details about each case were retained in the participant descriptions.

For all measures used in this study, higher scores indicate a higher degree of symptomology or psychological concern, and lower scores indicate a lesser degree of symptomology or psychological concern. Therefore, when the scores trend upwards or increase, this represents a deterioration. In contrast, when scores trend downwards or decrease, this represents an improvement. Cases one through five participated in the first group and cases six through ten participated in the second group.

## Quantitative Data

Table 2

*Summary of Psychological Outcomes for Repeated Measures and Pre-Post Measures*

Case	Repeated Measures						Pre-Post Measures												
	OAS		ISS		EDI-3 (Bulimia Scale)		Dass-21 (Depression)	EDI-3 (Low Self-Esteem Scale)	EDI-3 (Interpersonal Alienation Scale)	Nonacceptance (DERS)	Goals (DERS)	Impulse (DERS)	Awareness (DERS)	Strategies (DERS)	Clarity (DERS)	DERS Total			
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up										
1	Stable	-	*-	Variable	-	*-	Stable	*+	0	*-	*-	*-	-	-	-	+	+	+	+
2	Stable	-	+	Variable	-	0	Variable	*+	*+	*+	+	-	+	+	-	0	-	0	+
3	Stable	-	0	Variable	-	*+	Stable	*+	*+	*+	*+	+	0	-	+	*+	*+	+	*+
4	Variable	-	+	Variable	+	*+	Stable	+	0	0	+	0	-	+	+	+	+	+	+
5	Stable	*-	*-	Stable	-	0	Stable	*+	0	*+	-	-	0	-	*-	+	-	+	*-
6	Variable	+	*+	Variable	+	*+	Stable	+	*+	+	0	+	+	-	+	-	-	+	+
7	Variable	-	+	Variable	+	*+	Variable	+	+	*+	-	*-	*+	*+	+	-	*-	*-	-
8	Stable	-	*+	Stable	-	*+	Variable	-	*+	*+	*+	+	+	*+	*+	+	*+	*+	*+
9	Variable	-	0	Variable	0	+	Variable	*+	*+	+	+	+	+	+	+	*+	*+	*+	+
10	Variable	-	+	Variable	+	+	Variable	*+	*+	0	*+	+	-	0	0	*+	+	*+	+

*Note:* + denotes improvement relative to baseline; - denotes deterioration relative to baseline; 0 denotes ambiguous/no change relative to baseline. Baseline phases are coded as either stable or variable based on variability in data. OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

\* denotes clinical significance.

The first hypothesis for this study was that participants would report a reduction in bulimia symptomology. In terms of the baseline phase, 5 participants exhibited a stable baseline (i.e., little or no trend) on the Eating Disorder Inventory-3 (EDI-3) Bulimia scale prior to treatment. Of those who had unstable baselines, 3 participants were demonstrating improvement, 1 participant was deteriorating, and 1 participant exhibited a flat progression (i.e., no trend) prior to treatment. Table 2 illustrates that 9 participants exhibited an improvement in overall symptomology during the intervention phase, with 6 of them achieving a clinically significant improvement. Only one participant exhibited deterioration in this phase. Similarly, at follow-up 7 participants exhibited an overall improvement on this measure, with 6 participants achieving clinically significant changes, and no participants exhibiting deterioration. It was observed that all participants from the second group either exhibited decreasing symptomology (i.e., a downward trend) or maintained treatment gains at the one month follow-up, whereas only 2 participants from the first group demonstrated these changes (see Appendices U to DD). Overall, the data shows that the majority of participants' bulimia symptomology improved during and after treatment, and as such the hypothesis was retained.

The second hypothesis was that participant's levels of internal shame and external shame would decrease. Baseline phases for the Internalized Shame Scale (ISS) and the Other As Shamer (OAS) scale were largely variable across participants. In terms of the ISS, only 2 participants exhibited a stable baseline. Of the remaining participants, 5 of them demonstrated deterioration and 3 of them exhibited improvement prior to treatment. During the intervention phase 4 participants exhibited an improvement and 5 participants exhibited a deterioration with no clinically significant change achieved. However, during follow-up 7 participants exhibited an overall improvement on this measure, with 5 participants achieving clinically significant



improvement. It was noted that 1 participant exhibited a clinically significant deterioration on this measure at follow-up.

In terms of the OAS, 5 participants demonstrated a stable baseline, 2 participants were deteriorating, and 3 participants were improving prior to treatment. During the intervention phase, most participants exhibited a deterioration with only 1 participant exhibiting improvement. However, 6 participants did exhibit a downward trend in symptoms and an overall reduction in external shame at follow-up. Only 2 participants achieved a clinically significant improvement on this measure at follow-up, and 2 participants exhibited a clinically significant deterioration. Therefore, the hypothesis was only partially supported by the data as there was an overall reduction in internal shame with only minimal improvement in the domain of external shame.

The third hypothesis for this study was that any changes in bulimia nervosa symptomology, internal shame and external shame would occur gradually over time. This hypothesis was retained as improvements across all repeated measures did occur gradually. However, an unexpected finding was that for most participants, the application of the intervention had an immediate effect on participants' scores as was determined by observed changes in mean and slope at the beginning of treatment. The majority of participants (7) exhibited an immediate response on the ISS and Bulimia scale (EDI-3), whereas 5 participants exhibited an immediate response on the OAS. Participants generally showed a pattern of deterioration followed by improvement during the intervention phase for both the ISS and OAS (Appendices U to DD). Most interesting was the observation that on the Bulimia scale (EDI-3), two distinct patterns of change were observed during the intervention phase suggesting divergent change processes. Half of the participants exhibited a gradual, continual pattern of improvement,

whereas half of participants exhibited an initial deterioration followed by gradual improvement. However, participants who improved more gradually also exhibited subtle but observable fluctuations between deterioration and improvement. The results are graphically illustrated in full in Appendices U to DD.

The fourth hypothesis was that there would be a reduction in depression, low self-esteem, interpersonal alienation and difficulties with emotion regulation scores from pre-treatment to post-treatment. The findings for pre-post data (Table 2) were mixed with patterns of both improvement and deterioration among participants. Results show that in terms of depression symptomology (DASS-21), 7 participants exhibited an overall improvement with 5 of those participants achieving clinical significance. Additionally, 1 participant exhibited a clinically significant deterioration. On the Low Self-Esteem scale (EDI-3), 6 participants improved with 3 of those achieving a clinically significant improvement. It was noted that 1 participant exhibited a clinically significant deterioration on this measure. On the Interpersonal Alienation scale (EDI-3), 5 participants exhibited improvement. The only clinically significant change on this measure represented a deterioration for 2 participants. Results from the Difficulties with Emotion Dysregulation scales (DERS) were particularly variable. As can be seen, 8 participants exhibited an overall improvement on this measure with 2 participants achieving a clinically significant improvement. Despite not reaching clinical significance, many participants were observed to exhibit large reductions in their overall scores. Additionally, 1 participant exhibited a clinically significant deterioration.

The DERS subscales with the least improvement were the Nonacceptance of Emotional Responses (Nonacceptance) and Difficulties Engaging in Goal-Directed Behaviour (Goals), with only 5 participants exhibiting improvements and very few participants achieving clinical

significance (1 participant and 2 participants respectively). The Impulse Control Difficulties (Impulse) subscale revealed that 6 participants exhibited improvement. However, only 1 participant achieved a clinically significant improvement, and 1 participant exhibited a clinically significant deterioration. Similar findings were observed on the Limited Access to Emotion Regulation Strategies (Strategies) subscale, with 6 participants demonstrating an improvement. However, 3 participants exhibited a clinically significant improvement with 1 participant exhibiting a clinically significant deterioration. On the Lack of Emotional Awareness (Awareness) subscale, 7 participants exhibited an improvement with 3 participants exhibiting a clinically significant change. Lastly, on the Lack of Emotional Clarity (Clarity) subscale, 8 participants exhibited an improvement with 3 achieving clinical significance. Additionally, 1 participant exhibited a clinically significant deterioration on this subscale.

While there are clear patterns of improvement across the pre-post measures, patterns of deterioration were also observed. Only 1 participant exhibited a deterioration in the domain of depression (DASS-21). However, on most other scales there were between 3-4 participants that experienced some level of deterioration post-treatment. This was true of the Low Self-Esteem and Interpersonal Alienation (EDI-3) scales, as well as most of the DERS scales with the exception of the DERS total score, Lack of Emotional Clarity (Clarity) and Lack of Emotional Awareness (Awareness) scales, on which only 1-2 participants deteriorated. Given these mixed results, it can be concluded that the fourth hypothesis was only partially supported by the data. Overall, the majority of participants exhibited the hypothesized direction of change for depression, low self-esteem, emotional awareness, emotional clarity, and overall emotion regulation.

Results were inconsistent with respect to the fifth hypothesis of this study, which hypothesized that gains made on repeated measures by participants would be maintained at one month follow-up. There were in fact some participants that maintained gains obtained during treatment and, in some cases, experienced a further reduction in symptomology at follow-up. However, some participants returned to baseline level (i.e., no change compared to pre-treatment) or else exhibited a notable deterioration following the removal of treatment. Table 2 further highlights the unique trajectory of symptoms participants exhibited upon the removal of treatment. Therefore, this hypothesis was only partially supported.

**Analysis for case 1.** Participant 1 was a 32-year-old dental hygienist who met diagnostic criteria for bulimia nervosa at the time of her screening. It is worth noting that this participant missed three consecutive sessions mid-treatment and is missing one data point for all repeated measures for this reason. Participant 1 also disclosed to the principal investigator that she had completed an assessment through the Eating Disorder Program at the University of Alberta Hospital towards the end of the group and was recommended for the inpatient program, thus highlighting the severity of her eating disorder. Participant 1 was married with two children. She identified as a perfectionist and noted a general distrust of people. She described her husband as being an important emotional support, but indicated her family-of-origin was tumultuous. According to this participant, her mother struggled with her own mental illness and often displayed emotional lability and bouts of cruelty towards her. She stated that she got along well with her father, but that he had historically been emotionally and physically abusive during childhood. Although participant 1 missed a number of sessions, she was very willing to engage in chair work. It was observed that she was able to access anger with ease, but struggled to

access sadness or vulnerability when faced with her critic or a significant other during chair work.

Results for repeated measures (Table 3) show that at baseline her bulimia symptomology was stable, and that despite missing a quarter of the group there was a clinically significant improvement on the Bulimia scale (EDI-3) during the intervention phase (Figure 1), with treatment being deemed very effective (PEM = 1.0). While treatment was identified as being very effective at follow-up, it was noted that this participant's bulimia symptomology returned to baseline levels when treatment was withdrawn, and was therefore coded as an absence of change in Table 2. This participant had a variable baseline for the ISS with a trend towards improvement, and a stable baseline for the OAS. As can be seen, participant 1 exhibited little change on either the ISS (Figure 2) or OAS (Figure 3) during treatment. Results show that upon this participant's return to group at session 8 (week 15) she demonstrated elevated levels on both the ISS and OAS, which subsequently began to trend downwards during the latter part of treatment. However, once treatment was withdrawn she exhibited a clinically significant deterioration on both measures at follow-up.

Results from pre-post measures (Table 4) show a clinically significant deterioration on the Depression scale (DASS-21), although this participant's symptom severity remained within the Normal range, as well as on the Low Self-Esteem scale (EDI-3) and Interpersonal Alienation scale (EDI-3). However, this participant did also exhibit non-significant levels of improvement on the DERS total scale as well as the Lack of Emotional Awareness (Awareness), Limited Access to Emotion Regulation Strategies (Strategies), and Lack of Emotional Clarity (Clarity) subscales.

Table 3

*Repeated Measures Data for Case 1*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Increasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Increasing
Level	Not Applicable	Increased	Increased	Not Applicable	Increased	Increased	Not Applicable	Decreased	Unchanged
Overlap	Not Applicable	80%	0%	Not Applicable	20%	0%	Not Applicable	0%	100%
Immediacy	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Stable	Variable	Not Applicable	Variable	Variable	Not Applicable	Stable	Stable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Consistent	Discrepant	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Significant	Not Applicable	Non-Significant	Significant	Not Applicable	Significant	Non-Significant
PEM	Not Applicable	0.40	0.0	Not Applicable	0.0	0.0	Not Applicable	1.0	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 4

*Pre-Post Measures Data for Case 1*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	0	4	4.00	9.52	Significant
EDI-3 - Low Self-Esteem	42	48	6.00	8.82	Significant
EDI-3 - Interpersonal Alienation	35	59	24.00	28.92	Significant
DERS - Nonacceptance	11	16	5.00	16.67	Non-Significant
DERS - Goals	5	6	1.00	4	Non-Significant
DERS - Impulse	6	7	1.00	3.33	Non-Significant
DERS - Awareness	29	26	-3.00	10	Non-Significant
DERS - Strategies	12	9	-3.00	7.50	Non-Significant
DERS - Clarity	24	22	-2.00	8	Non-Significant
DERS - Total	87	86	-1.00	0.56	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

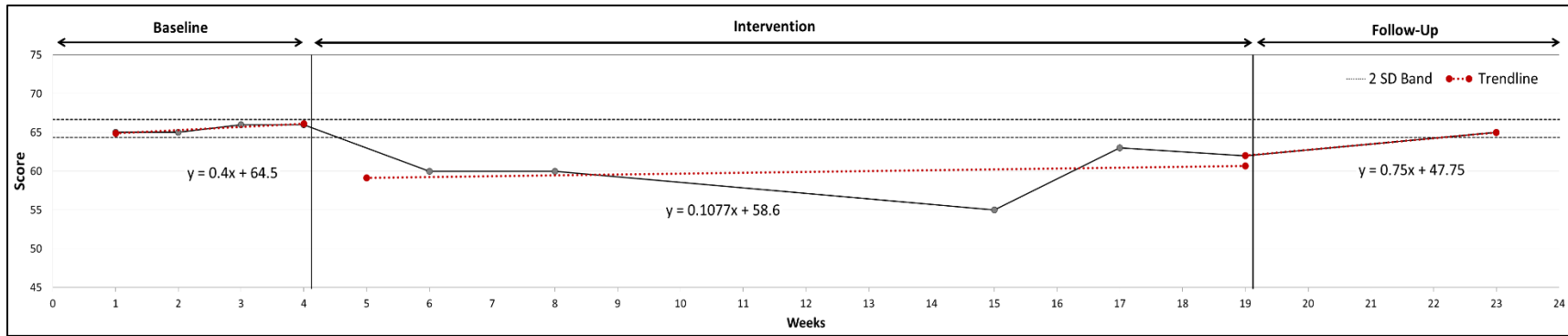


Figure 1. Repeated measures data for case 1 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 2. Internalized Shame Scale (ISS)

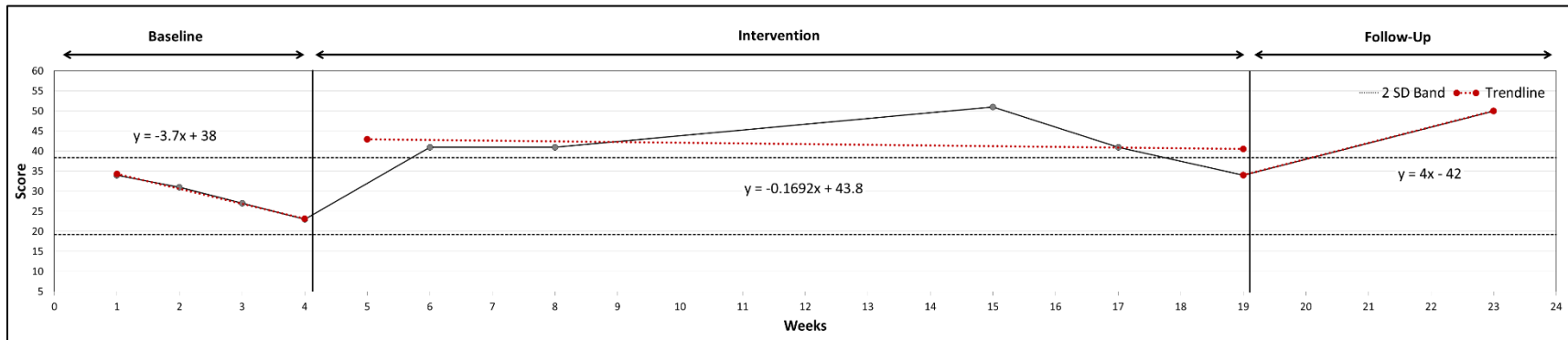


Figure 2. Repeated measures data for case 1 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.



Figure 3. Other As Shamer (OAS)

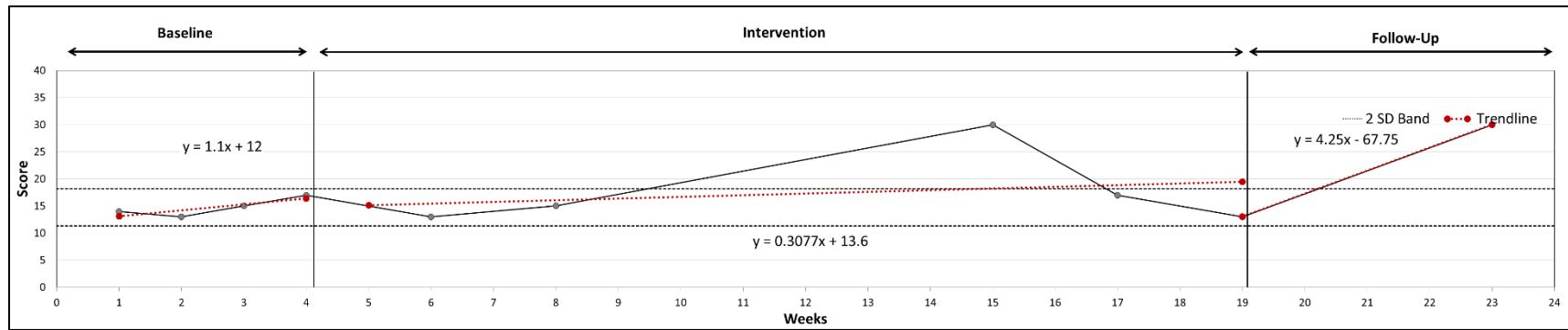


Figure 3. Repeated measures data for case 1 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 2.** Participant 2 was an 18-year-old undergraduate student in physics who met diagnostic criteria for bulimia nervosa at the time of her screening. She reported infrequent, passive thoughts about her death, but noted these thoughts were more related to having an accident and no longer existing than they were about suicide. She reported experiencing some perfectionism and worry, but indicated these issues were not pervasive. Participant 2 was single with no children and identified her primary support system as consisting of her mother and her sister. She indicated that her mother suffered with depression when she was a child. She described a sense of needing to take care of her mother and avoid upsetting her from a very young age. This participant's chair work often moved smoothly and quickly, as she was often able to quickly access underlying adaptive emotions. She was able to access sadness in response to criticism, followed by assertive anger which allowed her to stand up for herself and overcome her eating disorder symptoms. A similar emotion process was observed during an unfinished business task with her imagined mother. Participant 2 shared that her symptoms of bulimia nervosa had ceased around the mid-way point of therapy and did not return for the duration of group. Additionally, she stated that during the course of the group she had revealed her eating disorder to her mother, and was able to express her feelings and needs which had been previously challenging for her. At the end of therapy, participant 2 expressed a sense of pride about her progress in overcoming her eating disorder.

Results from repeated measures (Table 5) show a variable baseline and a trend towards improvement on the Bulimia scale (EDI-3). This participant exhibited a downward trend and a clinically significant improvement in her bulimia symptomology, both during treatment and at follow-up (Figure 4). During the intervention phase the treatment was deemed moderately effective (PEM = 0.83), whereas it was deemed very effective at follow-up (PEM = 1.0).

However, given that her symptomology was trending downward prior to treatment, it is unclear as to whether her continued improvement was due to the treatment or the result of external, uncontrolled variables. Results show that her mean score in the intervention phase was substantially lower than that of the baseline phase on the Bulimia scale (EDI-3). Furthermore, an immediate change in bulimia symptomology can be observed following the application of treatment, during which symptoms initially worsened followed by a gradual decline. Additionally, it can be seen that during the intervention phase, the magnitude of her downward trend did increase slightly, which indicates that treatment may have sped up her recovery process. Despite her downward trend prior to treatment, these findings are evidence of treatment effects. With respect to external shame, a stable baseline was observed (Figure 5). While participant 2 did not achieve clinical significance on the OAS, a downward trend in the magnitude of shame was observed at follow-up. Results show there was little to no change documented for the ISS (Figure 6), and that she was exhibiting an upward trend at baseline. It was noted that participant 2 exhibited particularly low degrees of both internal and external shame relative to other participants, and as compared to the highest possible scores on these measures.

Results from pre-post measures (Table 6) show a clinically significant improvement on the Depression scale (DASS-21), as well as non-significant improvements on the Low Self-Esteem scale (EDI-3), the DERS total scale, and the DERS subscales of Nonacceptance of Emotional Responses (Nonacceptance) and Difficulties Engaging in Goal-Directed Behaviour (Goals).

Table 5

*Repeated Measures Data for Case 2*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Increasing	Decreasing	Increasing	Increasing	Absent	Decreasing	Decreasing	Decreasing
Level	Not Applicable	Increased	Decreased	Not Applicable	Increased	Unchanged	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	33.33%	100%	Not Applicable	33.33%	100%	Not Applicable	16.67%	0%
Immediacy	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Stable	Stable	Not Applicable	Variable	Variable	Not Applicable	Variable	Stable	Not Applicable
Consistency	Not Applicable	Consistent	Discrepant	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Significant	Significant
PEM	Not Applicable	0.33	1.0	Not Applicable	0.33	1.0	Not Applicable	0.83	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 6

*Pre-Post Measures Data for Case 2*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	4	0	-4.00	9.52	Significant
EDI-3 - Low Self-Esteem	30	28	-2.00	2.94	Non-Significant
EDI-3 - Interpersonal Alienation	44	46	2.00	2.41	Non-Significant
DERS - Nonacceptance	12	10	-2.00	6.67	Non-Significant
DERS - Goals	18	15	-3.00	12	Non-Significant
DERS - Impulse	9	10	1.00	3.33	Non-Significant
DERS - Awareness	11	11	0.00	0	Non-Significant
DERS - Strategies	15	17	2.00	5	Non-Significant
DERS - Clarity	10	10	0.00	0	Non-Significant
DERS - Total	75	73	-2.00	1.11	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 4. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

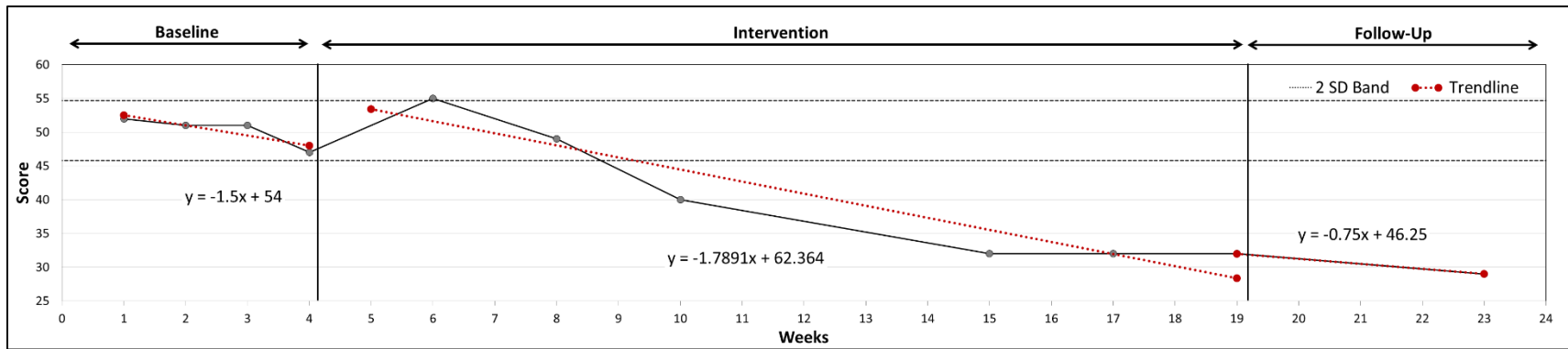


Figure 4. Repeated measures data for case 2 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 5. Internalized Shame Scale (ISS)

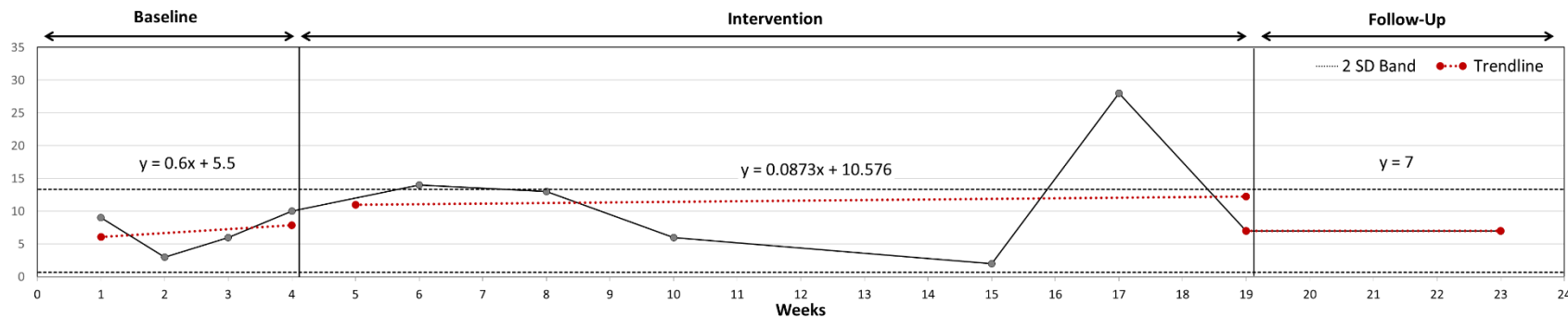


Figure 5. Repeated measures data for case 2 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 6. Other As Shamer (OAS)

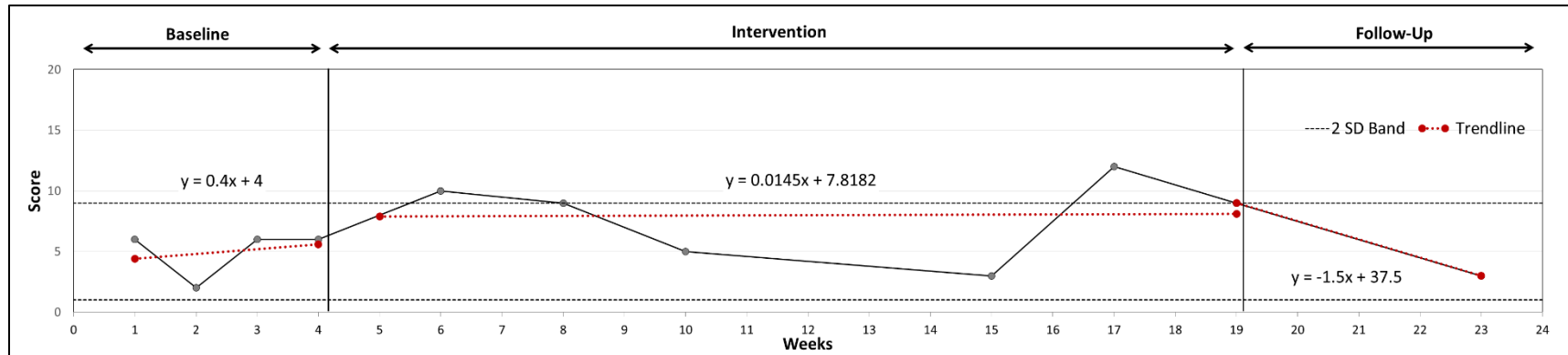


Figure 6. Repeated measures data for case 2 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 3.** Participant 3 was a 22-year-old paralegal who met diagnostic criteria for bulimia nervosa at the time of her screening. She reported fleeting thoughts of suicide from time to time and described herself as a perfectionist who struggled with impulsivity and chronic worry. Participant 3 was married with no children and identified her husband as an important support in her life. She reported that her mother suffered from depression when she was a child. She recalled feeling like she could not be a disturbance as a child and had to walk on eggshells to avoid upsetting her mother. Participant 3 often experienced significant sadness and hopelessness when faced with her critic, and she had great difficulty asserting herself or accessing anger. Her expression of emotions was often muted and subdued, and she was generally timid and soft-spoken when expressing herself during chair work. The therapists actively worked to facilitate her expression of sadness, but to also contact and evoke a more assertive anger response when faced with her critic. A similar process was observed during chair work with a significant other, particularly her mother, where sadness was readily accessible but assertive anger and expressing the right to a need was difficult. Although anger and assertion continued to be challenging for this participant, they became easier to access and evoke over the course of therapy.

With respect to repeated measures (Table 7), results show the most substantial change on the Bulimia scale (EDI-3). She exhibited a stable baseline, followed by a downward trend during the intervention phase where she achieved a clinically significant improvement (Figure 7). Furthermore, this improvement was maintained at follow-up. While the treatment was deemed debatably effective during the intervention phase, it was identified as very effective at follow-up. Baseline was stable for the OAS (Figure 8), but exhibited an upward trend for the ISS (Figure 9). Effect size was negligible for both the ISS and OAS during the intervention phase, but did exhibit a downward trend with a clinically significant improvement being achieved on the ISS at



follow-up. Given that this participant's internal shame was worsening during baseline, these results suggest an intervention effect. While effect size was high for external shame at follow-up, it was observed that this participant's shame returned to baseline level, and was thus coded as an absence of change in Table 2.

Results from pre-post measures (Table 8) show clinically significant changes on the Depression scale (DASS-21), shifting from Moderate severity at pre-treatment to Mild severity at post-treatment, and the Low Self-Esteem scale (EDI-3). Clinically significant changes were also observed on the DERS total scale, as well as the subscales of Lack of Emotional Awareness (Awareness) and Limited Access to Emotion Regulation Strategies (Strategies).

Table 7

*Repeated Measures Data for Case 3*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing
Level	Not Applicable	Increased	Unchanged	Not Applicable	Increased	Decreased	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	16.67%	100%	Not Applicable	50%	0%	Not Applicable	0%	0%
Immediacy	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Absent	Not Applicable
Variability	Stable	Stable	Not Applicable	Variable	Stable	Not Applicable	Stable	Stable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Significant	Not Applicable	Significant	Significant
PEM	Not Applicable	0.0	1.0	Not Applicable	0.16	1.0	Not Applicable	0.66	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 8

*Pre-Post Measures Data for Case 3*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 (Depression Scale)	20	12	-8.00	19.05	Significant
EDI-3 (Low Self-Esteem)	53	42	-11.00	16.18	Significant
EDI-3 (Interpersonal Alienation)	44	40	-4.00	4.82	Non-Significant
Nonacceptance (DERS)	19	19	0.00	0	Non-Significant
Goals (DERS)	17	18	1.00	4	Non-Significant
Impulse (DERS)	16	15	-1.00	3.33	Non-Significant
Awareness (DERS)	21	14	-7.00	23.33	Significant
Strategies (DERS)	24	23	-1.00	2.50	Significant
Clarity (DERS)	13	11	-2.00	8	Non-Significant
DERS Total	110	100	-10.00	5.56	Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 7. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

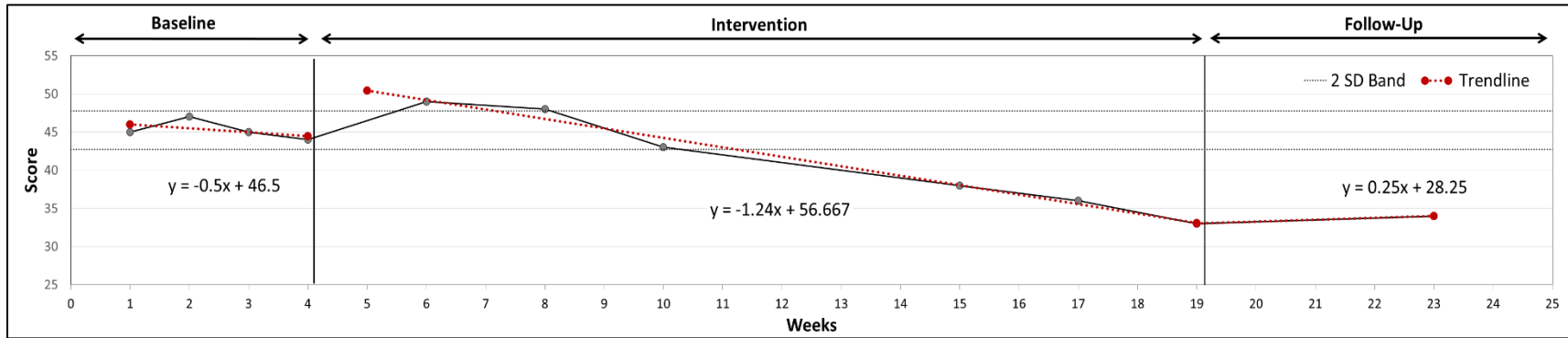


Figure 7. Repeated measures data for case 3 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 8. Internalized Shame Scale (ISS)

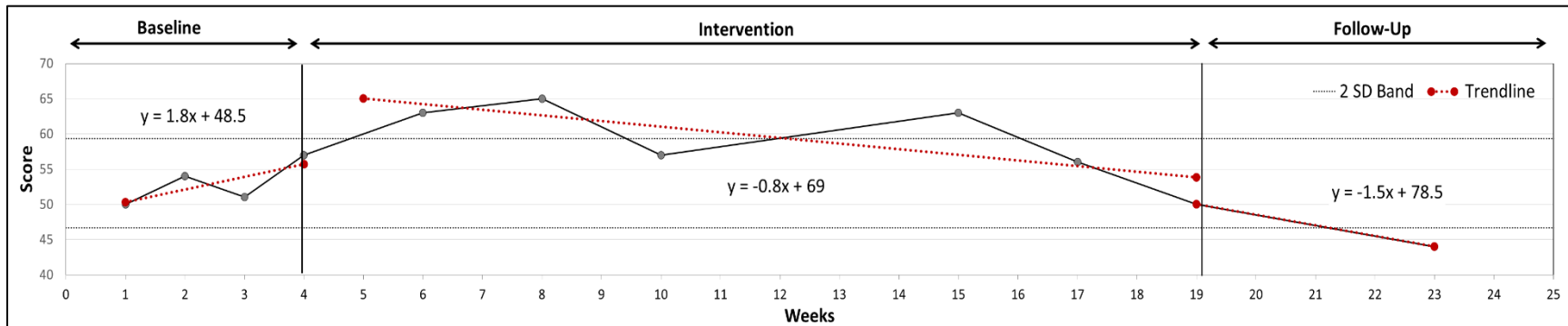


Figure 8. Repeated measures data for case 3 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 9. Other As Shamer (OAS)

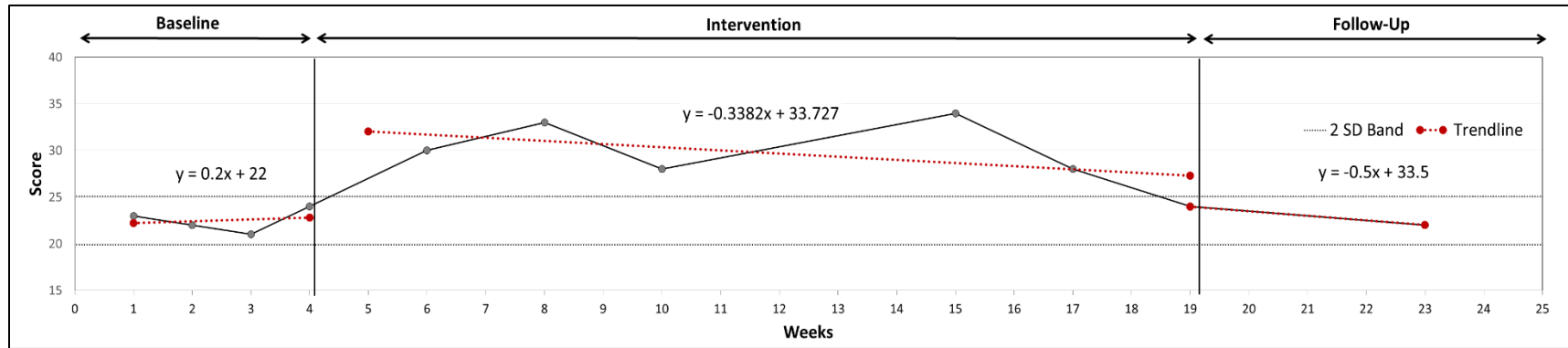


Figure 9. Repeated measures data for case 3 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 4.** Participant 4 was a 39-year-old geriatric nurse who met the diagnostic criteria for bulimia nervosa. This participant was one of two individuals who had a historical diagnosis of anorexia nervosa for which she had been previously hospitalized. She was single with no children, and self-identified as a chronic worrier with elements of perfectionism. Participant 4 had a limited emotional awareness, struggled to identify and label her feelings, and had particular difficulty experiencing her emotions. This was true for most negative emotions but was particularly true for the emotion of anger, which she had great difficulty recognizing and tolerating. She reported frequently using distractions to avoid her emotions. This participant had an extremely harsh and punitive self-critic which often left this individual stuck in feelings of shame, sadness and hopelessness. Her criticisms also consistently brought up fears about letting her loved ones down and being unloved herself. She appeared to have a limited sense of self beyond the critic. Further, the pervasiveness of her self-criticism sometimes meant that chair work progressed slowly as she had great difficulty accessing underlying adaptive emotions. Assertive anger or any form of resistance to the critic was often non-existent. Hopelessness was a particularly pervasive emotion for this individual, which she tended to collapse into. Unfinished business chair work was rarely used with this participant as she was often unable to connect with the concept and struggled to identify unresolved issues with significant others in her past.

Results from repeated measures (Table 9) show that the baseline phase for the Bulimia scale (EDI-3) was stable, but that clinical significance was not achieved during the intervention phase. This combined with a slight decreasing trend during the baseline phase makes it difficult to draw conclusions about treatment effect. However, her scores are observed to be approaching clinical significance at the end of treatment. Further, she demonstrated a decreasing trend in symptomology throughout the intervention phase and a moderate effect size ( $PEM = 0.83$ ) can

be seen (Figure 10). This suggests that despite a downward trend during baseline and an absence of significant change during intervention, treatment may have had some impact on her bulimia symptomology. Upon the removal of treatment, symptomology on the Bulimia scale (EDI-3) returned to baseline levels at follow-up. Baseline for the ISS (Figure 11) and OAS (Figure 12) were both variable, exhibiting an upward trend and a downward trend respectively. Scores on the ISS and OAS are observed to trend upwards during the intervention phase but exhibit a downward trend at follow-up. Given that internal shame was initially increasing (i.e., worsening) during both baseline and intervention, the observed reduction in severity at follow-up is indicative of treatment effects. Further, treatment was deemed to be very effective for internal shame (PEM = 1.0) at follow-up, having achieved a clinically significant improvement. Treatment effects on external shame are negligible to non-existent.

Pre-post results (Table 10) show that clinically significant change was not achieved on any pre-post measures, but that improvements were observed on the Low Self-Esteem scale (EDI-3), as well as across all DERS scales with the exception of Nonacceptance of Emotional Responses (Nonacceptance).

Table 9

*Repeated Measures Data for Case 4*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Decreasing	Increasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
Level	Not Applicable	Increased	Decreased	Not Applicable	Decreased	Decreased	Not Applicable	Decreased	Unchanged
Overlap	Not Applicable	66%	100%	Not Applicable	50%	0%	Not Applicable	50%	100%
Immediacy	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Absent	Not Applicable
Variability	Variable	Stable	Not Applicable	Variable	Stable	Not Applicable	Stable	Stable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Significant	Not Applicable	Non-Significant	Non-Significant
PEM	Not Applicable	0.33	1.0	Not Applicable	1.0	1.0	Not Applicable	0.83	0.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.



Table 10

*Pre-Post Measures Data for Case 4*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	8	8	0.00	0	Non-Significant
EDI-3 - Low Self-Esteem	63	58	-5.00	7.35	Non-Significant
EDI-3 - Interpersonal Alienation	46	46	0.00	0	Non-Significant
DERS - Nonacceptance	18	21	3.00	10	Non-Significant
DERS - Goals	17	15	-2.00	8	Non-Significant
DERS - Impulse	26	20	-6.00	20	Non-Significant
DERS - Awareness	26	22	-4.00	13.33	Non-Significant
DERS - Strategies	27	26	-1.00	2.50	Non-Significant
DERS - Clarity	23	19	-4.00	16	Non-Significant
DERS - Total	137	123	-14.00	7.78	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 10. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

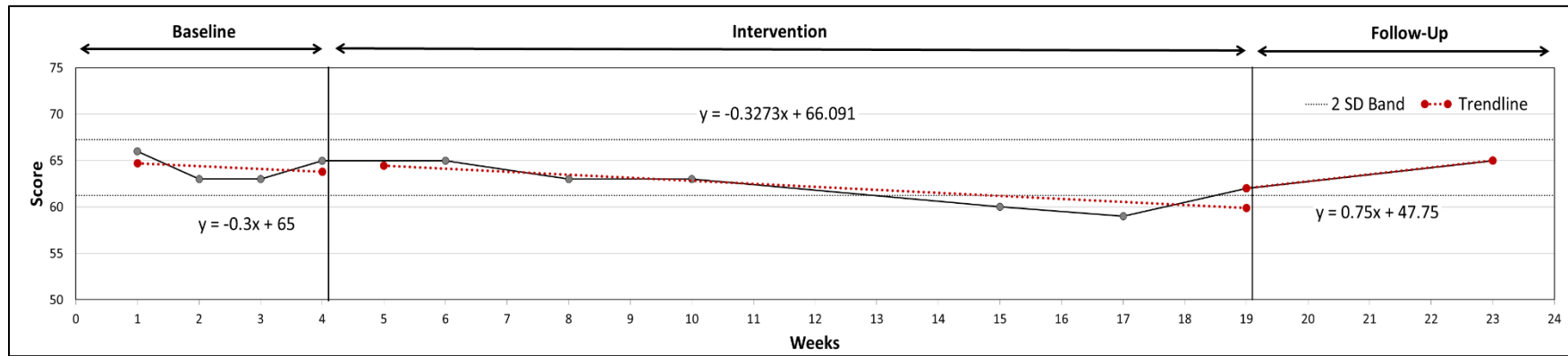


Figure 10. Repeated measures data for case 4 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 11. Internalized Shame Scale (ISS)

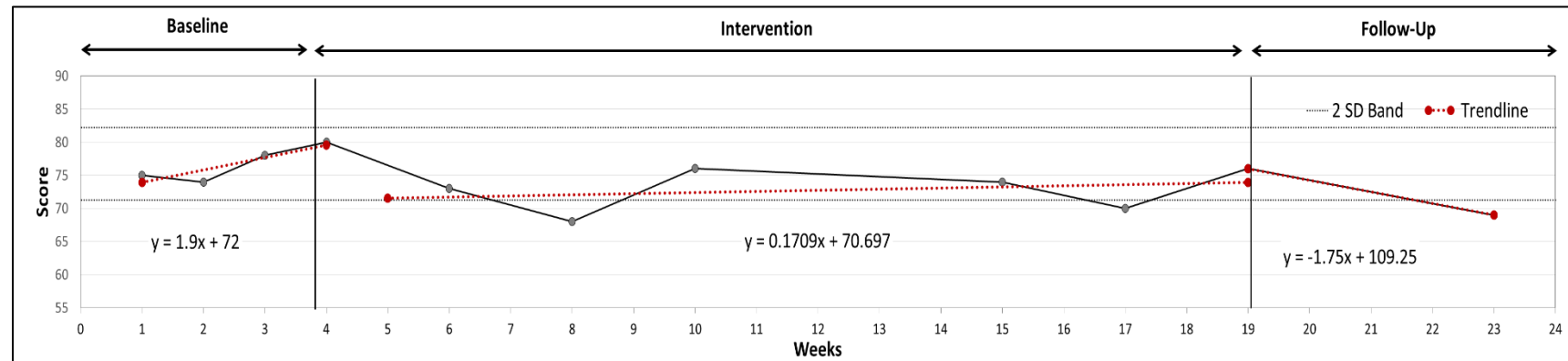


Figure 11. Repeated measures data for case 4 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 12. Other As Shamer (OAS)

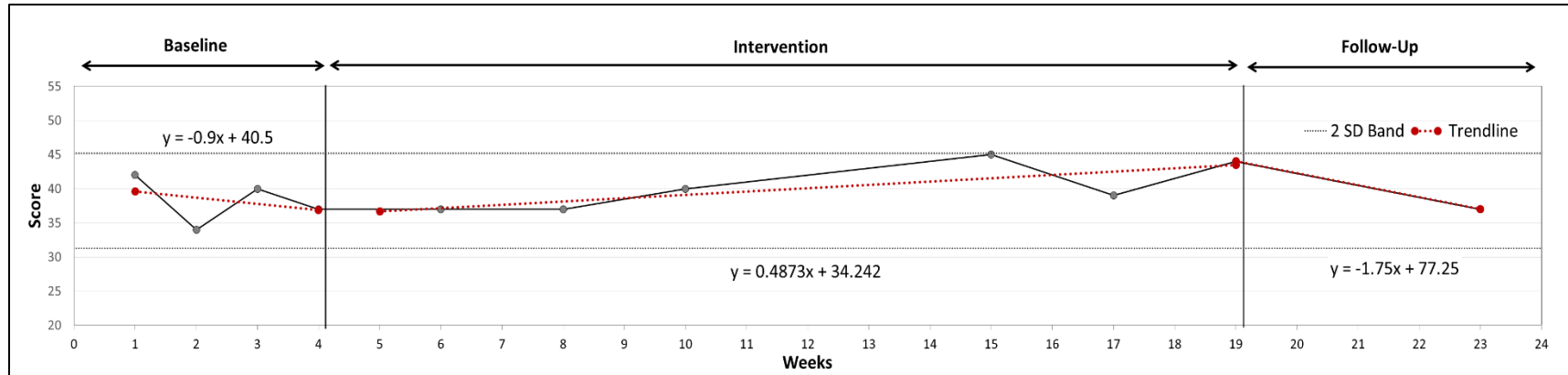


Figure 12. Repeated measures data for case 4 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 5.** Participant 5 was a 23-year-old medical student who met the diagnostic criteria for bulimia nervosa. This participant was one of two individuals who had a historical diagnosis of anorexia nervosa for which she had been previously hospitalized. She was single with no children, and identified as a chronic worrier and a perfectionist. Participant 5 had significant difficulty identifying and acknowledging her feelings, and required a lot of time to do so. She was able to identify an overarching feeling of anxiety, which she often described as static or a buzzing in the background, but had extreme difficulty accessing any other emotion. She periodically reported throughout the first few sessions that she had emotionally “checked out” while watching other participants chair work because it felt too overwhelming. She also reported a tendency to “check out” from her feelings for the remainder of the week following group, which sometimes made it challenging to share about her experiences and struggles between sessions. This chronic avoidance and suppression of emotions meant that chair work moved slowly. It took this participant time to learn how to identify her feelings and to be able to tolerate them for short periods of time. Further, when she was able to contact her emotions, she would often disconnect quickly and without effort such that there were numerous emotional blocks that required processing. A primary focus for the therapists was to help this participant remain in contact with her emotions long enough to express a need or access an underlying adaptive emotion. This participant described her relationship with her mother and sister as strained. She described feeling like she was the scapegoat of the family wherein her eating disorder was often blamed for broader family struggles. She also described feeling invalidated and ignored growing up, and noted that she was often told she was “too sensitive” by her family. Chair work involving significant others from her family was often challenging as she expressed a sense of helplessness and defeat. Despite these challenges, it was observed by the therapists that over the course of the

group this participant was more readily able to label her feelings, which was viewed as an important shift.

Results from repeated measures (Table 11) show a stable baseline on the Bulimia scale (EDI-3), followed by a clinically significant improvement during the intervention phase (Figure 13), and an effect size annotated as being debatably effective. Although this participant's bulimia symptomology exhibited a slight downward trend during baseline, the fact that her scores achieved clinical significance during the intervention phase is evidence of treatment effect. Upon the removal of treatment, symptomology was observed to trend upwards once more having only just fallen within the non-significant range. Despite this fact, the impact of treatment on bulimia symptomology at follow-up was deemed very effective. With respect to the OAS (Figure 15), this participant exhibited a stable baseline phase and a clinically significant deterioration during both the intervention and follow-up phases. In terms of the ISS, baseline was stable, but an elevation was observed during the intervention phase (Figure 14), followed by a downward trend during follow-up. Treatment was deemed not effective for internal and external shame.

Results from pre-post measures show a clinically significant improvement on the Depression scale (DASS-21), as well as non-significant improvements on the Lack of Emotional Awareness (Awareness) and Lack of Emotional Clarity (Clarity) DERS subscales. Small but clinically significant deteriorations were observed on the Interpersonal Alienation scale (EDI-3), the DERS total scale and the Impulse Control Difficulties subscale (Impulse).

Table 11

*Repeated Measures Data for Case 5*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Increasing
Level	Not Applicable	Increased	Increased	Not Applicable	Increased	Unchanged	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	16%	0%	Not Applicable	33%	100%	Not Applicable	50%	100%
Immediacy	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Absent	Not Applicable
Variability	Stable	Stable	Not Applicable	Stable	Variable	Not Applicable	Stable	Stable	Not Applicable
Consistency	Not Applicable	Discrepant	Discrepant	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Significant	Significant	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Significant	Non-Significant
PEM	Not Applicable	0.0	0.0	Not Applicable	0.33	0.0	Not Applicable	0.66	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; ; PEM = Percentage of data points exceeding the median.

Table 12

*Pre-Post Measures Data for Case 5*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	6	2	-4.00	9.52	Significant
EDI-3 - Low Self-Esteem	42	43	1.00	1.47	Non-Significant
EDI-3 - Interpersonal Alienation	51	53	2.00	2.41	Significant
DERS - Nonacceptance	14	14	0.00	0	Non-Significant
DERS - Goals	13	18	5.00	20	Non-Significant
DERS - Impulse	14	18	4.00	13.33	Significant
DERS - Awareness	24	23	-1.00	3.33	Non-Significant
DERS - Strategies	12	13	1.00	2.50	Non-Significant
DERS - Clarity	20	17	-3.00	12	Non-Significant
DERS - Total	97	103	6.00	3.33	Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 13. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

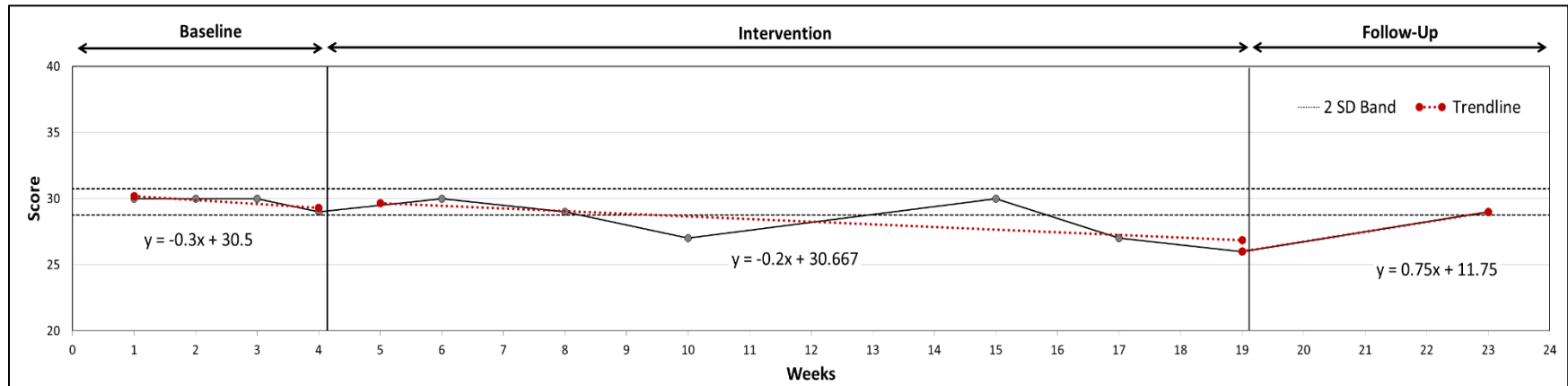


Figure 13. Repeated measures data for case 5 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 14. Internalized Shame Scale (ISS)

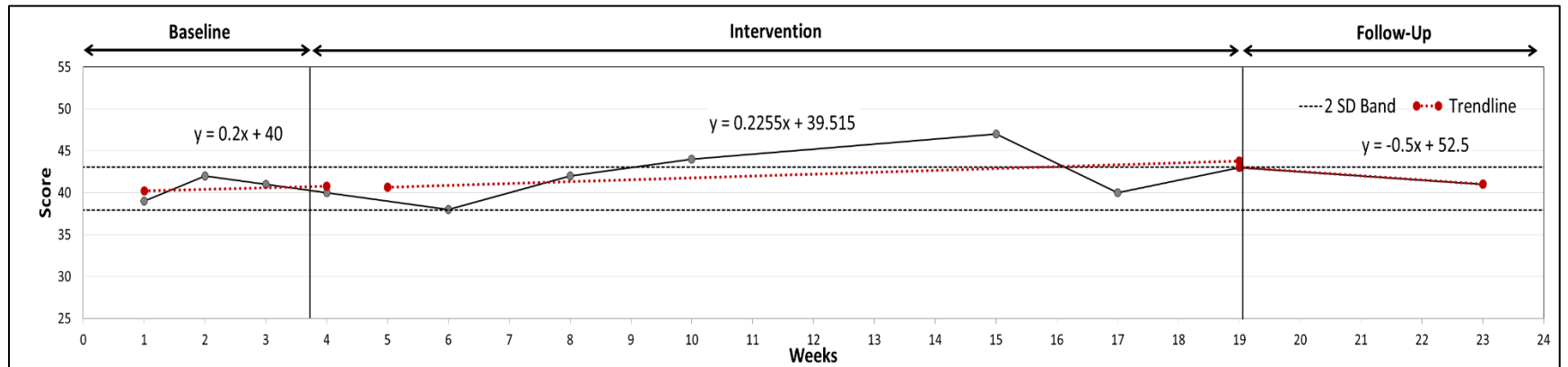


Figure 14. Repeated measures data for case 5 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.



Figure 15. Other As Shamer (OAS)

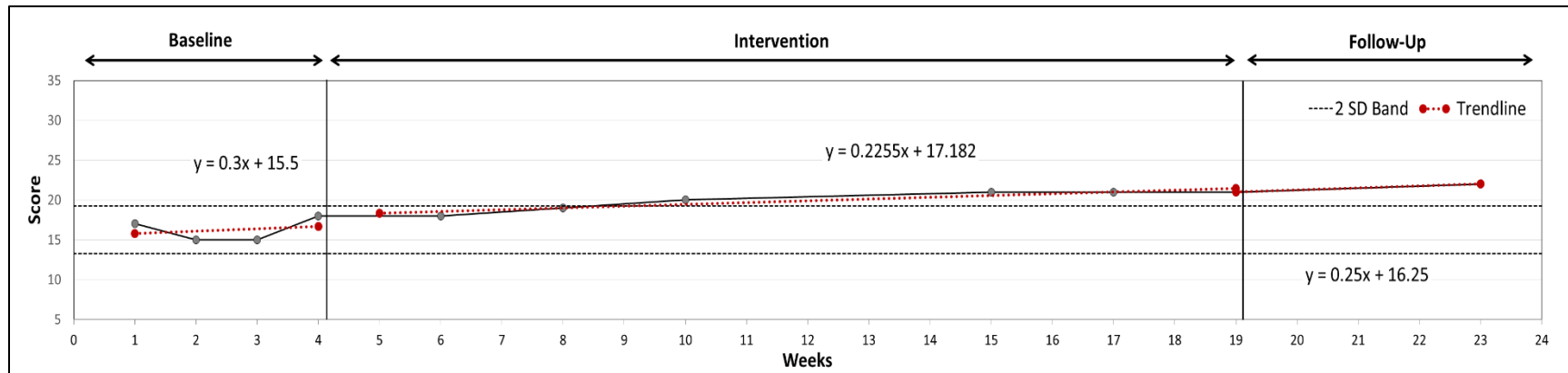


Figure 15. Repeated measures data for case 5 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 6.** Participant 6 was a 28-year-old doctoral student in environmental earth sciences who met the diagnostic criteria for bulimia nervosa at the time of her screening. This participant was in a long-term relationship and had no children. She held numerous jobs including a research assistantship, a teaching assistantship, and a part-time job as a waitress. Due to uncontrollable circumstances, this participant had to terminate treatment after 14 sessions. She described herself as a worrier and a perfectionist with a moderate use of substances. This participant described herself as often feeling overwhelmed and exhausted by her job and her school work. She would often come to group in this state, and was at times visibly fatigued, which sometimes prevented her from doing chair work. Her critic was very harsh, and a tug-of-war was often observed between the critic and the self where the critic would occasionally soften but subsequently return to its original state. There were times where this participant was readily able to express her sadness towards the critic, and could access feelings of anger and resentment towards it. However, other times this participant collapsed into a sense of hopelessness and defeat where she expressed feeling like things would never change. This participant reported having a difficult and at times strained relationship with her mother, and shared with the group during the third session that her eating disorder voice “was her mother”. Chair work for unfinished business with her mother was used on at least one occasion.

Baseline data were stable for the Bulimia scale (EDI-3) (Figure 16), whereas there was variability in the baseline for the ISS and OAS (Figure 17 and Figure 18) highlighting a trend of deterioration. Results from repeated measures (Table 13) show decreasing trends across all repeated measures, with the exception of the ISS, during the intervention phase. Furthermore, while clinical significance was not obtained during the intervention phase for any repeated measure, it was obtained at follow-up for all repeated measures with the impact of treatment

being identified as very effective (PEM = 1.0). Given that baseline was either stable or represented a deterioration, these improvements are highly suggestive of treatment effects.

Results from pre-post measures (Table 14) show improvements on the Depression scale (DASS-21), Interpersonal Alienation scale (EDI-3), the DERS total scale, and three subscales including Nonacceptance of Emotional Responses (Nonacceptance), Lack of Emotional Clarity (Clarity) and Impulse Control Difficulties (Impulse).

Table 13

*Repeated Measures Data for Case 6*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Decreasing	Decreasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing
Level	Not Applicable	Decreased	Decreased	Not Applicable	Decreased	Decreased	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	42%	0%	Not Applicable	42%	0%	Not Applicable	28%	0%
Immediacy	Not Applicable	Present	Not Applicable	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Variable	Variable	Not Applicable	Variable	Variable	Not Applicable	Stable	Variable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Significant	Not Applicable	Non-Significant	Significant	Not Applicable	Non-Significant	Significant
PEM	Not Applicable	0.71	1.0	Not Applicable	0.57	1.0	Not Applicable	0.57	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 14

*Pre-Post Measures Data for Case 6*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	24	22	-2.00	4.76	Non-Significant
EDI-3 - Low Self-Esteem	52	52	0.00	0.00	Non-Significant
EDI-3 - Interpersonal Alienation	62	59	-3.00	3.61	Non-Significant
DERS - Nonacceptance	30	28	-2.00	6.67	Non-Significant
DERS - Goals	22	23	1.00	4.00	Non-Significant
DERS - Impulse	21	19	-2.00	6.67	Non-Significant
DERS - Awareness	20	21	1.00	3.33	Non-Significant
DERS - Strategies	29	31	2.00	5.00	Non-Significant
DERS - Clarity	13	11	-2.00	8.00	Non-Significant
DERS - Total	135	133	-2.00	1.11	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 16. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

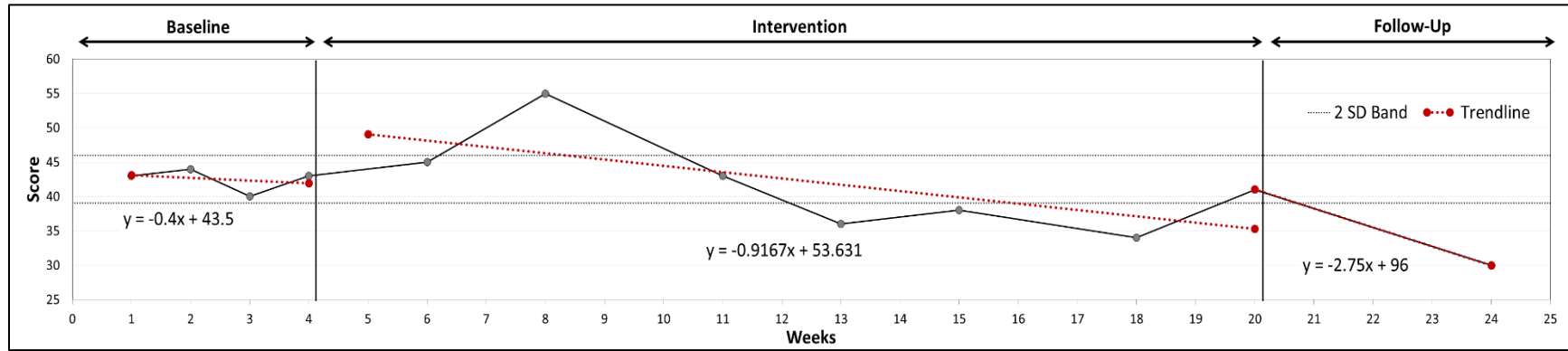


Figure 16. Repeated measures data for case 6 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 17. Internalized Shame Scale (ISS)

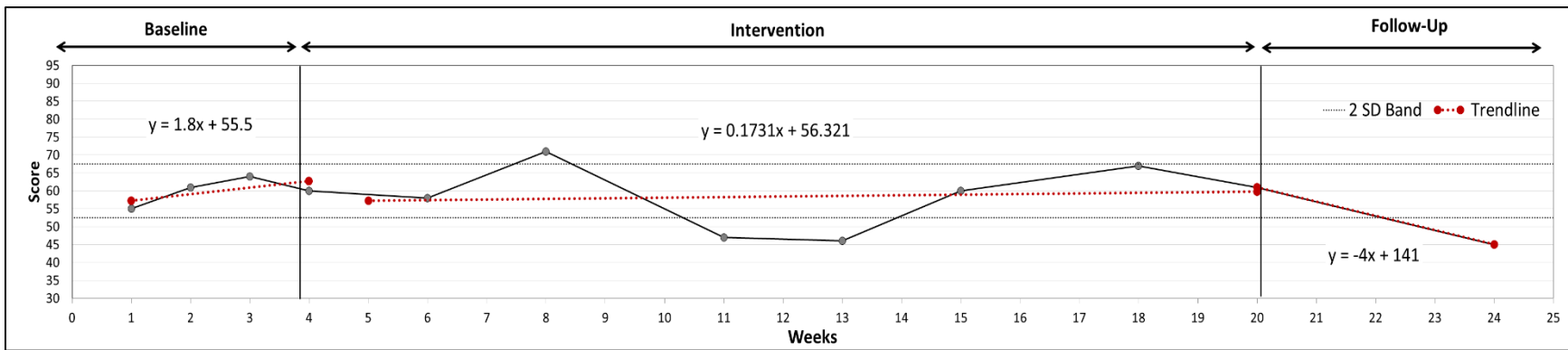


Figure 17. Repeated measures data for case 6 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 18. Other As Shamer (OAS)

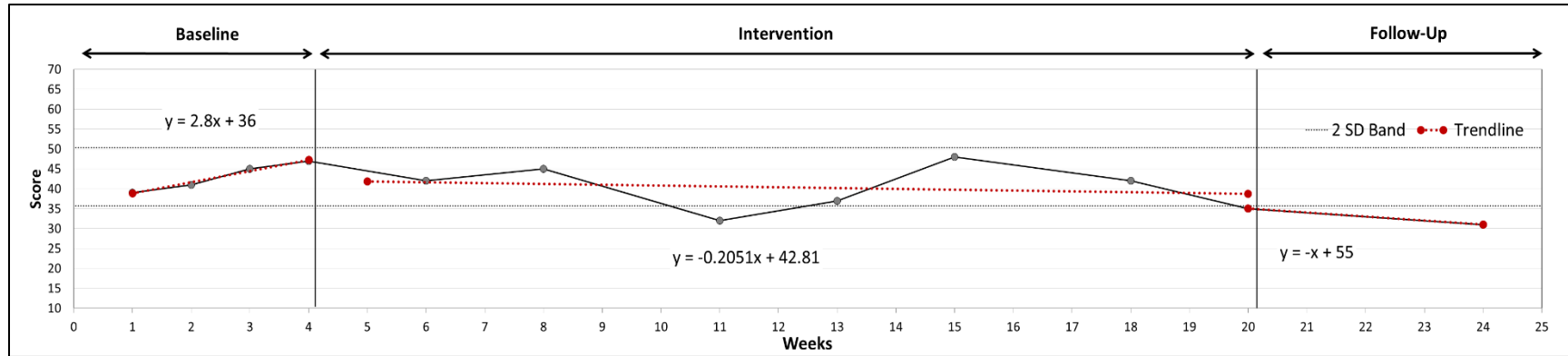


Figure 18. Repeated measures data for case 6 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 7.** Participant 7 was a 24-year-old undergraduate student in philosophy who met the diagnostic criteria for bulimia nervosa at the time of her screening. She described herself as a perfectionist who often struggled to make and keep friends. She also identified experiencing some worry and impulsivity. She reported that when it came to emotions she tended to avoid and suppress them, so she did not have to think about them. Participant 7 had a critic that adopted a less punitive and more supportive, helpful tone. Her critic encouraged her to work harder to achieve her goals, and as a result this participant was often in agreement with it. Because it initially masqueraded as helpful and supportive, it was initially challenging to activate the underlying critical messages and the participant's emotional response. However, over time the harsh criticisms were extracted, and the participant was able to experience and express her sadness and anger. Given that this participant had a tendency to block her feelings, she struggled at times to access and sit with her sadness. Similarly, assertive anger and the expression of needs did not come easily to her. This participant described coming from a family with two parents and no siblings. She stated that her parents were often worried about finances, worked late when she was growing up, and that they would often argue with one another. She identified a significant fear of disappointing her parents. Through chair work with her critic and her parents she was able to articulate feeling very alone as a child, and identified a persistent fear of being alone and unloved in adulthood. Over time, this participant was gradually able to express her sadness and assert herself and her needs. During the course of treatment, this participant revealed her eating disorder to her parents and also expressed some of the suppressed anger and frustration she had felt towards them as a child. The expression of such feelings was something she generally found challenging, particularly when directed towards her parents, so this was viewed as a positive shift.



Results for repeated measures (Table 15) show an upward trend on the Bulimia scale (EDI-3) during both baseline and the intervention phase, followed by a decreasing trend at follow-up (Figure 19). This improvement was not clinically significant. Given the deterioration exhibited during the baseline and intervention phase, it is difficult to conclude whether or not treatment had an effect. However, results show that the mean score during the intervention phase was lower than that of the baseline phase, and that there was an immediate change following the application of treatment (Appendix AA). Additionally, while the trend was one of deterioration during the intervention phase, it can be seen that the magnitude of the slope was significantly smaller than that of the baseline phase. Therefore, the treatment appears to have had some effect in at least slowing her rate of deterioration, and the observed improvement at follow-up may be further evidence of this. Furthermore, treatment was identified as being moderately effective (PEM = 0.75) during the intervention phase and very effective (PEM = 1.0) during follow-up for bulimia symptomology. Baseline was variable for the ISS and OAS, trending upwards for internal shame (Figure 20) and downwards for external shame (Figure 21). Effect sizes were moderate (PEM = 0.75) to high (PEM = 1.0) for the ISS during intervention and follow-up phases, respectively. Additionally, a clinically significant improvement was observed on the ISS at follow-up. Given that the severity of internal shame was increasing at baseline, this change strongly suggests a treatment effect. Results showed a non-significant change on the OAS, although a downward trend was observed at follow-up. However, a downward trend was also present during the baseline phase, and as such it is unclear as to whether treatment had an effect on external shame.

Results for pre-post measures (Table 16) were mixed. A clinically significant change was observed on the Depression scale (DASS-21), shifting from Extremely Severe at pre-treatment to

Severe at post-treatment. Significant improvements were also observed on the Nonacceptance of Emotional Responses (Nonacceptance) and Difficulties Engaging in Goal-Directed Behaviour (Goals) subscales. However, significant deteriorations were also observed on the Interpersonal Alienation scale (EDI-3) and the DERS subscales of Limited Access to Emotion Regulation Strategies (Strategies) and Lack of Emotional Clarity (Clarity). This suggests that while some aspects of emotion regulation were improved, other aspects became more challenging following treatment.

Table 15

*Repeated Measures Data for Case 7*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Increasing	Increasing	Decreasing
Level	Not Applicable	Increased	Decreased	Not Applicable	Decreased	Decreased	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	62%	0%	Not Applicable	62%	0%	Not Applicable	50%	100%
Immediacy	Not Applicable	Present	Present	Not Applicable	Absent	Absent	Not Applicable	Present	Present
Variability	Variable	Stable	Not Applicable	Variable	Variable	Not Applicable	Variable	Variable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Significant	Not Applicable	Non-Significant	Non-Significant
PEM	Not Applicable	0.12	1.0	Not Applicable	0.75	1.0	Not Applicable	0.75	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 16

*Pre-Post Measures Data for Case 7*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	34	24	-10.00	23.81	Significant
EDI-3 - Low Self-Esteem	53	61	8.00	11.76	Non-Significant
EDI-3 - Interpersonal Alienation	51	57	6.00	7.23	Significant
DERS - Nonacceptance	19	16	-3.00	10.00	Significant
DERS - Goals	19	14	-5.00	20.00	Significant
DERS - Impulse	15	11	-4.00	13.33	Non-Significant
DERS - Awareness	20	25	5.00	16.67	Non-Significant
DERS - Strategies	21	25	4.00	10.00	Significant
DERS - Clarity	13	19	6.00	24.00	Significant
DERS - Total	107	110	3.00	1.67	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 19. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

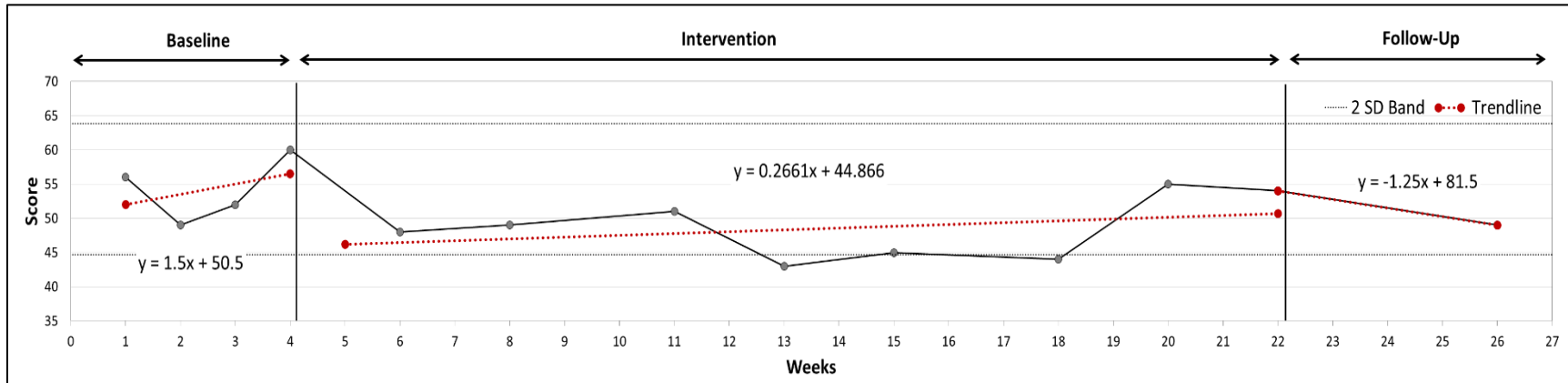


Figure 19. Repeated measures data for case 7 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 20. Internalized Shame Scale (ISS)

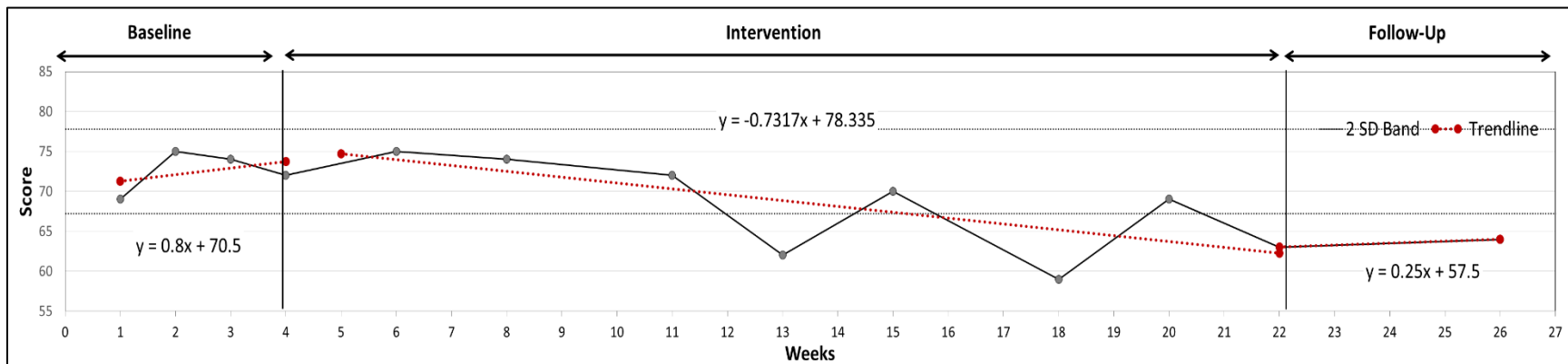


Figure 20. Repeated measures data for case 7 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 21. Other As Shamer (OAS)

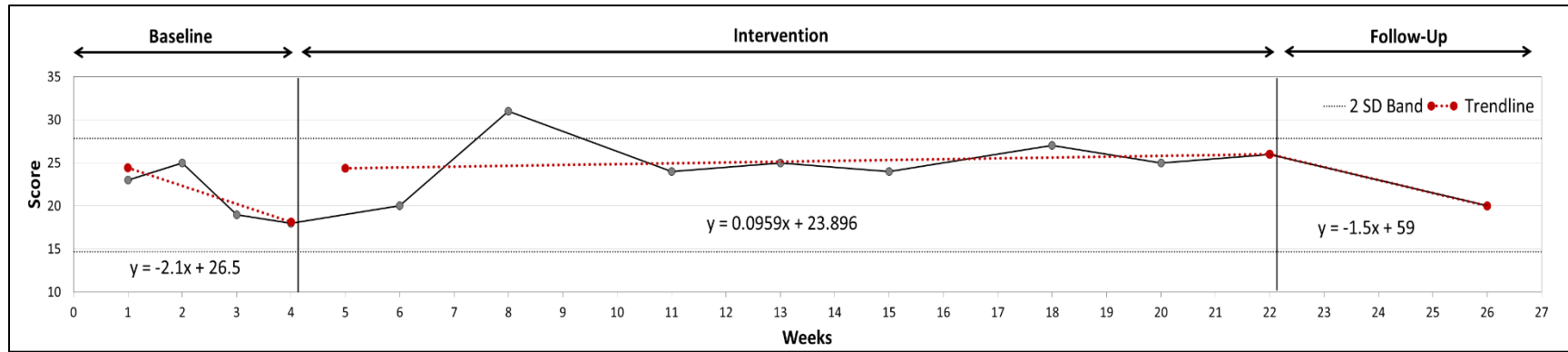


Figure 21. Repeated measures data for case 7 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 8.** Participant 8 was a 26-year-old realtor who exhibited sub-clinical symptoms of bulimia nervosa with predominant symptoms of binge-eating at the time of her screening. She was a single mother of two children, a three-year-old son and a four-year-old daughter. She had shared custody of the children with their biological father. As such, her children lived with her approximately 50% of the time. She described herself as a worrier with some issues around impulsivity. She noted that she often suppressed and avoided her emotions out of fear that they would otherwise completely take over. Participant 8 could often readily access and experience feelings of sadness and hopelessness, but struggled to access anger or assert her needs. This was true of chair work with her critic and with her mother. This participant described her relationship with her mother as being generally close, but noted it was also strained at times. She identified an inability to express her opinions or feelings to her mother out of fear that she might disappoint her, and identified receiving criticism from her mother regarding the participant's struggles. Over time this participant was better able to access anger, assert her needs and stand up for herself.

Repeated measure results (Table 17) show a variable baseline phase across the Bulimia scale (EDI-3) (Figure 22), and stable baseline phases across the ISS (Figure 23) and OAS (Figure 24), and a gradual deterioration across treatment on all repeated measures during the intervention phase. However, a downward trend can also be observed towards the end of the intervention phase across all measures, suggesting a tendency towards improvement in the latter phase of treatment. As such, effect sizes during the intervention phase were small to non-existent. However, at follow-up clinically significant improvements and large effect sizes can be observed across all three measures. Although the baseline was coded as variable for the Bulimia scale (EDI-3), there was only a minimally detectable trend. Given the near absence of trend for the

Bulimia scale (EDI-3), the stability at baseline for the ISS and OAS, and the downward trend towards the latter half of treatment, this suggests the presence of treatment effects.

Results from pre-post measures (Table 18) demonstrate improvements across all measures post-treatment, with clinical significance being achieved on the Depression scale (DASS-21) shifting from Severe at pre-treatment to Normal at post-treatment, the Low Self-Esteem scale (EDI-3) and numerous DERS scales including the DERS total scale, Difficulties Engaging in Goal-Directed Behaviour (Goals), Impulse Control Difficulties (Impulse), Limited Access to Emotion Regulation Strategies (Strategies) and Lack of Emotional Clarity (Clarity).



Table 17

*Repeated Measures Data for Case 8*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Decreasing	Decreasing
Level	Not Applicable	Increased	Decreased	Not Applicable	Increased	Decreased	Not Applicable	Increased	Decreased
Overlap	Not Applicable	12%	0%	Not Applicable	12%	0%	Not Applicable	75%	0%
Immediacy	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Stable	Variable	Not Applicable	Stable	Variable	Not Applicable	Variable	Variable	Not Applicable
Consistency	Not Applicable	Consistent	Consistent	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Significant	Not Applicable	Significant	Significant	Not Applicable	Non-Significant	Significant
PEM	Not Applicable	0.0	1.0	Not Applicable	0.25	1.0	Not Applicable	0.25	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 18

*Pre-Post Measures Data for Case 8*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	26	8	-18.00	42.86	Significant
EDI-3 - Low Self-Esteem	48	35	-13.00	19.12	Significant
EDI-3 - Interpersonal Alienation	51	44	-7.00	8.43	Non-Significant
DERS - Nonacceptance	30	21	-9.00	30.00	Non-Significant
DERS - Goals	25	15	-10.00	40.00	Significant
DERS - Impulse	29	13	-16.00	53.33	Significant
DERS - Awareness	18	12	-6.00	20.00	Non-Significant
DERS - Strategies	38	15	-23.00	57.50	Significant
DERS - Clarity	21	11	-10.00	40.00	Significant
DERS - Total	161	87	-74.00	41.11	Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 22. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

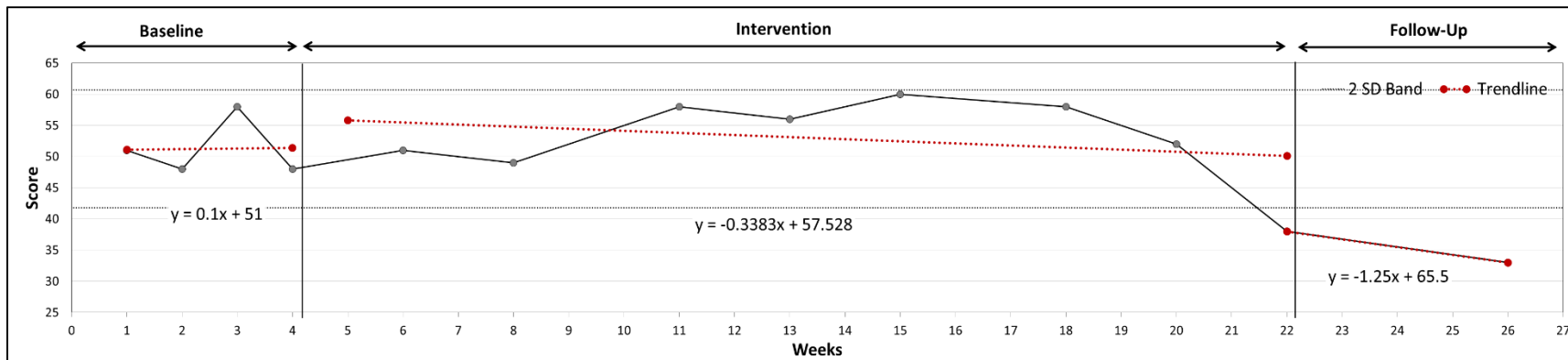


Figure 22. Repeated measures data for case 8 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 23. Internalized Shame Scale (ISS)

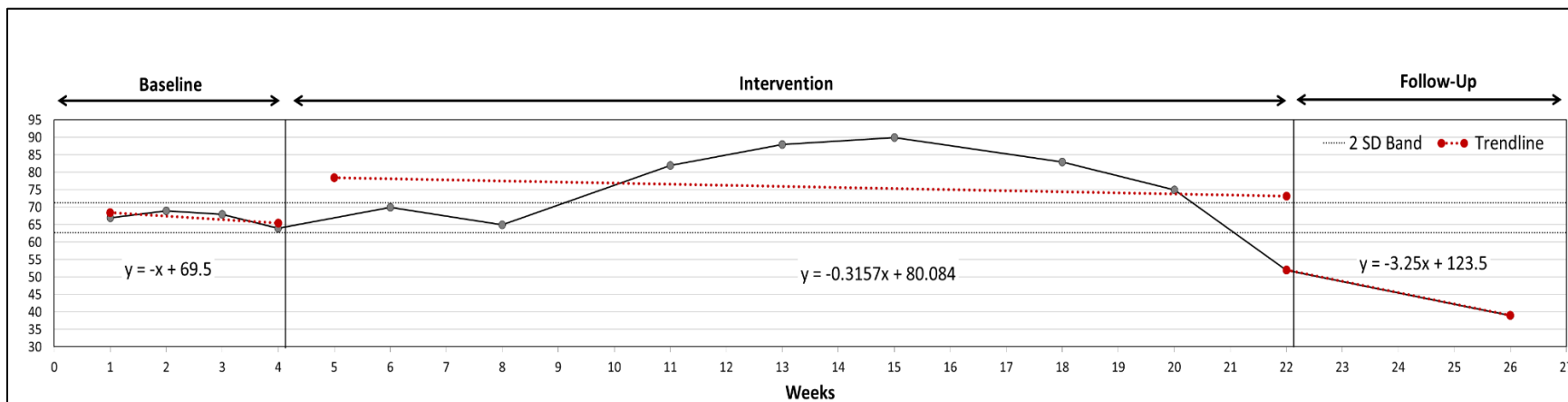


Figure 23. Repeated measures data for case 8 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 24. Other As Shamer (OAS)

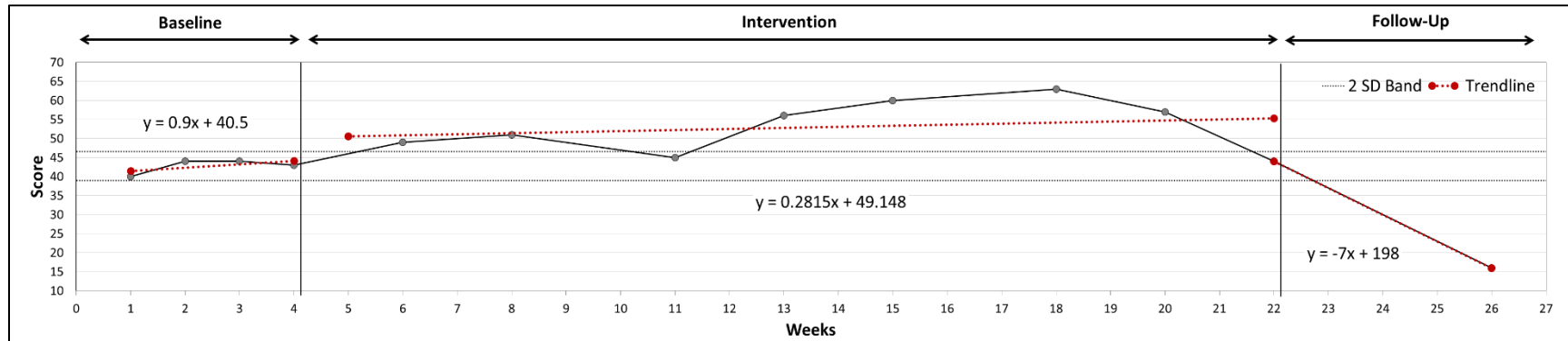


Figure 24. Repeated measures data for case 8 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 9.** Participant 9 was a 23-year-old lab assistant who met the diagnostic criteria of bulimia nervosa at the time of her screening. Due to uncontrollable circumstances, this participant was forced to terminate treatment at session 13. She had recently graduated from a Medical Laboratory Assistant training program and secured her first job in the field one month prior to the start of group. She lived with her common-law partner of three years and had no children. Participant 9 reported experiencing passive suicidal ideation characterized by numbness and a desire not to live anymore. She described herself as a perfectionist, a worrier, and reported that she often depended on others a lot. This participant tended to lapse into deep sadness when faced with her critic, and initially had difficulty accessing feelings of anger or assertiveness. She also identified significant fear at changing her eating disorder. Over time she was more readily able to access feelings of anger, express what her eating disorder cost her, and assert her needs. However, her critic remained relatively rigid throughout treatment. Unfinished business with this participant's sister also came up. During chair work with her sister she was able to express feelings of rejection and sadness, while also accessing assertive anger for what she needed and deserved (i.e., validation and support). Once group ended, this participant expressed a hope for the future that she could one day live without her eating disorder, while also expressing gratitude for her critic's efforts to keep her safe.

Results from repeated measures (Table 19) show a downward trend at baseline, and a clinically significant improvement on the Bulimia scale (EDI-3) with a large effect size ( $PEM = 1.0$ ) during both intervention and follow-up phases (Figure 25). The downward trend during baseline makes it somewhat difficult to draw conclusions about treatment effects on bulimia symptomology for this participant. However, in addition to achieving a clinically significant change, the mean score during the intervention phase was lower than that of the baseline phase,

suggesting possible treatment effects. Baseline was also variable for the ISS and OAS (Figure 26 and Figure 27), exhibiting a downward trend on both measures. Results were non-significant for internal and external shame, although it was observed that external shame also exhibited a downward trend during the intervention phase.

Results from the pre-post measures (Table 20) show improvements across all measures post-treatment, with clinical significance being achieved on three DERS subscales including Lack of Emotional Awareness (Awareness), Limited Access to Emotion Regulation Strategies (Strategies) and Lack of Emotional Clarity (Clarity).

Table 19

*Repeated Measures Data for Case 9*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Decreasing	Decreasing	Increasing	Decreasing	Decreasing	Absent	Decreasing	Decreasing	Absent
Level	Not Applicable	Increased	Unchanged	Not Applicable	Increased	Decreased	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	16%	0%	Not Applicable	50%	0%	Not Applicable	33%	0%
Immediacy	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Variable	Stable	Not Applicable	Variable	Variable	Not Applicable	Variable	Stable	Not Applicable
Consistency	Not Applicable	Consistent	Discrepant	Not Applicable	Consistent	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Significant	Significant
PEM	Not Applicable	0.16	1.0	Not Applicable	0.66	1.0	Not Applicable	1.0	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 20

*Pre-Post Measures Data for Case 9*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	14	12	-2.00	4.76	Non-Significant
EDI-3 - Low Self-Esteem	48	47	-1.00	1.47	Non-Significant
EDI-3 - Interpersonal Alienation	16	40	-6.00	7.23	Non-Significant
DERS - Nonacceptance	30	22	-8.00		Non-Significant
DERS - Goals	24	22	-2.00		Non-Significant
DERS - Impulse	25	18	-7.00		Non-Significant
DERS - Awareness	21	18	-3.00		Significant
DERS - Strategies	28	21	-7.00		Significant
DERS - Clarity	23	14	-9.00		Significant
DERS - Total	151	115	-36.00		Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.



Figure 25. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

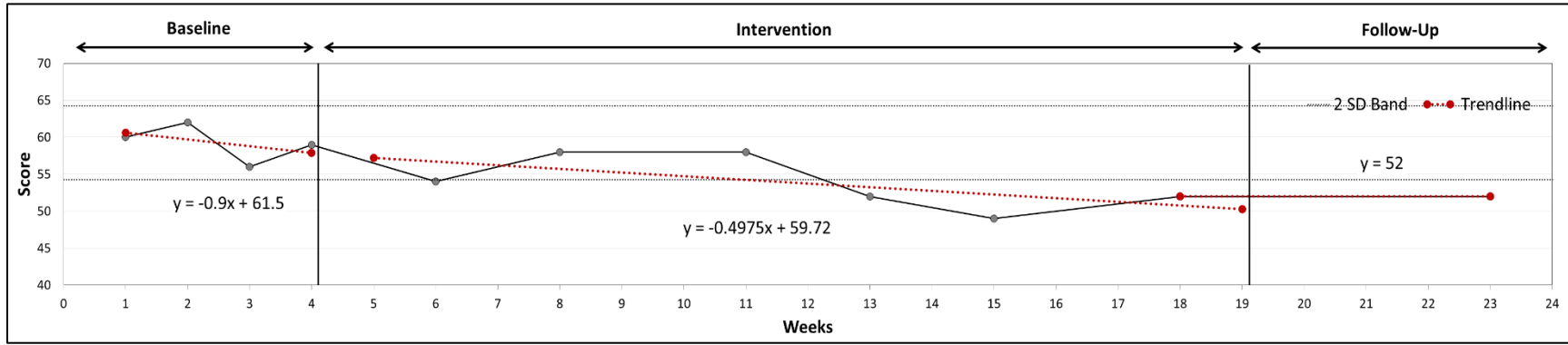


Figure 25. Repeated measures data for case 9 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 26. Internalized Shame Scale (ISS)

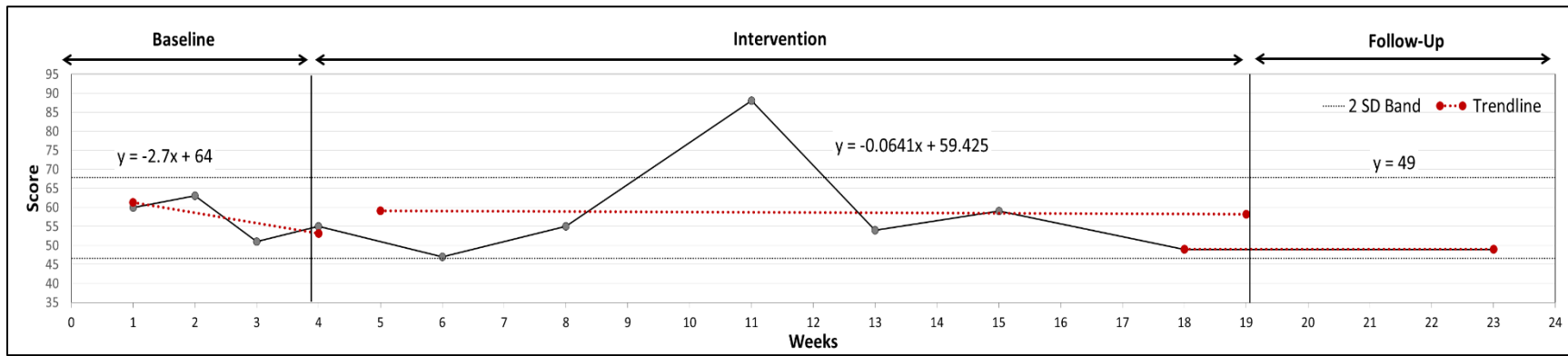


Figure 26. Repeated measures data for case 9 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 27. Other As Shamer (OAS)

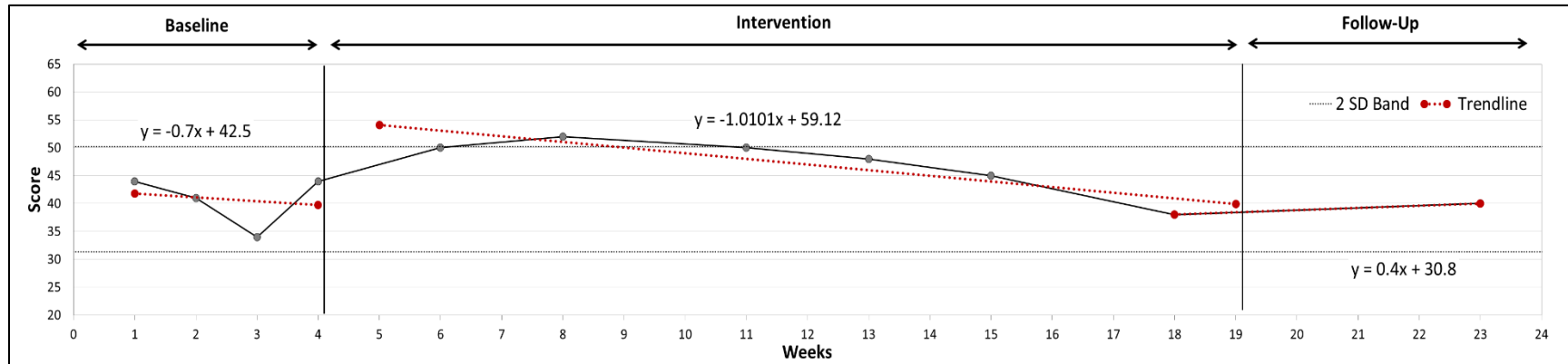


Figure 27. Repeated measures data for case 9 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

**Analysis for case 10.** Participant 10 was a 42-year-old woman employed as the director of human resources at a financial institution. She exhibited subclinical symptoms of bulimia with predominant symptoms of binge-eating at the time of her screening. She also had Type I diabetes and reported that as a part of her eating disorder she occasionally restricted her insulin intake to prevent weight gain. Participant 10 was divorced and had three daughters aged six, eight, and eleven. She lived with her children and her common-law partner of five years. This participant reported that she used to be highly athletic throughout her adolescence and mid-20's. She indicated that she played numerous sports and used to run competitively until the age of 25, at which point she injured herself and was forced to stop. She reported experiencing passive thoughts of suicide which tended to occur when feeling stressed and overwhelmed. She identified as being generally distrustful of others, as struggling with chronic worry, and as being a perfectionist. Participant 10 had a very harsh and punitive critic. She was readily able to access defensive and assertive anger in response to her critic, but struggled to identify and connect with more vulnerable emotions. She identified early on that her anger was covering up her sadness, but that she was unable to go there. She also stated that she was somewhat hesitant to express her anger out of fear that it would be unmanageable and overwhelming. This participant had significant blaming anger towards her illness (i.e., diabetes) and believed this was the root cause of her eating disorder. She was unable to connect with the idea of unfinished business with a significant other, so her chair work largely focused on her critic and her diabetes. Over time this participant was gradually able to connect with, identify and express more vulnerable emotions, including sadness, embarrassment and fear. At times she would briefly experience these emotions followed by an immediate disconnect. However, as group progressed she was better able to sit with and tolerate them.

Results for repeated measures (Table 21) show variable baselines across all measures. A downward trend during baseline was observed for the Bulimia scale (EDI-3), followed by a continued downward trend and a clinically significant improvement in both the intervention and follow-up phases (Figure 28). While the impact of treatment was deemed debatably effective during the intervention phase (PEM = 0.50), it was identified as very effective at follow-up (PEM = 1.0). An immediate response upon the application of treatment was observed wherein the participant exhibited an initial escalation in bulimia symptomology followed by improvement, which indicates the presence of treatment effects despite the variable baseline (Appendix DD). Variable baselines were also observed for the ISS and OAS, with the ISS demonstrating a downward trend (Figure 29) and the OAS exhibiting an upward trend (Figure 30). Non-significant changes were observed for the ISS and OAS during the intervention phase, although a downward trend and a large effect size can be seen on the OAS at follow-up.

Results for pre-post measures (Table 22) show clinically significant improvements on the Low Self-Esteem scale (EDI-3) and two DERS subscales including Lack of Emotional Awareness (Awareness) and Lack of Emotional Clarity (Clarity).

Table 21

*Repeated Measures Data for Case 10*

Levels of Analysis	OAS			ISS			EDI-3 – Bulimia Scale		
	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up	Baseline	Intervention	Follow-Up
Trend	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	Absent	Decreasing	Decreasing	Absent
Level	Not Applicable	Increased	Decreased	Not Applicable	Decreased	Decreased	Not Applicable	Decreased	Decreased
Overlap	Not Applicable	100%	0%	Not Applicable	25%	0%	Not Applicable	37%	0%
Immediacy	Not Applicable	Absent	Not Applicable	Not Applicable	Absent	Not Applicable	Not Applicable	Present	Not Applicable
Variability	Variable	Stable	Not Applicable	Variable	Stable	Not Applicable	Variable	Variable	Not Applicable
Consistency	Not Applicable	Discrepant	Consistent	Not Applicable	Discrepant	Consistent	Not Applicable	Discrepant	Discrepant
Clinical Significance	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Non-Significant	Non-Significant	Not Applicable	Significant	Significant
PEM	Not Applicable	0.12	1.0	Not Applicable	1.0	1.0	Not Applicable	0.50	1.0

*Note:* OAS = Other As Shamer; ISS = Internalized Shame Scale; EDI-3 = Eating Disorder Inventory-3; PEM = Percentage of data points exceeding the median.

Table 22

*Pre-Post Measures Data for Case 10*

Measure	Pre	Post	Change Score	% Change	Clinical Significance
DASS-21 - Depression Scale	14	14	0.00	0.00	Non-Significant
EDI-3 - Low Self-Esteem	50	42	-8.00	11.76	Significant
EDI-3 - Interpersonal Alienation	59	53	-6.00	7.23	Non-Significant
DERS - Nonacceptance	12	14	2.00	6.67	Non-Significant
DERS - Goals	12	12	0.00	0.00	Non-Significant
DERS - Impulse	14	14	0.00	0.00	Non-Significant
DERS - Awareness	25	17	-8.00	26.67	Significant
DERS - Strategies	18	16	-2.00	5.00	Non-Significant
DERS - Clarity	16	13	-3.00	12.00	Significant
DERS - Total	97	86	-11.00	6.11	Non-Significant

*Note:* EDI-3 = Eating Disorder Inventory-3; DASS-21 = Depression Anxiety Stress Scale-21; DERS = Difficulties with Emotion Regulation Scale.

Figure 28. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

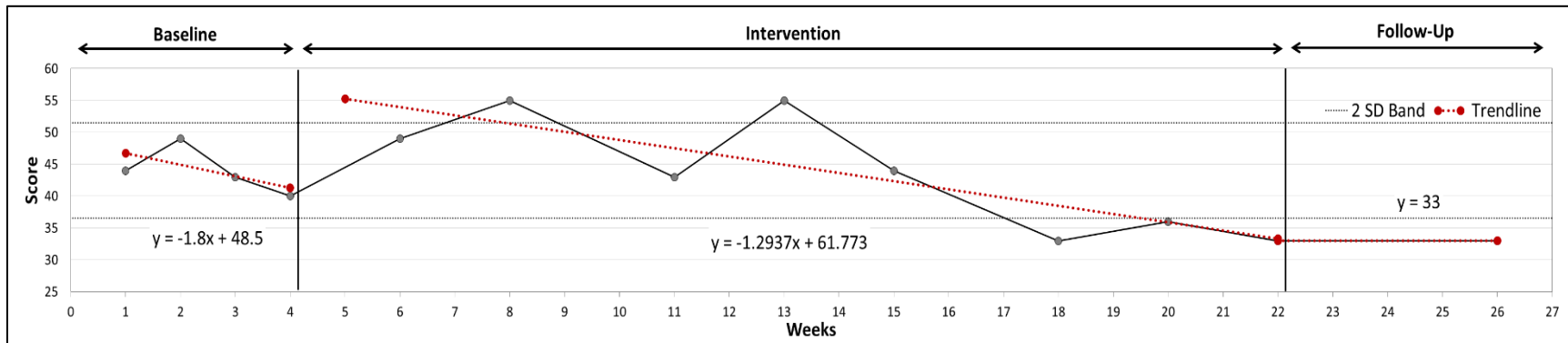


Figure 28. Repeated measures data for case 10 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 29. Internalized Shame Scale (ISS)

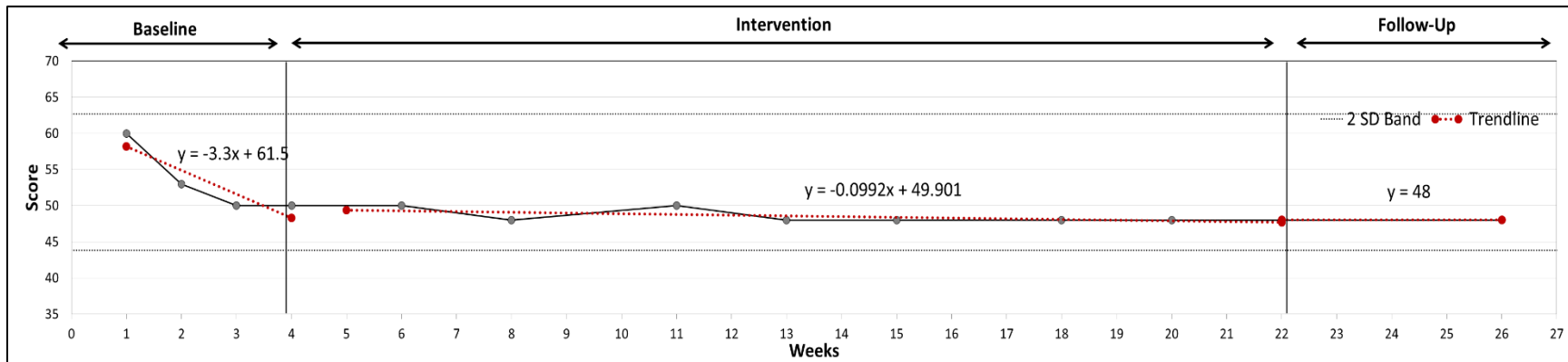


Figure 29. Repeated measures data for case 10 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure 30. Other As Shamer (OAS)

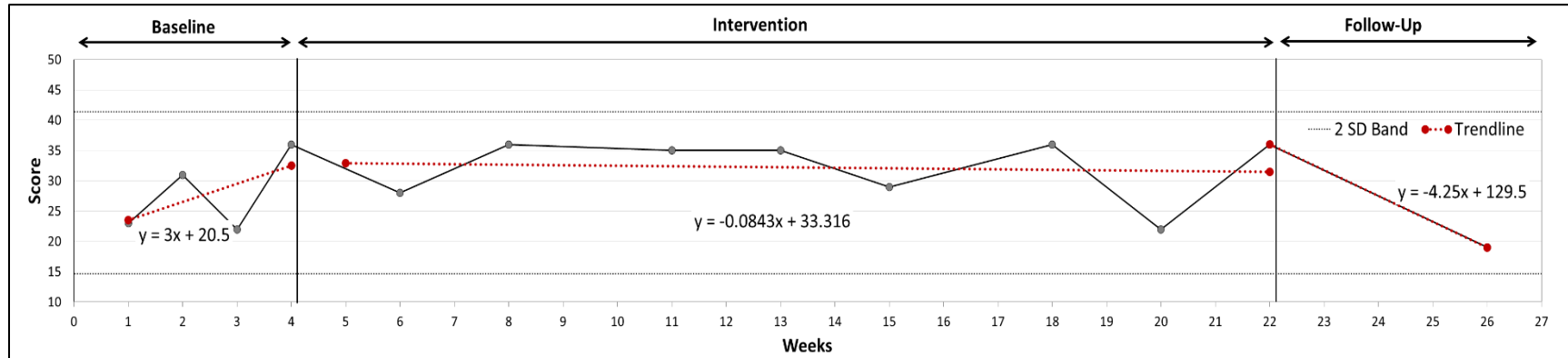


Figure 30. Repeated measures data for case 10 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Trend lines are presented for each phase. 2 SD band = two standard deviations above and below the baseline mean.



## **Participant Feedback**

The Helpful Aspects of Therapy Form (HAT; Llewelyn, 1988) was used after the second therapy group to collect feedback about what events or experiences the five participants found helpful. Participants were also asked to rate the helpfulness of each event they had identified, on a scale from 1 to 9, with higher ratings indicating a greater degree of helpfulness. This information was collected to better understand what it was in the therapy process that the participants had found most beneficial. Participant's feedback was examined for trends and revealed six categories of helpful events. The average ratings for each category are provided. It was observed that one participant consistently assigned a much lower rating of 3 to the events (case 10), whereas other participants provided ratings ranging from 7.5 to 9.

**Category one: Group support.** All five of the participants identified the support they received from the group as helpful, with an average rating of 7.2. They described taking great benefit from receiving emotional support from both group members and therapists, appreciated the similarities in struggles among group members, and saw value in receiving validation, praise and encouragement from the group. For example, one participant stated:

“I think the third most helpful thing was just having a group to talk things out with who understood. I appreciated the support from [the therapists] and the verbal encouragement and praise whenever I talked about something I did that was difficult regarding food but did it anyway.”

The importance of these experiences was also highlighted in another participant's statement:

“Group discussion was very helpful because it made me realize that I'm not alone and that all of us girls related to one another and were constantly supporting each other every

day. We are done group now but still have a group chat to communicate with each other to continue the support.”

**Category two: Dialogue with the inner critic and/or eating disorder voice.** Being able to engage in dialogue with the self-critic (self-evaluative conflict split) or the eating disorder voice (symptom split) through chair work was identified by three participants as helpful, with an average rating of 6.5. The profound impact of this experience is illustrated through the following participant’s statement:

“I remember my ED voice telling me that I just shouldn't eat at all and I remember believing it and being sad about believing it and feeling like a failure because I wasn't strong enough to want to eat. ... I hold onto that time as a reminder of something that I don't want and why I need to keep working on my recovery intentionally every day.”

Another participant wrote:

“This event helped me because it made me look at my ED in a different perspective and I got the chance to say what I wanted to it. I gained motivation to recover and confidence that I can get through this if my ED voice can be overcome.”

**Category three: Softening of the eating disorder voice.** Two participants also described the importance of experiencing a reduction in the harshness of their eating disorder voice, and provided an average rating of 8.25. For example, one participant reported:

“Probably when my ED voice apologized to me was the most important moment for me. ... It was important because it showed me that in my darkest part of myself I am capable of having love for myself... I had never experienced that coming from my critic so it really blew me away.”

Another participant stated:

“Up until that point, I always felt like my eating disorder was against me, and could never try to do things for my good. After this, I saw that it was really just trying to protect me from things that I was actually always afraid of, and things that I knew made me upset.”

**Category four: Emotional awareness.** Three participants described the ability to identify and acknowledge their feelings as helpful. This category was given an average rating of 6.3. One participant wrote:

“I think the rise of realization and awareness during the session was most helpful. I think I may have been avoiding to deal with problems and difficulties in life especially when it comes to emotions and feelings. I didn't realize that until I started the group that people were able to identify their emotions and feelings and express what it is that is bothering them. But I was unable to do that and didn't even realize that I couldn't identify my own feelings at times.”

**Category five: Emotional expression.** One participant also identified the ability to express her feelings to others as particularly helpful and provided a rating of 8. This participant reported:

“Hard feelings are difficult to deal with, but it's all in your own mind that makes it difficult a lot of times. ... Expressing my own feelings to others is also helpful since people are not mind-readers...”

**Category six: Unfinished business.** One participant also described the unfinished business chair work intervention as being most helpful and provided a rating of 8. This participant stated:

“The most helpful event was the chair work I did with the conversation with my sister. there was a lot of emotion that I had never dealt with before and it helped me for future situations with her.”

### **Therapists’ Reflections**

The therapists who ran both groups had a number of observations and reflections relevant to the study on the experience of running an emotion-focused therapy group for eating disordered women. The first observation was regarding the benefits of using EFT in a group format. EFT-G allowed members to garner the benefits of EFT while also accentuating certain aspects of treatment that would have otherwise been missed in individual therapy.

One example of the benefits of group-based EFT was the support and care members exhibited for one another. Members of both groups were observed to form strong relationships and connections with one another, related to one another’s experiences and concerns (i.e., universality), and supported one another through difficult sessions or emotional experiencing. This also speaks to the development of cohesion among group members. Although group cohesion was not measured in this study, the connections members forged and their observed commitment to the group highlighted its presence. For example, in the first group when participant 1 returned after her three-session absence, all group members expressed joy at her return and one participant stated that it felt like they were “a family” again. Another example highlighting group cohesion was observed in the second group. Following the completion of treatment, group members exchanged contact information and, as was reflected in one participant’s feedback, formed a social media chat group where they could continue to talk and support one another.

Another example of the benefits of EFT-G was the opportunity for group members to support one another in confronting their critics. There were times when members had difficulty confronting or standing up to their harsh inner critics during chair work. When this occurred it was observed that, at times, other group members would comment on the harshness of that individual's critic and would explicitly counter the punitive, self-critical messages it had given that individual. Group members would make comments about the individual's positive qualities that the critic had failed to acknowledge, or else would become angry and assertive towards the critic on the individual's behalf.

Related to the group principles of cohesion and universality, the therapists also observed that participants were able to learn and benefit from one another's experiences and insights. In witnessing other's experiences and progress, participants were prompted to think more deeply or in different and unique ways about their own experiences. An example of this observation was when one participant shared that her eating disorder voice greatly resembled that of a parent, which prompted all other group members to make similar connections for themselves. This held true even when the content or context of an individual's story differed from that of other group members, as participants were often able to relate to one another's underlying emotional experiences. Among the most common shared emotional experiences were those of shame, worthlessness, loneliness, sadness, and an overarching sense of not being good enough.

Among the most significant changes that the therapists observed was an increase in participant's emotional awareness and emotional expression. Most of the participants in this study initially had great difficulty acknowledging, experiencing and expressing their emotions, both in group and in their lives. Participants in both groups were observed to exhibit a gradual improvement in their ability to notice and identify their emotions, and name the associated needs.

Some participants also exhibited an increased tolerance for unpleasant emotions which was observed by the increasing amounts of emotional pain they were able and willing to tolerate throughout chair work, and their own descriptions of tolerating emotional pain in their daily lives. For example, one participant initially described her emotional experience as “fuzzy” and “noisy”, but was unable to identify any emotions beyond a non-specific worry. However, it was observed that by the end of group she was able to name a myriad of emotions, had begun to express them to people in her life, and became consciously aware of her tendency to shut her feelings down. An increase in emotional expression outside of the confines of the group was another overarching theme that was observed. A number of participants in each group shared that they had either begun to express their unpleasant and feared emotions (e.g., sadness, anger) to people in their lives, asked for what they needed when experiencing an emotion, or revealed and discussed their eating disorder with a loved one.

A key observation was the differences in the use of chair work interventions with the two women who had prior diagnoses of anorexia nervosa as compared to the rest of the participants. The therapists noted that the chair work with these two individuals was often more challenging for a couple of reasons. Firstly, these participants appeared to have greater difficulty accessing and expressing their emotions during chair work. It was common to encounter frequent and repeated self-interruptive splits during chair work interventions with these women. This was not experienced as frequently with the other participants. Secondly, the self-criticism of these two participants was particularly harsh, punishing and rigid. That is, they were often deeply stuck in their self-critical processes. Due to the unrelenting nature of their critics, this led to a slower rate of change. These two factors often led to a slower pace of emotional processing, indicating that they would inherently require many more sessions to complete this type of treatment. While

other participants exhibited similar processes, the therapists shared the observation that chair work for participants with symptoms of bulimia often progressed with more ease allowing for greater emotional shifts. It seems very likely that EFT for anorexia will work, but that it requires many more sessions and greater patience and determination than for bulimia.

Another key observation was the different needs of the two groups with respect to psychoeducation and informational discussions relating to emotions and eating disorders. Psychoeducation is not emphasized in EFT as an explicit focus or as part of the change process. However, existing EFT-G protocols for eating disorders incorporate basic psychoeducation about emotions and how they relate to eating disorder symptomology. This information is often presented in the first session to ensure a shared understanding of the rationale for treatment among group members. The therapists observed that the second group appeared to require more information and discussions about such topics as compared to the first group. Longer and more frequent discussions were had in the second group regarding how eating disorder symptoms are used to manage emotions; the harmful impact of labeling certain foods as bad; the distinction between whether emotional pain stems directly from the food you consume versus the internal critical dialogue about the food; the importance of balanced and flexible eating habits; the harmful effect of placing rigid rules and expectations on oneself regarding food and nutritional intake; and the myriad of factors that can contribute to the development of an eating disorder, including cultural and societal views, messages from the media, biological and genetic factors, difficulties with emotion regulation, and early learning experiences around emotions. It is unclear as to why the second group appeared to require more dedicated time to explore such concepts, although it is possible that this is a product of the group members having less

experience in psychotherapy for eating disorders as compared to the participants in the first group, who collectively had more experience with treatment.

The final observation was that eating disorders are accompanied by a very high, fluctuating level of ambivalence. This ambivalence was exhibited by most participants at some point in treatment. Ambivalence often showed up when participants were engaged in a dialogue with their eating disorder voice when they expressed fear at letting the illness go and a desire for the symptoms to remain. Another sign of ambivalence was observed in the periodic tendency for some group members to engage in dieting behaviour or weight-loss practices while in treatment for their eating disorders. Lastly, there was a minority of participants who briefly held the belief that their symptoms were not that of an eating disorder, but rather the product of a medical, physical or biological concern which they could not control. This ambivalence in its various forms highlights the sometimes ego-syntonic nature of eating disorders and the role of denial within the illness, which collectively pose additional challenges for recovery. One of the central clinical challenges of treating eating disorders is that most sufferers to some degree enjoy the disorder and are profoundly ambivalent about getting better. This ambivalence has a perfect analogue in a culture that adores thinness and yet pays ample lip service to how disordered this attachment is.



## **Discussion**

The objective of this study was to further understand the clinical utility of EFT-G in the treatment of women with bulimia nervosa. Several psychological outcomes were examined in this study. Three key psychological outcomes, including bulimia symptomology, internal shame and external shame, were repeatedly measured before, during and after EFT-G to examine overarching patterns of change across individuals, and to identify any nuances of change that might exist within individuals of this population. Four additional variables of interest were measured in a pre-post treatment format to better understand the impact of EFT-G on depression, low self-esteem, interpersonal alienation and emotion dysregulation. Expected outcomes for this study were that EFT-G would lead to a gradual reduction in bulimia symptomology, internal shame and external shame over the course of treatment, and that these gains would be maintained at the one-month follow-up. It was also anticipated that there would be a reduction (i.e., improvement) in depression, low self-esteem, interpersonal alienation and difficulties with emotion regulation following the completion of EFT-G. Given that treatment responses to EFT-G have not yet been widely examined at the individual level, comparisons to existing research was challenging. As such, this section will draw parallels and make comparisons with related or relevant research wherever possible.

### **Summary of Findings**

The primary focus of this study was the clinical utility of EFT-G in treating bulimia symptomology. All but one participant demonstrated improvements in bulimia symptomology during the course of treatment. The one participant who did not improve during treatment did exhibit improvement at follow-up. Further, the majority of participants achieved clinical significance in these improvements either during treatment or at follow-up. These findings

provide clear evidence for the effectiveness of EFT-G in the treatment of bulimia nervosa, and indicate that EFT-G may be a promising alternative when conventional treatments do not work.

A second major focus of this dissertation was shame. EFT-G reduced the experience of internal shame for most participants, but this change was not immediate. A minority of participants reported a reduction in internal shame during treatment. However, the majority of participants reported a reduction at follow-up, with half of them achieving a clinically significant change. In contrast, very few participants reported a reduction in external shame during treatment, with the majority of participants experiencing deterioration. However, at follow-up the majority of participants reported a reduction in external shame, with very few participants achieving a clinically significant change. This pattern of change may be accounted for by the use of group intervention. That is, participants may have experienced an elevation in their external shame during treatment as a result of engaging in emotion processing work in the presence of others, which may have produced feelings of vulnerability and shame. Together, this suggests that EFT-G shows clear clinical utility in reducing internal shame with bulimic women but exhibits a milder effect on the experience of external shame.

Of great interest were the unexpected findings that a minority of participants deteriorated either during or following treatment on various psychological outcomes. Fluctuation between deterioration and improvement could be observed across bulimia symptomology, internal shame and external shame. Additionally, all participants exhibited some degree of deterioration on at least one pre-post treatment measure, and all pre-post treatment measures reflected deterioration for at least one participant. Further, some participants deteriorated to such a degree that it was deemed clinically significant. While unexpected, patterns of deterioration can be explained, in

part, by the EFT model for change and research on the process of emotional transformation. These findings will be discussed at length below.

Together, the results of this study are highly promising as they provide clear evidence of the clinical utility of EFT-G as a viable treatment option for bulimia nervosa. Most importantly, these findings not only highlight the ability of EFT-G to treat eating disorder pathology, but also the underlying construct of shame. This outcome is particularly essential as shame is an emotion that has been identified as being at the heart of this illness (Goss & Allan, 2009; Goss & Gilbert, 2002; Keith et al., 2009) and integral to the process of recovery (Keith et al., 2009; Kelly et al., 2014; Troop et al., 2008).

### **Bulimia Symptomology**

The majority of participants in this study experienced an overall reduction in bulimia symptomology either during or following the completion of group. Furthermore, many of these participants achieved a change that was considered to be clinically significant. Our findings are consistent with the existing research employing an EFT-G approach to treating bulimia nervosa and binge-eating disorder (Ivanova, 2013; Wnuk, 2009), which showed that emotion-focused group therapy was effective in reducing binge-eating and purging behaviours. Although the primary population of focus for this study was women with symptoms of bulimia nervosa, the work of Wnuk (2009) and Ivanova (2013) remains relevant given the overlap of symptomology (i.e., binge-eating) and the otherwise limited body of research in this area. Similarly, our findings also supported the work of Compare et al. (2013), who examined the effects of a 20-week emotion-focused therapy group on women with binge-eating disorder. The results demonstrated that emotion-focused group therapy produced a significant reduction in binge-eating pathology among 33% of participants. Our findings are further corroborated by Banack (2015), who

conducted a case study examining outcomes for EFT in an individual format for a woman with bulimia nervosa. Although the format of therapy in our study differed from that of this study (i.e., individual vs. group), the results hold relevance given the population of interest. Banack (2015) demonstrated that individual therapy spanning 17 sessions produced a large reduction in eating disordered behaviours, attitudes and concerns.

In addition to experiencing reduced symptomology during treatment, we also found that many of our participants either maintained those gains or experienced a further decrease in symptoms at one month follow up. These findings are also supported by Banack (2015) who demonstrated an ongoing reduction and downward trend in eating disorder symptomology at six months post-treatment. Interestingly, four of the five participants from the second group reported a decline in bulimia symptomology that achieved a clinically significant change at follow-up. However, only two participants from the first group reported such change. The remaining three participants from group reported a mild worsening of symptoms at follow-up following the withdrawal of treatment, such that they returned to baseline levels. Although the reason for this discrepancy is unclear, one possible explanation is the different lengths of treatment in each group. This will be discussed at length elsewhere.

Beyond the lens of EFT, these findings are further supported by psychotherapy outcome research using CBT and IPT. CBT in both a group and individual format has been shown to reduce the frequency of binge eating and purging, and improve attitudes or concerns about body weight and shape (Agras et al., 2000; Chen et al., 2003; Fairburn et al., 1991; Fairburn et al., 1993; Jones & Clausen, 2013; Nevonen & Broberg, 2005; Waller et al., 2014; Shapiro et al., 2007). Individual and group IPT has produced similar improvements in eating disorder

behaviours and psychopathology (Agras et al., 2000; Fairburn et al., 1991; Fairburn et al., 1993; Mitchell et al., 2002; Nevoenen & Broberg, 2005; Shapiro et al., 2007). While the modalities of treatment may differ, the outcomes are comparable.

The number of participants in this study who exhibited a clinically significant improvement in bulimia symptomology (i.e., 60%) is also comparable to and corroborated by psychotherapy outcome research using CBT and IPT. CBT, the gold standard in the treatment of bulimia, has proven effective for approximately 50% of those who seek help (American Psychiatric Association, 2006; Bailer et al., 2004; Jacobi et al., 2002; Mitchell et al., 2002; Polnay et al., 2014; Stice et al., 1999; Wilson et al., 2007). IPT is often the second line of defense in the treatment of bulimia nervosa, and has produced similar rates of success comparable to that of CBT (Agras et al., 2000; Fairburn et al., 2015; Fairburn et al., 1993; Miniati et al., 2018). Although the findings in this study are based upon individual changes deemed clinically significant as opposed to group outcomes based on larger sample sizes and statistical significance, these findings hold relevance.

## **Shame**

To our knowledge, treatment outcomes for shame have not yet been objectively measured or examined in the context of EFT or eating disorder recovery. Interestingly, our findings show that EFT-G was effective in reducing internal and external shame for the majority of participants. Half of participants achieved a clinically significant change on internal shame at follow-up, with only a minority doing so on external shame. Research indicates that shame is a prominent feature of eating disorder pathology, and that recovery is thought to be related to a reduction in the overall experience of shame (Keith et al., 2009; Kelly et al., 2014; Troop et al., 2008). Given the role of eating disorder symptomology in emotion regulation (Dolhanty, 2006; Dolhanty &

Greenberg, 2007, 2009), this overall reduction in shame is consistent with the reduction in bulimia symptomology achieved by the majority of participants. Interestingly, of the four participants who did not make a clinically significant change in their bulimia symptomology at follow-up, two participants (both from group two) deteriorated on measures of shame (internal and/or external), and two participants (one from group one and one from group two) exhibited a downward trend (i.e., improved) but did not achieve a meaningful change on at least one measure of shame.

An interesting outcome was that more participants experienced a reduction in internal shame than external shame. These findings are corroborated by existing research suggesting that bulimia nervosa has a stronger affiliation with internal shame than with external shame (Troop et al., 2008; Troop & Redshaw, 2012). This suggests that EFT-G is more effective in alleviating one's self-criticisms (i.e., internal shame) and less effective in remedying the perception that others hold negative judgments about the self (i.e., external shame), for women with symptoms of bulimia nervosa.

## **Depression**

Improvements in depression were experienced by the majority of our participants with half of them achieving clinical significance. This is consistent with the results of previous research studies utilizing EFT for eating disordered woman (Banack, 2015; Ivanova, 2013; Wnuk, 2009). These outcomes are also consistent with the strong body of evidence supporting EFT as an effective intervention for depression (Robinson et al., 2012; Watson et al., 2003; Goldman et al., 2006; Greenberg, 2017). Furthermore, these findings are supported by outcome research employing other treatment approaches for bulimia, including CBT and IPT, which have produced improvements in depression

symptomology and general psychiatric well-being (Chen et al., 2003; Fairburn et al., 1991; Fairburn et al., 1993; Waller et al., 2014; Wilson et al., 2007; Nevenon & Broberg, 2005) as an adjunct outcome to changes in eating disorder pathology. Only one participant deteriorated on this measure: case 1. This participant was absent for three sessions mid-treatment and exhibited particularly severe eating disorder symptomology, which may in part account for her deterioration.

### **Self-Esteem and Interpersonal Functioning**

Improvements in self-esteem were obtained for approximately half of participants with a minority achieving clinical significance, which is consistent with the work of Wnuk (2009). It is also in line with Ivanova's (2013) research, which demonstrated a slight improvement in self-esteem following a course of EFT-G. A similar outcome for interpersonal alienation was noted, with approximately half of participants showing an improvement that was not clinically significant. These findings are in line with that of Ivanova (2013) who documented a negligible but observable change in interpersonal alienation following EFT-G. These findings are also peripherally related to psychotherapy outcome research using CBT and IPT in the treatment of bulimia, which has documented improvements in interpersonal functioning and social-esteem following the completion of treatment (Agras et al., 2000; Chen et al., 2003; Fairburn et al., 1991; Fairburn et al., 1993; Wilson et al., 2007).

While corroborated by some research, this finding is also distinct from that of Banack (2015) who demonstrated that a woman with bulimia undergoing individual EFT did not exhibit any significant changes regarding interpersonal problems, and in fact deteriorated in certain domains of interpersonal functioning. The results of Banack (2015) are, however, more consistent with our results highlighting that a minority of participants deteriorated with respect to

their self-esteem and interpersonal alienation. The fact that existing EFT-G research has not studied outcomes at the individual level poses limitations on our ability to make comparisons and draw conclusions about these mixed results. Regardless, our findings suggest that EFT-G may be effective in alleviating low self-esteem and feelings of distrust, disappointment, misunderstanding and estrangement in relation to others, but that the outcomes may differ across individuals.

### **Emotion Regulation**

Outcomes for emotion regulation were highly mixed and individualized. All participants made gains in some domains of emotion regulation, while also exhibiting deterioration or an absence of change in others. There was an overarching pattern of gains among the majority of participants in emotion regulation as a whole, which is consistent with previous research findings on the utility of EFT-G for enhancing emotion regulation (Banack, 2015; Ivanova, 2013; Wnuk, 2009). Interestingly, outcome research employing CBT or IPT for bulimia nervosa have not systematically examined outcomes for emotion regulation, thus preventing comparisons from being made. However, one study did identify emotional lability as a moderating variable in treatment responses to an enhanced form of CBT among women with bulimia. More specifically, this study highlighted that women with higher emotional lability tended to exhibit fewer reductions in eating disorder pathology in response to enhanced CBT (Accurso et al., 2016).

This study also examined emotion regulation sub-scales to analyze changes in the specific domains of emotion regulation. Interestingly, existing research studies utilizing EFT and EFT-G for eating disorders did not analyze, publish, or comment on the DERS subscales where applicable. As such, direct comparisons to the literature cannot be made.



Consistent with the overall improvement in emotion regulation, most participants improved in the domains of emotional clarity and emotional awareness with a minority of participants making a clinically significant change. There were also gains made in a further four domains of emotion regulation, including enhancing participant's acceptance of their emotions, enabling them to engage in goal-directed behaviour despite experiencing emotions, improving control of impulsive behaviours, and increasing strategies to more effectively cope with emotions. Approximately half of participants reported improvements in these four domains. Despite these improvements, few participants made clinically significant changes in any of the six domains described. These small improvements that do not reach clinical significance is corroborated by Banack (2015) who demonstrated that EFT delivered in an individual format produced a questionable impact on emotion regulation, with a small effect size and a downward trajectory in emotion regulation difficulties being noted. Together, this suggests that EFT-G was generally helpful in increasing participant's awareness of and clarity about the emotions they experience, and in improving their overall ability to regulate those emotions. However, this also suggests that participants exhibit unique and distinct treatment responses in the domain of emotion regulation, where the changes appear to be small and highly individualized. It is unclear as to what factors might predict or impact improvement on certain domains but not on others.

### **Clinical Relevance of an Idiographic Approach**

Much of the clinical research on treatment outcomes for eating disorders has employed group-based designs to examine effectiveness, thus allowing for generalizations across people within a given diagnostic category. Group-based studies, such as randomized clinical trials (RCT), are undeniably necessary and useful in the search for effective treatments. However, it is often the case that n-of-1 studies are neglected in favor of group research despite the significant

value they stand to offer to our clinical understanding of these complex and multi-faceted disorders.

This dichotomy echoes the age-old idiographic versus nomothetic debate in psychology. Gordon Allport introduced these terms to American psychology in 1937. He defined a nomothetic approach as one that studies and describes general or universal laws across groups of people, an example of which would be a RCT. In contrast, an idiographic approach is an examination of what is specific or unique to an individual. Allport (1937) asserted that psychology tended to neglect idiographic approaches in favor of nomothetic approaches, but argued that there is room and a need for both.

Although a nomothetic approach (i.e., group-based research) is needed to make generalizations about treatment outcomes, these generalizations come at a cost. Lumping people together and focusing on what is true for a group has the significant limitation of paving over individual differences that may exist and preventing us from understanding how individual change occurs in psychotherapy. Therefore, while both a nomothetic and idiographic approach to psychotherapy outcome research are arguably needed, it remains true that the idiographic focus is often lost in clinical research in favor of a nomothetic approach.

While the neglect of an idiographic approach is arguably detrimental to all psychotherapy outcome research, it is particularly problematic in the study of eating disorder treatment. A myriad of nomothetic studies have demonstrated that our current modes of treatment for bulimia nervosa (i.e., CBT, IPT) are effective for only half of those who seek help. Although this information is valuable, the limited success of these treatments highlights the need for an in-depth exploration of treatment effects at the individual level. Therein lies the inherent clinical value of the single subject design. By adopting an idiographic approach, this study has identified

not only common trends and patterns of change across individuals, but has also highlighted the process of change that occurs within a group of individuals with a shared pathology. These idiopathic processes of change across measures of bulimia symptomology, internal shame and external shame will be discussed at length below.

### **Patterns of Change**

While most participants experienced a reduction in bulimia symptomology, the patterns of change were somewhat inconsistent across participants. Two distinct patterns of change were highlighted. The first pattern of change involved an overall decline in bulimia symptomology, but was characterized by at least one period of deterioration where symptoms worsened such that the severity escalated beyond that of pre-treatment levels. The second pattern of change was characterized by a more consistent and gradual decline in symptomology during treatment. However, the majority of participants who exhibited the second pattern of change also experienced subtle fluctuations between improvement and deterioration throughout treatment. The key distinction was that these fluctuations were less pronounced and less severe than those described in the first pattern of change. Deterioration, whether sizeable or subtle, most commonly occurred during the first half of the group (i.e., during the first six to eight sessions), although some participants did oscillate between improvement and deterioration in the latter half of group as well.

A similar change process was observed for internal and external shame. The majority of participants were observed to exhibit at least one period of deterioration during treatment where the severity of shame reached pre-treatment levels, followed by improvement. Further, as with bulimia symptomology, most of the participants who did not deteriorate to pre-treatment severity did exhibit subtle fluctuations between deterioration and improvement throughout treatment. For

both internal and external shame, many participants experienced more than one fluctuation between deterioration and improvement. Deterioration occurred almost equally during the first and second half of treatment, with some participants experiencing periods of deterioration at both ends of treatment.

These patterns of change as described here are well established in the literature. Based on an existing model for emotional processing of distress (Pascual-Leone & Greenberg, 2007), Pascual-Leone (2009) has elucidated the moment-to-moment change process for emotional restructuring using experiential therapy. He outlined these patterns of change within what he termed good and poor within-session events. Good within-session events are those that end in reduced distress and are characterized by increased meaning making. A poor within-session event is one where clients do not make new meaning from their distress.

Pascual-Leone (2009) demonstrated that emotional change within sessions does not adhere to a coherent, linear path, but instead follows a path that is highly variable. Emotional processing and good session outcomes are not dependent on getting rid of negative emotions, but instead occur when an individual can gradually shift between and experience a wider range of emotions. Emotional change within sessions occurs in what Pascual-Leone (2009) described as a two-steps-forward, one-step-backward pattern. In other words, individuals with good in-session events who make progress and are trending towards improvement are also likely to experience subsequent periods of distress. However, he also demonstrated that clients with good in-session events experienced a gradual reduction in the duration of these emotional collapses, such that they suffered from distress for shorter periods of time.

Pascual-Leone (2009) speculated in this ground-breaking article that the within-session patterns of change he illustrated may be similar to patterns of change across treatment. The findings of this study support his theory. The distinct patterns of change across bulimia, internal shame and external shame described in this study echo Pascual-Leone's (2009) sawtooth pattern of change (i.e., 2-steps-forward, 1-step-back). That is, while the majority of participants demonstrated a gradual improvement across time, this change was not linear and was in fact characterized by periods of deterioration and improvement similar to what Pascual-Leone (2009) described within individual sessions.

The fluctuations between deterioration and improvement in bulimia symptomology, internal shame, and external shame can be explained by a number of factors within the given framework of emotional processing. Firstly, these findings are consistent with the guiding principles of EFT, which suggest that the activation of underlying maladaptive emotion schemes, emotional arousal, and emotional expression are necessary for emotional transformation (Dolhanty & Greenberg, 2007; Elliott et al., 2004b; Greenberg, 2015; Greenberg et al., 1993). This mechanism of change inherently requires the experience of emotional distress, which may in turn lead to a temporary increase in eating disorder symptomology (i.e., deterioration).

Secondly, as described in the above section, research shows that effective emotional processing in experiential therapy is not associated with a steady trajectory of improvement, but that change occurs in a two-steps-forward, one-step-backward fashion. That is, clients who are exhibiting effective emotional processing may periodically experience distress, and that distress changes by moving through it (Pascual-Leone & Greenberg, 2007; Pascual-Leone, 2009).

Thirdly, there is strong evidence suggesting that eating disorder symptoms serve to regulate emotional distress (Dolhanty, 2006; Dolhanty & Greenberg, 2007, 2009). Therefore,

based on the treatment modality and the described principles of change, it stands to reason that the periodic deterioration (i.e., elevation) in bulimia symptomology can be explained by an elevation in overall levels of distress and emotional arousal. Further, the periodic deterioration (i.e., elevation) of internal and external shame described in this study may have been a significant contributor to the escalation in bulimia symptomology based on the eating disorder model of emotion regulation (Dolhanty, 2006; Dolhanty & Greenberg, 2007, 2009).

Our findings are further corroborated by the work of Ivanova (2013) who provided additional support for this described change process. Ivanova (2013) demonstrated that EFT-G with a bulimic population prompted heightened emotional arousal which peaked between sessions five through eight (i.e., emotional collapse or deterioration), after which it subsequently declined (i.e., improvement). This is consistent with our findings which highlight periods of deterioration both in the first and second half of group.

### **Heterogeneity of Psychological Outcomes**

As discussed in the previous section, overarching patterns of change can be observed across the various outcome measures. However, it is undeniable that there are also divergent patterns and nuances of change within these outcomes which warrant exploration.

Across repeated measures of bulimia symptomology, internal shame and external shame, some participants exhibited distinct periods of fluctuation between deterioration and improvement. Other participants exhibited a more gradual process of change, but still demonstrated subtle fluctuations between improvement and deterioration that were less pronounced. And further still, a small minority of participants exhibited little or no change on

certain outcomes, with a relatively flat progression of scores. A similar divergence was observed at follow-up across all three repeated measures. That is, some participants maintained their treatment-level outcomes, some deteriorated, and others improved.

Another difference was that the pattern of change differed across participants. While there was generally a tendency for fluctuation between deterioration and improvement, some participants experienced one period of fluctuation whereas others exhibited two. Furthermore, the timing of these fluctuations was variable. Some participants experienced fluctuations during the first half of treatment, some the second half of treatment, and others experienced fluctuations during both halves. No consistent differences were found with respect to the number or timing of fluctuations across the two groups. That is, despite the presence of patterns, individual participants also exhibited somewhat distinct processes of change from one another. It is unclear at this time as to what factors might contribute to or amplify these differences.

Additionally, outcomes on pre-post measures were highly mixed. All participants deteriorated and improved on at least one outcome measure post-treatment. The existence of such variation is further evidence as to the importance of understanding treatment response at the individual level.

Together, these differences suggest that while these participants exhibit similar clusters of symptoms and exhibit overarching trends of change, there is an individualized aspect to their recovery process and their response to treatment. This further highlights the necessity of adopting an idiographic approach to research in order to more effectively study and treat individuals with bulimia nervosa.

Although the degree of variability in treatment response was unexpected, these findings are corroborated by research highlighting the diversity among individuals within specific

diagnostic categories of eating disorders. While there are core features that individuals with bulimia nervosa must exhibit, bulimia is not a homogenous disorder (Fairburn, 1991). Individuals with bulimia may exhibit variability across a number of different factors including personality traits (Goldner et al., 1999; Westen & Harnden-Fischer, 2001), historical eating disorder diagnoses (Bardone-Cone et al., 2008), psychological comorbidities such as depression, anxiety or substance use (Wonderlich et al., 2005), and negative affect (Stice et al., 2008; Chen & LeGrange, 2007; Grilo et al., 2001; Stice & Agras, 1999; Stice & Fairburn, 2003; Stice et al., 2008). Further, different people with bulimia nervosa may exhibit the core features of this diagnosis to varying degrees, such as frequency of behaviours (i.e., bingeing and purging), severity and duration of the illness, and the degree of psychosocial disturbances affiliated with the eating disorder (Fairburn, 1991). This indicates that despite the commonality of their symptoms, the presentation of this illness and the way in which it is experienced may be highly individualized for each person.

This heterogeneity may have significant implications for treatment. Given the degree of variability that has been documented in the literature, it is plausible that bulimic individuals may have variable responses to different types of treatment, regardless of their shared diagnosis (Fairburn & Peveler, 1990; Grilo et al., 2008; Stice et al., 2001; Stice & Agras, 1999; Stice et al., 2008; Sysko, Hildebrandt, Wilson, Wilfley, & Agras, 2010). In other words, what works for one person may not work for another, despite having the same illness (Fairburn & Peveler, 1990). The findings of this study in conjunction with the heterogeneous nature of this disorder may, in part, account for the difficulty in finding more globally effective treatment options for individuals with eating disorders.



## **Treatment Length**

A number of outcomes in this study warrant a discussion about the necessity for a longer course of treatment. The goal of therapy is to produce a lasting change that will persist long after treatment is terminated. Within the framework of EFT for eating disorders, the goal is to produce lasting emotional change such that target symptoms are alleviated.

Amid the nuanced and heterogeneous changes were a number of participants who exhibited downward trends in symptoms of bulimia, internal shame and external shame at follow-up, suggesting a continued treatment effect beyond the end of group. These results are promising and speak to the continued emotional change that may occur after EFT-G ends. However, it also raises the question as to how much more effective EFT-G may be if treatment were extended beyond 16 sessions. Given the observed changes in just 16 weeks, it is plausible that a longer course of treatment would allow participants to make further gains during treatment and at follow-up. Furthermore, it is possible that EFT-G of a longer duration may have promoted a cessation of symptoms allowing participants to enter remission.

Further support for this argument is the observation that some participants demonstrated an escalation in bulimia symptomology, internal shame and/or external shame upon the removal of treatment. This suggests that the removal of treatment prompted some degree of relapse. Had treatment been longer, these individuals may have demonstrated more pronounced changes and may have been able to sustain them following termination of EFT-G.

Additionally, there were two outcomes that distinguished the first and second groups from one another, which may be accounted for by the different lengths of treatment. First, far fewer participants (i.e., two) from the first group achieved a clinically significant improvement in bulimia symptomology at follow-up. In contrast, four of the five participants in the second group

reported a clinically significant change in bulimia symptomology at follow-up. It is possible that greater gains in the domain of eating disorder symptomology among the participants from group two were obtained due to an extended course of treatment. Second, among the most striking findings were that a very small minority of participants (i.e., two) experienced a clinically significant elevation in shame (internal or external) during treatment which did not recede and exhibited no improvement at follow-up. Both of these participants were from the first group. It is worth noting that in addition to poor outcomes on measures of shame, these participants did not exhibit a clinically significant change in bulimia symptomology at follow-up. There is a notable gap in the literature on this topic, and as such these findings cannot be directly corroborated or disputed. However, given that the only two participants who exhibited persistent deterioration in the domain of shame were from the first group (i.e., 12 weeks) as opposed to the second group (i.e., up to 16 weeks), one possible explanation is the length of treatment. It is possible that EFT treatment interventions activated and heightened the emotional experience of shame, as would be expected according to existing emotion processing research (Dolhanty & Greenberg, 2007; Elliott et al., 2004b; Greenberg, 2015; Greenberg et al., 1993; Ivanova, 2013; Pascual-Leone, 2009), but that the duration of treatment was too short to allow for adequate processing and transformation of these experiences for these particular individuals.

The possible need for further treatment may also be related, in part, to the individuals themselves. One of the participants who deteriorated was case 1. This participant missed three sessions in the middle of treatment and reported particularly severe bulimia symptoms. It is therefore possible that either the number of sessions missed, the fact that they were missed mid-treatment, or the severity of her illness can account for the heightened experience of shame. It is

both plausible and understandable that this participant may have required additional treatment in order to achieve change.

The second participant who deteriorated was case 5. This participant had a prior diagnosis of anorexia nervosa, was especially numb and out of touch with her emotions as compared to other participants, and sometimes collapsed into a state of passive defeat and helplessness when emotions were accessed. This participant was often unable to contact, identify and label her emotions, and required a great deal of time to sit with her experiences in order to do so. As such, her chair work tended to move more slowly compared to other participants. It was observed by the therapists that much of her progress in the group was around learning to feel and identify her emotions. The observed elevation in her levels of shame may simply reflect her gradually increasing emotional awareness. Given her level of emotional awareness at the beginning of group, it is possible this participant was not yet ready or able to engage in emotional processing work. It is therefore possible that her diagnostic origins (i.e., anorexia nervosa) combined with the extent of her lack of emotional awareness would have necessitated a longer course of treatment in order to change her experience of shame. This explanation is further supported by the previously proposed guideline, and demonstrated necessity, of treatment ranging from 12 to 18 months for the effective treatment of anorexia nervosa (Dolhanty & Greenberg, 2009; Wilson et al., 2007).

As previously described, all participants deteriorated in at least one of the following domains post-treatment: low self-esteem, interpersonal alienation, depression and emotional dysregulation. However, given that change in EFT is rooted in emotional processing, of particular interest is the finding that all participants deteriorated on at least one subscale of emotion regulation. One possible explanation for these outcomes is that treatment may have

activated painful and otherwise avoided and deeply buried emotions through chair work interventions, in accordance with the EFT emotion processing model (Dolhanty & Greenberg, 2007; Elliott et al., 2004b; Greenberg, 2015; Greenberg et al., 1993; Ivanova, 2013; Pascual-Leone, 2009). However, that treatment may not have been long enough to allow for a resolution of all the painful emotions that were activated. This could account for why all participants made gains in some areas but deteriorated in others. It could also account for why participants made both gains and losses in different domains of emotion regulation specifically, given that the activation of painful emotions occurred consistently and often.

Eating disorders play an important role in regulating, avoiding, or suppressing painful emotions. It is therefore possible that individuals with eating disorders may require a longer, more intensive course of treatment in order to create emotional change and obtain more pronounced changes with respect to emotion regulation. This proposal is supported by one study which illustrated that among a community-based sample, increased treatment length for bulimia nervosa, regardless of treatment modality, predicted better global outcomes (Thompson-Brenner & Westen, 2005). This is also in line with the recommended guidelines in the effective treatment of anorexia nervosa as spanning 12 to 18 months in duration (Dolhanty & Greenberg, 2009; Wilson et al., 2007). Further support for a longer course of treatment comes from previous research highlighting that at the end of 16 weeks of EFT-G, eating disordered women reported having only just obtained a clearer sense of the issues they needed to resolve in therapy (Ivanova, 2013).

If emotion change occurs in a two-steps-forward, one-step-back fashion (Pascual-Leone, 2009), then it stands to reason that the length of time required to adequately process maladaptive emotions and activate adaptive emotions in their place will largely depend on where the person is starting. The number of steps someone has to take to adequately process and change their emotions will in part determine how long treatment must be. Someone who has more steps to take will naturally require more time in treatment to accomplish this task. Therefore, an individual who has limited emotional awareness, has numbed themselves to their emotions, or who has learned to expertly avoid, suppress or block their feelings will likely require more time in treatment than someone who has heightened emotional awareness or is readily in contact with their emotions at the start of therapy. The latter description rarely applied to individuals with eating disorders, whereas the former often does, thus highlighting the necessity of longer treatment to facilitate productive emotional change.

Additional factors identified in this study that may necessitate a longer course of treatment include perfectionism, ambivalence about treatment, and the ego-syntonic nature of eating disorders.

Many of the participants in this study self-identified as struggling with perfectionism. Perfectionism is a well-documented trait among women with bulimia nervosa (Bardone-Cone, Sturm, Lawson, Robinson, & Smith, 2010; Boone, Soenens & Braet, 2011; Bulik et al., 2003; Levinson et al., 2017; Lilenfeld et al., 2000; Lilenfeld, Wonderlich, Riso, Crosby & Mitchell, 2006). It has been identified as a pre-disposing factor in the development of bulimia (Vohs, Bardone, Joiner, Abramson, & Heatherton, 1999), and studies have demonstrated that perfectionism may continue to be elevated among these individuals even after recovery (Kaye et al., 1998; Lilenfeld et al., 2000; Stein et al., 2002).

Perfectionism can prove to be a complicating factor in the treatment of eating disorders. For example, perfectionism is associated with poor treatment responses across different types of short-term treatments including CBT, IPT and pharmacotherapy (Blatt, 1995; Blatt & Zuroff, 2002; Flett & Hewitt, 2002), and is associated with difficulties establishing a good working alliance in therapy (Blatt & Zuroff, 2002; Flett & Hewitt, 2002). Despite the obvious negative consequences that stem from perfectionistic striving, perfectionists tend to perceive and focus on the benefits that stem from their perfectionistic tendencies (e.g., performing well at work or school), which they may be unwilling to give up. Perfectionists may also strive for perfection within the therapeutic process, such as expecting perfection from the therapist or having high expectations for immediate and drastic change, which can interfere with treatment. Additionally, individuals with perfectionism may be more likely to express hostility towards the therapist which can make treatment more challenging (Blatt & Zuroff, 2002).

In addition to the challenges that perfectionism poses in treatment, there is also an extensive body of literature implicating perfectionism in both depression and suicidal ideation (Blatt, 1995; Burns, 1980; Hewitt, Flett & Weber, 1994; Smith et al., 2018). Unsurprisingly, many of the participants in this study also reported experiencing some degree of suicidal ideation prior to treatment.

In short, perfectionism often presents as an intractable issue that is resistant to treatment and that is affiliated with a myriad of complicating issues including depression and suicide. Given that perfectionism is just one of many traits commonly displayed by women with bulimia, it is no wonder that the successful treatment of this disorder is such a monumental task.

Another factor supporting the argument for a lengthier course of treatment is the phenomenon of ego-syntonicity of eating disorder symptomology and ambivalence about recovery. As was described in the therapist's reflections, there was often a pervasive sense of ambivalence about recovery among participants throughout treatment. This ambivalence stems from the well-documented phenomenon of the sometimes ego-syntonic nature of eating disorders, whereby eating-related thoughts, obsessions or behaviours are consistent with an individual's identity, values and goals (Lalonde & O'Connor, 2015; Mazure et al., 1994; Roncero, Belloch, Perpina & Treasure, 2013; Sunday & Halmi, 2000). For example, certain eating disorder behaviours or thoughts may be perceived as bringing one closer to the goal of losing weight, thereby making these thoughts and behaviours desirable. Additionally, research shows that for some individuals the eating disorder becomes an essential part of their identity. For these people, recovery from the illness would then mean living without an identity (Bulik & Kendler, 2000). Therefore, ego-syntonicity can be a significant hindering factor in the pursuit of effective treatment. It can lead to treatment resistance or ambivalence, treatment refusal, and poor insight as to the severity of the illness (Bulik & Kendler, 2000; Lalonde & O'Connor, 2015).

In summary, it is the combination of emotional avoidance, the heterogeneous nature of bulimia nervosa, the presence of perfectionism, the ego-syntonic nature of the illness, and the subsequent ambivalence about treatment that makes it so very challenging to effectively treat this disorder. Given the myriad of complicating and treatment-hindering factors that can exist in the presence of bulimia nervosa, it is unsurprising that certain individuals with this disorder may require a longer course of treatment to overcome not only the disorder itself, but the accompanying challenges and traits that may serve to perpetuate it.

## **Participant Feedback**

Feedback was collected from participants in the second group using the Helpful Aspects of Therapy (HAT) questionnaire. This information was gathered to provide some context for the above outcomes to better understand how and why participants found group to be helpful.

The aspect of therapy endorsed by all participants as helpful was the group support, which is consistent with the work of Brennan et al. (2015). Participants described the value in receiving emotional support, validation, praise and encouragement from both group members and therapists. This was consistent with the therapist's observation that there was significant clinical value in group-based EFT such that participants could view the work of other group members and share their experiences with one another. For example, watching group members express a feared emotion, experience a softening in their critical voice, or receive an apology from the critic or a significant other appeared to be transformative for the observing participants. The group format and the support of other group members allowed participants to consider new ways of relating to their own emotions or internal dialogue, sometimes prompting a shift in their chair work. A distinct but related study highlighted the importance of group members being able to watch others engage in chair work interventions to work through issues that they could relate to (Ivanova, 2013). This is also in line with Wnuk's (2009) research in which participants identified the support of the group leaders as being most helpful.

The second and third most endorsed categories of helpful events were engaging in a dialogue with either the self-critic or eating disorder voice, and developing an enhanced



emotional awareness. These categories reflect the work of Brennan et al. (2015) where a group of women identified the importance of being able to recognize the destructive impact that their inner critic had, and the value they took from learning to access and accept avoided emotions. The category of emotional awareness is also similar to Wnuk's (2009) research where participants reported learning to identify their emotional needs as helpful.

The fourth and fifth most endorsed categories were the softening of the eating disorder voice, and the ability to express their emotions. To achieve a softening in the eating disorder voice (i.e., a reduction in body and food-related self-criticism), participants were required to engage in a dialogue with the part of themselves that promoted eating disorder symptoms to experience the emotional impact of their harsh criticisms, and to understand the protective role that the eating disorder was playing in their lives. The identification of this experience as helpful is corroborated by existing research highlighting the benefit of engaging in self-critical chair work (Wnuk, 2009) and recognizing both the destructive and protective aspects of the critic (Brennan et al., 2015). The identification of emotional expression as a helpful experience is also reflected in existing literature (Brennan et al., 2015; Wnuk, 2009).

The sixth category identified the importance of the unfinished business intervention, which was not explicitly identified as a helpful experience in the EFT-G and eating disorder literature. However, the unfinished business intervention has undeniable relevance to the other categories identified here, including emotional awareness and emotional expression. This intervention is utilized based on the presence of a marker that there are unresolved feelings towards a significant other, and these markers tended to arise during self-critic or eating disorder chair work. Furthermore, the previously identified experiences of increased emotional awareness and emotional expression would also tend to arise from the unfinished business intervention.

Therefore, while this category was not identified by most participants, we argue that it has great relevance and a strong connection to the other helpful experiences identified here.

Overall, participants rated and described this group as helpful. They valued the support and connection with group members and therapists and identified chair work with their eating disorder voice or inner critic as being the most beneficial interventions utilized in group. The importance of connection in the group echoes existing research highlighting the importance of positive, empathic therapeutic relationships, both with therapists and other group members, in the process of change (Greenberg et al., 1993; Watson, 2007, 2018; Watson & Geller, 2005; Watson et al., 2014; Watson & Greenberg, 1994). This feedback also suggests that above and beyond the utility of a group format, EFT chair work interventions and the emotional processes that ensue are seen by participants as having value in the journey to recovery.

### **Clinical Implications**

Based on the results and the therapist's reflections, there are a number of suggestions for clinical practice that can be taken from this study.

Firstly, the results outlined in this study clearly indicate that EFT-G has a great deal of promise in the treatment of bulimia nervosa, not only in reducing eating disorder symptomology but also in alleviating the emotional burden of shame. While the effectiveness of EFT-G (Brennan et al., 2015; Compare et al., 2013; Ivanova, 2013; Wnuk, 2009) and EFT in individual therapy (Banack, 2015; Dolhanty & Greenberg, 2009) for eating disorders has been demonstrated, this is the first study to our knowledge objectively demonstrating the utility of EFT-G in reducing shame. This is significant as

the EFT model identifies a reduction of shame and other painful emotions as a key facet of change (Dolhanty & Greenberg, 2007; Elliott et al., 2004b; Greenberg, 2015; Greenberg et al., 1993; Pascual-Leone, 2009). Furthermore, given that shame is a core emotion in the presence and maintenance of eating disorders (American Psychiatric Association, 2013; Goss & Allan, 2009; Goss & Gilbert, 2002; Keith et al., 2009; Sanftner et al., 1995; Swan & Andrews, 2003; Troop et al., 2008), this finding is of great importance and further highlights the utility of this novel treatment in promoting eating disorder recovery.

Feedback from the second group highlighted the value of delivering treatment in a group format, as all participants identified the support of the group itself as an integral facet of their treatment. Feedback also highlighted the value participants placed on the chair work interventions, particularly those of self-evaluative conflict splits (i.e., self-criticism), symptom splits (i.e., eating disorder voice), and unfinished business. This is an important finding because it highlights the utility of EFT and the specific interventions within this model above and beyond the reported benefits of the group format.

In terms of the clinical application of EFT-G, there were both challenges and advantages that warrant attention in the application of this intervention with an eating disordered population. The first challenge is the degree of emotional avoidance and suppression that tends to coincide with eating disorder behaviours. It is often the case that individuals with eating disorders are very fearful of their emotions and will avoid them at any cost, often resorting to symptoms (i.e., binge-eating and purging) to manage them (Corstorphine, Mountford et al., 2007; Davis & Jamieson, 2005; Dolhanty & Greenberg, 2007, 2009; Dolhanty, 2006; Haedt-Matt & Keel, 2011; Svaldi et al., 2012). It was observed in group that participants were generally disconnected from their emotions such that they struggled to contact, identify and/or tolerate them. Given the highly

emotional nature of EFT-G, it was not uncommon that participants experienced self-interruptive splits (i.e., emotional blocks) during other chair work interventions. This was informative of their emotional processing style, but also tended to disrupt the processing that may have otherwise been occurring. Therefore, one of the key challenges to be aware of is that chair work and emotional processing may occur more slowly with this population than it might with other clinical issues.

Another challenge in conducting chair work with an eating disordered population was that the desire for recovery was often punctuated by periods of ambivalence. One moment a participant would express dislike for the eating disorder and the negative emotional impact it had on them, and in the next moment experience fear and reluctance about letting the eating disorder go. This ambivalence stalled the recovery process and made it more challenging to achieve a softening in the critic or eating disorder voice.

The last clinical challenge in working with an eating disordered population was the often harsh and relentless nature of participant's inner critics. It was noted that self-critical evaluative split and symptom split interventions often needed to be repeated many times and gradually worked through over the course of several sessions. It was observed that a participant might make progress one week in softening their inner critic, but that several weeks later the self-criticism would escalate once more. As such, emotional change was observed to occur slowly.

Despite these challenges, there were also several advantages that stemmed from utilizing EFT-G to treat bulimia nervosa. One of the key advantages was that the participants could all relate to one another on a common struggle, which served to normalize their experiences. Participants were able to develop relationships with other

group members and be honest about their struggles in a safe and trusting environment. Given the amount of shame and secrecy that tends to coincide with having an eating disorder (American Psychiatric Association, 2013; Sanftner & Tantillo, 2011; Shapiro & Powers, 2011), this can be viewed as a uniquely healing feature of EFT-G.

The second major advantage was that participants could observe one another's chair work. Observing the chair work of others could facilitate change in a number of ways. It can prompt participants to reflect inward on their own experiences even when they are not engaged in chair work directly; it can allow participants to consider new ways of relating to their own critics, eating disorder voices, or significant others; and it allows them to observe productive emotional expression and to witness emotional change in others. The observation of emotional expression can be particularly important when a participant observes others expressing a healthy emotion or need that they themselves might avoid or suppress (e.g., sadness, grief, assertive anger, or a need for love).

This study also highlights the individualized nuances of treatment response among bulimic women. The fact that such pronounced nuances exist within a given diagnostic group for a given treatment approach is critical knowledge for clinicians to have, because it suggests that while one size fits most, it does not fit all, nor does it fit in the same way. Despite a common symptomology, individuals with symptoms of bulimia nervosa appear to undergo overlapping but somewhat distinct processes of change, including whether or not deterioration precedes improvement, when in treatment deterioration takes place, and the magnitude or frequency with which deterioration occurs. It is essential that clinicians be aware of the patterns of deterioration and improvement that women with bulimia may exhibit during treatment, while also remembering that each participant may differ in the timing, degree and frequency of such

fluctuations. Beyond the scope of clinical practice, the nuanced treatment responses outlined in this study also highlights the importance of utilizing an idiopathic approach in future psychotherapy outcome research to better understand these differences.

While it extends beyond the scope of this study, based on the distinctly heterogeneous nature of bulimia nervosa, effective treatment may require an integration of EFT with other interventions or approaches to therapy. This may include but may not be limited to providing additional psychoeducation, utilizing behavioural interventions, or providing concrete strategies and skills for symptom control and emotion regulation. It is possible that deviating from an EFT protocol may complement rather than detract from the emotion processing work that is otherwise being done and could facilitate the recovery process. This is in line with the therapists' reflections, which highlighted the second group's need for additional psychoeducation and concrete emotion regulation strategies. While not an explicit component of the treatment protocol, some participants identified group discussions of this nature as helpful for their recovery process. This highlights the need for more well-rounded treatments that treat the whole person by incorporating and working with cognitions, behaviours and emotions in different ways, rather than focusing more narrowly on certain components. This proposal is consistent with Thompson-Brenner & Westen's (2005) suggestion that the integration of treatments may be very important to effectively treat the broad range of pathology and differing symptom presentations among individuals with bulimia nervosa.

Similarly, given the amount of discussion and informal psychoeducation that tended to take place in group, there may be benefit in having additional group sessions dedicated solely to psychoeducation about the etiology of eating disorders, the

relationship between symptoms and emotion regulation, and the emotional versus the physical effects of food and diet. This suggestion stems from the observation that one session of psychoeducation appears to have been insufficient for some participants. Some individuals appeared to lack knowledge about certain topics, which occasionally necessitated that additional group time be dedicated to these discussions. Therefore, additional sessions dedicated to psychoeducation could be highly beneficial.

While 16 weeks of EFT-G proved largely effective in reducing bulimia symptomology, internal shame and external shame for the majority of participants, the majority of participants continued to exhibit some bulimia symptomology following the completion of treatment. That is, remission was not achieved. However, downward trends (i.e., trend towards improvement) for bulimia and shame symptomology could be observed towards the end of treatment or at follow-up in both groups. It is therefore possible that symptomology may have continued to decline had therapy been longer, and that participants may have achieved remission given more time. This suggests that while short-term therapy using EFT-G can produce positive changes, a moderate-to long-term course of therapy may produce greater, more lasting changes.

This suggestion is supported by the potential for chronicity (Bøgh et al., 2005; Fichter & Quadflieg, 2004; Keel et al., 1999; Keller et al., 1991; Steinhausen & Weber, 2009), the moderate relapse rates (Keel et al., 1999; Keller et al., 1991; Olmsted et al., 2005; Richard et al., 2005; Yu et al., 2013), and the inherent tendency for emotional avoidance among individuals with eating disorders (Dolhanty, 2006; Dolhanty & Greenberg, 2007, 2009). This proposal is also supported by one study which illustrated that increased treatment length for bulimia nervosa, regardless of treatment modality, predicted better global outcomes (Thompson-Brenner & Westen, 2005). While the ideal length of treatment is unclear at this time, the potentially

enduring nature of these illnesses and the high rates of relapse may indicate that a more intensive and long-standing treatment is required. It is possible that length of treatment would be best modeled after that which is offered for personality disorders, which entails intensive psychotherapy for six to twelve months. However, this suggestion would warrant further investigation.

Additionally, given the time it takes to adapt to and understand the mechanics of the chair work interventions, it may be of benefit for participants to engage in one-on-one therapy with the group therapists prior to beginning group. This could help save time that is otherwise spent discussing and explaining the interventions, and may minimize the feelings of self-doubt that implicitly occur when trying a new intervention for the first time in front of unknown others.

### **Limitations**

There are several limitations that should be considered when interpreting the results of this study. While the use of a single subject withdrawal design came with several advantages, there were also inherent limitations in the use of this particular method. The main disadvantage was the limited internal validity of this study design. It is possible that unidentified and unmeasured factors may have been responsible for the changes observed during treatment, as opposed to the intervention.

Another disadvantage was that the underlying assumption of a withdrawal design is that the measured behaviour is expected to return to baseline levels upon the removal of treatment (Byiers et al., 2012). The observation of such an effect typically provides further evidence about the effects of treatment. However, as is the case in counselling psychotherapy research, this assumption was not relevant to the present study as the



expectation was that treatment gains would be maintained following the removal of the intervention (Ray, 2015). Therefore, the maintenance of gains or further improvement at follow-up (i.e., after the removal of treatment) was interpreted as evidence of the lasting effects of EFT-G. However, given that this interpretation differs from the underlying assumptions of a withdrawal design, follow-up data must be interpreted with caution as there is no way to verify that such conclusions or interpretations are accurate.

An additional limitation was the small number of measurements that were taken within each phase, particularly in the follow-up phase. Given that only one data point was obtained during the follow-up phase, clinical significance was determined based on whether or not this single measurement fell outside of the two standard deviation band. This is a limitation as it is recommended that at least two data points in a given phase be examined to determine clinical significance (Kazdin, 2011). Therefore, conclusions about clinical significance during follow-up should be drawn with caution. Furthermore, the single data point in the follow-up phase places an additional limitation on the resulting effect size, which should also be interpreted with caution, as a pattern of symptomology could not be established.

A related limitation is that there was some instability noted across baseline phases, where participants exhibited either increasing or decreasing trends prior to treatment. The presence of a variable baseline creates difficulty in analyzing the presence or absence of treatment effects, particularly in the presence of trends denoting improvement (i.e., decreasing). Further, due to time constraints the baseline phase could not be extended until stability was achieved where necessary. This is therefore noted as a significant limitation of this study.

Visual analysis is used to interpret the findings of single subject research, and is an effective way to examine individual-level treatment responses. However, a limitation of this

method is that while there are guidelines for interpretation, there are no standardized criteria or procedures in place. Therefore, analysis can be highly subjective and can allow for bias or create disagreement among raters (Graham et al., 2012). Additionally, due to limited time and resources, the principal investigator was the sole rater in interpreting results, thereby introducing the possibility of bias. In an effort to reduce bias in the interpretation of repeated measures data, an expert in single subject design was consulted throughout the interpretive process. Additionally, a more conservative stance was adopted when analyzing pre-post data. This involved adopting the higher of the proposed minimally important difference scores for the DASS-21 (Depression scale) when determining clinical significance, and using a one standard deviation band (as opposed to a 2 SD band) around non-clinical means to determine whether clinically significant change had occurred for the remainder of the outcome measures. A one standard deviation band creates a smaller data range within which post-treatment scores must fall in order to be deemed clinically significant, thereby ensuring a cautious stance when drawing conclusions.

Serial dependence, which refers to the correlation between data points that are repeatedly measured, is a common issue in single subject design. It violates the assumption of independence, thereby preventing the use of parametric statistical analysis to determine whether treatment produced a significant change in symptomology (Backman & Harris, 1999; Graham et al., 2012). Given that parametric assumptions were not met and inferential statistical procedures were therefore not relevant for this study, effect size was estimated using a visual index in lieu of a statistical index. However, an inherent limitation in using a visual index of effect size is that there are numerous

methods that can be employed with no agreement on the best method to use (Lenz, 2013; Parker et al., 2011; Ray, 2015). The index used for this study was the PEM. The primary limitations of PEM are that the resulting effect sizes tend to be higher than that of other visual indices, and PEM is known to have low power and low specificity (Manolov et al., 2010). Given these limitations, this index should be used and interpreted as a source of supplemental information to the visual analysis, rather than a replacement for it.

This study has limited external validity given the small sample size. This study included ten participants with overlapping symptomology, although diversity was noted in the severity and specific clusters of symptoms that were exhibited across individuals. While this diversity lends more weight to the generalizability of the patterns and trends across individual treatment responses, further replication of these results would be necessary in order to generalize findings to the broader population (Graham et al., 2012; Janosky et al., 2009).

The final limitation of this study was the researcher and therapist allegiance to EFT. Findings are somewhat mixed about the impact of researcher allegiance in psychotherapy outcome, with some studies challenging the notion that allegiance creates bias (Klein, 1999; Lambert, 1999; Leykin & DeRubeis, 2009). However, there is a large body of research supporting the hypothesis that research allegiance can have a profound impact on treatment efficacy, often skewing treatment effects in favor of the preferred treatment (Dragioti, Dimoliatis, Fountoulakis, & Evangelou, 2015; Falkenström, Markowitz, Jonker, Philips & Holmqvist, 2013; Munder, Brütsch, Leonhart, Gerger & Barth, 2013; Munder, Fluckiger, Gerger & Wampold, 2011). Given that no efforts were made to control for researcher allegiance, this poses an inherent threat to the internal validity of the study.

## **Future Directions**

EFT is a relatively novel approach in the treatment of eating disorders. Despite its promise and increased application with this population, it remains surprisingly under-researched in the context of both individual and group treatment. There are only a handful of studies exploring the effectiveness of EFT for eating disorders in a group setting (Compare et al., 2013; Brennan et al., 2015; Ivanova, 2013; Wnuk, 2009) or in an individual setting (Banack, 2015; Dolhanty & Greenberg, 2009). Further, the majority of this limited research has been conducted on bulimic populations (i.e., bulimia nervosa or binge-eating disorder) with little attention paid to anorexia nervosa. Given the innumerable psychological and medical complications stemming from anorexia, and the lethality of this particular illness (American Psychiatric Association, 2013), the first recommendation for future directions is to pursue in a more in-depth investigation of treatment outcomes from an EFT perspective for anorexia. Secondly, while the EFT literature has largely focused on bulimic disorders, this research has primarily been conducted in a group treatment setting. Therefore, additional research is needed to gain a more thorough understanding of treatment outcomes for individual therapy. Thirdly, a comparison of group versus individual therapy would be warranted in the future, once further evidence is gathered, to identify the most efficient mode of treatment for this population.

Another suggestion for future direction would be to conduct additional single subject research utilizing different methodological approaches that offer greater experimental control. For example, employing a multiple baseline design would be ideal as this would overcome the previously outlined limitations of the withdrawal design by

lengthening the baseline phase and introducing treatment at different points in time (Backman & Harris, 1999; Graham et al., 2012). This particular approach could be used for treatment delivery in an individual or group format to further our understanding of the utility of EFT as a treatment modality, while also allowing for an understanding of treatment effects at the individual level.

Provided the resources were available, a mixed-method study would be of immeasurable value such that quantitative and qualitative findings can be collected, systematically integrated and inform one another. A systematic, mixed-methods examination of the change process that occurs within and across sessions would be of great interest, both across different eating disorder diagnostic groups and different modalities of treatment (i.e., group versus individual). A study of this nature could utilize self-report measures, open-ended questions, and a systematic evaluation of within-session experiencing as determined by external raters, similar to that employed by Pascual-Leone (2009). Of particular interest would be an investigation of whether or not individuals with eating disorders display distinct patterns of emotional change relative to other populations, and how those patterns might vary across diagnostic categories and across individuals within a given diagnostic group.

An important next step to further our understanding of EFT for eating disorders would be to conduct a large-scale RCT study to compare the efficacy of EFT to a control group or existing evidence-based approaches, such as CBT and IPT. This is a crucial piece of research that is absent from the existing body of literature in clarifying EFT's validity as an evidence-based treatment for eating disorders.

Lastly, although EFT-G was effective for the majority of participants in reducing bulimia symptomology and internal shame, it was only somewhat effective with respect to external shame. It was initially anticipated that a reduction in external shame would be greatly facilitated

by group treatment. However, it is possible that the effects of EFT-G on external shame were dulled by the normalizing effect of a shared symptomology among participants. While it is possible that participants may have felt less shame and stigma about their eating disorder within the confines of the group, they may have continued to anticipate, fear or perceive judgments from others outside the group about their conditions. Of interest would be an investigation of the treatment effects of emotion-focused family therapy (EFFT) on both internal and external shame. Much like EFT, EFFT views emotion as central to eating disorder pathology such that symptoms are used to manage and avoid painful feelings. However, EFFT emphasizes the healing power of family in recovery from an eating disorder. EFFT helps caregivers learn how to interrupt patterns of emotional avoidance within the family system and provides parents with emotion processing skills so they can better support their loved ones through the recovery process (Robinson, Dolhanty, Stillar, Henderson, & Mayman, 2014). It may be that through this process of caregiver support and emotion coaching, a bulimic individual's experience of external shame will in turn decrease beyond that which has been demonstrated with EFT-G.

## **Conclusion**

Eating disorders, despite their chronicity, high rate of comorbid pathology and myriad of medical complications, continue to be treated unsatisfactorily. Yet psychotherapy outcome research, beyond the only moderately effective modalities of CBT and IPT, continues to be shockingly under-represented in the literature. The purpose of this study was to expand the current body of knowledge using a relatively novel form of treatment, emotion-focused group therapy, with a particular focus on treatment response at the individual level and the effects of this approach in reducing shame among women with symptoms of bulimia nervosa. Repeated measures findings highlight common trends and patterns of change, while also revealing more nuanced treatment responses at the individual level. An overall reduction in eating disorder symptomology, internal shame and external shame was observed for the majority of participants, although treatment gains were least prominent for external shame. Improvements were also identified for depression symptomology, self-esteem, interpersonal alienation, and emotion regulation. However, patterns of change and domains of improvement varied from one individual to another. Some participants exhibited patterns of improvement, some exhibited deterioration, and some demonstrated a fluctuation between deterioration and improvement. Furthermore, while there were overarching trends and patterns, the direction of change varied across symptom measures and individuals. These findings highlight the inherent diversity among individuals with these disorders and a need for greater attention to individualized treatment responses in order to effectively promote recovery. Although research is limited, the findings of this study are largely corroborated by the existing literature examining the utility of EFT for eating disorders. This study expands the existing literature by providing further evidence for the use of EFT in eating

disorder treatment, as well as in reducing shame, a pervasive and problematic emotion inherent to the experience of an eating disorder.



## References

- Accurso, E. C., Wonderlich, S. A., Crosby, R. D., Smith, T. L., Klein, M. H., Mitchell, J. E., ... Peterson, C. B. (2016). Predictors and moderators of treatment outcome in a randomized clinical trial for adults with symptoms of bulimia nervosa. *Journal of Consulting and Clinical Psychology, 84*, 178-184. doi:10.1037/ccp0000073
- Agras, W. S., Walsh, T., Fairburn, C. G., Wilson, G. T., & Kraemer, H. C. (2000). A multicenter comparison of cognitive-behavioral therapy and interpersonal psychotherapy for bulimia nervosa. *Archives of General Psychiatry, 57*, 459-466. doi:10.1001/archpsyc.57.5.459
- Allport, G. W. (1937). *Personality: A psychological interpretation*. Oxford, England: Henry Holt and Company.
- American Psychiatric Association. (2006). *Practice guideline for the treatment of patients with eating disorders* (3rd ed.). Washington, D.C.: American Psychiatric Association.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Association.
- Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the depression anxiety stress scales in clinical groups and a community sample. *Psychological Assessment, 10*, 176-181. doi:10.1037/1040-3590.10.2.176
- Backman, C. L., & Harris, S. R. (1999). Case studies, single-subject research, and N of 1 randomized trials: Comparisons and contrasts. *American journal of physical medicine & rehabilitation, 78*(2), 170-176.

- Bailer, U., de Zwaan, M., Leisch, F., Strnad, A., Lennkh-Wolfsberg, C., El-Giamal, N., ... Kasper, S. (2004). Guided self-help versus cognitive-behavioural group therapy in the treatment of bulimia nervosa. *International Journal of Eating Disorders*, *35*, 522-537. doi:10.1002/eat.20003
- Balsamo, M., Macchia, A., Carlucci, L., Picconi, L., Tommasi, M., Gilbert, P., & Saggino, A. (2015). Measurement of external shame: An inside view. *Journal of Personality Assessment*, *97*, 81-89. doi:10.1080/00223891.2014.947650
- Banack, K. D. (2015). *A case study of emotion-focused therapy for bulimia nervosa* (Doctoral dissertation). Retrieved from University of Alberta Libraries Institutional Repository. (uac.e2e2e039.13af.4b78.8636.b9edd339c1a3)
- Bardone-Cone, A. M., Maldonado, C. R., Crosby, R. D., Mitchell, J. E., Wonderlich, S. A., Joiner Jr., T. E., ... le Grange, D. (2008). Revisiting differences in individuals with bulimia nervosa with and without a history of anorexia nervosa: Eating pathology, personality, and maltreatment. *International Journal of Eating Disorders*, *41*, 697-704. doi:10.1002/eat.20567
- Bardone-Cone, A. M., Sturm, K., Lawson, M. A., Robinson, D. P., & Smith, R. (2010). Perfectionism across stages of recovery from eating disorders. *The International Journal of Eating Disorders*, *43*, 139-148. doi:10.1002/eat.20674
- Barrett-Lennard, G. T. (1997). The recovery of empathy-toward others and self. In A. C. Bohart & L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in theory research & practice* (pp. 103–121). Washington, DC: APA. doi:10.1037/10226-000
- Baumeister, R. F., & Vohs, K. D. (2003). Self-regulation and the executive function of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 197–217). New York, NY: Guilford Press.

- Benini, L., Todesco, T., Grave, R.D., Deiorio, F., Salandini, L., & Vantini, I. (2004). Gastric emptying in patients with restricting and binge/purging subtypes of anorexia nervosa. *American Journal of Gastroenterology*, *99*, 1448-1454. doi:<https://doi.org/10.1111/j.1572-0241.2004.30246.x>
- Bernard, H., Burlingame, G., Flores, P., Greene, L., Joyce, A., Kobos, J. C., ... Feirman, D. (2008). Clinical practice guidelines for group psychotherapy. *International Journal Of Group Psychotherapy*, *58*, 455–542. doi:10.1521/ijgp.2008.58.4.455
- Blatt, S. J. (1995). The destructiveness of perfectionism: Implications for the treatment of depression. *American Psychologist*, *50*(12), 1003-1020.
- Blatt, S. J., & Zuroff, D. C. (2002). Perfectionism in the therapeutic process. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 393-406). Washington, DC: American Psychological Association.
- Bøgh, E.H., Rokkedal, K., & Valbak, K. (2005). A 4-year follow-up on bulimia nervosa. *European Eating Disorders Review*, *13*, 48-53. doi:10.1002/erv.601
- Bohart, A.C., Elliott, R., Greenberg, L.S., & Watson, J.C. (2002). Empathy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 89-108). New York, NY: Oxford University Press.
- Boone, L., Soenens, B., & Braet, C. (2011). Perfectionism, body dissatisfaction, and bulimic symptoms: the intervening role of perceived pressure to be thin and thin ideal internalization. *Journal of Social and Clinical Psychology*, *30*, 1043-1068. doi:10.1521/jsep.2011.30.10.1043
- Boutelle, K., Neumark-Sztainer, D., Story, M., & Resnick, M. (2002). Weight control behaviors among obese, overweight, and nonoverweight adolescents. *Journal of Pediatric Psychology*, *27*, 531-540. doi:10.1093/jpepsy/27.6.531

- Bowles, T., Kurlender, M., & Hellings, B. (2011). Family functioning and family stage associated with patterns of disordered eating in adult females. *The Australian Educational and Developmental Psychologist*, 28, 47-60. doi:10.1375/aedp.28.1.47
- Boyce, W. F. (2004). *Young people in Canada: Their health and well-being* (Publication no. H39-498/2004E). Ottawa, ON: Health Canada.
- Boyce, W. F., King, M. A., & Roche, J. (2008). *Healthy settings for young people in Canada* (Publication no. HP35-6/2007E-PDF). Ottawa, ON: Public Health Agency of Canada.
- Brabender, V., Fallon, A., & Smolar, A. I. (2004). *Essentials of group therapy*. Hoboken, N.J.: Wiley.
- Brennan, M. A., Emmerling, M. E., & Whelton, W. J. (2015). Emotion-focused group therapy: Addressing self-criticism in the treatment of eating disorders. *Counselling and Psychotherapy Research*, 15, 67-75. doi:10.1002/capr.12012
- Bulik, C. M., & Kendler, K. S. (2000). I am what I (don't) eat: Establishing an identity independent of an eating disorder. *The American Journal of Psychiatry*, 157, 1755-1760. doi:10.1176/appi.ajp.157.11.1755
- Bulik, C. M., Tozzi, F., Anderson, C., Mazzeo, S. E., Aggen, S., & Sullivan, P. F. (2003). The relation between eating disorders and components of perfectionism. *The American Journal of Psychiatry*, 160, 366-368. doi:10.1176/appi.ajp.160.2.366
- Burlingame, G. M., Fuhriman, A., & Anderson, E. (1995). Group psychotherapy efficacy: A meta-analytic perspective. Paper presented at the 103rd annual convention of the American Psychological Association.
- Burlingame, G. A., Kircher, J. C., & Taylor, S. (1994). Methodological considerations in group psychotherapy research: Past, present, and future practices. In A. Fuhriman & G. M. Burlingame

- (Eds.), *Handbook of group psychotherapy: An empirical and clinical synthesis* (pp. 41-82). New York, NY: John Wiley & Sons, Inc.
- Burlingame, G. M., McClendon, D. T., & Alonso, J. (2011). Cohesion in group therapy. *Psychotherapy Relationships That Work: Evidence-Based Responsiveness*, 48, 34-42.  
doi:10.1093/acprof:oso/9780199737208.003.0005
- Burlingame, G. M., Strauss, B., & Joyce, A. S. (2013). Change mechanisms and effectiveness of small group treatments. In M. J. Lambert (Eds.), *Bergin and garfield's handbook of psychotherapy and behaviour change* (6<sup>th</sup> ed.). (pp. 640-689). Hoboken, NJ: John Wiley & Sons, Inc
- Burns, D. (1980). The perfectionist's script for self-defeat. *Psychology Today*, 14, 34-57.
- Bydlowski, S., Corcos, M., Jeammet, P., Paterniti, S., Berthoz, S., Laurier, C., . . . Consoli, S. M. (2005). Emotion-processing deficits in eating disorders. *International Journal of Eating Disorders*, 37, 321-329. doi:10.1002/eat.20132
- Byiers, B. J., Reichle, J., & Symons, F. J. (2012). Single-subject experimental design for evidence-based practice. *American Journal of Speech-Language Pathology*, 21, 397-414. doi:10.1044/1058-0360(2012/11-0036)
- Byrne, S. M., & McLean, N. J. (2002). The cognitive-behavioral model of bulimia nervosa: A direct evaluation. *International Journal of Eating Disorders*, 31, 17-31. doi:10.1002/eat.10002
- Cameron, I. M., Cunningham, L., Crawford, J. R., Eagles, J. M., Eisen, S. V., Lawton, K., . . . Hamilton, R. J. (2007). Psychometric properties of the BASIS-24 (behaviour and symptom identification scale-revised) mental health outcome measure. *International Journal of Psychiatry in Clinical Practice*, 11, 36-43. doi:10.1080/13651500600885531
- Carter, F. A., Jordan, J., McIntosh, V. V. W., Luty, S., McKenzie, J. M., Framptom, C. M. A., . . . Joyce, P. R. (2011). The long-term efficacy of three psychotherapies for anorexia nervosa: A

randomized, controlled trial. *International Journal of Eating Disorders*, 44, 647-654.

doi:10.1002/eat.20879

Cavanaugh, C. J., & Lemberg, R. (1999). What we know about eating disorders: Facts and statistics. In R. Lemberg & L. Cohn (Eds.) *Eating disorders: A reference sourcebook* (pp 7-11). Phoenix, AZ: Oryx Press.

Chen, E. Y., & Le Grange, D. (2007). Subtyping adolescents with bulimia nervosa. *Behaviour Research and Therapy*, 45, 2813–2820. doi:10.1016/j.brat.2007.09.003

Chen, E., Touyz, S. W., Beumont, P. J. V., Fairburn, C. G., Griffiths, R., Butow, P., ... Basten, C. (2003). Comparison of group and individual cognitive-behavioral therapy for patients with bulimia nervosa. *International Journal of Eating Disorders*, 33, 241–254. doi:10.1002/eat.10137

Clausen, L., Rosenvinge, J. H., Friberg, O., & Rokkedal, K. (2011). Validating the Eating Disorder Inventory-3 (EDI-3): A comparison between 561 female eating disorders patients and 878 females from the general population. *Journal of Psychopathology and Behavioral Assessment*, 33, 101-110. doi:10.1007/s10862-010-9207-4

Collins, M. E. (1991). Body figure perceptions and preferences among pre-adolescent children. *International Journal of Eating Disorders*, 10, 199-208. doi:10.1002/1098-108X(199103)10:2<199::AID-EAT2260100209>3.0.CO;2-D

Compare, A., Calugi, S., Marchesini, G., Shonin, E., Grossi, E., Molinari, E., & Grave, R. D. (2013). Emotionally focused group therapy and dietary counseling in binge eating disorder. Effect on eating disorder psychopathology and quality of life. *Appetite*, 71, 361-368.

Cook, D. R. (1988). Measuring shame: The Internalized Shame Scale. *Alcoholism Treatment Quarterly*, 4, 197-215. doi:10.1300/J020v04n02\_12

- Cook, D. R. (1991). Shame, attachment, and addictions: Implications for family therapists. *Contemporary Family Therapy, 13*, 405-419. doi:10.1007/BF00890495
- Cook, D. R. (1994, 2001). *Internalized shame scale: Technical manual*. North Tonawanda, NY: Multi-Health Systems, Inc.
- Corey, M. S., Corey, G., & Corey, C. (2010). *Groups: Process and practice* (8<sup>th</sup> ed.). Belmont, CA: Brooks/Cole.
- Corstorphine, E., Mountford, V., Tomlinson, S., Waller, G., & Meyer, C. (2007). Distress tolerance in the eating disorders. *Eating Behaviours, 8*, 91-97. doi:10.1016/j.eatbeh.2006.02.003
- Cumella, E. J. (2006). Review of the Eating Disorder Inventory-3. *Journal of Personality Assessment, 87*, 116-117. doi:10.1207/s15327752jpa8701\_11
- Darwin, C. (1872). *The Expression of the Emotions in Man and Animals*. London, UK: John Murray.
- Davis, R., & Jamieson, J. (2005). Assessing the functional nature of binge eating in the eating disorders. *Eating Behaviours, 6*, 345-354. doi:10.1016/j.eatbeh.2005.02.001
- Davis, C., & Katzman, M. (1999). Culture and eating disorders. In R. Lemberg & L. Cohn (Eds). *Eating Disorders: A reference sourcebook*. Phoenix, AZ: Oryx Press.
- Decaluwé, V., & Braet, C. (2005). The cognitive behavioural model for eating disorders: A direct evaluation in children and adolescents with obesity. *Eating Behaviours, 6*, 211-220. doi:10.1016/j.eatbeh.2005.01.006
- Dolhanty, J. (2006). Emotion-focused therapy for eating disorders. National Eating Disorder Information Center, 21(2). Retrieved from <http://nedic.ca/emotion-focused-therapy-eating-disorders>

- Dolhanty, J., & Greenberg, L. S. (2007). Emotion-focused therapy in the treatment of eating disorders. *European Psychotherapy, 7*, 97-116. Retrieved from <http://nedic.ca/emotion-focused-therapy-eating-disorders>
- Dolhanty, J., & Greenberg, L. S. (2009). Emotion-focused therapy in a case of anorexia nervosa. *Clinical Psychology and Psychotherapy, 16*, 366-382. doi:10.1002/cpp.624
- Dragioti, E., Dimoliatis, I., Fountoulakis, K.N., & Evangelou, E. (2015). A systematic appraisal of allegiance effect in randomized controlled trials of psychotherapy. *Annals of General Psychiatry, 14*, 1-9. doi:10.1186/s12991-015-0063-1
- Eddy, K. T., Dorer, D. J., Franko, D. L., Tahilani, K., Thompson-Brenner, H., & Herzog, D. B. (2007). Should bulimia nervosa be subtyped by history of anorexia nervosa? A longitudinal validation. Commentaries. *Diagnosis and Classification, 40*, S67-S71. doi:10.1002/eat
- Eisen, S. V., Normand, S. L., Belanger, A. J., Spiro, A. III., & Esch, D. (2004). The revised behavior and symptom identification scale (BASIS-R): Reliability and validity. *Medical Care, 42*, 1230-1241. doi:10.1097/00005650-200412000-00010
- Eisler, I. (2005). The empirical and theoretical base of family therapy and multiple family day therapy for adolescent anorexia nervosa. *Journal of Family Therapy, 27*(2), 104-131.
- Elliott, R. (1986). Interpersonal process recall (IPR) as a psychotherapy process research method. In L. S. Greenberg & W. M. Pinsoff (Eds.), *The psychotherapeutic process: A research handbook* (pp. 503-528). New York, NY: Guilford.
- Elliott, R., Watson, J., Goldman, R., & Greenberg, L. (2004a). Empty chair work for unfinished interpersonal issues. Washington, DC, US: American Psychological Association.



- Elliott, R., Watson, J. C., Goldman, R. N., & Greenberg, L. S. (2004b). *Learning emotion-focused therapy: The process-experiential approach to change*. Washington, DC: American Psychological Association.
- Espelage, D. L., Mazzeo, S. E., Aggen, S. H., Quittner, A. L., Sherman, R., & Thompson, R. (2003). Examining the construct validity of the Eating Disorder Inventory. *Psychological Assessment*, *15*, 71-80. doi:10.1037/1040-3590.15.1.71
- Facchini, M., Sala, L., Malfatto, G., Bragato, R., Redaelli, G., & Invitti, C. (2006). Low-K<sup>+</sup> dependent QT prolongation and risk for ventricular arrhythmia in anorexia nervosa. *International Journal of Cardiology*, *106*, 170-176. doi:10.1016/j.ijcard.2005.01.041
- Fairburn, C. G. (1991). The heterogeneity of bulimia nervosa and its implications for treatment. *Journal of Psychosomatic Research*, *35*, 3-9. doi:https://doi.org/10.1016/0022-3999(91)90108-Z
- Fairburn, C. G., Bailey-Straebler, S., Basden, S., Doll, H. A., Jones, R., Murphy, R., ... & Cooper, Z. (2015). A transdiagnostic comparison of enhanced cognitive behaviour therapy (CBT-E) and interpersonal psychotherapy in the treatment of eating disorders. *Behaviour Research and Therapy*, *20*, 64-71. doi:10.1016/j.brat.2015.04.010
- Fairburn C. G., & Cooper, P. J. (1984). The clinical features of bulimia nervosa. *British Journal of Psychiatry*, *144*, 238-246. doi:10.1192/bjp.144.3.238
- Fairburn, C. G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: a “transdiagnostic” theory and treatment. *Behaviour Research and Therapy*, *41*, 509-528. doi:10.1016/S0005-7967(02)00088-8
- Fairburn, C. G., Jones, R., Peveler, R. C., Hope, R. A., & O'Connor, M. (1993). Psychotherapy and bulimia nervosa: Longer-term effects of interpersonal psychotherapy, behavior therapy, and cognitive behavior therapy. *Archives of General Psychiatry*, *50*(6), 419-428.

- Fairburn, C. G., & Peveler, R. C. (1990). Bulimia nervosa and a stepped care approach to management. *Gut, 31*(11), 1220-1222.
- Fairburn, G. G., Stice, E., Cooper, Z., Doll, H. A., Norman, P. A., & O'Connor, M. E. (2003). Understanding persistence of bulimia nervosa: A 5-year naturalistic study. *Journal of Consulting and Clinical Psychology, 71*, 103–109. doi:10.1037/0022-006X.71.1.103
- Falkenström, F., Markowitz, J.C., Jonker, H., Philips, B., & Holmqvist, R. (2013). Can psychotherapists function as their own controls? Meta-analysis of the crossed therapist design in comparative psychotherapy trials. *The Journal of Clinical Psychiatry, 74*, 482-491. doi:10.4088/JCP.12r07848
- Fichter, M.M, & Quadflieg, N. (2004). The course and outcome of bulimia nervosa. *Psychological Medicine, 34*, 1395-1406. doi:10.1007/s00787-003-1113-9
- Fichter, M. M., & Quadflieg, N. (2007). Long-term stability of eating disorder diagnoses. Commentaries. *Diagnosis and Classification, 40*, S61-S66. doi:10.1002/eat
- Field, N. P., & Horowitz, M. J. (2015). Applying an empty-chair monologue paradigm to examine unresolved grief. *Psychiatry: Interpersonal and Biological Processes, 61*, 279-287.
- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-31). Washington, DC: American Psychological Association.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear. Exposure to corrective information. *Psychological bulletin, 99*, 20-35. doi:10.1037/0033-2909.99.1.20
- Fowler, J. C., Charak, R., Elhai, J. D., Allen, J. G., Frueh, B. C., & Oldham, J. M. (2014). Construct validity and factor structure of the Difficulties in Emotion Regulation Scale among adults with

severe mental illness. *Journal of Psychiatric Research*, 58, 175-180.

doi:10.1016/j.jpsychires.2014.07.029

- Fuhriman, A., & Burlingame, G. M. (1994). Group psychotherapy: Research and practice. In A. Fuhriman & G. M. Burlingame (Eds.), *Handbook of group psychotherapy: An empirical and clinical synthesis* (pp. 3-40). New York, NY: John Wiley & Sons, Inc.
- Gallo, K., Comer, J., & Barlow, D. (2013). Single-case experimental designs and small pilot trial designs. In J. Comer & P. Kendall's (Eds.), *The Oxford handbook of research strategies for clinical psychology* (pp. 24–39). New York, NY: Oxford University Press.
- Garner, D. M. (2004). *Eating Disorder Inventory-3: Professional Manual*. Lutz, FL: Psychological Assessment Resources, Inc.
- Germans, S., van Heck, G. L., & Hodiament, P. P. G. (2012). Results of the search for personality disorder screening tools: Clinical implications. *Journal of Clinical Psychiatry*, 73, 165-173.  
doi:10.4088/JCP.11m07067
- Germans, S., van Heck, G. L., Hodiament, P. P. G., Elshoff, D., Kondakci, H., Kloet, J., & Rijnders, C. A. T. (2013). Validation of two informant-based screening instruments for personality disorders in a psychiatric outpatient population. *Journal of Hospital Administration*, 2, 133-142.  
doi:10.5430/jha.v2n2p133
- Germans, S., van Heck, G. L., Moran, P., & Hodiament, P. P. G. (2008). The self-report standardized assessment of personality-abbreviated scale: Preliminary results of a brief screening test for personality disorders. *Personality and Mental Health*, 2, 70-76. doi:10.1002/pmh.34
- Gianini, L. M., White, M. A., & Masheb, R. M. (2013). Eating pathology, emotion regulation, and emotional overeating in obese adults with binge eating disorder. *Eating Behaviors*, 14, 309-313.

- Gilbert, P. (1998). What is shame? Some core issues and controversies. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 3-38). New York, NY: Oxford University Press.
- Gilbert, P. (2002). Body shame: A biopsychosocial conceptualization and overview with treatment implications. In P. Gilbert & J. Miles (Eds), *Body shame: Conceptualization, research and treatment* (pp. 3–54). Hove, UK: Brunner-Routledge.
- Goldman, R. N., Greenberg, L. S., & Angus, L. (2006). The effects of addition emotion-focused interventions to the client-centered relationship conditions in the treatment of depression. *Psychotherapy Research, 16*, 537-549. doi:10.1080/10503300600589456
- Goldman, R., Watson, J., & Greenberg, L. (2011). Contrasting two clients in emotion-focused therapy for depression 2: The case of "Eloise," "it's Like opening the windows and letting the fresh air come in". *Pragmatic Case Studies in Psychotherapy, 7*, 305-338. doi:10.14713/pcsp.v7i2.1093.
- Goldner, E. M., Srikameswaran, S., Schroeder, M. L., Livesley, W. J. & Birmingham, C. L. (1999). Dimensional assessment of personality pathology in patients with eating disorders. *Psychiatry Research 85*(2), 151–159.
- Goldschmidt, A. B., Peterson, C. B., Wonderlich, S. A., Crosby, R. D., Engel, S. G., Mitchell, J. E., ... Berg, K. C. (2013). Trait-level and momentary correlates of bulimia nervosa with a history of anorexia nervosa. *International Journal of Eating Disorders, 46*, 140–146. doi:10.1002/eat.22054
- Gomez, R., Summers, M., Summers, A., Wolf, A., & Summers, J. J. (2014). Depression anxiety stress scales-21: Factor structure and test-retest invariance, and temporal stability and uniqueness of latent factors in older adults. *Journal of Psychopathology and Behavioral Assessment, 36*, 308-317. doi:10.1007/s10862-013-9391-0

- Goss, K., & Allan, S. (2009). Shame, pride and eating disorders. *Clinical Psychology and Psychotherapy, 16*, 303-316. doi:10.1002/cpp.627
- Goss, K., & Gilbert, P. (2002). Eating disorders, shame, and pride: A cognitive-behavioural functional analysis. In P. Gilbert & J. Miles (Eds.), *Body shame: Conceptualisation, research and treatment* (pp. 219-255). New York, NY: Brunner-Routledge.
- Goss, K., Gilbert, P., & Allan, S. (1994). An exploration of shame measures-I: The Other As Shamer scale. *Personality and Individual Differences, 17*, 713-717. doi:10.1016/0191-8869(94)90149-X
- Government of Canada. (2006). *The Human Face of Mental Health and Mental Illness in Canada 2006* (Cat. No. HP5-19/2006E). Ottawa, ON: CA. Minister of Public Works and Government Services Canada.
- Graham, J.E., Karmarkar, A.M., & Ottenbacher, K.J. (2012). Small sample research designs for evidence-based rehabilitation: Issues and methods. *American Congress of Rehabilitation Medicine, 93*, 111-116. doi:10.1016/j.apmr.2011.12.017
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41-54. doi:10.1023/B:JOBA.0000007455.08539.94
- Greenberg, L. S. (2015). *Emotion-focused therapy: Coaching clients to work through their feelings* (2<sup>nd</sup> ed.). Washington, DC: American Psychological Association.
- Greenberg, L.S. (2017). Emotion-focused therapy of depression. *Person-Centered & Experiential Psychotherapies, 16*, 106-117. doi:10.1080/14779757.2017.1330702

- Greenberg, L. S., & Bolger, E. (2001). An emotion-focused approach to the over-regulation of emotion and emotional pain. *Journal of Clinical Psychology, 57*, 197-211. doi:10.1002/1097-4679(200102)57:2<197::AID-JCLP6>3.0.CO;2-O
- Greenberg, L. S., & Iwakabe, S. (2011). Emotion-focused therapy and shame. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the therapy hour* (pp. 69-90). Washington, DC: American Psychological Association.
- Greenberg, L. S., Rice, L. N., Elliott, R. (1993). *Facilitating emotional change: The moment-by-moment process*. New York, NY: The Guilford Press.
- Greenberg, L., & Watson, J. (2006). *Emotion-focused therapy for depression*. Washington, DC, US: American Psychological Association.
- Greenberg, L., & Watson, J. (2010). Experiential therapy of depression: Differential effects of client-centered relationship conditions and process experiential interventions. *Psychotherapy Research, 8*, 210-224. doi:10.1080/10503309812331332317.
- Grilo, C. M., Hrabosky, J. I., White, M. A., Allison, K. C., Stunkard, A. J., & Masheb, R. M. (2008). Overvaluation of shape and weight in binge eating disorder and overweight controls: Refinement of a diagnostic construct. *Journal of Abnormal Psychology, 117*(2), 414 – 419.
- Grilo, C. M., Masheb, R. M., & Berman, R. M. (2001). Subtyping women with bulimia nervosa along dietary and negative affect dimensions: A replication in a treatment-seeking sample. *Eating and Weight Disorders, 6*, 53–58. doi:10.1037/a0013887
- Grilo, C. M., Masheb, R. M., & Wilson, G. T. (2001). Subtyping binge eating disorder. *Journal of Consulting and Clinical Psychology, 69*, 1066-1072. doi:10.1037//0022-006X.69.6.1066

- Haedt-Matt, A. A., & Keel, P. K. (2011). Revisiting the affect regulation model of binge eating: A meta-analysis of studies using ecological momentary assessment. *Psychological Bulletin, 137*, 660-681. doi:10.1037/a0023660
- Halchuk, R. E., Makinen, J. A., & Johnson, S. M. (2010). Resolving attachment injuries in couples using emotionally focused therapy: A three-year follow up. *Journal of Couple and Relationship Therapy, 9*, 31-47. doi:10.1080/15332690903473069
- Hawkins, N., Richards, P. S., Granley, H. M., & Stein, D. M. (2004). The impact of exposure to the thin-ideal media image on women. *Eating Disorders, 12*, 35-50. doi:10.1080/10640260490267751
- Haworth-Hoepfner, S. (2000). The critical shapes of body image: The role of culture and family in the production of eating disorders. *Journal of Marriage and the Family, 62*, 212-227. doi:10.1111/j.1741-3737.2000.00212.x
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the depression anxiety stress scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44*, 227-239. doi:10.1348/014466505X29657
- Hoek, H. W. (2007). Incidence, prevalence and mortality of anorexia and other eating disorders. *Current Opinion in Psychiatry, 19*, 389-394. doi:10.1097/01.yco.0000228759.95237.78
- Hewitt, P. L., Flett, G. L., & Weber, C. (1994). Dimensions of perfectionism and suicide ideation. *Cognitive Therapy and Research, 18*(5), 439-460.
- Hoek, H. W., & van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders, 34*, 383-396. doi:10.1002/eat.10222
- Holowaty, K. A. M., & Paivio, S. C. (2012). Characteristics of client-identified helpful events in emotion-focused therapy for child abuse trauma. *Psychotherapy Research, 22*, 56-66. doi:10.1080/10503307.2011.622727

- Hopwood, C. J., Ansell, E. B., Fehon, D. C., & Grilo, C. M. (2010). Personality heterogeneity in female adolescent inpatients with features of eating disorders. *Comprehensive Psychiatry*, *51*, 585-591. doi:10.1016/j.comppsy.2010.03.006
- Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the national comorbidity survey replication. *Biological Psychiatry*, *61*, 348-358. doi:10.1016/j.biopsych.2006.03.040
- Hütter, G., Ganepola, S., & Hofmann, W. (2009). The hematology of anorexia nervosa. *International Journal of Eating Disorders*, *42*, 293-300. doi:10.1002/eat.20610
- Ivanova, I. (2013). *The "how" of change in emotion-focused group therapy for eating disorders*. (Doctoral dissertation). Retrieved from OAIster. (edsoai.889911832)
- Ivanova, I., & Watson, J. (2014). Emotion-focused therapy for eating disorders: Enhancing emotional processing. *Person-Centered & Experiential Psychotherapies*, *13*, 278-293. doi:10.1080/14779757.2014.910132.
- Jacobi, C., Dahme, B., & Dittmann, R. (2002). Cognitive-behavioural, fluoxetine and combined treatment for bulimia nervosa: Short- and long-term results. *European Eating Disorders Review*, *10*, 179-198. doi:10.1002/erv.452
- Janosky, J.E., Leininger, S.L., Hoerger, M.P., & Libkuman, T.M. (2009). *Single subject designs in biomedicine*. Dordrecht, South Holland: Springer. doi:10.1007/978-90-481-2444-2
- Johnson, J. E., Burlingame, G. M., Olsen, J. A., Davies, D. R., & Gleave, R. L. (2005). Group climate, cohesion, alliance, and empathy in group psychotherapy: Multilevel structural equation models. *Journal of Counselling Psychology*, *52*, 310-321. doi:10.1037/0022-0167.52.3.310



- Jones, A., & Clausen, L. (2013). The efficacy of a brief group CBT program in treating patients diagnosed with bulimia nervosa: A brief report. *International Journal of Eating Disorders*, *46*, 560-562. doi:10.1002/eat.22120
- Kaye, W. H., Greeno, C. G., Moss, H., Fernstrom, J., Fernstrom, M., Lilenfeld, L. R., ... Mann, J. J. (1998). Alterations in serotonin activity and psychiatric symptoms after recovery from bulimia nervosa. *Archives of General Psychiatry*, *55*, 927–935. doi:10.1001/archpsyc.55.10.927
- Kazdin, A.E. (2011). *Single-case research designs: Methods for Clinical and Applied Settings* (2nd ed.). Second Edition. New York, NY: Oxford University Press.
- Keel, P.K., Mitchell, J.E., Miller, K.B., Davis, T.L., & Crow, S.J. (1999). Long-term outcome in bulimia nervosa. *Archives of General Psychiatry*, *56*, 63-69. doi:10.1001/archpsyc.56.1.63
- Keith, L., Gillanders, D., & Simpson, S. (2009). An exploration of the main sources of shame in an eating-disordered population. *Clinical Psychology and Psychotherapy*, *16*, 317-327. doi:10.1002/cpp.629
- Keller, M.B., Herzog, D.B., Lavori, P.W., Bradburn, I.S., & Mahoney, E.M. (1991). The naturalistic history of bulimia nervosa: Extraordinarily high rates of chronicity, relapse, recurrence, and psychosocial morbidity. *International Journal of Eating Disorders*, *12*, 1-9. doi:10.1002/1098-108x
- Kelly, A. C., Carter, J. C., & Borairi, S. (2014). Are improvements in shame and self-compassion early in eating disorders treatment associated with better patient outcomes? *International Journal of Eating Disorders*, *47*, 54-64. doi:10.1002/eat.22196
- Kelly, J. F., Magill, M., Slaymaker, V., & Kahler, C. (2010). Psychometric validation of the Leeds dependence questionnaire (LDQ) in a young adult clinical sample. *Addictive Behaviors*, *35*, 331-336. doi:10.1016/j.addbeh.2009.11.005

- Kennedy-Moore, E., & Watson, J. C. (2001). How and when does emotional expression help? *Review of General Psychology, 5*, 187-212. doi:10.1037//1089-2680.5.3.187
- Kerlinger, F. N. (2000). *Foundations of behavioral research* (4th ed.). Fort Worth, TX: Harcourt College Publishers.
- Klein, D. F. (1999). Dealing with the effects of therapy allegiances. *Clinical Psychology: Science and Practice, 6*(1), 124–126.
- Krabbenborg, M. A. M., Danner, U. N., Larsen, J. K., van der Veer, N., van Elburg, A. A., de Ridder, D., ... Engels, R. C. M. E. (2012). The eating disorder diagnostic scale: Psychometric features within a clinical population and a cut-off point to differentiate clinical patients from healthy controls. *European Eating Disorders Review, 20*, 315-320. doi:10.1002/erv.1144
- Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M & Shadish, W. R. (2010). Single-case designs technical documentation. Retrieved from What Works Clearinghouse website: [http://ies.ed.gov/ncee/wwc/pdf/wwc\\_scd.pdf](http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf).
- Laessle, R. G., Wittchen, H. U., Fichter, M. M., & Pirke, K. M. (1989). The Significance of Subgroups of Bulimia and Anorexia Nervosa: Lifetime Frequency of Psychiatric Disorders. *International Journal of Eating Disorders, 8*(5), 569–574.
- Lalonde, M. P., & O'Connor, K. (2015). Food for thought: Change in ego-dystonicity and fear of self in bulimia nervosa over the course of inference based treatment. *Journal of Psychology & Clinical Psychiatry, 23*, 1-10. doi:10.1002/erv.2349
- Lambert, M. J. (1999). Are differential treatment effects inflated by researcher therapy allegiance? Could clever Hans count? *Clinical Psychology: Science and Practice, 6*(1), 127–130.

- Lampard, A. M., Byrne, S. M., McLean, N., & Fursland, A. (2011). An evaluation of the enhanced cognitive-behavioural model of bulimia nervosa. *Behaviour Research and Therapy*, 49, 529-535.  
doi:10.1016/j.brat.2011.06.002
- Lenz, A.S. (2013). Calculated effect size in single-case research: A comparison of nonoverlap methods. *Measurement and Evaluation in Counseling and Development*, 46, 64-73.  
doi:10.1177/0748175612456401
- Lewis, M. (1995). Embarrassment: The emotion of self-exposure and evaluation. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 198-218). New York, NY: The Guilford Press.
- Levinson, C. A., Brosf, L. C., Vanzhula, I. A., Bumberry, L., Zerwas, S., & Bulik, C. M. (2017). Perfectionism group treatment for eating disorders in an inpatient, partial hospitalization, and outpatient setting. *European Eating Disorders Review: The Journal of the Eating Disorders Association*, 25, 579–585. doi:10.1002/erv.2557
- Leykin, Y., & DeRubeis, R. J. (2009). Allegiance in psychotherapy outcome research: Separating association from bias. *Clinical Psychology: Science and Practice*, 16, 54–65.  
doi:10.1111/j.1468-2850.2009.01143.x
- Lilenfeld, L. R., Stein, D., Bulik, C. M., Strober, M., Plotnicov, K., Pollice, C. ... Kaye, W. H. (2000). Personality traits among currently eating disordered, recovered and never ill first-degree female relatives of bulimic and control women. *Psychological Medicine*, 30(6), 1399-1410.
- Lilenfeld, L. R., Wonderlich, S., Riso, L. P., Crosby, R., & Mitchell, J. (2006). Eating disorders and personality: A methodological and empirical review. *Clinical Psychology Review*, 26, 299–320.  
doi:10.1016/j.cpr.2005.10.003

- Llewelyn, S. P. (1988). Psychological therapy as viewed by clients and therapists. *British Journal of Clinical Psychology, 27*(3), 223-237.
- Lovibond, S.H., & Lovibond, P.F. (1995). *Manual for the Depression Anxiety Stress Scales*. (2nd ed.). Sydney: Psychology Foundation.
- Manolov, R., Solanas, A., & Leiva, D. (2010). Comparing “Visual” Effect Size Indices for Single-Case Designs. *Methodology, 6*, 49-58. doi:10.1027/1614-2241/a000006
- Manolov, R., Solanas, A., & Leiva, D. (2010). Comparing “Visual” Effect Size Indices for Single-Case Designs. *Methodology, 6*, 49-58. doi:10.1027/1614-2241/a000006
- Matos, M., Pinto-Gouveia, J., Gilbert, P., Duarte, C., & Figueiredo, C. (2015). The Other As Shamer Scale-2: Development and validation of a short version of a measure of external shame. *Personality and Individual Differences, 74*, 6-11. doi:10.1016/j.paid.2014.09.037
- Maxwell, H., Compare, A., Brugnera, A., Zarbo, C., Rabboni, M., Dalle Grave, R., & Tasca, G. A. (2018). Reflective Functioning and Growth in Therapeutic Alliance During Emotionally Focused Group Therapy for Binge-Eating Disorder. *Group Dynamics: Theory, Research and Practice, 22*, 32-44. doi:10.1037/gdn0000078
- Mazure, C. M., Halmi, K. A., Sunday, S. R., Romano, S. J., & Einhorn, A. M. (1994). The Yale-Brown-Cornell Eating Disorder Scale: Development, use, reliability and validity. *Journal of Psychiatric Research, 28*(5), 425-445.
- McLean Hospital. (2006). *Behaviour and Symptom Identification Scale: BASIS-24 Instruction Guide*. Belmont, MA: McLean Hospital.
- Mellin, L., McNutt, S., Hu, Y., Schreiber, G. B., Crawford, P., & Obarzanek, E. (1997). A longitudinal study of the dietary practices of black and white girls 9 and 10 years old at enrollment: The

NHLBI growth and health study. *Journal of Adolescent Health*, 20, 27-37. doi:10.1016/S1054-139X(96)00176-0

Mennin, D. S., & Fresco, D. M. (2010). Emotion regulation as an integrative framework for understanding and treating psychopathology. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 356-379). New York, NY: John Wiley & Sons, Inc.

Milos, G., Spindler, A., Schnyder, U., & Fairburn, C. G. (2005). Instability of eating disorder diagnoses: Prospective study. *British Journal of Psychiatry*, 187, 573–578. doi:10.1192/bjp.187.6.573

Miniati, M., Callari, A., Maglio, A., & Calugi, S. (2018). Interpersonal psychotherapy for eating disorders: Current perspectives. *Psychology Research and Behavior Management*, 11, 353-369. doi:<https://doi.org/10.2147/PRBM.S120584>

Mitchell, J. E. (2016). Medical comorbidity and medical complications associated with binge-eating disorder. *International Journal of Eating Disorders*, 49, 319–323. doi:<https://doi-org.login.ezproxy.library.ualberta.ca/10.1002/eat.22452>

Mitchell, J. E., Halmi, K., Wilson, G. T., Agras, S., Kraemer, H., & Crow, S. (2002). A randomized secondary treatment study of women with bulimia nervosa who fail to respond to CBT. *International Journal of Eating Disorders*, 32, 271-281. doi:10.1002/eat.10092

Monteleone, P., Di Genio, M., Monteleone, A. M., Di Filippo, C., & Maj, M. (2011). Investigation of factors associated to crossover from anorexia nervosa restricting type (ANR) and anorexia nervosa binge-purging type (ANBP) to bulimia nervosa and comparison of bulimia nervosa patients with or without previous ANR or ANBP. *Comprehensive Psychiatry*, 52, 56–62. doi:10.1016/j.comppsy.2010.05.002

- Moran, P., Leese, M., Lee, T., Walter, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality-abbreviated Scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry, 183*, 228–232. doi:10.1192/bjp.183.3.228
- Munder, T., Brüttsch, O., Leonhart, R., Gerger, H., & Barth, J. (2013). Researcher allegiance in psychotherapy outcome research: An overview of reviews. *Clinical Psychology Review, 33*, 501-511. doi:10.1016/j.cpr.2013.02.002
- Munder, T., Fluckiger, C., Gerger, H., & Wampold, B.E. (2011). Is the allegiance effect an epiphenomenon of true efficacy differences between treatments? A meta-analysis. *Journal of Counselling Psychology, 59*, 631-637. doi:10.1037/a0029571
- Neumark-Sztainer, D., & Hannan, P. (2001). Weight-related behaviors among adolescent girls and boys: A national survey. *Archives of Pediatric and Adolescent Medicine, 154*, 569-577. doi:10.1001/archpedi.154.6.569
- Nevonen, L., & Broberg, A. G. (2005). A comparison of sequenced individual and group psychotherapy for eating disorder not otherwise specified. *European Eating Disorders Review, 13*, 29-37. doi:10.1002/erv.617
- Nevonen, L., & Broberg, A. G. (2006). A comparison of sequenced individual and group psychotherapy for bulimia nervosa. *International Journal of Eating Disorders, 39*, 117-127. doi:10.1002/eat.20206
- Norcross, J. C. (2002). Empirically supported therapy relationships. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 3-16). New York, NY: Oxford University Press.
- Olmsted, M.P., Kaplan, A.S., & Rockert, W. (2005). Defining remission and relapse in bulimia nervosa. *International Journal of Eating Disorders, 38*, 1-6. doi:10.1002/eat.20144

- Paivio, S. C., & Greenberg, L. S. (1995). Resolving “unfinished business”: Efficacy of experiential therapy using empty-chair dialogue. *Journal of Consulting and Clinical Psychology, 63*, 419-425. doi:10.1037/0022-006X.63.3.419
- Paivio, S. C., Jarry, J. L., Chagigiorgis, H., Hall, I., & Ralston, M. (2010). Efficacy of two versions of emotion-focused therapy for resolving child abuse trauma. *Psychotherapy Research, 20*, 353-366. doi:10.1080/10503300903505274
- Paivio, S. C., & Laurent, C. (2001). Empathy and emotion regulation: Reprocessing memories of childhood abuse. *Journal of Clinical Psychology/In Session: Psychotherapy in Practice, 57*, 213-226. doi:10.1002/1097-4679(200102)57:2<213::AID-JCLP7>3.0.CO;2-B
- Paivio, S. C., & Nieuwenhuis, J. A. (2001). Efficacy of Emotion Focused Therapy for adult survivors of child abuse: A preliminary study. *Journal of Traumatic Stress, 14*, 115-133. doi:10.1023/A:1007891716593
- Parker, R.I., Vannest, K.J., & Davis, J.L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behaviour Modification, 35*, 303-322. doi:10.1177/0145445511399147
- Pascual-Leone, A. (2009). Dynamic emotional processing in experiential therapy: Two steps forward, one step back. *Journal of Consulting and Clinical Psychology, 77*, 113-126. doi:10.1037/a0014488
- Pascual-Leone, A., & Greenberg, L. S. (2007). Emotional processing in experiential therapy: Why “the only way out is through”. *Journal of Consulting and Clinical Psychology, 75*, 875-887. doi:10.1037/0022-006X.75.6.875
- Perls, F.S. (1969). *Gestalt therapy verbatim*. Maob, UT: Real People Press.
- Perls, F.S., Hefferline, R., & Goodman, P. (1951). *Gestalt therapy*. New York: Dell.

- Polnay, A., James, V. A. W., Hodges, L., Murray, G. D., Munro, C., & Lawrie, S. M. (2014). Group therapy for people with bulimia nervosa: Systematic review and meta-analysis. *Psychological Medicine*, *44*, 2241-2254. doi:10.1017/S0033291713002791
- Polivy, J., & Herman, P. (2002). Causes of eating disorders. *Annual Review of Psychology*, *53*, 187-213. doi:0084-6570/02/0201-0187\$14.00
- Raistrick, D., Bradshaw, J., Tober, G., Weiner, J., Allison, J., & Healey, C. (1994). Development of the Leeds dependence questionnaire (LDQ): A questionnaire to measure alcohol and opiate dependence in the context of a treatment evaluation package. *Addiction*, *89*, 563-572. doi:10.1111/j.1360-0443.1994.tb03332.x
- Ray, D. C. (2015). Single-case research design and analysis: Counseling applications. *Journal of Counseling and Development*, *93*, 394-402. doi:10.1002/jcad.12037
- Rice, L. N., & Greenberg, L. S. (1992). Humanistic approaches to psychotherapy. In D. K. Freedheim, H. J. Freudenberger, J. W. Kessler, S. B. Messer, D. R. Peterson, H. H. Strupp, & P. L. Wachtel (Eds.), *History of psychotherapy: A century of change* (pp. 197-224). Washington, DC, US: American Psychological Association.
- Richard, M., Bauer, S., & Kordy, H. (2005). Trans-diagnostic outcome of eating disorders: A 30-month follow-up study of 629 patients. *European Eating Disorders Review*, *13*, 180-190. doi:10.1002/erv.1025
- Rieger, E., Van Buren, D. J., Bishop, M., Tanofsky-Kraff, M., Welch, R., & Wilfley, D. E. (2010). An eating disorder-specific model of interpersonal psychotherapy (IPT-ED): Causal pathways and treatment implications. *Clinical Psychology Review*, *30*, 400-410. doi:10.1016/j.cpr.2010.02.001
- Roberto, C.A., Mayer, L.E., Brickman, A.M., Barnes, A., Muraskin, J., Yeung, L., Steffener, J., Sy, M., Hirsch, J., Stern, Y., & Walsh, B.T. (2011). Brain tissue volume changes following weight gain



in adults with anorexia nervosa. *International Journal of Eating Disorders*, 44, 406-411.

doi:10.1002/eat.20840

Robinson, A. L., Dolhanty, J., & Greenberg, L. (2013). Emotion-focused family therapy for eating disorders in children and adolescents. *Clinical Psychology and Psychotherapy*, 22, 75-82.

doi:0.1002/cpp.1861

Robinson, A. L., Dolhanty, J., Stillar, A., Henderson, K., & Mayman, S. (2014). Emotion-focused family therapy for eating disorders across the lifespan: A pilot study of a 2-day transdiagnostic intervention for parents. *Clinical Psychology and Psychotherapy*. Advanced Online Publication.

doi:10.1002/cpp.1933

Robinson, A. L., McCague, E. A., & Whissell, C. (2012). Single-case investigation of an emotion-focused therapy group for anxiety and depression. *International Journal of Integrative Psychotherapy*, 3, 59-81. doi:10.1080/14779757.2014.910131

doi:10.1080/14779757.2014.910131

del Rosario, P. M., & White, R. M. (2006). The Internalized Shame Scale: Temporal stability, internal consistency, and principal components analysis. *Personality and Individual Differences*, 41, 95-103. doi:10.1016/j.paid.2005.10.026

doi:10.1016/j.paid.2005.10.026

Rogers, C. R. (1951). *Client-centered therapy*. Boston, MA: Houghton-Mifflin.

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21, 95-103. doi:10.1037/h0045357

doi:10.1037/h0045357

Rogers, C.R. (1959). A Theory of Therapy, Personality, and Interpersonal Relationships, as Developed in the Client-Centered Framework. In S. Koch (Ed.), *Psychology, A Study of a Science. Vol. III: Formulations of the Person and the Social Context* (pp. 184-256). New York, NY: McGraw-Hill.

- Roncero, M., Belloch, A., Perpina, C., & Treasure, J. (2013). Ego-syntonicity and ego-dystonicity of eating-related intrusive thoughts in patients with eating disorders. *Psychiatry Research*, *208*, 67-73. doi:10.1016/j.psychres.2013.01.006
- Rybak, C. J., & Brown, B. (1996). Assessment of internalized shame: Validity and reliability of the Internalized Shame Scale. *Alcoholism Treatment Quarterly*, *14*, 71-83. doi:10.1300/J020V14N01\_07
- Sanftner, J. L., Barlow, D. H., Marschall, D. E., & Tangney, J. P. (1995). The relation of shame and guilt to eating disorder symptomatology. *Journal of Social and Clinical Psychology*, *14*, 315-324. doi:10.1521/jscp.1995.14.4.315
- Sanftner, J. L., & Tantillo, M. (2011). Body image and eating disorders: A compelling source of shame for women. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the therapy hour* (pp. 277–303). Washington, DC: American Psychological Association.
- Schaumberg, K., Jangmo, A., Thornton, L. M., Birgegård, A., Almqvist, C., Norring, C., ... Bulik, C. M. (2018). Patterns of diagnostic transition in eating disorders: A longitudinal population study in Sweden. *Psychological Medicine*, 1-9. doi:10.1017/S0033291718001472
- Schmidt, U., & Treasure, J. (2006). Anorexia nervosa: Valued and visible. A cognitive-interpersonal maintenance model and its implications for research and practice. *British Journal of Clinical Psychology*, *45*, 343–366. doi:10.1348/014466505X53902
- Scruggs, T. E., & Mastropieri, M. A. (1998). Summarizing single-subject research: Issues and applications. *Behavior Modification*, *22*, 221–242. doi:10.1177/0145445598022300
- Shapiro, J. R., Berkman, N. D., Brownley, K. A., Sedway, J. A., Lohr, K. N., & Bulik, C. M. (2007). Bulimia nervosa treatment: A systematic review of randomized controlled trials. *International Journal of Eating Disorders*, *40*, 321-336. doi:10.1002/eat

- Shapiro, E. L., & Powers, T. A. (2011). Shame and the paradox of group therapy. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the therapy hour* (pp. 115-135). Washington, DC: American Psychological Association.
- Smink, F. R. E., van Hoeken, D., & Hoek, H. W. (2012). Epidemiology of eating disorders: Incidence, prevalence and mortality rates. *Current Psychiatry Reports, 14*, 406-414. doi:10.1007/s11920-012-0282-y
- Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Mushquash, C., Flett, G. L., & Hewitt, P. L. (2018). The perniciousness of perfectionism: A meta-analytic review of the perfectionism-suicide relationship. *Journal of Personality, 86*, 522–542. doi:10.1111/jopy.12333
- Speranza, M., Loas, G., Wallier, J., & Corcos, M. (2007). Predictive value of alexithymia in patients with eating disorders: A 3-year prospective study. *Journal of Psychosomatic Research, 63*, 365-371. doi:10.1016/j.jpsychores.2007.03.008
- Stein, D., Kaye, W. H., Matsunaga, H., Orbach, I., Har-Even, D., Frank, G., ... Rao, R. (2002). Eating-related concerns, mood, and personality traits in recovered bulimia nervosa subjects: A replication study. *International Journal of Eating Disorders, 32*, 225–229. doi:10.1002/eat.10025
- Steinhausen, H.C., & Weber, S. (2009). The outcome of bulimia nervosa: Findings from one-quarter century of research. *The American Journal of Psychiatry, 166*, 1331-1341. doi:10.1176/appi.ajp.2009.09040582
- Stice, E. (1999). Clinical implications of psychosocial research on bulimia nervosa and binge eating disorder. *Eating Disorders, 55*(6), 675–683.

- Stice, E. (2001). A prospective test of the dual-pathway model of bulimic pathology: Mediating effects of dieting and negative affect. *Journal of Abnormal Psychology, 110*, 124-135.  
doi:10.1037//0021-843X.110.1.124
- Stice, E., & Agras, W. S. (1998). Predicting onset and cessation of bulimic behaviors during adolescence: A longitudinal grouping analyses. *Behavior Therapy, 29*(2), 257-276.
- Stice, E., & Agras, W. S. (1999). Subtyping bulimic women along dietary restraint and negative affect dimensions. *Journal of Consulting and Clinical Psychology, 67*(4), 460-469.
- Stice, E., Agras, W. S., Telch, C. F., Halmi, K. A., Mitchell, J. E., & Wilson, G. T. (2001). Subtyping binge eating-disordered women along dieting and negative affect dimensions. *International Journal of Eating Disorders, 30*(1), 11–27.
- Stice, E., Bohon, C., Marti, C. N., & Fischer, K. (2008). Subtyping women with bulimia nervosa along dietary and negative affect dimensions: Further evidence of reliability and validity. *Journal of Consulting and Clinical Psychology, 76*, 1022-1033. doi:10.1037/a0013887
- Stice, E., & Fairburn, C. G. (2003). Dietary and dietary-depressive sub-types of bulimia nervosa show differential symptom presentation, social impairment, comorbidity, and course of illness. *Journal of Consulting and Clinical Psychology, 71*, 1090 –1094. doi:10.1037/0022-006X.71.6.1090
- Stice, E., Fisher, M., & Martinez, E. (2004). Eating disorder diagnostic scale: Additional evidence of reliability and validity. *Psychological Assessment, 16*, 60-71. doi:10.1037/1040-3590.16.1.60
- Stice, E., Telch, C. F., & Rizvi, S. L. (2000). Development and validation of the eating disorder diagnostic scale: A brief self-report measure of anorexia, bulimia, and binge-eating disorder. *Psychological Assessment, 12*, 123-131. doi:10.1037//1040-3590.12.2.123
- Striegel-Moore, R. H., & Cachelin, F. M. (2001). Etiology of eating disorders in women. *The Counselling Psychologist, 29*, 635-661. doi:10.1177/0011000001295002

- Streigel-Moore, R. H., & Franko, D. L. (2003). Epidemiology of binge eating disorder. *International Journal of Eating Disorders, 34*, 19-29. doi:10.1002/eat.10202
- Stuart, S., & Robertson, M. D. (2003). *Interpersonal psychotherapy : A clinician's guide*. New York, NY: Arnold.
- Sullivan, P. (2002). Course and outcome of anorexia nervosa and bulimia nervosa. In C. Fairburn & K. D. Brownell (Eds.). *Eating disorders and obesity* (pp. 226-232). New York, NY: Guilford Press.
- Sullivan, P. F., Bulik, C. M., Carter, F. A., Gendall, K. A., & Joyce, P. R. (1996). The significance of a prior history of anorexia in bulimia nervosa. *The International Journal of Eating Disorders, 20*(3), 253-261.
- Sunday, S. R., & Halmi, K. A. (2000). Comparison of the Yale-Brown-Cornell Eating disorders Scale in Recovered Eating Disorder patients, restrained dieters, and nondieting controls. *The International Journal of Eating Disorders, 28*(4), 455-459.
- Svaldi, J., Griepenstroh, J., Tuschen-Caffier, B., & Ehring, T. (2012). Emotion regulation deficits in eating disorders: A marker of eating pathology or general psychopathology? *Psychiatry Research, 197*, 103-111. doi:10.1016/j.psychres.2011.11.009
- Swan, S., & Andrews, B. (2003). The relationship between shame, eating disorders and disclosure in treatment. *British Journal of Clinical Psychology, 42*, 367-378.  
doi:10.1348/014466503322528919
- Sysko, R., Hildebrandt, T., Wilson, G. T., Wilfley, D. E., & Agras, W. S. (2010). Heterogeneity moderates treatment response among patients with binge eating disorder. *Journal of Consulting and Clinical Psychology, 78*, 681-690. doi:10.1037/a0019735
- Tasca, G.A., & Bone, M. (2007). Individual versus group psychotherapy for eating disorders. *International Journal of Group Psychotherapy, 57*, 399-403. doi:10.1521/ijgp.2007.57.3.399

- Tantam, D. (1998). The emotional disorders of shame. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 161-175). New York, NY: Oxford University Press.
- Tantleff-Dunn, S., Gokee-LaRose, J., & Peterson, R. D. (2004). Interpersonal psychotherapy for the treatment of anorexia nervosa, bulimia nervosa, and binge eating disorder. In J. K. Thompson (Ed.), *Handbook of eating disorders and obesity* (pp. 163–185). Hoboken, NJ: John Wiley & Sons, Inc.
- Tangney, J. P., Burggraf, S. A., & Wagner, P. E. (1995). Shame-proneness, guilt-proneness, and psychological symptoms. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 343-367). New York, NY: The Guilford Press.
- Tangney, J. P., & Dearing, R. L. (2004). *Shame and guilt*. New York, NY: The Guilford Press.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *The Annual Review of Psychology*, 58, 345-372. doi:10.1146/annurev.psych.56.091103.070145
- Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, 101, 469-478. doi:10.1037/0021-843X.101.3.469
- Tesser, A. (2003). Self-evaluation. In M. R. Leary, & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 275–290). New York, NY: Guilford Press.
- Thompson-Brenner, H., & Westen, D. (2005). A naturalistic study of psychotherapy for bulimia nervosa, Part 2. *The Journal of Nervous and Mental Disease*, 193, 585-595. doi:10.1097/01.nmd.0000178883.82580.18

- Tozzi, F., Thornton, L. M., Rotondo, A., Mauri, M., Cassano, G., Keel, P., ... Mitchell, J. (2005). Symptom fluctuation in eating disorders: Correlates of diagnostic crossover. *The American Journal of Psychiatry*, *162*, 732-740. doi:10.1176/appi.ajp.162.4.732
- Troop, N. A., Allan, S., Serpell, L., & Treasure, J. L. (2008). Shame in women with a history of eating disorders. *European Eating Disorders Review*, *16*, 480-488. doi:10.1002/erv.858
- Troop, N. A., & Redshaw, C. (2012). General shame and bodily shame in eating disorders: A 2.5-year longitudinal study. *European Eating Disorders Review*, *20*, 373-378. doi:10.1002/erv.2160
- Utzinger, L. M., Mitchell, J. E., Cao, L., Crosby, R. D., Crow, S. J., Wonderlich, S. A., & Peterson, C. B. (2015). Clinical utility of subtyping binge eating disorder by history of anorexia or bulimia nervosa in a treatment sample. *International Journal of Eating Disorders*, *48*, 785-789. doi:10.1002/eat.22422
- Vaz, F. J., Guisado, J. A., & Penas-Lledo, E. M. (2003). History of anorexia nervosa in bulimic patients: Its influence on body composition. *The International Journal of Eating Disorder*, *34*, 148-155. doi:10.1002/eat.10153
- Vaz-Leal, F. J., Rodriguez Santos, L., García-Herráiz, M. A., Monge-Bautista, M., & López-Vinuesa, B. (2011). Bulimia Nervosa with History of Anorexia Nervosa: Could the Clinical Subtype of Anorexia Have Implications for Clinical Status and Treatment Response? *The International Journal of Eating Disorders*, *44*, 212-219. doi:10.1002/eat.20805
- Vitousek, K., Watson, S., & Wilson, G. T. (1998). Enhancing motivation for change in treatment-resistant eating disorders. *Clinical Psychology Review*, *18*, 391-420. doi:10.1016/S0272-7358(98)00012-9

- Vohs, K. D., Bardone, A. M., Joiner, T. E., Abramson, L. Y., & Heatherton, T. F. (1999). Perfectionism, perceived weight status, and self-esteem interact to predict bulimic symptoms: A model of bulimic symptom development. *Journal of Abnormal Psychology, 108*(4), 695–700.
- Wade, T. D., Keski-Rahkonen, A., & Hudson, J. (2011). Epidemiology of eating disorders. In M. Tsuang, M. Tohen & P. B. Jones (Eds.), *Textbook in psychiatric epidemiology* (3rd ed.) (pp. 343-360). Chichester, UK: John Wiley & Sons, Ltd.
- Waller, G., Gray, E., Hinrichsen, H., Mountford, V., Lawson, R., & Patient, E. (2014). Cognitive-behavioral therapy for bulimia nervosa and atypical bulimic nervosa: Effectiveness in clinical settings. *International Journal of Eating Disorders, 47*, 13-17. doi:10.1002/eat.22181
- Watson, J. C. (2002). Re-visioning empathy. In D. Cain, & J. Seeman (Eds.), *Handbook of research in humanistic therapies* (pp. 445-471). doi:10.1037/10439-014
- Watson, J. C. (2007). Reassessing Rogers' necessary and sufficient conditions of change. *Psychotherapy: Theory, Research, Practice, Training, 44*, 268-273. doi:10.1037/0033-3204.44.3.268
- Watson, J. C. (2011). The process of growth and transformation: Extending the process model. *Person-Centered & Experiential Psychotherapies, 10*, 11-27. doi:10.1080/14779757.2011.564760
- Watson, J. C. (2015). Empathy. In D. Cain, K. Keenan, & S. Rubin (Eds.), *Humanistic psychotherapies: Handbook of research and practice* (2nd ed., pp. 445–471). Washington, DC: APA.
- Watson, J. C. (2018). Mapping patterns of change in emotion-focused psychotherapy: Implications for theory, research, practice, and training. *Psychotherapy Research, 28*, 389- 405. doi:10.1080/10503307.2018.1435920



- Watson, J. C., & Geller, S. M. (2005). The relation among the relationship conditions, working alliance, and outcome in both process-experiential and cognitive-behavioral psychotherapy. *Psychotherapy Research, 15*, 25-33. doi:10.1080/10503300512331327010
- Watson, J. C., Gordon, L. B., Stermac, L., Kalogerakos, F., & Steckley, P. (2003). Comparing the effectiveness of process-experiential with cognitive-behavioural psychotherapy in the treatment of depression. *Journal of Consulting and Clinical Psychology, 71*, 773-781. doi:10.1037/0022-006X.71.4.773
- Watson, J. C., & Greenberg, L. S. (1994). The working alliance in experiential therapy: Enacting the relationship conditions. In A. Horvath & L. Greenberg (Eds.), *The working alliance: Theory, research and practice* (pp. 153-172). New York, NY: Wiley.
- Watson, J. C., & Greenberg, L. S. (2017). *Emotion focused psychotherapy for generalized anxiety disorder*. Washington, DC: APA.
- Watson, J. C., & Pos, A. E. (2017). Humanistic and experiential perspectives. In R. J. DeRubeis & D. R. Strunk (Eds.), *The Oxford handbook of mood disorders* (pp. 459-468). New York, NY: Oxford University Press.
- Watson, J. C., Steckley, P. L., & McMullen, E. J. (2014). The role of empathy in promoting change. *Psychotherapy Research, 24*, 286-298. doi:http://dx.doi.org/10.1080/10503307.2013.802823
- Weiss, L., Katzman, M., & Wolchik, S. (1994). Bulimia nervosa: Definition, diagnostic criteria, and associated psychological problems. In L. Alexander-Mott & D. Lumsden (Eds.), *Understanding eating disorders: Anorexia nervosa, bulimia nervosa, and obesity*. Philadelphia, PA: Taylor & Francis.
- Werner, K., & Gross, J. J. (2010). Emotion regulation and psychopathology: A conceptual framework. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation and psychopathology: A*

- transdiagnostic approach to etiology and treatment* (pp. 13-37). New York, NY: The Guilford Press.
- Wertheim, E., Paxton, S., & Blaney, S. (2009). Body image in girls. In L. Smolak & J. K. Thompson (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (2nd ed.) (pp. 47-76). Washington, D.C.: American Psychological Association.
- Westen, D., & Harnden-Fischer, J. (2001). Personality profiles in eating disorders: rethinking the distinction between Axis I and Axis II. *The American Journal of Psychiatry*, *158*(4), 547-562.
- Westmoreland, P., Krantz, M.J., & Mehler, P.S. (2016). Medical complications of anorexia nervosa and bulimia. *The American Journal of Medicine*, *129*, 30-37.  
doi:<https://doi.org/10.1016/j.amjmed.2015.06.031>
- White, J. H. (2000). Symptom development in bulimia nervosa: a comparison of women with and without a history of anorexia nervosa. *Archives of Psychiatric Nursing*, *14*(2), 81–92.
- Wildes, J. E., Marcus, M. D., Bright, A. C., & Dapelo, M. M. (2012). Emotion and eating disorder symptoms in patients with anorexia nervosa: An experimental study. *International Journal of Eating Disorders*, *45*, 876-882. doi:10.1002/eat.22020
- Wilfley, D. E., Stein, R., & Welch, R. (2003). Interpersonal psychotherapy. In J. Treasure, U. Schmidt & E. van Furth (Eds.), *Handbook of eating disorders* (2<sup>nd</sup> ed.) (pp. 253–270). Chichester, UK: John Wiley & Sons.
- Williamson, D.A., White, M.A., York-Crowe, E., & Stewart, T.M. (2004). Cognitive-behavioural theories of eating disorders. *Behaviour Modification*, *28*, 711-738.  
doi:10.1177/0145445503259853
- Wilson, G. T., Grilo, C. M., & Vitousek, K. M. (2007). Psychological treatment of eating disorders. *American Psychologist*, *62*, 199-216. doi:10.1037/0003-066X.62.3.199

- Wnuk, S. (2009). *Treatment development and evaluation of emotion-focused group therapy for women with symptoms of bulimia nervosa* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (NR64962)
- Wnuk, S. M., Greenberg, L., & Dolhanty, J. (2015). Emotion-focused group therapy for women with symptoms of bulimia nervosa. *Eating Disorders, 23*, 253-261.  
doi:10.1080/10640266.2014.964612
- Wonderlich, S. A., Crosby, R. D., Joiner, T., Peterson, C. B., Bardone-Cone, A., Klein, M. et al., ... Vrshek, S. (2005). Personality subtyping and bulimia nervosa: Psychopathological and genetic correlates. *Psychological Medicine, 35*, 649-657. doi:10.1017/S0033291704004234
- Wood, J. V., & Wilson, A. E. (2003). How important is social comparison? In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 344–366). New York, NY: Guilford Press.
- Yahalom, M., Spitz, M., Sandler, L., Heno, N., Roguin, N., & Turgeman, Y. (2013). The significance of bradycardia in anorexia nervosa. *The International Journal of Angiology: Official Publication Of The International College Of Angiology, Inc, 22*, 83–94. doi:https://doi-org.login.ezproxy.library.ualberta.ca/10.1055/s-0033-1334138
- Yalom, I. D., & Leszcz, M. (2005). *The Theory and Practice of Group Psychotherapy* (5<sup>th</sup> Ed.). Cambridge, MA: Basic Books.
- Yu, J., Agras, W.S., & Bryson, S. (2013). Defining recovery in adult bulimia nervosa. *Eating Disorders, 21*, 379-394. doi:10.1080/10640266.2013.827536
- Zander, M. E., & De Young, K. P. (2014). Individual differences in negative affect and weekly variability in binge eating frequency. *International Journal of Eating Disorders, 47*, 296-301.  
doi:10.1002/eat.22222

Zuroff, D., Blatt, S. J., Sotsky, S. M., Krupnick, J. L., Martin, D. J., Sainslow, C. A. III, & Simmens, S. (2000). Relation of therapeutic alliance and perfectionism to outcome in brief outpatient treatment of depression. *Journal of Consulting and Clinical Psychology, 68*, 114-124.  
doi:10.1037//0022-006X,68.1.114

Appendix A  
Sample Questions From the Eating Disorder Diagnostic Scale (EDDS) – DSM 5 Version

Over the past 3 months...

- |   |     |   |   |   |   |   |    |
|---|-----|---|---|---|---|---|----|
| 1. Have you felt fat?   | 0   | 1 | 2 | 3 | 4 | 5 | 6  |
| 2. Have you had a definite fear that you might gain weight or become fat?   | 0   | 1 | 2 | 3 | 4 | 5 | 6  |
| 3. Has your weight or shape influenced how you judge yourself as a person?  | 0   | 1 | 2 | 3 | 4 | 5 | 6  |
| 4. During the past <u>3 months</u> have there been times when you have eaten what other people would regard as an unusually large amount of food (e.g., a pint of ice cream) given the circumstances? | Yes |   |   |   |   |   | No |
| 5. During the times when you ate an unusually large amount of food, did you experience a loss of control (e.g., felt you couldn't stop eating or control what or how much you were eating)?           | Yes |   |   |   |   |   | No |

Appendix B  
 Sample Questions From the Self-Report Standardized Assessment of Personality –  
 Abbreviated Scale (SAPAS-SR)

Instructions: This questionnaire is about how you behave and the way you think and feel things usually. In other words it is about your behaviour and your way of being, in general (“**most of the time**” and “**in most situations**”). Please read each question carefully, and answer each question by checking yes or no.

- |   |            |          |
|---|------------|----------|
| 1. In general, do you have difficulty making and keeping friends?<br>If the answer is yes, does this apply “most of the time” and “in most situations”? | Yes<br>Yes | No<br>No |
| 2. Would you normally describe yourself as a loner?<br>If the answer is yes, does this apply “most of the time” and “in most situations”?               | Yes<br>Yes | No<br>No |
| 3. In general, do you trust other people?<br>If the answer is no, does this apply “most of the time” and “in most situations”?                          | Yes<br>Yes | No<br>No |
| 4. Do you normally lose your temper easily?<br>If the answer is yes, does this apply “most of the time” and “in most situations”?                       | Yes<br>Yes | No<br>No |

Appendix C  
Sample Questions From the Leeds Dependence Questionnaire (LDQ)

Here are some questions about the importance of alcohol or other drugs in your life. Think about the main substance you have been using over the **last 4 weeks** and tick the closest answer to how you see yourself.

	Never 0	Sometimes 1	Often 2	Nearly Always 3
Do you find yourself thinking about when you will next be able to have another drink or take more drugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is drinking or taking drugs more important than anything else you might do during the day?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you feel that your need for drink or drugs is too strong to control?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you plan your days around getting and taking drink or drugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you drink or take drugs in a particular way in order to increase the effect it gives you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D  
Sample Questions From the BASIS-24

Instructions to Respondents:

This survey asks about how you are feeling and doing in different areas of life. Please check the box to the left of your answer that best describes yourself during the *PAST WEEK*. Please answer every question. If you are unsure about how to answer, please give the best answer you can.

During the *PAST WEEK*, how often did you...

14. Think you had special powers?

- 0 Never
- 1 Rarely
- 2 Sometimes
- 3 Often
- 4 Always

15. Hear voice or see things?

- 0 Never
- 1 Rarely
- 2 Sometimes
- 3 Often
- 4 Always

16. Think people were watching you?

- 0 Never
- 1 Rarely
- 2 Sometimes
- 3 Often
- 4 Always

17. Think people were against you?

- 0 Never
- 1 Rarely
- 2 Sometimes
- 3 Often
- 4 Always



Appendix E  
Sample Questions From the Eating Disorder Inventory-3 (EDI-3)

For each item, decide if the item is true about you **ALWAYS (A)**, **USUALLY (U)**, **OFTEN (O)**, **SOMETIMES (S)**, **RARELY (R)**, or **NEVER (N)**. Circle the letter that corresponds to your rating on the Answer Sheet. For example, if your rating for an item is **OFTEN**, you would circle the “**O**” for that item on the Answer Sheet.

- 4. I eat when I am upset.
- 5. I stuff myself with food.
- 28. I have gone on eating binges where I felt that I could not stop.
- 53. I have the thought of trying to vomit in order to lose weight.
- 61. I eat or drink in secrecy.

Appendix F  
Sample Questions From the Internalized Shame Scale (ISS)

Below is a list of statements describing feelings or experiences that you may have. Read each statement carefully and circle the number to the right of each item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. Try to be as honest as you can when responding. Please answer all of the items.

	Never	Seldom	Sometimes	Often	Almost Always
1. I feel like I am never quite good enough.	0	1	2	3	4
2. I feel somehow left out.	0	1	2	3	4
3. I think that people look down on me.	0	1	2	3	4
5. I scold myself and put myself down.	0	1	2	3	4
8. I see myself as being very small and insignificant	0	1	2	3	4

Appendix G  
Sample Questions From the Other As Shamer (OAS) Scale

We are interested in how people think others see them. Below is a list of statements describing feelings or experiences about how you may feel other people see you.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below.

0 = Never	1 = Seldom	2 = Sometimes	3 = Frequently	4 = Almost Always
-----------	------------	---------------	----------------	-------------------

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. I feel other people see me as not good enough.   | 0 | 1 | 2 | 3 | 4 |
| 2. I think that other people look down on me.       | 0 | 1 | 2 | 3 | 4 |
| 3. Other people put me down a lot.                  | 0 | 1 | 2 | 3 | 4 |
| 4. I feel insecure about others opinions of me.     | 0 | 1 | 2 | 3 | 4 |
| 5. Other people see me as not measuring up to them. | 0 | 1 | 2 | 3 | 4 |

Appendix H  
Sample Questions From the Depression, Anxiety and Stress Scale (DASS-21)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. *The rating scale is as follows:*

0	Did not apply to me at all	Never
1	Applied to me to some degree, or some of the time	Sometimes
2	Applied to me to a considerable degree, or a good part of time	Often
3	Applied to me very much, or most of the time	Almost Always

- |  |               |
|--|---------------|
| I couldn't seem to experience any positive feeling at all.   | 0   1   2   3 |
| I found it difficult to work up the initiative to do things. | 0   1   2   3 |
| I felt that I had nothing to look forward to.                | 0   1   2   3 |
| I felt down-hearted and blue.                                | 0   1   2   3 |
| I was unable to become enthusiastic about anything.          | 0   1   2   3 |

Appendix I  
Sample Questions From the Difficulties in Emotion Regulation Scale (DERS)

Please indicate how often the following statements apply to you by writing the appropriate number from the scale below on the line beside each item.

1-----	2-----	3-----	4-----	5
almost never	sometimes	about half the time	most of the time	almost always
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)

1. I am clear about my feelings.
2. I pay attention to how I feel.
3. I experience my emotions as overwhelming and out of control.
4. I have no idea how I am feeling.
5. I have difficulty making sense out of my feelings.

Appendix J  
Sample Questions From the Helpful Aspects of Therapy Form

Please describe the most important, second most important, and third most important events in this manner.

1. Of the events which occurred over the course of therapy, which one do you feel was the most **helpful** or **important** for you personally? (By "event" we mean something that happened in the session. It might be something you said or did, or something your therapist said or did.)
  
2. Please describe what made this event helpful/important and what you got out of it.
  
3. How helpful was this particular event? Rate it on the following scale. (half-point ratings are OK; e.g., 7.5).

Appendix K  
Screening Information Letter for the First Group

**Information Letter - Phase One**

**Study Title:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

**Research Investigator:**

Jennifer Bartlett, M.Ed.

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

587-983-8289

jebartle@ualberta.ca

**Supervisor:**

Dr. William Whelton, Ph.D.

Associate Professor

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

780-492-3746

wwhelton@ualberta.ca

Background

You are being asked to participate in this research study by Jennifer Bartlett to fulfil the dissertation requirements for the Doctor of Philosophy degree in Counselling Psychology. Women who are at least 18 years old and who meet the diagnostic criteria for bulimia nervosa are invited to participate.

Purpose

This study is being conducted in order to improve the delivery of treatment for bulimia nervosa in mental health settings. While there are existing treatments for bulimia nervosa that are used with success, the fact remains that a number of individuals do not respond adequately to these treatments. It is therefore important to continue to research alternative approaches to improve treatment and recovery rates. For this study, we will examine the effectiveness of emotion-focused therapy delivered in a group format in reducing the symptoms of bulimia nervosa and shame. We anticipate that the findings of this study will have implications for the treatment of bulimia nervosa in the future, and that it will provide an enhanced understanding of the effectiveness of emotion-focused group therapy in reducing shame and bulimia nervosa symptoms.

Study Procedures

This is the first phase of a two-phase study. During phase one of this study, data will be collected through online questionnaires. If you choose to participate, you will be asked to complete a series of online questionnaires that will assess your eating disorder symptoms and overall mental

health. These questionnaires will be a combination of rating scales, frequency scores, and brief open-ended questions (i.e., height, weight). Phase one will require approximately 20-30 minutes to complete, and will determine whether the second phase of this study may be a good fit for you. If phase two may be appropriate for you, the primary researcher will contact you to initiate phase two, which will involve a 19 week commitment, including a 12-week long group therapy program for bulimia nervosa and emotional distress, the completion of questionnaires, and a one month post-treatment follow-up. If phase two of this study is not the right fit for you, the data obtained from you during phase one will be stored and kept for five years in accordance with the University of Alberta's data collection policy. Additionally, you will be provided with a list of resources from which you may choose to seek mental health services.

The following chart outlines the timeline that research participants will progress through:

Complete Phase One Questionnaires (approximately 20-30 minutes)
Await confirmation of eligibility for phase two
Meet with principal investigator for 1.5 hours to review limits to confidentiality, risks and benefits of the study, and to review treatment goals and group protocols
Complete short series of questionnaires three weeks prior to treatment (approximately 20-30 minutes)
Complete short series of questionnaires two weeks prior to treatment (approximately 20-30 minutes)
Complete longer series of questionnaires one week prior to treatment (approximately 100-120 minutes)
Attend group session 1 (2 hours)
Attend group session 2 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 3 (2 hours)
Attend group session 4 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 5 (2 hours)
Attend group session 6 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 7 (2 hours)
Attend group session 8 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 9 (2 hours)
Attend group session 10 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 11 (2 hours)
Attend group session 12 (2 hours); Complete series of questionnaires (approximately 100-120 minutes)
Complete short series of questionnaires one month following the completion of treatment (approximately 20-30 minutes)

### Benefits



As a participant in phase one of this study, it is possible that completing these questionnaires will provide insight as to the types of mental health issues you may be struggling with, and may motivate you to seek help to deal with these issues.

### Risks

As a participant in phase one of this study, there is a small possibility that completing these questionnaires will cause some psychological discomfort or distress. If this occurs, you are welcome to contact Jennifer Bartlett for a list of mental health resources from which you may choose to seek help.

### Voluntary Participation

You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obligated to answer any specific questions. Furthermore, even if you agree to participate in this study, you can change your mind and withdraw at any time. In the event of withdrawal, any existing data that has been collected will be destroyed.

### Confidentiality & Anonymity

Your information, and any information you share, will be confidential. To ensure your anonymity and confidentiality, the only people who will have access to your information will be the primary researcher (Jennifer Bartlett), the research supervisor (William Whelton), and the Health Research Ethics Board. Your legal name will be documented. However, to better protect confidentiality and ensure anonymity, a study code will be assigned to you which will be associated with all questionnaires and data. The data obtained from questionnaires in phase one will not be analyzed and will not be disseminated; its sole purpose is to determine eligibility for participation in phase two of this study.

Precautions will be taken to ensure all data is properly stored and secured. Electronic data will be collected through a secure website with password protection features, and any information transferred from the website to a hard-drive will be encrypted and stored on a password-protected computer in a password-protected file. Data will be stored and kept for five years following the completion of this research project, at which time all electronic data will be deleted.

### Further Information

If you have any further questions regarding this study, please do not hesitate to contact:

Jennifer Bartlett, M.Ed.  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
jebartle@ualberta.ca  
587-983-8289

Dr. William Whelton, Ph.D.

Associate Professor  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
780-492-3746  
wwhelton@ualberta.ca

The plan for this study has been reviewed for its adherence to ethical guidelines by the Health Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Appendix L  
Screening Information Letter for the Second Group

**Information Letter - Phase One**

**Study Title:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

**Research Investigator:**

Jennifer Bartlett, M.Ed.

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

587-983-8289

jebartle@ualberta.ca

**Supervisor:**

Dr. William Whelton, Ph.D.

Associate Professor

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

780-492-3746

wwhelton@ualberta.ca

Background

You are being asked to participate in this research study by Jennifer Bartlett to fulfil the dissertation requirements for the Doctor of Philosophy degree in Counselling Psychology. Women who are at least 18 years old and who meet the diagnostic criteria for bulimia nervosa are invited to participate.

Purpose

This study is being conducted in order to improve the delivery of treatment for bulimia nervosa in mental health settings. While there are existing treatments for bulimia nervosa that are used with success, the fact remains that a number of individuals do not respond adequately to these treatments. It is therefore important to continue to research alternative approaches to improve treatment and recovery rates. For this study, we will examine the effectiveness of emotion-focused therapy delivered in a group format in reducing the symptoms of bulimia nervosa and shame. We anticipate that the findings of this study will have implications for the treatment of bulimia nervosa in the future, and that it will provide an enhanced understanding of the effectiveness of emotion-focused group therapy in reducing shame and bulimia nervosa symptoms.

Study Procedures

This is the first phase of a two-phase study. During phase one of this study, data will be collected through online questionnaires. If you choose to participate, you will be asked to complete a series of online questionnaires that will assess your eating disorder symptoms and overall mental

health. These questionnaires will be a combination of rating scales, frequency scores, and brief open-ended questions (i.e., height, weight). Phase one will require approximately 20-30 minutes to complete, and will determine whether the second phase of this study may be a good fit for you. If phase two may be appropriate for you, the primary researcher will contact you to initiate phase two, which will involve a 23 week commitment, including a 16-week long group therapy program for bulimia nervosa and emotional distress, the completion of questionnaires, and a one month post-treatment follow-up. If phase two of this study is not the right fit for you, the data obtained from you during phase one will be stored and kept for five years in accordance with the University of Alberta's data collection policy. Additionally, you will be provided with a list of resources from which you may choose to seek mental health services.

The following chart outlines the timeline that research participants will progress through:

Complete Phase One Questionnaires (approximately 20-30 minutes)
Await confirmation of eligibility for phase two
Meet with principal investigator for 1.5 hours to review limits to confidentiality, risks and benefits of the study, and to review treatment goals and group protocols
Complete short series of questionnaires three weeks prior to treatment (approximately 20-30 minutes)
Complete short series of questionnaires two weeks prior to treatment (approximately 20-30 minutes)
Complete longer series of questionnaires one week prior to treatment (approximately 100-120 minutes)
Attend group session 1 (2 hours)
Attend group session 2 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 3 (2 hours)
Attend group session 4 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 5 (2 hours)
Attend group session 6 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 7 (2 hours)
Attend group session 8 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 9 (2 hours)
Attend group session 10 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 11 (2 hours)
Attend group session 12 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 13 (2 hours)
Attend group session 14 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 15 (2 hours)

Attend group session 16 (2 hours); Complete series of questionnaires (approximately 100-120 minutes)
Complete short series of questionnaires one month following the completion of treatment (approximately 20-30 minutes)

### Benefits

As a participant in phase one of this study, it is possible that completing these questionnaires will provide insight as to the types of mental health issues you may be struggling with, and may motivate you to seek help to deal with these issues.

### Risks

As a participant in phase one of this study, there is a small possibility that completing these questionnaires will cause some psychological discomfort or distress. If this occurs, you are welcome to contact Jennifer Bartlett for a list of mental health resources from which you may choose to seek help.

### Voluntary Participation

You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obligated to answer any specific questions. Furthermore, even if you agree to participate in this study, you can change your mind and withdraw at any time. In the event of withdrawal, any existing data that has been collected will be destroyed.

### Confidentiality & Anonymity

Your information, and any information you share, will be confidential. To ensure your anonymity and confidentiality, the only people who will have access to your information will be the primary researcher (Jennifer Bartlett), the research supervisor (William Whelton), and the Health Research Ethics Board. Your legal name will be documented in a separate document. However, to better protect confidentiality and ensure anonymity, a study code will be assigned to you which will be associated with all data collected both online and in hard-copy form; no identifying information will be collected from you online. The data obtained from questionnaires in phase one will not be analyzed and will not be disseminated; its sole purpose is to determine eligibility for participation in phase two of this study.

Precautions will be taken to ensure all data is properly stored and secured. Electronic data will be collected through a secure website with password protection features, and any information transferred from the website to a hard-drive will be encrypted and stored on a password-protected computer in a password-protected file. Data will be stored and kept for five years following the completion of this research project, at which time all electronic data will be deleted.

### Further Information

If you have any further questions regarding this study, please do not hesitate to contact:

Jennifer Bartlett, M.Ed.  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
jebartle@ualberta.ca  
587-983-8289

Dr. William Whelton, Ph.D.  
Associate Professor  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
780-492-3746  
wwhelton@ualberta.ca

The plan for this study has been reviewed for its adherence to ethical guidelines by the Health Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Appendix M  
Consent Form for Screening Questionnaires

**Title of Project:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

Principal Investigator(s): Jennifer Bartlett, M.Ed.

Phone Number(s): 587-983-8289

---

	<u>Yes</u>	<u>No</u>
Do you understand that you have been asked to be in a research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you read and received a copy of the attached Information Letter?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand the benefits and risks involved in taking part in this research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had an opportunity to ask questions and discuss this study?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are free to withdraw from the study at any time (up until the publication of the study) without penalty, without having to give a reason?	<input type="checkbox"/>	<input type="checkbox"/>
Has the issue of confidentiality been explained to you?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are expected to keep all information that is revealed about other group members private and confidential?	<input type="checkbox"/>	<input type="checkbox"/>

Who explained this study to you?

---

I agree to take part in this study: YES  NO

I understand that by typing my name below, I am providing my electronic signature and consent: YES  NO

Name of Research Participant: \_\_\_\_\_

Date: \_\_\_\_\_

**THE INFORMATION LETTER MUST BE ATTACHED TO THIS CONSENT FORM AND A COPY GIVEN TO THE RESEARCH SUBJECT**





Appendix O  
Group Therapy Information Letter for First Group

**Information Letter - Phase Two**

**Study Title:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

**Research Investigator:**

Jennifer Bartlett, M.Ed.

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

587-983-8289

jebartle@ualberta.ca

**Supervisor:**

Dr. William Whelton, Ph.D.

Associate Professor

Department of Educational Psychology

University of Alberta

Edmonton, AB, T6G 2G5

780-492-3746

wwhelton@ualberta.ca

Background

You are being asked to participate in this research study by Jennifer Bartlett to fulfil the dissertation requirements for the Doctor of Philosophy degree in Counselling Psychology. Women who are at least 18 years old and who meet the diagnostic criteria for bulimia nervosa are invited to participate.

Purpose

This study is being conducted in order to improve the delivery of treatment for bulimia nervosa in mental health settings. While there are existing treatments for bulimia nervosa that are used with success, the fact remains that a number of individuals do not respond adequately to these treatments. It is therefore important to continue to research alternative approaches to improve treatment and recovery rates. For this study, we will examine the effectiveness of emotion-focused therapy delivered in a group format in reducing the symptoms of bulimia nervosa and shame. We anticipate that the findings of this study will have implications for the treatment of bulimia nervosa in the future, and that it will provide an enhanced understanding of the effectiveness of emotion-focused group therapy in reducing shame and bulimia nervosa symptoms.

Study Procedures

During phase two of this study, data will be collected through both online and pen-and-paper questionnaires. If you choose to participate, you will be asked to complete: (a) a 12-week group therapy program with each session lasting two hours each, which will take place during the

winter of 2016, and (b) several questionnaires that will be administered at various points in time prior to, during, and up to one month following treatment. The questionnaires will be a combination of rating scales and long-answer reflective questions that will assess your thoughts, feelings and behaviours related to your eating disorder symptoms, emotions, and self-regulation strategies. Group sessions will involve some psychoeducation about eating disorders and emotions, sharing individual emotional challenges and struggles with group members, and participating in interventions involving emotional experiencing and exploration in a group setting. Group sessions will take place at the University of Alberta, and will be co-led by Jennifer Bartlett (student researcher) and a doctoral student in the Counselling Psychology program at the University of Alberta with experience in emotion-focused therapy and eating disorders.

Prior to participating in this study, you will be required to meet with the primary researcher for approximately 1.5 hours to review risks and benefits of participating in the study, to explain the importance of and limits to confidentiality (i.e., imminent harm to self or others, suspected abuse or neglect of children, court subpoena), to ensure treatment goals adequately align with individuals' goals, to establish realistic expectations, and to review the group interventions that will be employed. Participants will be asked to complete a series of questionnaires once a week for three weeks prior to beginning treatment. Questionnaires administered two and three weeks prior to treatment will require approximately 20-30 minutes to complete, and a longer series of questionnaires will be administered one week prior to treatment, requiring approximately 100-120 minutes to complete. Following the initiation of group treatment, questionnaires will be administered repeatedly to participants throughout the study. Following group sessions on weeks 2, 4, 6, 8, and 10, participants will be asked to complete a series of pen-and-paper questionnaires which will require approximately 20-30 minutes to complete. Following the conclusion of week 12, participants will be asked once again to complete a longer series of pen-and-paper questionnaires that will require a total of 100-120 minutes to complete. Finally, a one-month follow-up will be conducted at which time participants will be asked to complete a final series of questionnaires requiring approximately 20-30 minutes to complete.

The following chart outlines the timeline that research participants will progress through:

Complete Phase One Questionnaires (approximately 20-30 minutes)
Await confirmation of eligibility for phase two
Meet with principal investigator for 1.5 hours to review limits to confidentiality, risks and benefits of the study, and to review treatment goals and group protocols
Complete short series of questionnaires three weeks prior to treatment (approximately 20-30 minutes)
Complete short series of questionnaires two weeks prior to treatment (approximately 20-30 minutes)
Complete longer series of questionnaires one week prior to treatment (approximately 100-120 minutes)

Attend group session 1 (2 hours)
Attend group session 2 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 3 (2 hours)
Attend group session 4 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 5 (2 hours)
Attend group session 6 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 7 (2 hours)
Attend group session 8 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 9 (2 hours)
Attend group session 10 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 11 (2 hours)
Attend group session 12 (2 hours); Complete series of questionnaires (approximately 100-120 minutes)
Complete short series of questionnaires one month following the completion of treatment (approximately 20-30 minutes)

### Benefits

As a participant in this study, you may benefit by:

- Gaining an enhanced understanding of the functional relationship between emotions and eating disorder symptoms
- Developing emotion-regulation skills and increased emotional awareness
- Experiencing a reduction in, or possible elimination of, bulimia nervosa symptomology
- Experiencing a reduction in negative emotions (in quantity, frequency, or severity)
- Experiencing acceptance and validation from others
- Learning from the challenges, successes, and experiences of other group members
- Identifying goals for future treatment

### Risks

As a participant in this study, you may be subject to the following risks:

- No reduction in, or worsening of, bulimia nervosa symptomology
- No reduction in, or worsening of, negative emotions (in quantity, frequency, or severity)
- Short-term emotional distress
- Discomfort with sharing issues with group members
- Discomfort with unfamiliar interventions and techniques used in group sessions
- Lack of social connection with group members
- Unresolved issues requiring further treatment

### Voluntary Participation

You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obligated to answer any specific questions. Furthermore, even if you agree to participate in this study, you can change your mind and withdraw at any time. In the event of withdrawal, any existing data that has been collected will be removed from the analysis and will not be included in the published dissertation or any other publications that may stem from this research project. The data will also be destroyed to ensure no further use (i.e., electronic information will be deleted, printed or hard-copy information will be shredded). If you do withdraw from the study, you may continue to participate in the group and receive treatment, should you choose to do so. However, while you may withdraw from this study at any time, your data may not be withdrawn upon the publication of this study, as it would be impossible to do so.

### Confidentiality & Anonymity

Your information, and any information you share, will be confidential. To ensure your anonymity and confidentiality, the only people who will have access to your identifying information (i.e., full legal name, contact information) will be the primary researcher (Jennifer Bartlett), the research supervisor (William Whelton), and the Health Research Ethics Board. Group sessions will be electronically video-recorded for the express purpose of clinical supervision and to ensure adherence to the group treatment protocol. The only people who will view these recordings will be the research supervisor and a licensed psychologist within the Edmonton area. Phase two of this study may employ a small number of research assistants for the purposes of data analysis. These research assistants will have access to the data obtained from you during this study (i.e., questionnaire responses), but will not have access to any identifying information. Your legal name will be documented in a separate document. However, to better protect confidentiality and ensure anonymity, a study code will be assigned to you which will be associated with all data collected both online and in hard-copy form; no identifying information will be collected from you online.

It is anticipated that the data from phase two of this study will be disseminated through scholarly journals and conference presentations. As all identifying information will be removed from the data, your anonymity will be ensured. As a participant in this study, you are entitled to receive a summary of the findings from this research study and, if interested, you may indicate your preference on the participant consent form.

Although precautions will be taken to ensure that participants' information remains anonymous, complete anonymity cannot be guaranteed in the context of the group itself, as participants will meet and interact with one another on a weekly basis. However, it is crucial that each participant understand the importance of maintaining confidentiality for all other participants in this group to ensure that personal and private information shared in the group, including participants' names, are not revealed to anyone. Participants are not to discuss identifying information or other participants' issues outside of the group setting. It should be noted that there are certain limitations to confidentiality within the parameters of this study in which confidentiality must be breached. These limitations include: (1) suspected neglect or abuse of a child; (2) imminent risk of harm to self or others; and (3) a court subpoena.

Data will be collected using both electronic and pen-and-paper formats and, as such, precautions will be taken to ensure all data is properly stored and secured. Electronic data will be collected through a secure website with password protection features, and any information transferred from the website to a hard-drive will be encrypted and stored on a password-protected computer in a password-protected file. Video-recordings will also be stored electronically in an encrypted and password-protected file. Hard-copy data will be stored in a locked filing cabinet or drawer in a locked office. Data will be stored and kept for five years following the completion of this research project, at which time all electronic data will be deleted and all hard-copy data will be shredded and disposed of.

#### Further Information

If you have any further questions regarding this study, please do not hesitate to contact:

Jennifer Bartlett, M.Ed.  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
jebartle@ualberta.ca  
587-983-8289

Dr. William Whelton, Ph.D.  
Associate Professor  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
780-492-3746  
wwhelton@ualberta.ca

The plan for this study has been reviewed for its adherence to ethical guidelines by the Health Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Appendix P  
Group Therapy Information Letter for Second Group

**Information Letter - Phase Two**

**Study Title:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

**Research Investigator:**

Jennifer Bartlett, M.Ed.  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
587-983-8289  
jebartle@ualberta.ca

**Supervisor:**

Dr. William Whelton, Ph.D.  
Associate Professor  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
780-492-3746  
wwhelton@ualberta.ca

Background

You are being asked to participate in this research study by Jennifer Bartlett to fulfil the dissertation requirements for the Doctor of Philosophy degree in Counselling Psychology. Women who are at least 18 years old and who meet the diagnostic criteria for bulimia nervosa are invited to participate.

Purpose

This study is being conducted in order to improve the delivery of treatment for bulimia nervosa in mental health settings. While there are existing treatments for bulimia nervosa that are used with success, the fact remains that a number of individuals do not respond adequately to these treatments. It is therefore important to continue to research alternative approaches to improve treatment and recovery rates. For this study, we will examine the effectiveness of emotion-focused therapy delivered in a group format in reducing the symptoms of bulimia nervosa and shame. We anticipate that the findings of this study will have implications for the treatment of bulimia nervosa in the future, and that it will provide an enhanced understanding of the effectiveness of emotion-focused group therapy in reducing shame and bulimia nervosa symptoms.

Study Procedures

During phase two of this study, data will be collected through both online and pen-and-paper questionnaires. If you choose to participate, you will be asked to complete: (a) a 16-week group therapy program with each session lasting two hours each, which will take place during the Fall

of 2017, and (b) several questionnaires that will be administered at various points in time prior to, during, and up to one month following treatment. The questionnaires will be a combination of rating scales and long-answer reflective questions that will assess your thoughts, feelings and behaviours related to your eating disorder symptoms, emotions, and self-regulation strategies. Group sessions will involve some psychoeducation about eating disorders and emotions, sharing individual emotional challenges and struggles with group members, and participating in interventions involving emotional experiencing and exploration in a group setting. Group sessions will take place at the University of Alberta, and will be co-led by Jennifer Bartlett (student researcher) and a doctoral student in the Counselling Psychology program at the University of Alberta with experience in emotion-focused therapy and eating disorders.

Prior to participating in this study, you will be required to meet with the primary researcher for approximately 1.5 hours to review risks and benefits of participating in the study, to explain the importance of and limits to confidentiality (i.e., imminent harm to self or others, suspected abuse or neglect of children, court subpoena), to ensure treatment goals adequately align with individuals' goals, to establish realistic expectations, and to review the group interventions that will be employed. Participants will be asked to complete a series of questionnaires once a week for three weeks prior to beginning treatment. Questionnaires administered two and three weeks prior to treatment will require approximately 20-30 minutes to complete, and a longer series of questionnaires will be administered one week prior to treatment, requiring approximately 100-120 minutes to complete. Following the initiation of group treatment, questionnaires will be administered repeatedly to participants throughout the study. Following group sessions on weeks 2, 4, 6, 8, 10, 12, 14, and 16 participants will be asked to complete a series of pen-and-paper questionnaires which will require approximately 20-30 minutes to complete. Following the conclusion of week 16, participants will be asked once again to complete a longer series of pen-and-paper questionnaires that will require a total of 100-120 minutes to complete. Finally, a one-month follow-up will be conducted at which time participants will be asked to complete a final series of questionnaires requiring approximately 20-30 minutes to complete.

The following chart outlines the timeline that research participants will progress through:

Complete Phase One Questionnaires (approximately 20-30 minutes)
Await confirmation of eligibility for phase two
Meet with principal investigator for 1.5 hours to review limits to confidentiality, risks and benefits of the study, and to review treatment goals and group protocols
Complete short series of questionnaires three weeks prior to treatment (approximately 20-30 minutes)
Complete short series of questionnaires two weeks prior to treatment (approximately 20-30 minutes)
Complete longer series of questionnaires one week prior to treatment (approximately 100-120 minutes)
Attend group session 1 (2 hours)
Attend group session 2 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 3 (2 hours)



Attend group session 4 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 5 (2 hours)
Attend group session 6 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 7 (2 hours)
Attend group session 8 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 9 (2 hours)
Attend group session 10 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 11 (2 hours)
Attend group session 12 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 13 (2 hours)
Attend group session 14 (2 hours); Complete series of questionnaires (approximately 20-30 minutes)
Attend group session 15 (2 hours)
Attend group session 16 (2 hours); Complete series of questionnaires (approximately 100-120 minutes)
Complete short series of questionnaires one month following the completion of treatment (approximately 20-30 minutes)

### Benefits

As a participant in this study, you may benefit by:

- Gaining an enhanced understanding of the functional relationship between emotions and eating disorder symptoms
- Developing emotion-regulation skills and increased emotional awareness
- Experiencing a reduction in, or possible elimination of, bulimia nervosa symptomology
- Experiencing a reduction in negative emotions (in quantity, frequency, or severity)
- Experiencing acceptance and validation from others
- Learning from the challenges, successes, and experiences of other group members
- Identifying goals for future treatment

### Risks

As a participant in this study, you may be subject to the following risks:

- No reduction in, or worsening of, bulimia nervosa symptomology
- No reduction in, or worsening of, negative emotions (in quantity, frequency, or severity)
- Short-term emotional distress
- Discomfort with sharing issues with group members
- Discomfort with unfamiliar interventions and techniques used in group sessions

- Lack of social connection with group members
- Unresolved issues requiring further treatment

### Voluntary Participation

You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obligated to answer any specific questions. Furthermore, even if you agree to participate in this study, you can change your mind and withdraw at any time. In the event of withdrawal, any existing data that has been collected will be removed from the analysis and will not be included in the published dissertation or any other publications that may stem from this research project. The data will also be destroyed to ensure no further use (i.e., electronic information will be deleted, printed or hard-copy information will be shredded). If you do withdraw from the study, you may continue to participate in the group and receive treatment, should you choose to do so. However, while you may withdraw from this study at any time, your data may not be withdrawn upon the publication of this study, as it would be impossible to do so.

### Confidentiality & Anonymity

Your information, and any information you share, will be confidential. To ensure your anonymity and confidentiality, the only people who will have access to your identifying information (i.e., full legal name, contact information) will be the primary researcher (Jennifer Bartlett), the research supervisor (William Whelton), and the Health Research Ethics Board. Group sessions will be electronically video-recorded for the express purpose of clinical supervision and to ensure adherence to the group treatment protocol. The only people who will view these recordings will be the research supervisor and a licensed psychologist within the Edmonton area. Phase two of this study may employ a small number of research assistants for the purposes of data analysis. These research assistants will have access to the data obtained from you during this study (i.e., questionnaire responses), but will not have access to any identifying information. Your legal name will be documented in a separate document. However, to better protect confidentiality and ensure anonymity, a study code will be assigned to you which will be associated with all data collected both online and in hard-copy form; no identifying information will be collected from you online.

It is anticipated that the data from phase two of this study will be disseminated through scholarly journals and conference presentations. As all identifying information will be removed from the data, your anonymity will be ensured. As a participant in this study, you are entitled to receive a summary of the findings from this research study and, if interested, you may indicate your preference on the participant consent form.

Although precautions will be taken to ensure that participants' information remains anonymous, complete anonymity cannot be guaranteed in the context of the group itself, as participants will meet and interact with one another on a weekly basis. However, it is crucial that each participant understand the importance of maintaining confidentiality for all other participants in this group to ensure that personal and private information shared in the group, including participants' names, are not revealed to anyone. Participants are not to discuss identifying information or other

participants' issues outside of the group setting. It should be noted that there are certain limitations to confidentiality within the parameters of this study in which confidentiality must be breached. These limitations include: (1) suspected neglect or abuse of a child; (2) imminent risk of harm to self or others; and (3) a court subpoena.

Data will be collected using both electronic and pen-and-paper formats and, as such, precautions will be taken to ensure all data is properly stored and secured. Electronic data will be collected through a secure website with password protection features, and any information transferred from the website to a hard-drive will be encrypted and stored on a password-protected computer in a password-protected file. Video-recordings will also be stored electronically in an encrypted and password-protected file. Hard-copy data will be stored in a locked filing cabinet or drawer in a locked office. Data will be stored and kept for five years following the completion of this research project, at which time all electronic data will be deleted and all hard-copy data will be shredded and disposed of.

#### Further Information

If you have any further questions regarding this study, please do not hesitate to contact:

Jennifer Bartlett, M.Ed.  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
jebartle@ualberta.ca  
587-983-8289

Dr. William Whelton, Ph.D.  
Associate Professor  
Department of Educational Psychology  
University of Alberta  
Edmonton, AB, T6G 2G5  
780-492-3746  
wwhelton@ualberta.ca

The plan for this study has been reviewed for its adherence to ethical guidelines by the Health Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Appendix Q  
Consent Form to Participate in Group Therapy Research

**Title of Project:** Emotion-Focused Group Psychotherapy for Bulimia Nervosa

Principal Investigator(s): Jennifer Bartlett, M.Ed.

Phone Number(s): 587-983-8289

	<u>Yes</u>	<u>No</u>
Do you understand that you have been asked to be in a research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you read and received a copy of the attached Information Letter?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand the benefits and risks involved in taking part in this research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had an opportunity to ask questions and discuss this study?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are free to withdraw from the study at any time (up until the publication of the study) without penalty, without having to give a reason?	<input type="checkbox"/>	<input type="checkbox"/>
Has the issue of confidentiality been explained to you?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are expected to keep all information that is revealed about other group members private and confidential?	<input type="checkbox"/>	<input type="checkbox"/>

Who explained this study to you? \_\_\_\_\_

I agree to take part in this study:                      YES                         NO  

Signature of Research Participant

\_\_\_\_\_

(Printed Name) \_\_\_\_\_

Date: \_\_\_\_\_

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee \_\_\_\_\_ Date \_\_\_\_\_

**THE INFORMATION LETTER MUST BE ATTACHED TO THIS CONSENT FORM AND  
A COPY GIVEN TO THE RESEARCH SUBJECT**

Appendix R  
Participant Demographic Form

**Participant Demographic Form**

**Study code:** \_\_\_\_\_

**Birth date:** \_\_\_\_\_ **Age:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Home phone:** \_\_\_\_\_ **Cell phone:** \_\_\_\_\_

**Race/Ethnicity:**

- Asian/Pacific Islander  Black or African American  Hispanic or Latino  
 Indigenous or aboriginal  Caucasian/white  Other (please specify: \_\_\_\_\_)  
 Prefer not to indicate

**Relationship status:**

- Single  Married  Partnered  Separated  Divorced  Widowed  
 Prefer not to specify

**Current level of education:**

- Less than junior high school  Junior high school  Partial high school  
 High school diploma/GED  Certificate in a trade/technology  Partial college/university  
 College/university degree  Graduate/professional degree  Prefer not to specify

**Annual income:**

- Less than \$10,000  \$10,000 to \$20,000  \$20,000 to \$30,000  \$30,000 to \$40,000  
 \$40,000 to \$50,000  \$50,000 to \$60,000  \$60,000 to \$70,000  \$70,000 to \$80,000  
 \$80,000 or more  Prefer not to specify

**General Information**

**Have you ever been diagnosed with an eating disorder?:**  Yes  No

**If yes, please specify:** Diagnosis: \_\_\_\_\_ Date of diagnosis: \_\_\_\_\_

**How long have you experienced symptoms of bulimia nervosa?:** \_\_\_\_\_

**Please list any additional diagnoses you currently have:** \_\_\_\_\_

\_\_\_\_\_

**Are you currently taking any medications?**  Yes  No

**If yes, please list all medications and indicate the reason for taking them.**

<b>Medication</b>	<b>Reason/Purpose</b>

**Have you received previous mental health services (i.e, individual counselling, group treatment, psychiatrist):**  Yes  No

**If yes, please list the type, purpose, duration and effectiveness of all services received:**

<b>Service Received</b>	<b>Purpose</b>	<b>Duration</b>	<b>How helpful was this service?</b>

**Have you ever been hospitalized for a psychological issue?**  Yes  No

**If yes, please list the dates and reasons for hospitalization:**

Date	Reason for Hospitalization

**Please indicate if you have experienced any of the following:**

Physical abuse  Sexual abuse  Prefer not to specify  None of the above



## Appendix S

### Experiential activity: Creating emotional distance from a difficult emotion

It is sometimes helpful to get some distance from a feeling, particularly from feelings that are overwhelming or unhealthy. This is a skill that you can develop with practice, and we are going to lead you through an exercise to demonstrate this skill. In this exercise, we will be evoking an emotion, and we want you to pay attention to the process of your emotion rather than the content. You can then try to access another more balancing, positive emotion.

Step 1. Take a minute to get comfortable in your chair. You can move around, reposition yourself, or if you are comfortable you may choose to stay where you are. Now, imagine a situation or personal interaction that produces a difficult, painful emotion. This might be a conversation with a parent or a partner, or an unpleasant encounter with a friend or an acquaintance, that left you with feelings of anger, rage, sadness, worthlessness, or undesirability.

Step 2. Allow this emotion to emerge. Sit with it. As the emotion emerges, shift your attention to the sensations of that emotion. Notice and describe these sensations; the quality, the intensity, the location, and any changes that occur as you observe these sensations. As you do this, breathe.

Step 3. Pay attention to the thoughts to accompany this emotion and these sensations. Describe your mental process; whether you're thinking, remembering, or criticizing. Breathe.

Step 4. Now focus your attention on another, softer, good or pleasant feeling, such as love, joy, or compassion. Imagine a personal situation or a personal interaction in which you feel this. Feel that good feeling now. All that feeling to fill you up.

Step 5. Talk to the old, difficult feeling from the place of your new healthier, pleasant feeling. What can you say to the bad feeling that will help transform it to be a better feeling? Say this to it now.

Exercise taken and modified from Greenberg, L. S. (2002). *Emotion-focused therapy: Coaching clients to work through their feelings* (pp. 214). Washington, DC: American Psychological Association.

**EMOTION-FOCUSED GROUP THERAPY**  
**FOR BULIMIA NERVOSA**  
**Group Member Manual**

Jennifer Bartlett, Susan Wnuk, Joanne Dolhanty, & Les Greenberg, 2016

## TABLE OF CONTENTS

THE PURPOSE OF THIS MANUAL .....	2
The Purpose of the Emotion-Focused Therapy Group for Bulimia Nervosa ...	2
PART I: WHEN FEELINGS CAUSE TROUBLE .....	3
What is an Emotion? .....	3
Types of Information Provided by Emotions.....	4
The Emotion Sequence.....	4
Labeling Emotions.....	6
Primary and Secondary Emotions .....	7
Emotion Expression.....	8
Emotion Avoidance, Blocking and Stopping.....	8
How Feeling Bad Leads to Feeling Good .....	9
Emotion Regulation and Soothing Strategies.....	9
PART II: EATING DISORDER INFORMATION.....	12
Eating Disorders .....	12
Physical Effects of Bulimia Nervosa .....	14
Psychological Effects of Bulimia Nervosa.....	15
Risk Factors for Eating Disorders .....	17
Body Weight Regulation .....	17
Normal Eating.....	18
The Function of Eating Disorders.....	19
Coping Strategies.....	20
Body Image Strategies .....	24
Stages of Change .....	24
CONCLUSION .....	25
APPENDIX I: Giving Up an Eating Disorder .....	26
APPENDIX II: Emotion-Focused Therapy for Eating Disorders .....	27
APPENDIX III: Session 1 Presentation Slides.....	28
APPENDIX IV: Group Worksheets.....	29

## THE PURPOSE OF THIS MANUAL

This manual is meant to provide you with additional useful information during your participation in the Emotion-Focused Therapy Group for Bulimia Nervosa. After describing the group, we divide the manual into two parts: Part I describes why emotions are important, how they happen, and ways to think about them and respond to them in new ways. Part II provides information about eating disorders, including the symptoms, how eating disorders start, and strategies for stopping symptoms and eating normally. This manual does not cover these topics exhaustively but is instead meant to give you a bit more background information than we will have time to cover in the group. Some of the sections are theoretical and some are more practical, so focus on the parts you find the most helpful.

If you have any questions about the content or would like to know where to find more information about the topics discussed here, please let us know.

### The Purpose of the Emotion-Focused Therapy Group for Bulimia Nervosa

1. To find the connections between your eating disorder symptoms and feelings
2. To learn ways to work with your feelings in healthier ways

The purpose of this group is to help you learn to relate to your emotions in healthy ways, especially as they relate to your symptoms. Eating disorders often develop as a way for people to manage intense feelings that they can't directly act on. So, the eating disorder becomes a kind of solution to bad feelings that are reactions to life problems, but then the eating disorder takes over and makes things worse. This doesn't mean that you're necessarily aware of how your feelings connect to your eating disorder symptoms, or how your symptoms help you manage your feelings about yourself and your life, but through this group we'll work on helping you find those connections. We'll give you information about emotions and about eating disorders, then we'll do different activities designed to help you gain self-awareness and learn ways to relate to yourself and your emotions in accepting, healthy ways. We'll also assign homework so that you can continue this work between sessions.

## PART I: WHEN FEELINGS CAUSE TROUBLE

Growing up, many people are taught to avoid their feelings or aren't taught ways to respond to them in healthy ways. Feelings can also be left over from previous situations like abuse or traumatic events. This makes it harder to get your needs met, especially in relationships.

We are often afraid of our feelings because they can make us feel out of control. When we're faced with scary or painful emotions like shame, fear or anger, often our first impulse is to block them or put ourselves down for feeling them. When we avoid, ignore, or push down our feelings, they will usually come out in other ways. Or, you might find that you become easily overwhelmed by your feelings and act in impulsive ways to deal with them.

Problems with feelings are usually the result of past learning. By learning and trying out new ways of responding to your emotions, you will gain new confidence in handling them. The goal is to be able to face your feelings directly and even to learn from them. Then, you can stop spending time and energy avoiding them or doing impulsive things that make you feel better in the short-term but a lot worse off in the long-term.

### What is an Emotion?

Emotions are an essential part of what it means to be human. Emotions...

- Tell you about how you're responding to important events
- Give you information about your well-being
- Guide the actions you take
- Help you make sense of situations

At the most basic level, emotions are important because they provide you with information about situations that are important to your well-being. If you pay attention to and experience your emotions you'll get the full benefit of the information they give you. This is true of emotions that feel good as well as those that feel bad. It's important not to judge yourself when you are feeling a negative emotion; instead, pay attention to your feelings in a friendly, curious way so that you can learn about your experiences and needs.

### Types of Information Provided by Emotions

As we stated above, emotions provide information. Below are some more specific things you can learn about yourself if you pay attention to your feelings:

1. **What's happening?** Emotions occur naturally in response to events that matter. They tell you if your boundaries or rights have been violated (anger), if you are in danger (fear) or if you have lost something important (sadness).
2. **What do I need?** Emotions tell you what you need and what you care about. They tell you if you need to assert your boundaries (anger), if you need security and safety (fear) or if you need companionship and comfort (sadness).
3. **What should I do?** Emotions guide your actions. If you have been treated unfairly and you feel angry, it's natural to want to defend yourself. If you're afraid, it makes sense to freeze and run. When you're sad and alone, it's helpful to seek comfort and companionship.
4. **What are others learning about me?** Your emotional expressions communicate to others what's going on with you, just as you pick up emotions from others by their facial expressions

and body language. This doesn't always mean that other people are accurate in their interpretations, just as you're not always accurate in figuring out what's going on with them.

### The Emotion Sequence

The process by which an emotion happens can be broken down into a series of steps (although when you're in the middle of experiencing a strong emotion you're not usually aware of this):

1. **Appraisal:** Something going on around you or inside you causes you to react. You might feel a sense of attraction or repulsion. This first happens outside of your conscious awareness.
2. **Sensation:** You have a bodily reaction that at first you're not aware of. But if you pay close attention you can recognize physical changes. Your heart might start to beat fast, your face might get hot, you might feel goose bumps, your eyes might water, you might feel a lump in your throat, or your stomach muscles might tighten up. All of these sensations are part of the emotion experience and it's important not to be afraid of them because they are your body's natural response to the environment.
3. **Labeling:** Once you become aware of these physical changes, you usually name how you're feeling, though sometimes you're not exactly clear what it is you're feeling. You can use emotion terms like "afraid" or "angry", metaphors like "feeling lost" or less clear descriptions like "stressed out." The important thing here is to become aware of what you're feeling and experiencing and to put it into words.
4. **Action Tendency:** This is the behavioural response that is meant to meet the need in the feeling. Each emotion has its own natural action tendency:

For example...

Fear: to get away

Anger: to assert your boundaries or fight for what you need

Shame: to hide

Love: to connect and share yourself with someone else

The action tendency can happen with or without conscious thought. For example, if you're driving and all of a sudden another driver cuts you off, you'll automatically slam on the brakes or veer to one side without the conscious thought that you're afraid. Often you're unaware of what you are feeling and why, so sometimes the way you act can give you clues to what you are feeling.

**Facial Expression and Body Gestures.** Your facial expressions and body language represent what you're feeling. For example, you know that when a person knits their eyebrows, purses their lips, and raises their chest they are likely feeling angry. You also know that a person with slouched shoulders, droopy eyes and a long down-sloped mouth is feeling sad.

**Voice Tone and Tempo.** Each emotion has a particular voice tone and tempo. Someone who is angry tends to speak quickly, loudly and expressively. Someone feeling sad will speak slowly and softly, will pause often and sigh.

**Delayed Reactions.** Sometimes reactions to situations can be delayed, and even when there is an immediate reaction, a second delayed reaction can follow. For example, people who suddenly have trouble falling asleep, concentrating on daily tasks, or are having a lot of trouble making minor decisions are likely feeling upset about something that is going on in their lives.

### Labeling Emotions

It's important to be able to name the emotion you're experiencing because this helps you to identify the feeling, to make meaning of it, and to respond appropriately. The following is a list of emotion names along with other words that describe that feeling:

**Sadness:** sorrow, misery, despair, hopelessness, anguish, depression, gloominess, feeling blue, dejection, feeling down

**Fear:** panic, hysteria, apprehension, anxiety, tension, nervousness, edginess, worry, apprehension

**Anger:** bitterness, fury, wrath, scorn, spite, irritation, frustration, annoyed, rage, resentment

**Shame:** humiliation, embarrassment, mortification, dishonour, disgrace

**Disgust/contempt:** repulsion, loathing, nauseate, abhorrent, aversion, antipathy, hatred

**Love:** attraction, affection, passion, infatuation, yearning, adoration, liking, fondness, caring, compassion, desire, respect, admiration, appreciation, approval

**Joy:** zeal, enraptured, delight, triumphant, eager, euphoria, optimistic, happiness, pleasure, enjoyment, ecstasy, bliss, elation

**Surprise:** amazed, astonished, wonder, awe, revelation, flabbergasted, startled,

**Unclear or mixed emotions:** upset, distressed, overwhelmed, disturbed, troubled. We use these labels when we're not sure what we're feeling, or we might feel several emotions in reaction to one event.

Did you notice that there are more negative emotions than positive emotions? As humans we've evolved this way because negative emotions are important for our survival and well-being. This was especially true in earlier times when the threats to our lives and physical safety were more frequent and more serious. Now, even though most of us don't have to worry about having enough to eat or being chased by tigers, the emotion system that evolved to deal with those threats is still part of who we are. So, you might feel intense fear at the thought of missing an

important appointment, even though this isn't life-threatening in the same way that being chased by a tiger is. We also evolved to feel positive emotions because when we are physically safe and feeling happy, we are more likely to interact with our environments and the people around us. These interactions help us to learn, grow and contribute.

### Primary and Secondary Emotions

There are two types of emotional reactions, primary and secondary ones, which differ in terms of *when* they are experienced, not in terms of *how* they are experienced:

1. **Primary emotions:** Your very first feeling in response to a situation.

Primary emotions are reactions to something that is happening right now, and when the situation is dealt with or disappears, the emotion also fades. Becoming aware of these requires awareness and practice.

2. **Secondary emotions:** These are reactions to primary emotions and can cause you to lose sight of your immediate reaction. For example, some people have learned to feel ashamed whenever they feel angry. So, even though the anger happens first, it is soon overtaken by shame.

Also, secondary emotions often feel bad, confusing or vague. They can come with negative self-talk and negative thoughts about yourself, other people, or the world, so you end up feeling bad about yourself and your situation.

Other examples of secondary emotions:

- Depression to cover anger
- Resentment to cover hurt
- Sadness to cover anger
- Anger to cover sadness or jealousy
- Coolness to cover fear

Primary and secondary emotions can combine in many different ways depending on your past learning experiences. If you were taught that “nice girls don't get angry”, then you might be prone to feeling sad whenever you feel angry.

To figure out whether an emotion is primary or secondary, you need to experience it and ask yourself what else you're feeling. Watching the thoughts that are connected to the emotion can also provide clues. If you find, for example, that you're feeling angry while telling yourself that you shouldn't be feeling hurt because it won't help anyway, there's a good chance that your primary emotion was hurt.

### Emotion Expression



Emotion expression is important but it might not always fix what’s wrong. Who you express your feelings to and when you express them makes a difference. Unfortunately, you can’t expect that your emotional expression will always get the response you need. Therefore, it’s important to put your feelings into perspective by considering your situation so that you can decide on the best path to take.

Emotion Avoidance, Blocking and Stopping

Through past experience most of us learn that sometimes we shouldn’t be feeling what we’re feeling or that the feeling is so frightening that we should try to stop it or prevent it. Children will sometimes be told to stop feeling sad or angry, or whatever emotion their parent has trouble with. So, we learn ways to block or stop ourselves from feeling emotions. This can happen by numbing out or spacing out, or by distracting with activities or self-talk. The problem is that often the original emotion doesn’t get resolved and a bad feeling lingers.

Below is a list of reasons you might have for avoiding your feelings, followed by reasons for experiencing your feelings.

<i>Good reasons for avoiding</i>	<i>Good reasons for not avoiding</i>
I’m afraid of what others will think.	Others know no better than I do about how I should feel about things. Emotions simply <i>are</i> .
I’m afraid of my own emotions.	Emotions themselves can’t hurt me. It’s what I do with them that counts.
I don’t want to be bothered by my feelings.	They are there anyway and when I don’t attend to them they linger.
They seem overwhelming.	They seem overwhelming because I haven’t learned how to pay attention and regulate them.
I’m more comfortable without them.	They are an important part of who I am and by paying attention to them I can make better choices
They take too much energy.	It takes more energy to try to block or suppress them because they keep coming back. If I allow them to come and go I will feel clearer.

How Feeling Bad Leads to Feeling Good

Focusing on emotions can help you change...

**You have to arrive at a place before you can leave it, so you have to acknowledge it and feel it if you want to leave it.**

*Example:*

Imagine a little girl who wants to feel loved. She seeks that love by going up to her mom and asking for a hug. Her mom reacts coldly, telling her that she's too busy and that the girl should go play by herself. The girl feels hurt and rejected, then ashamed of herself for asking for the hug in the first place. She thinks that maybe there's something wrong with her that her mom turned her away, or maybe there's something wrong with her for asking for attention in the first place. The girl made sense of these events in the best way she knew how at the time and learned that the need to be loved is something to be ashamed of.

Now imagine that the girl has grown up and has a lingering sense of shame about herself. This makes it difficult for her in relationships because she always puts the other person's needs before her own, and ends up feeling used. Her shame about herself has spread to her body: she hates the way she looks and she feels she will be more acceptable if she is thin.

If she works with her shame, spending time exploring it and feeling it, she'll find that underneath it is that early need to be loved that got blocked, as well as sadness that the need wasn't met. By experiencing and talking about the shame, the healthy sadness replaces the shame, and she rediscovers her need to feel loved. She can then use this information to treat herself well and to try new ways of being in relationships.

## Appendix U Visual Analysis for Case 1

Figure U1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

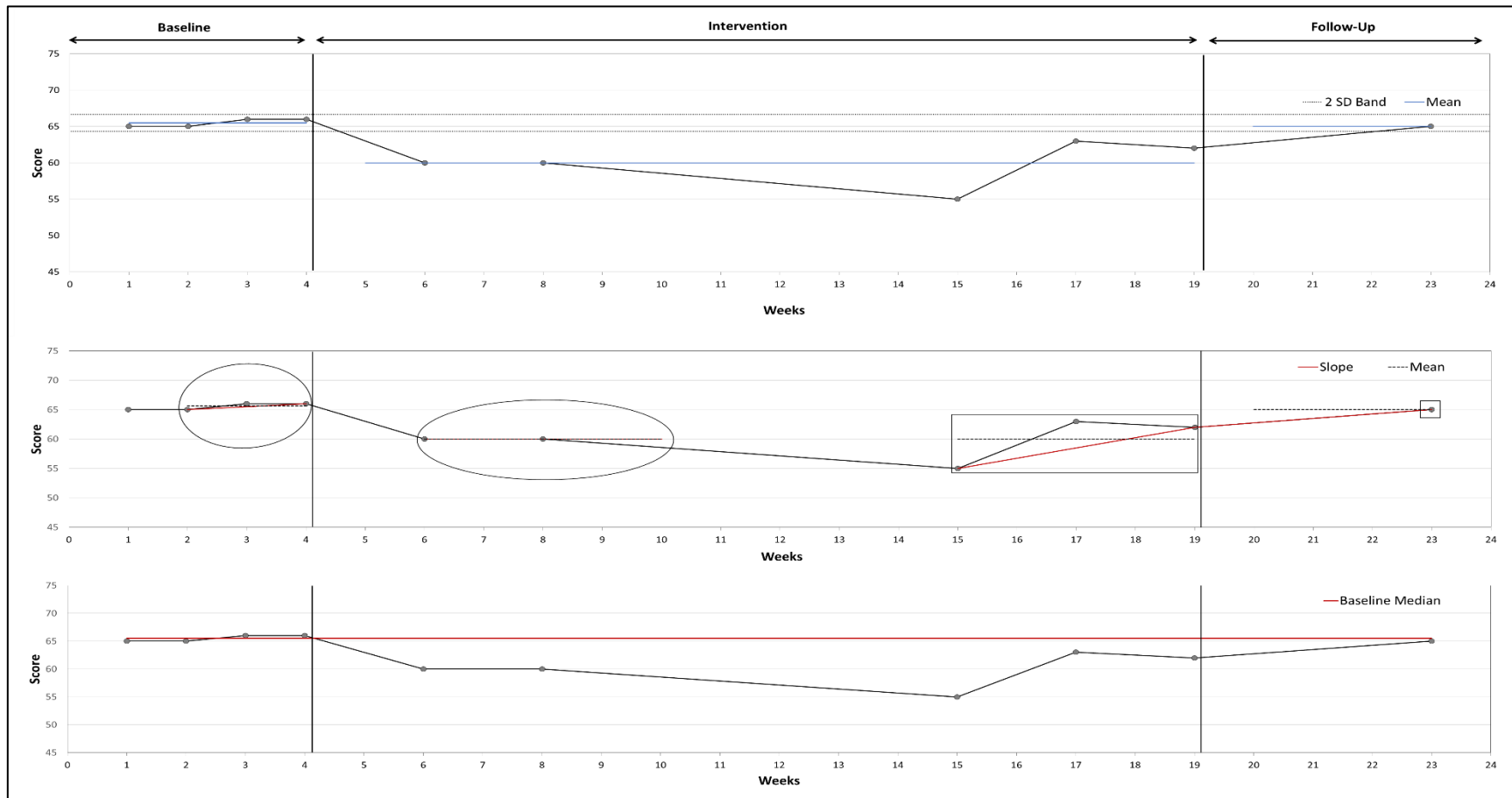


Figure U1. Repeated measures data for case 1 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure U2. Internalized Shame Scale (ISS).

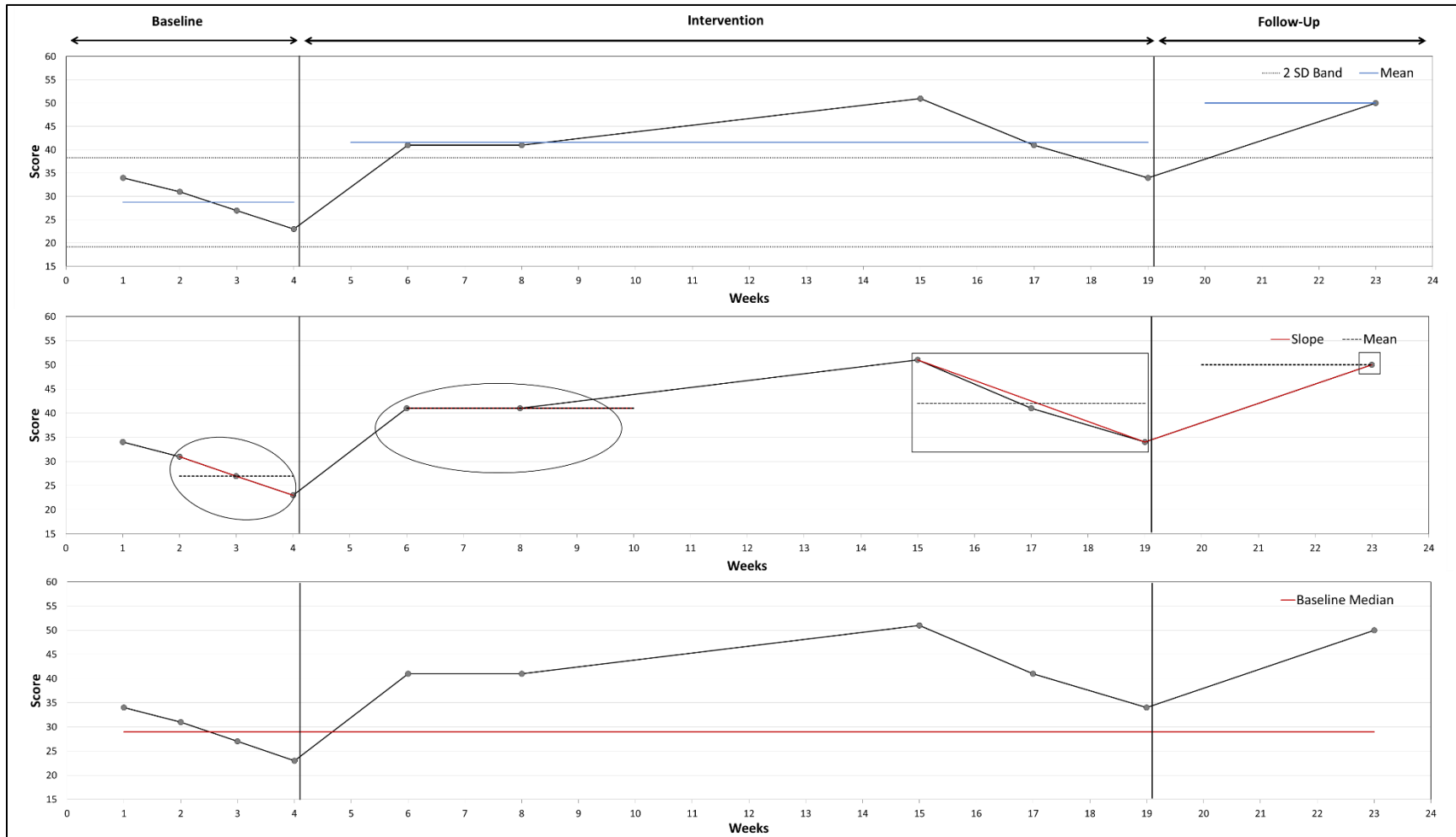


Figure U2. Repeated measures data for case 1 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure U3. Other As Shamer (OAS)

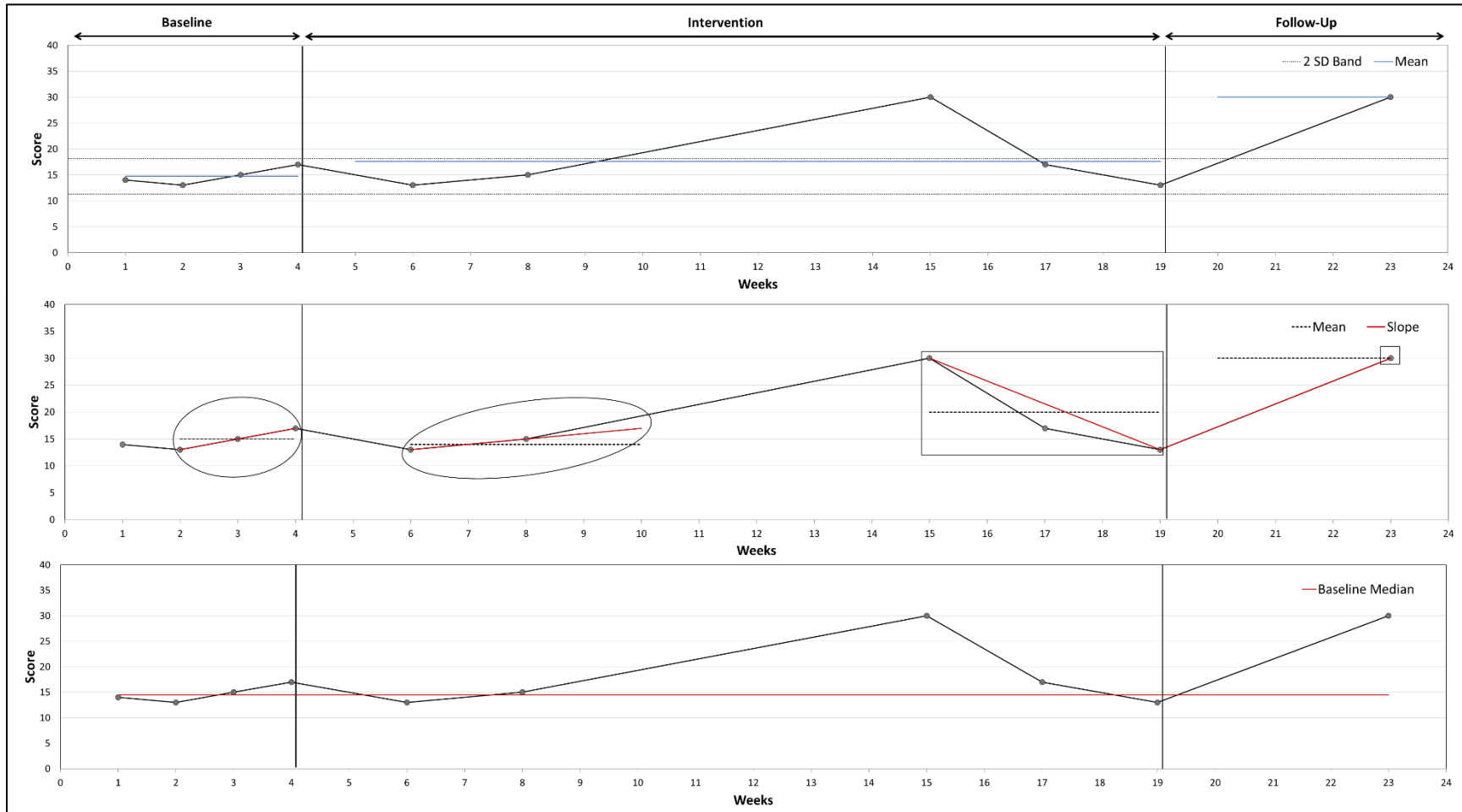


Figure U3. Repeated measures data for case 1 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

## Appendix V Visual Analysis for Case 2

Figure V1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

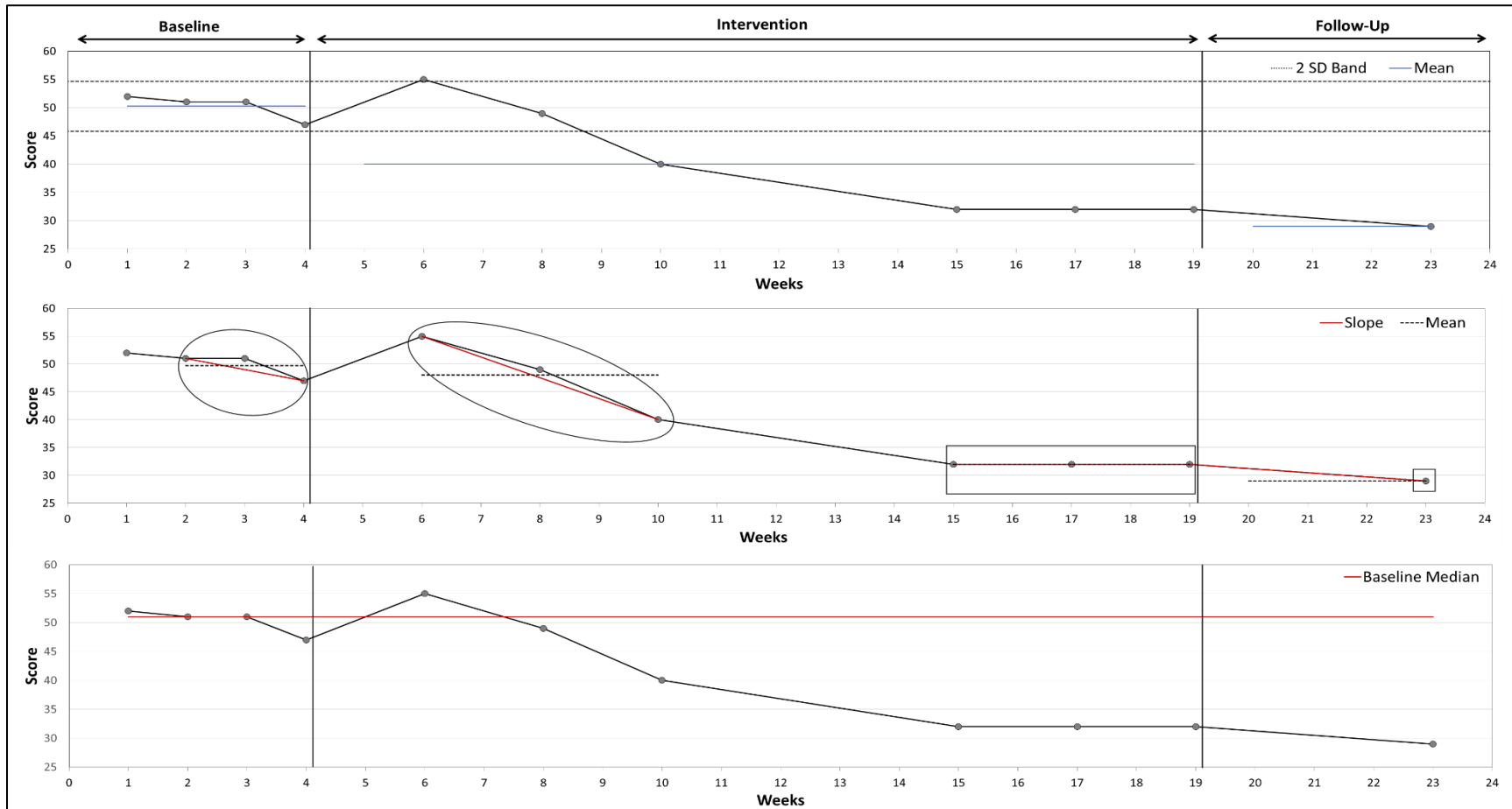


Figure V1. Repeated measures data for case 2 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure V2. Internalized Shame Scale (ISS)

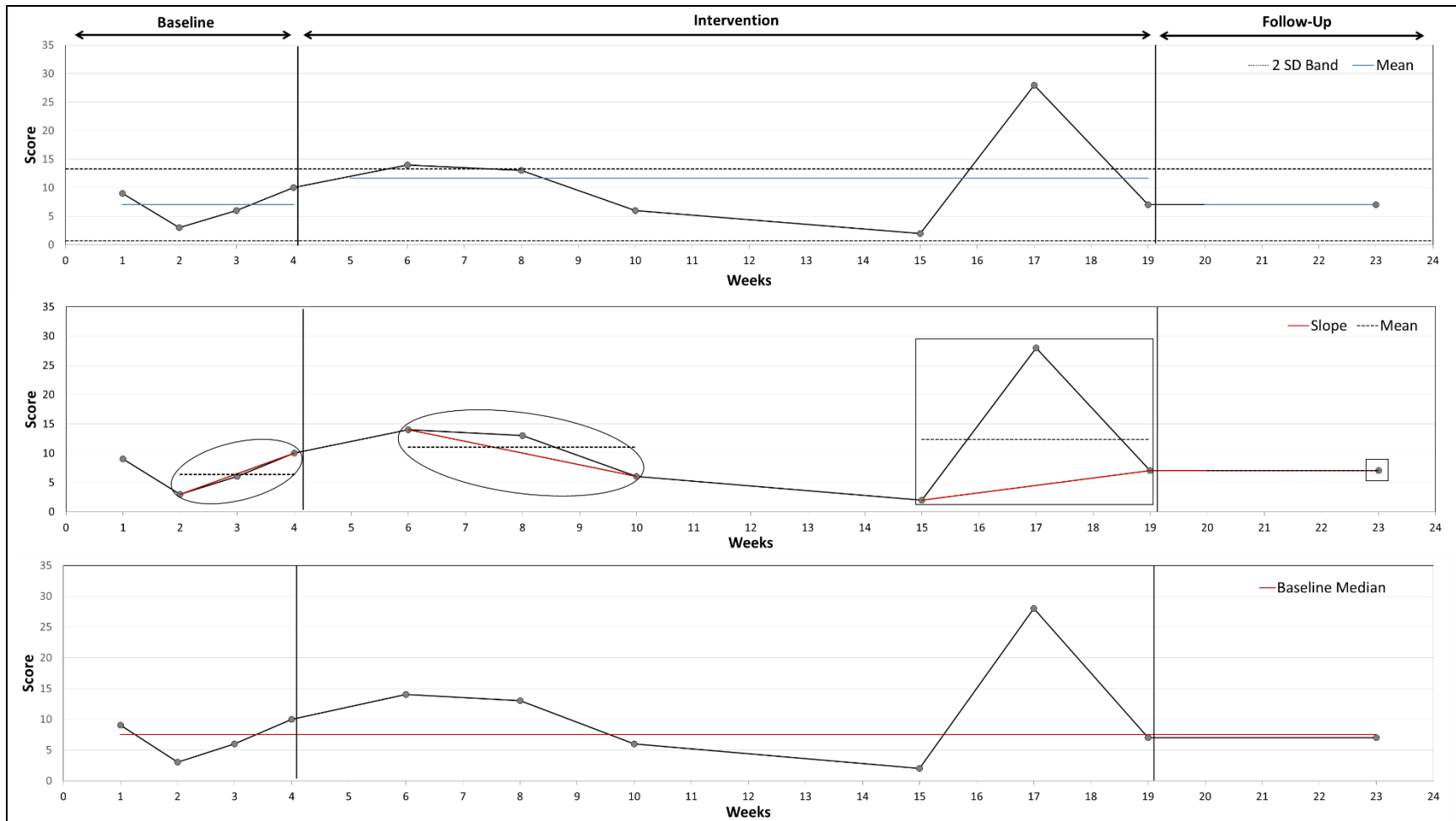


Figure V2. Repeated measures data for case 2 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure V3. Other As Shamer (OAS)

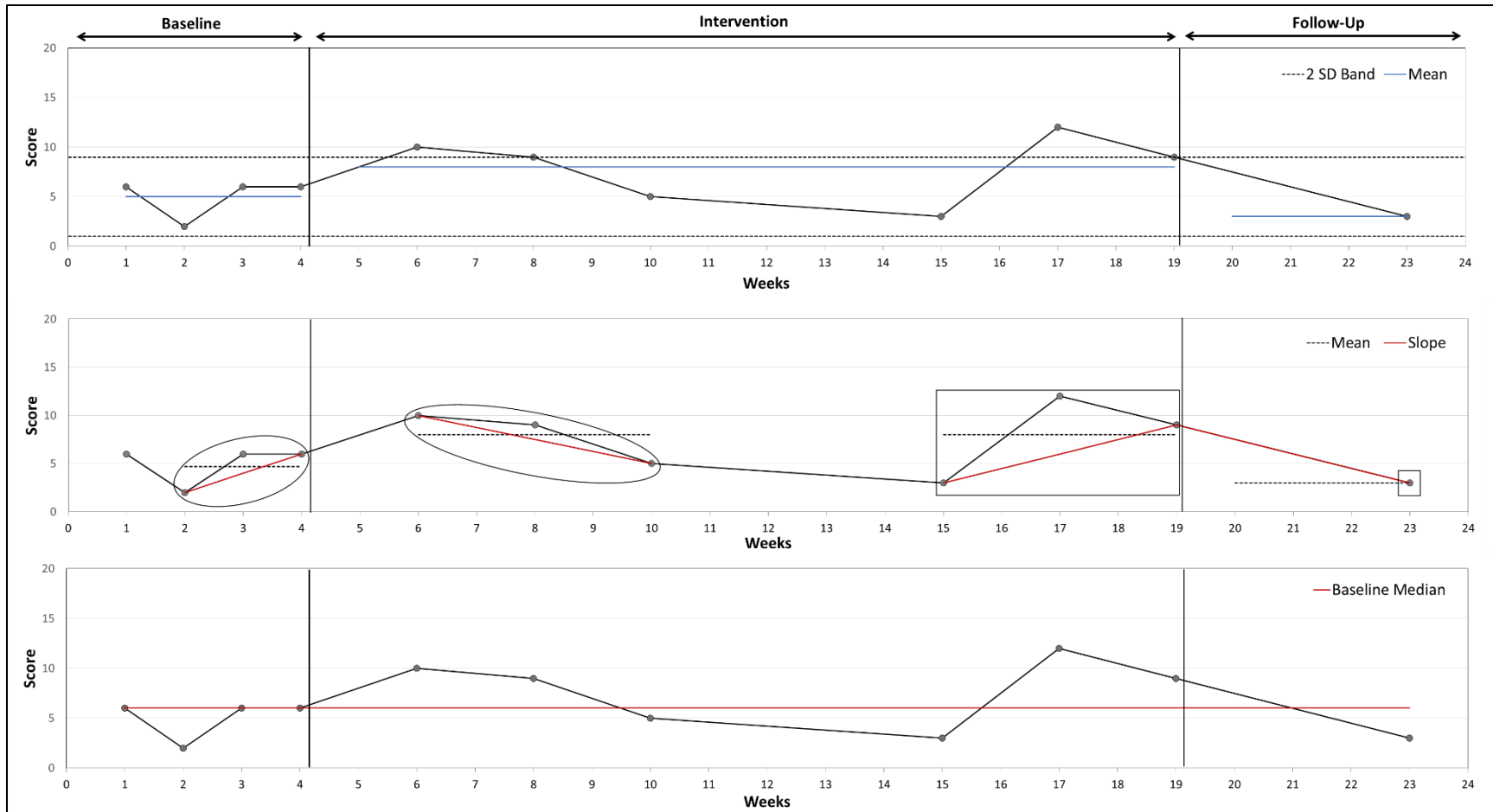


Figure V3. Repeated measures data for case 2 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.



## Appendix W Visual Analysis for Case 3

Figure W1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

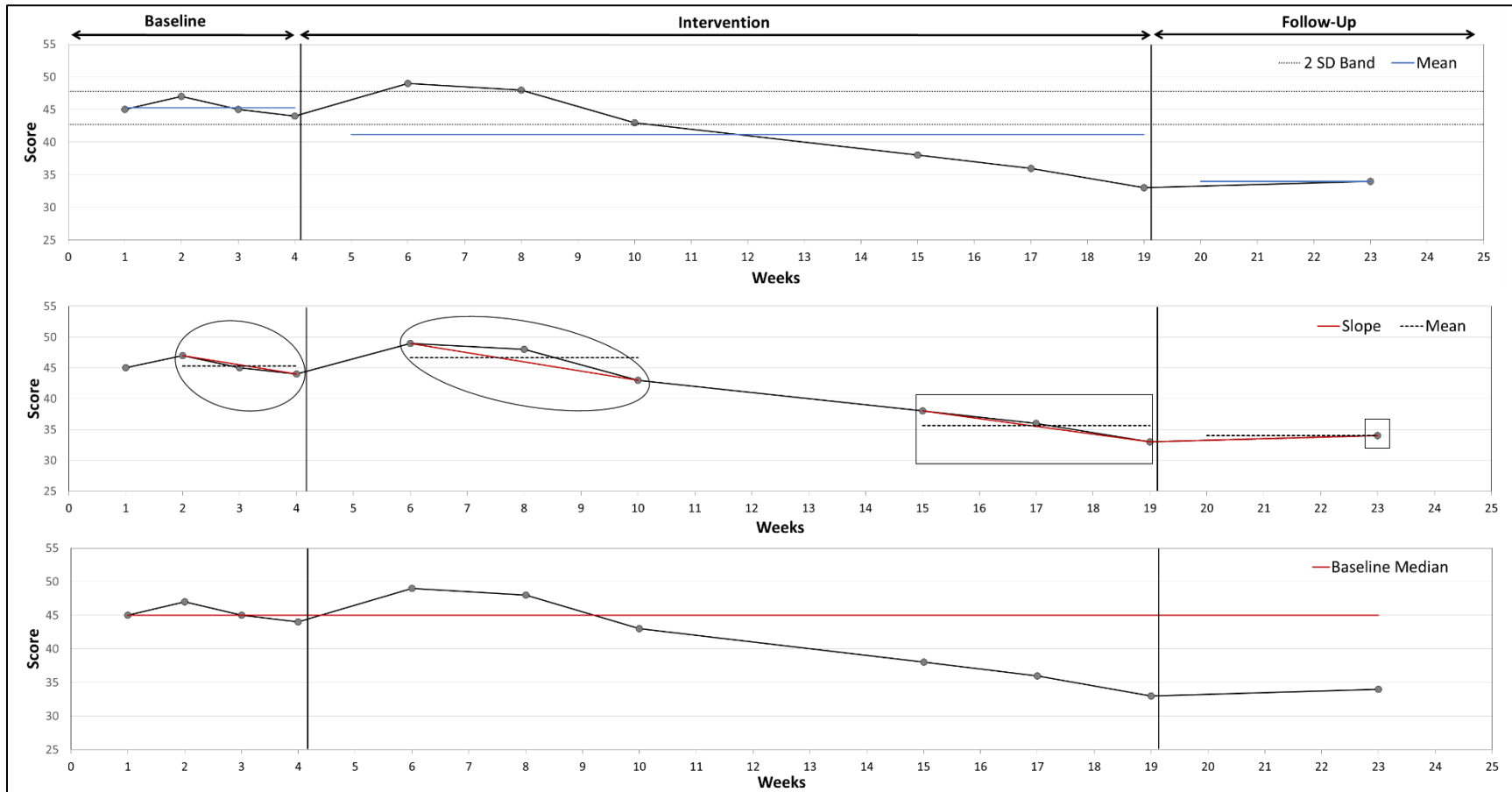


Figure W1. Repeated measures data for case 3 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure W2. Internalized Shame Scale (ISS)

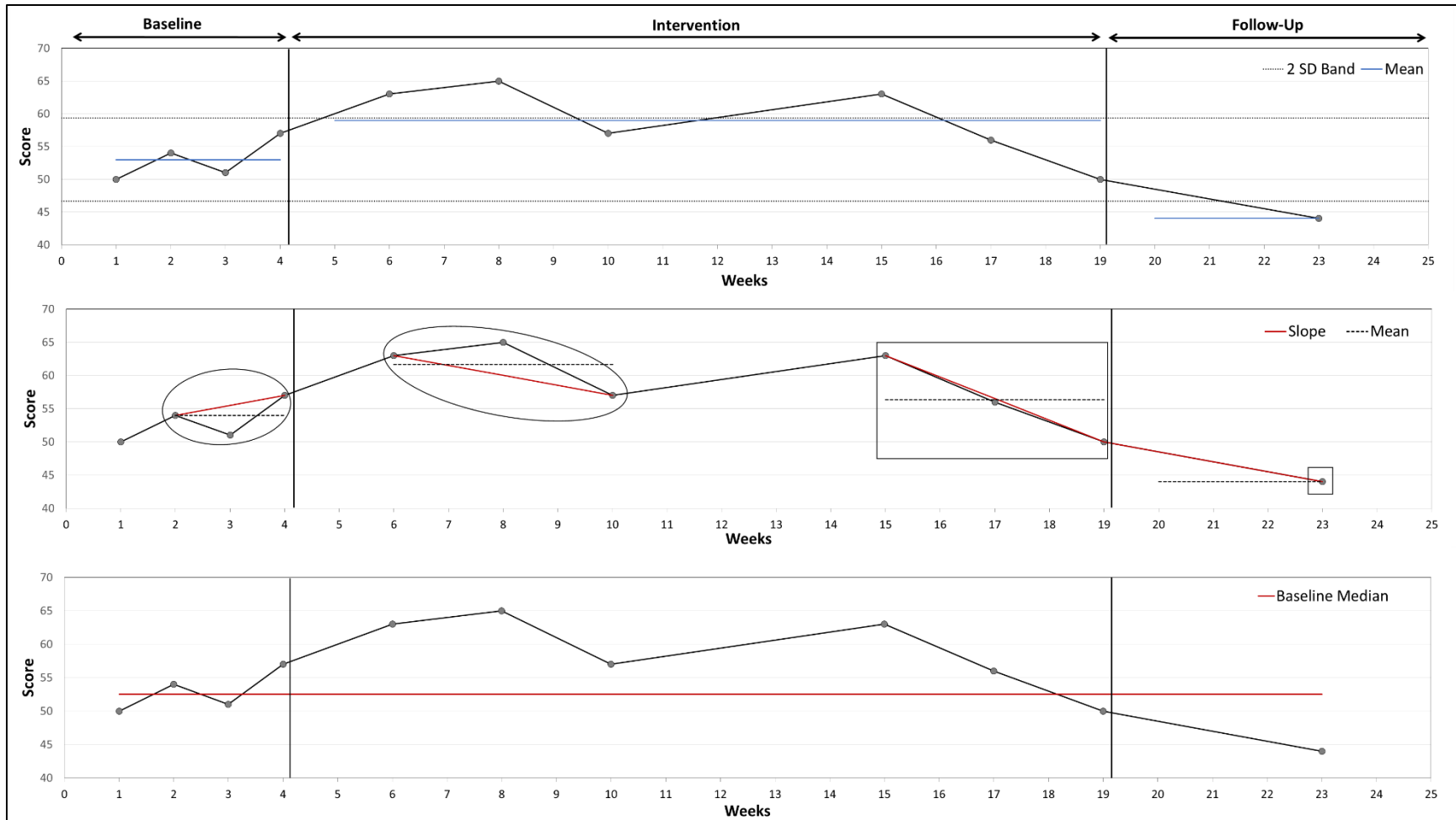


Figure W2. Repeated measures data for case 3 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure W3. Other As Shamer (OAS)

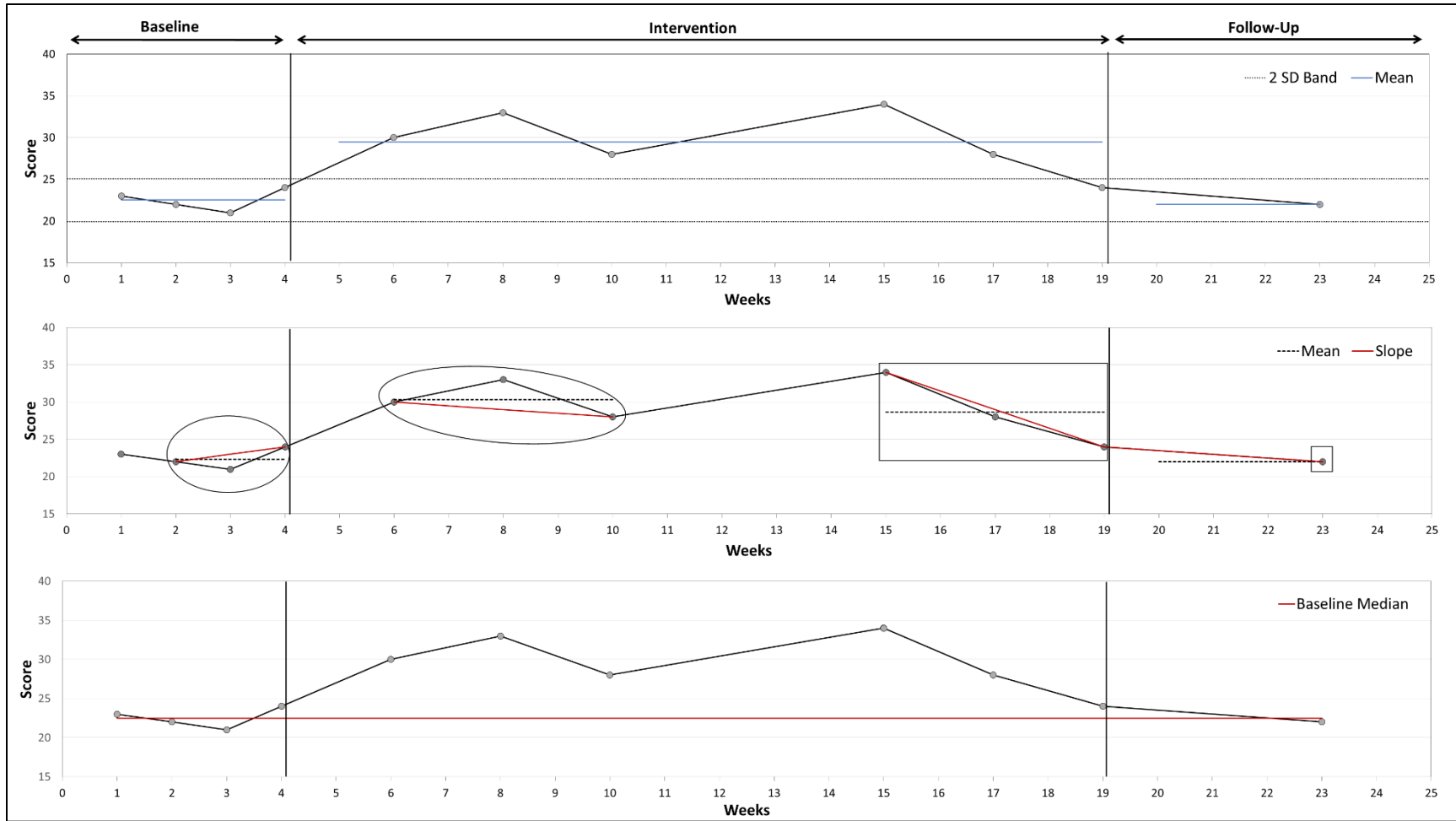


Figure W3. Repeated measures data for case 3 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

## Appendix X Visual Analysis for Case 4

Figure X1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

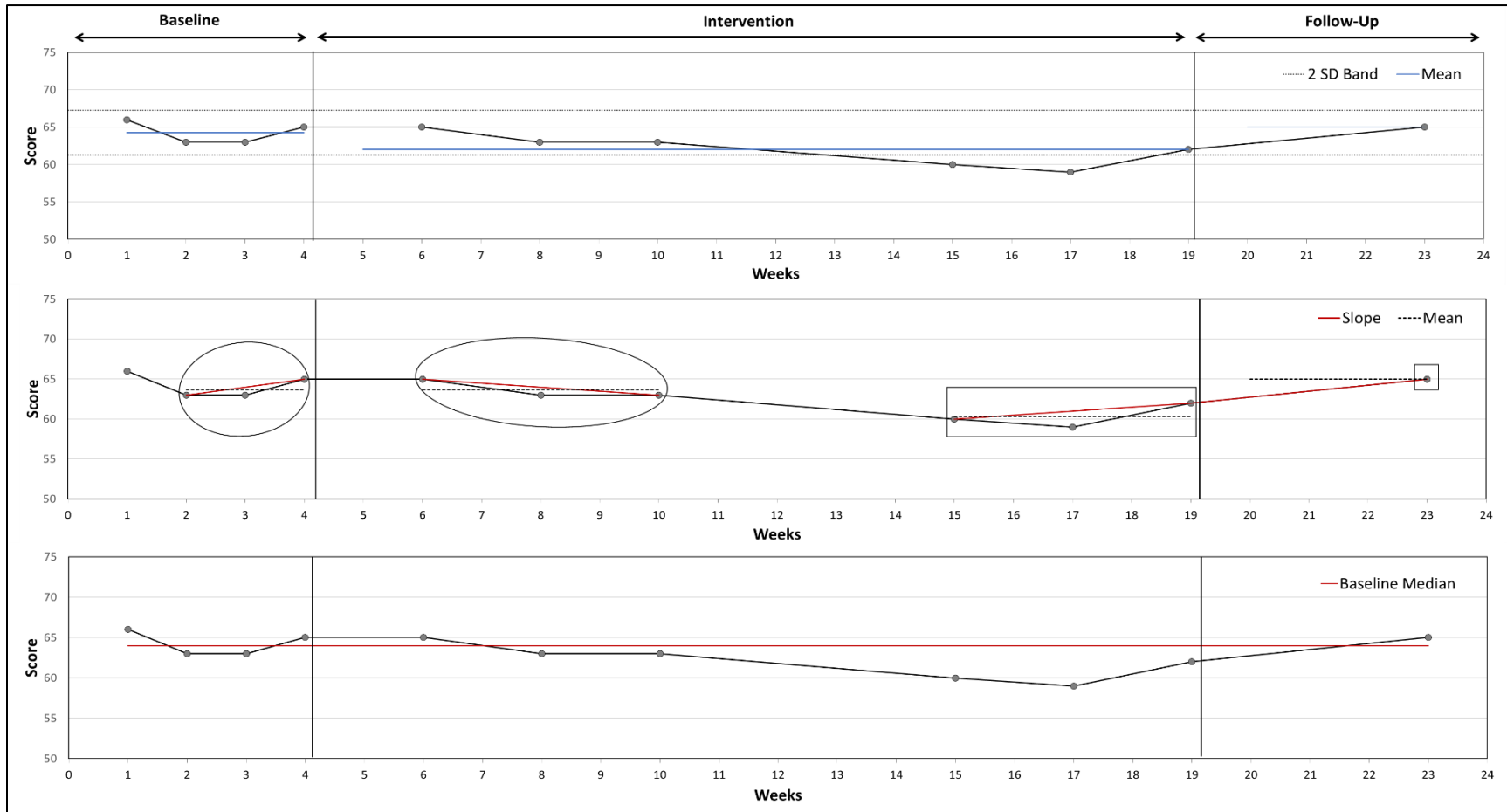


Figure X1. Repeated measures data for case 4 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure X2. Internalized Shame Scale (ISS)

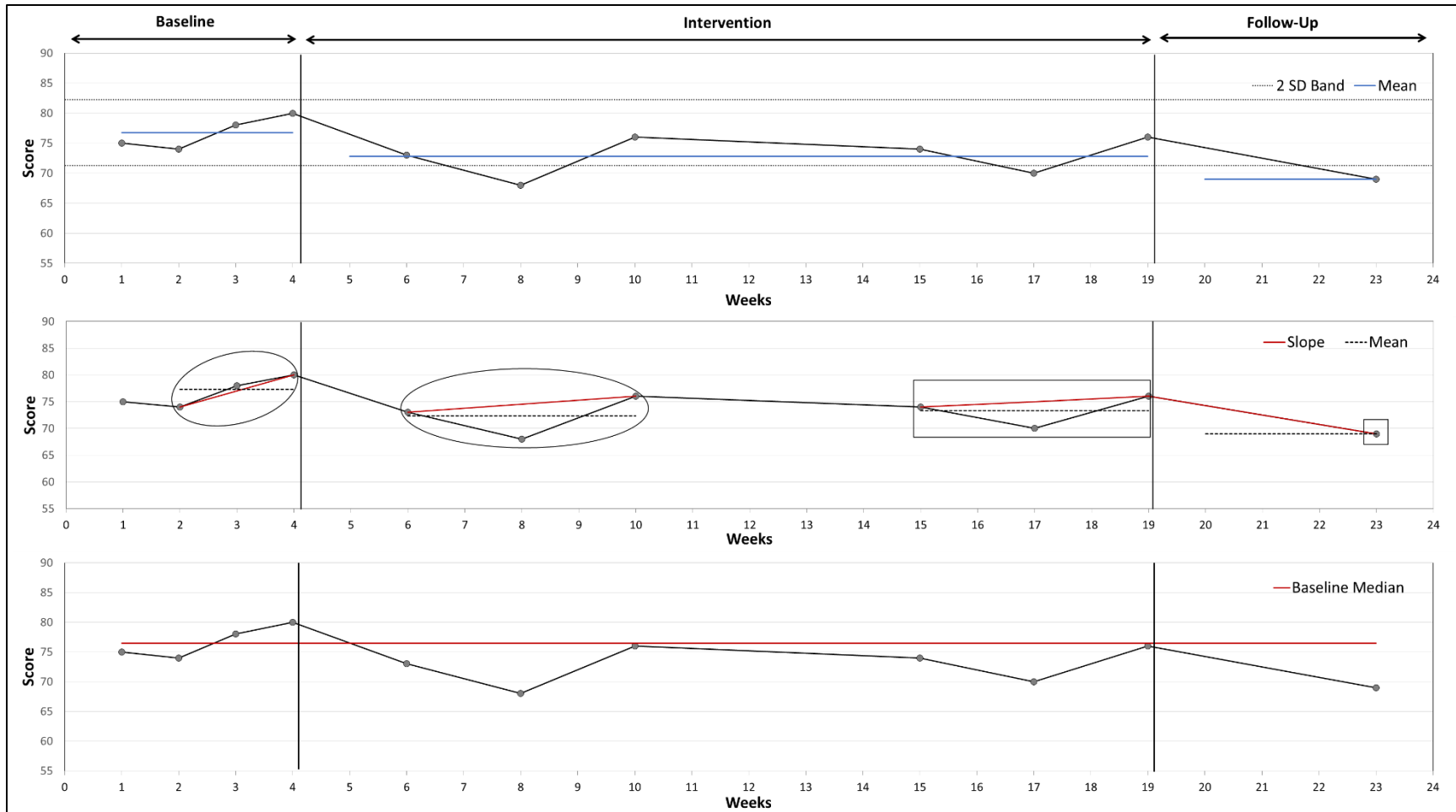


Figure X2. Repeated measures data for case 4 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure X3. Other As Shamer (OAS)

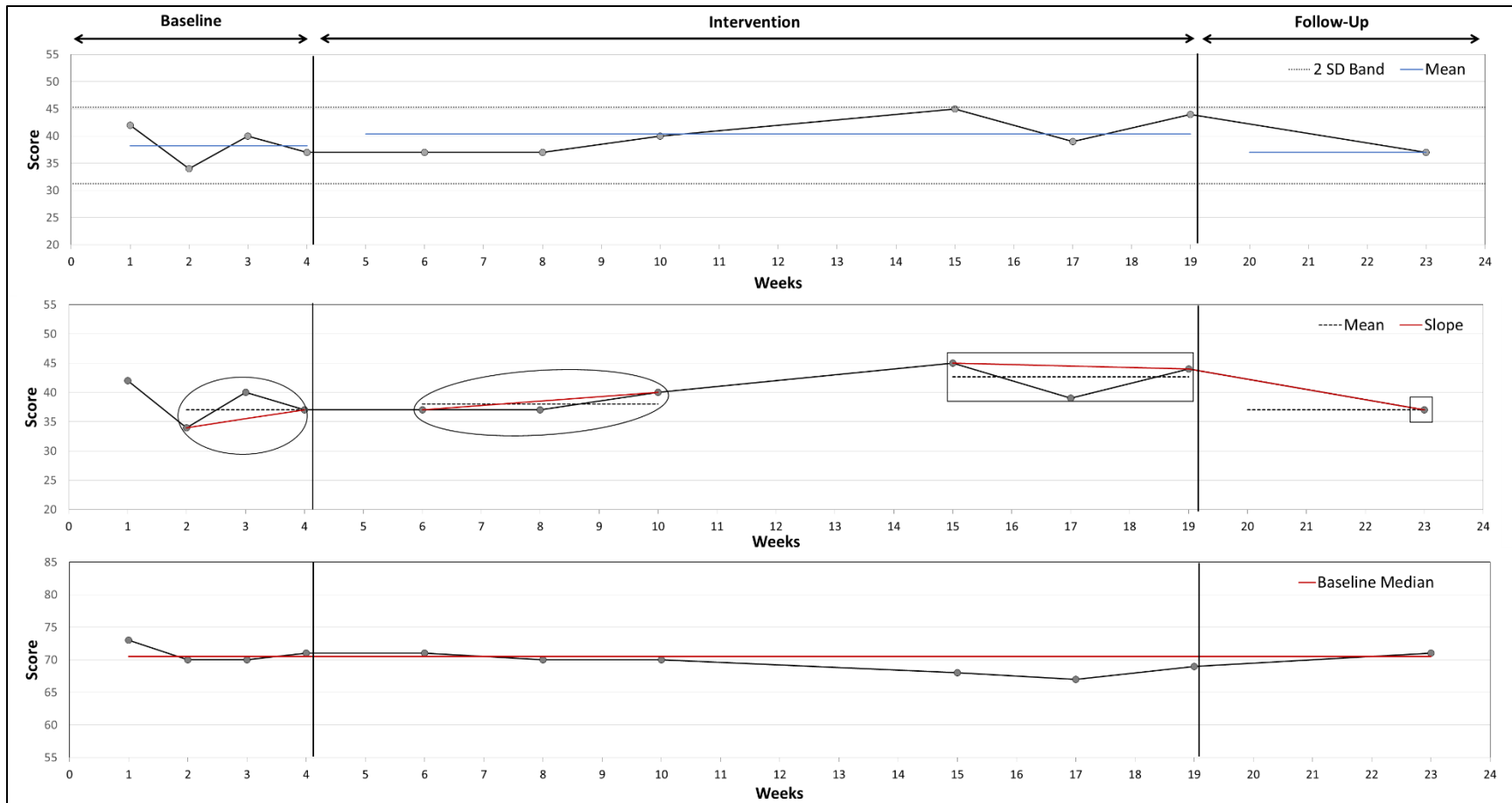


Figure X3. Repeated measures data for case 4 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

## Appendix Y Visual Analysis for Case 5

Figure Y1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

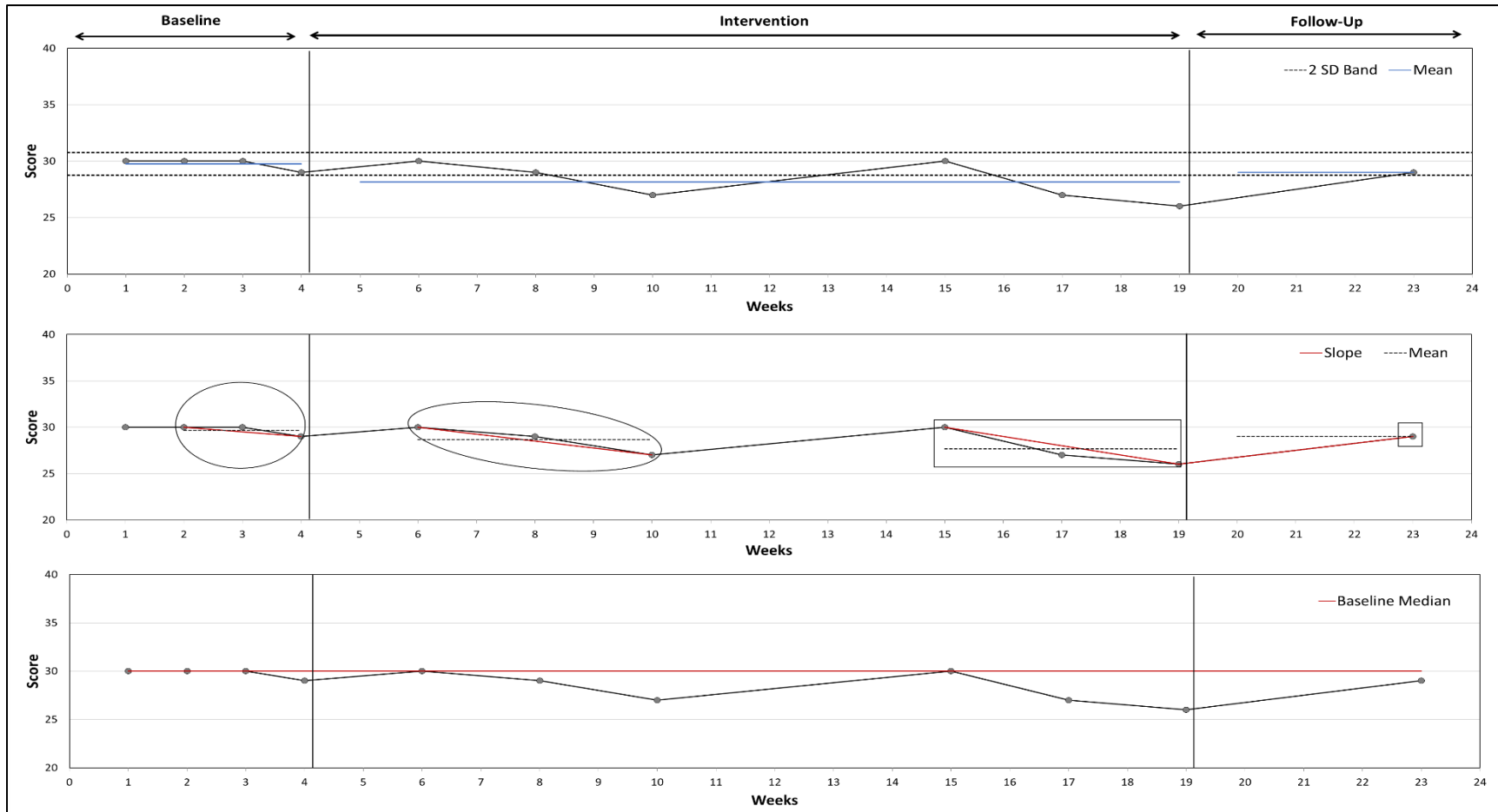


Figure Y1. Repeated measures data for case 5 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure Y2. Internalized Shame Scale (ISS)

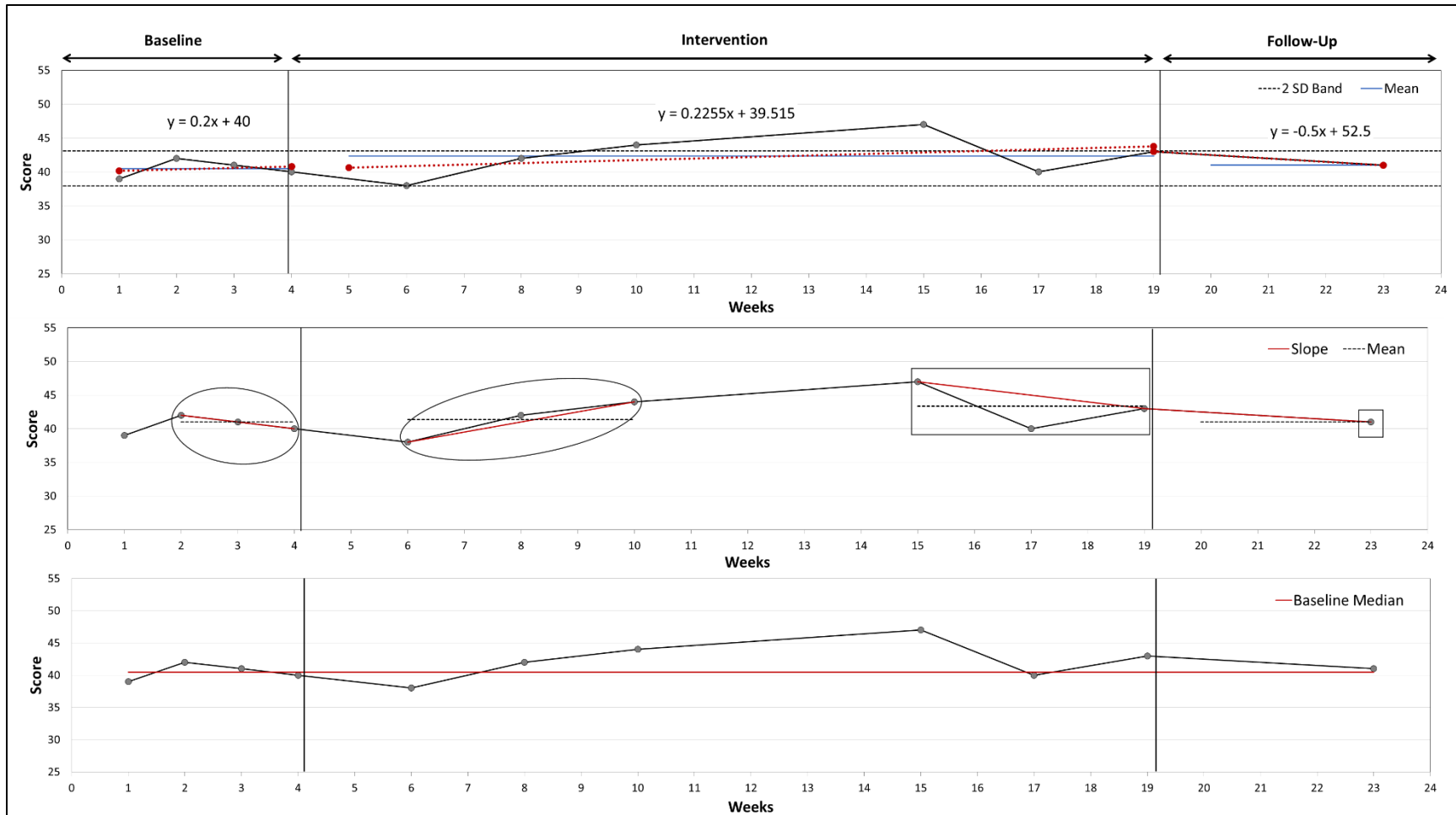


Figure Y2. Repeated measures data for case 5 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.



Figure Y3. Other As Shamer (OAS)

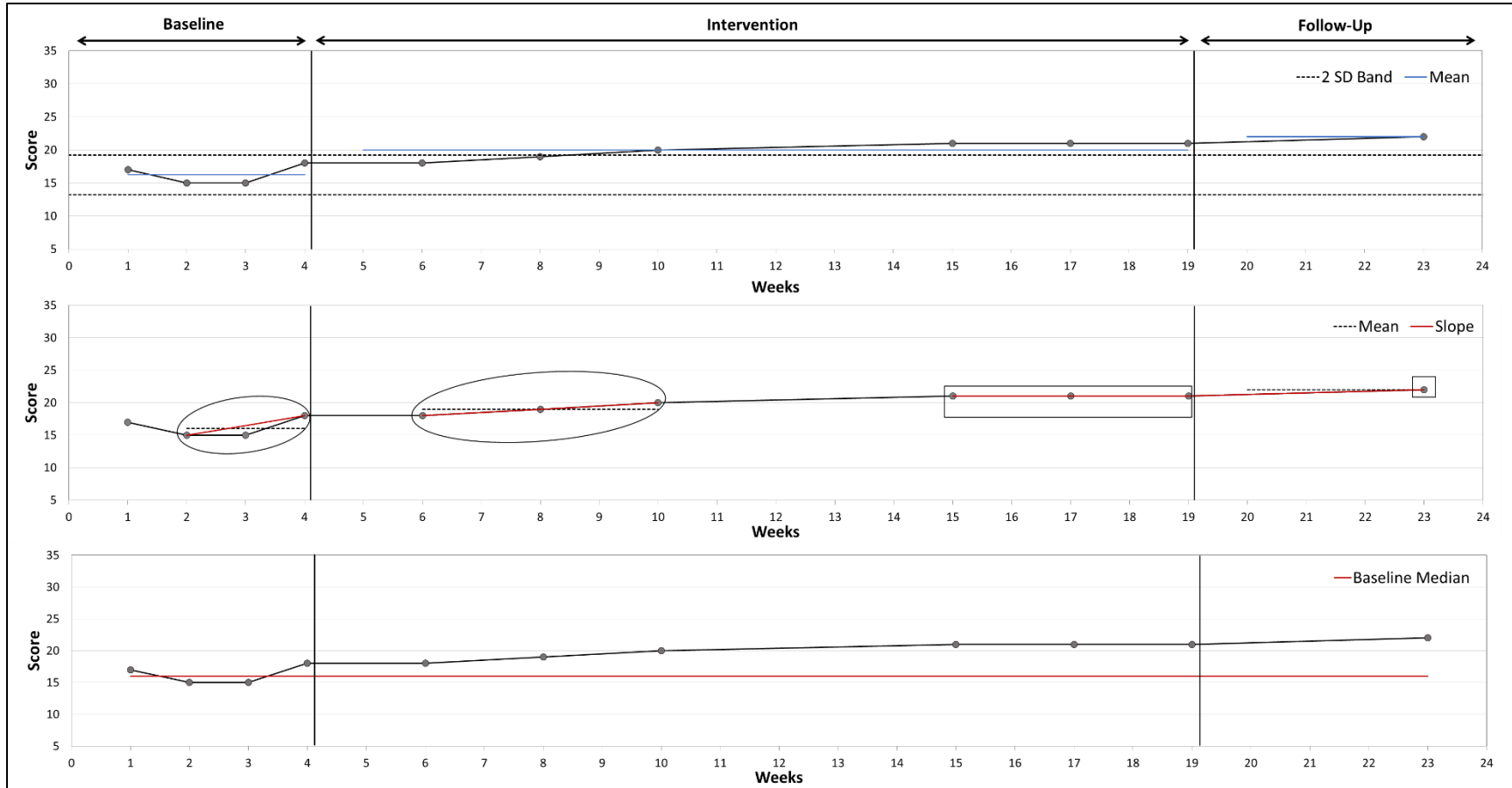


Figure Y3. Repeated measures data for case 5 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Appendix Z  
 Visual Analysis for Case 6

Figure Z1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

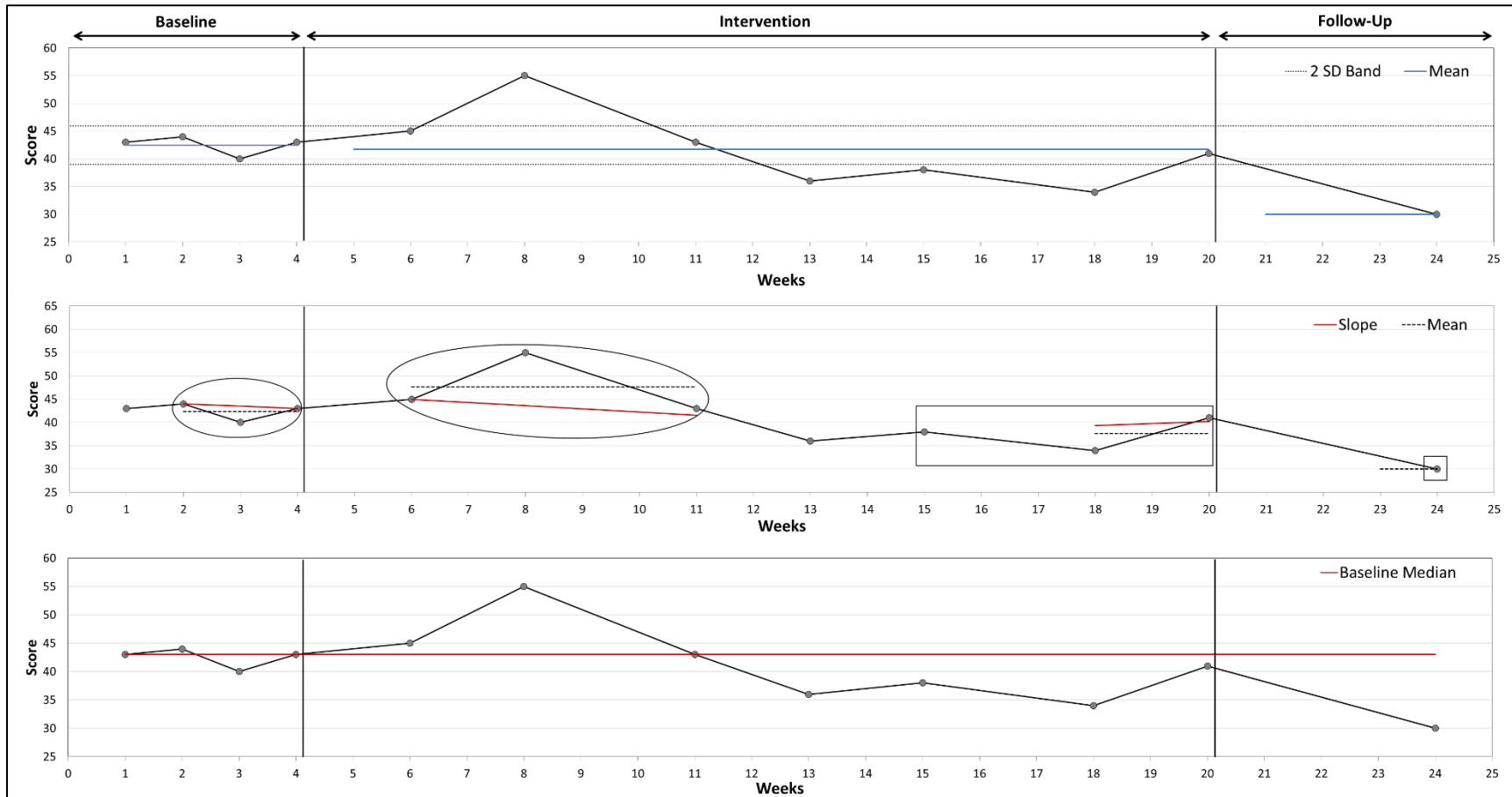


Figure Z1. Repeated measures data for case 6 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure Z2. Internalized Shame Scale (ISS)

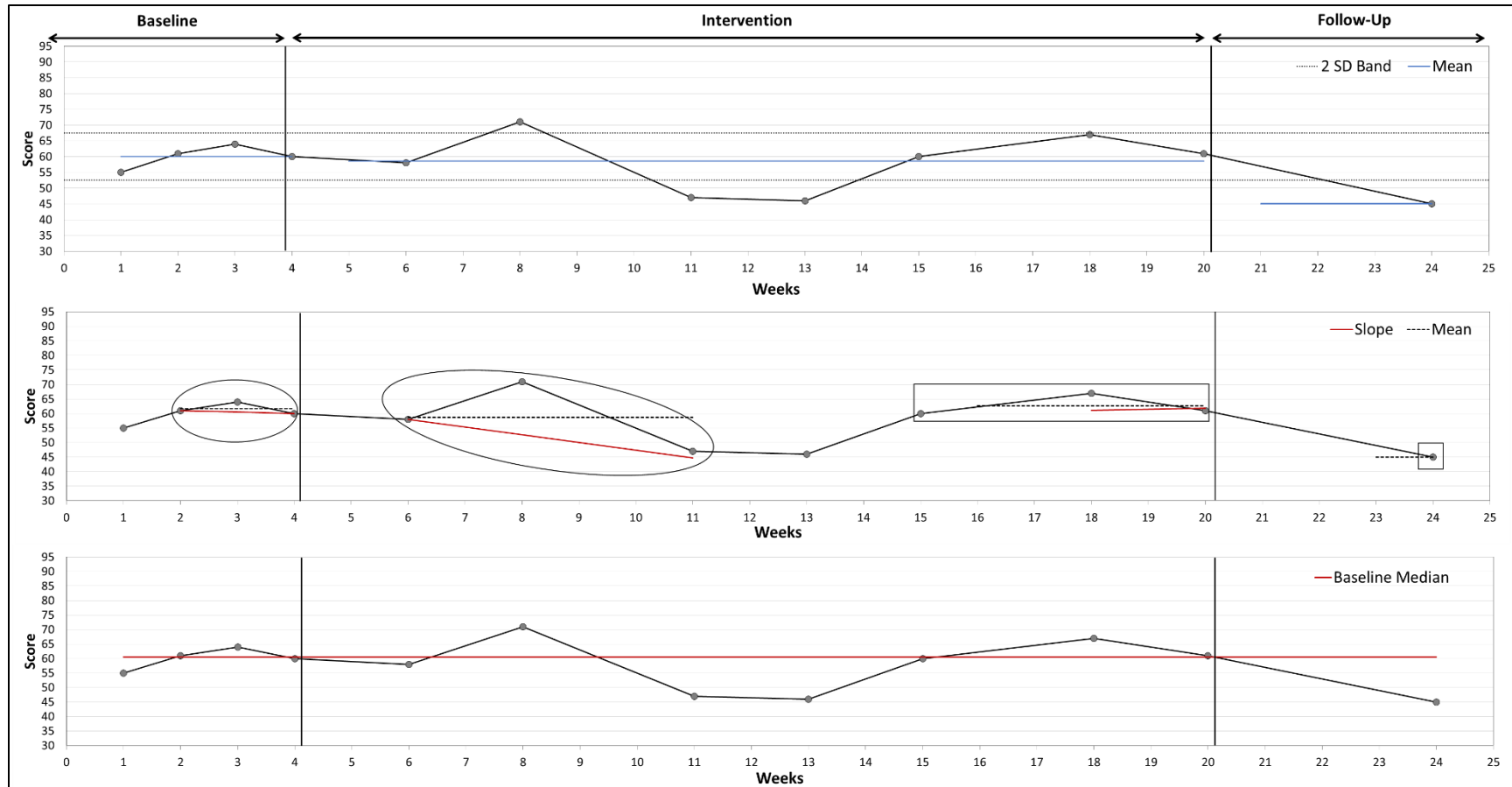


Figure Z2. Repeated measures data for case 6 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure Z3. Other As Shamer (OAS)

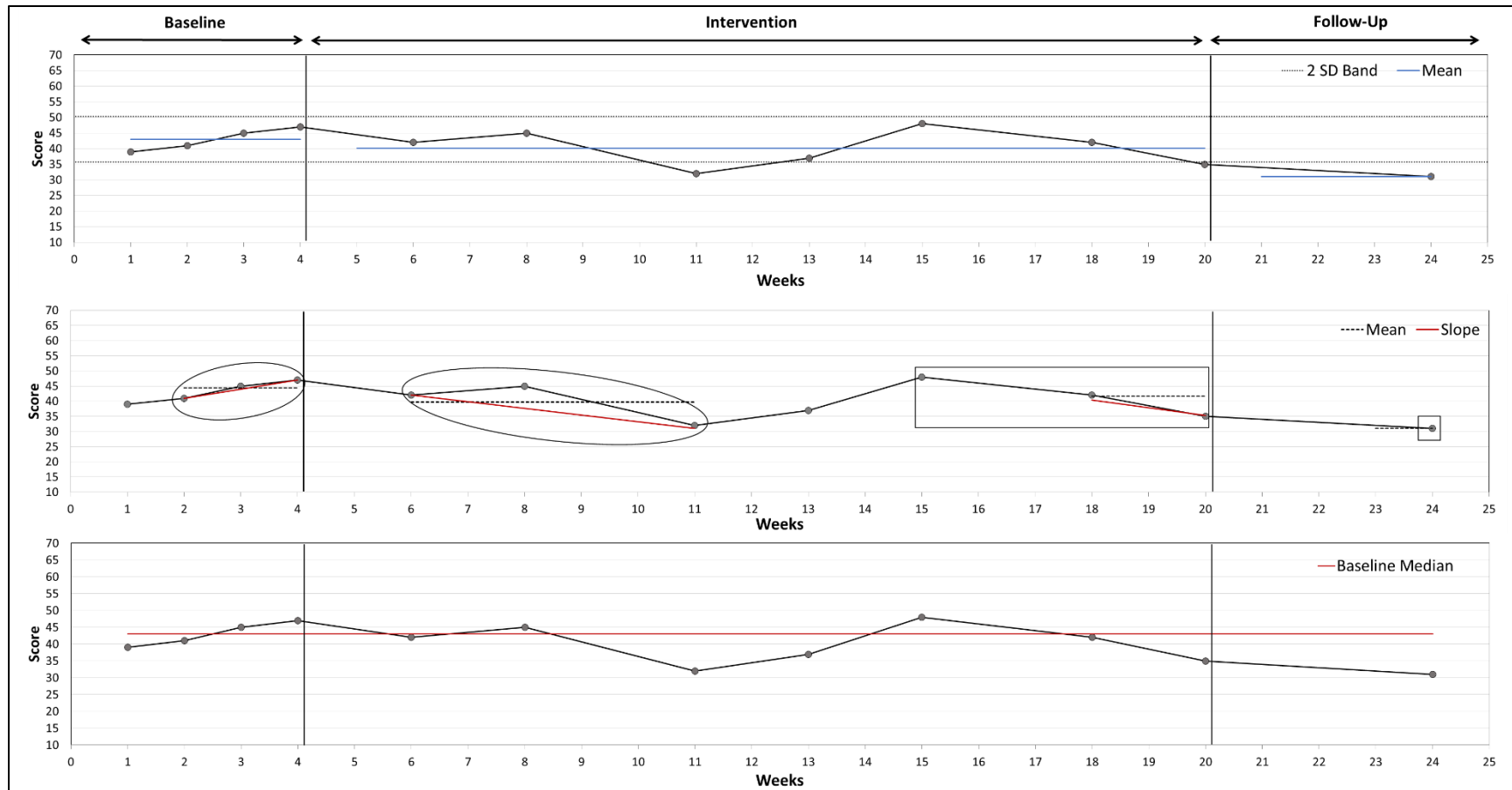


Figure Z3. Repeated measures data for case 6 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Appendix AA  
Visual Analysis for Case 7

Figure AA1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

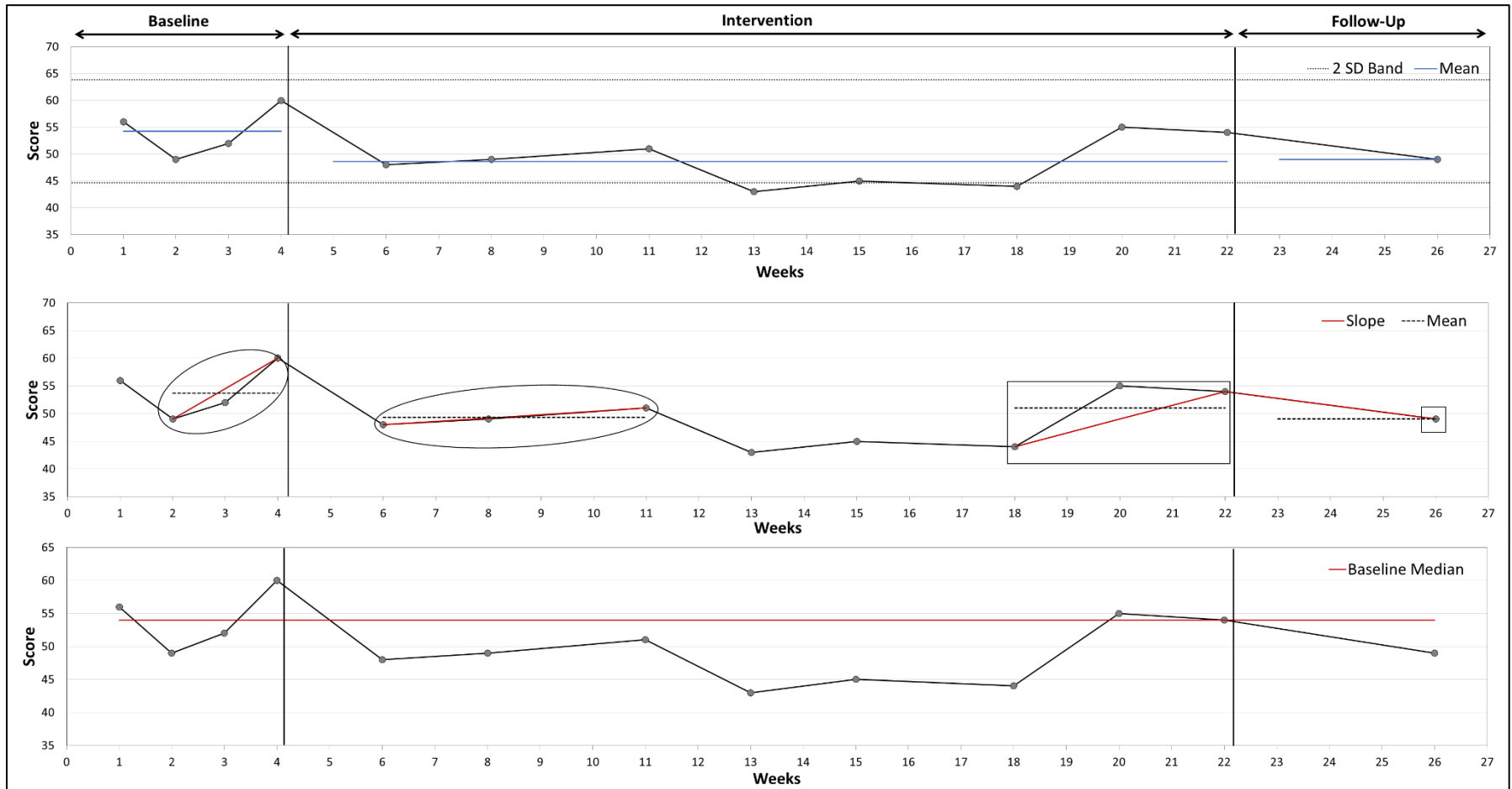


Figure AA1. Repeated measures data for case 7 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure AA2. Internalized Shame Scale (ISS)

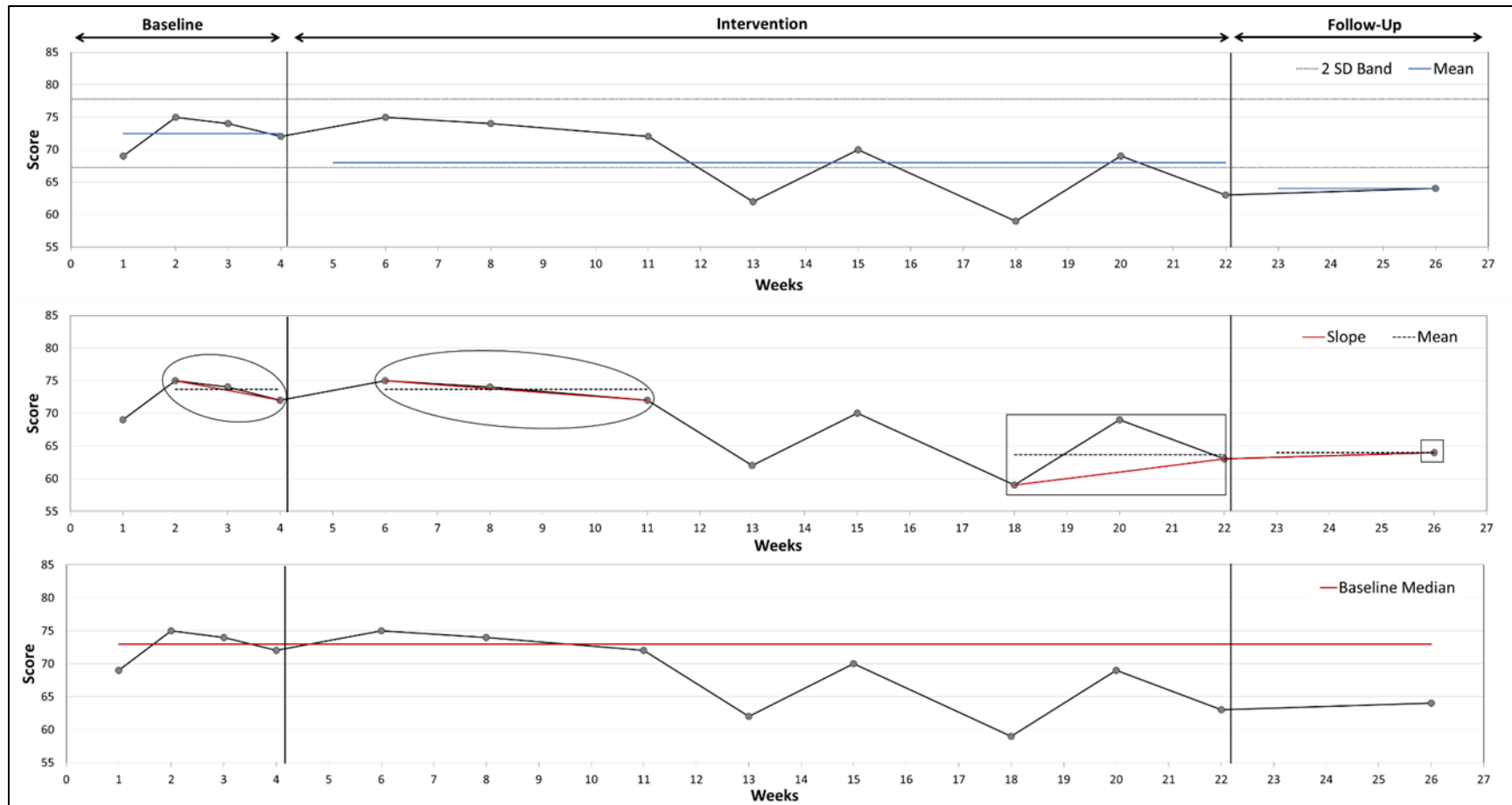


Figure AA2. Repeated measures data for case 7 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure AA3. Other As Shamer (OAS)

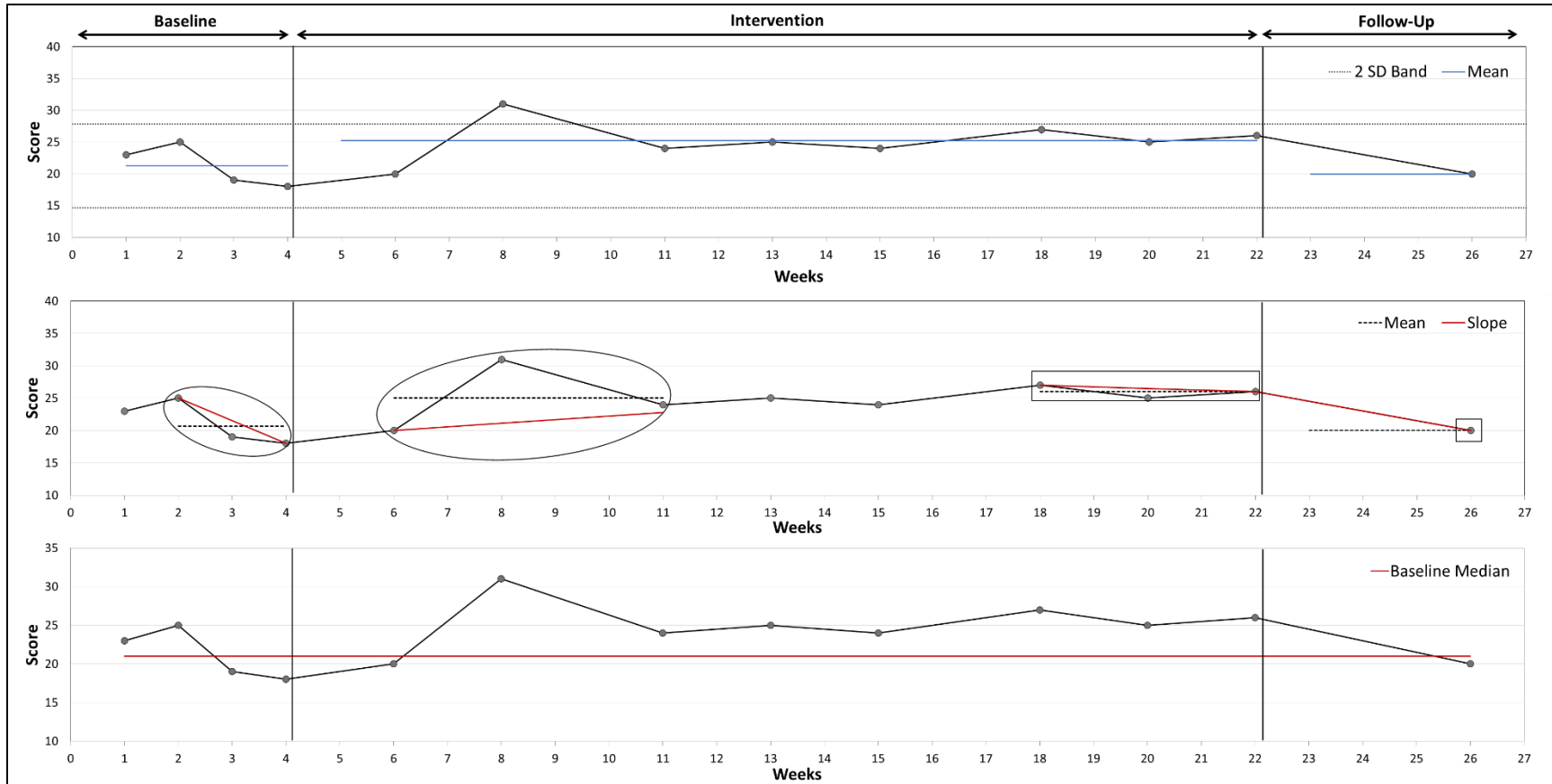


Figure AA3. Repeated measures data for case 7 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

## Appendix BB Visual Analysis for Case 8

Figure BB1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

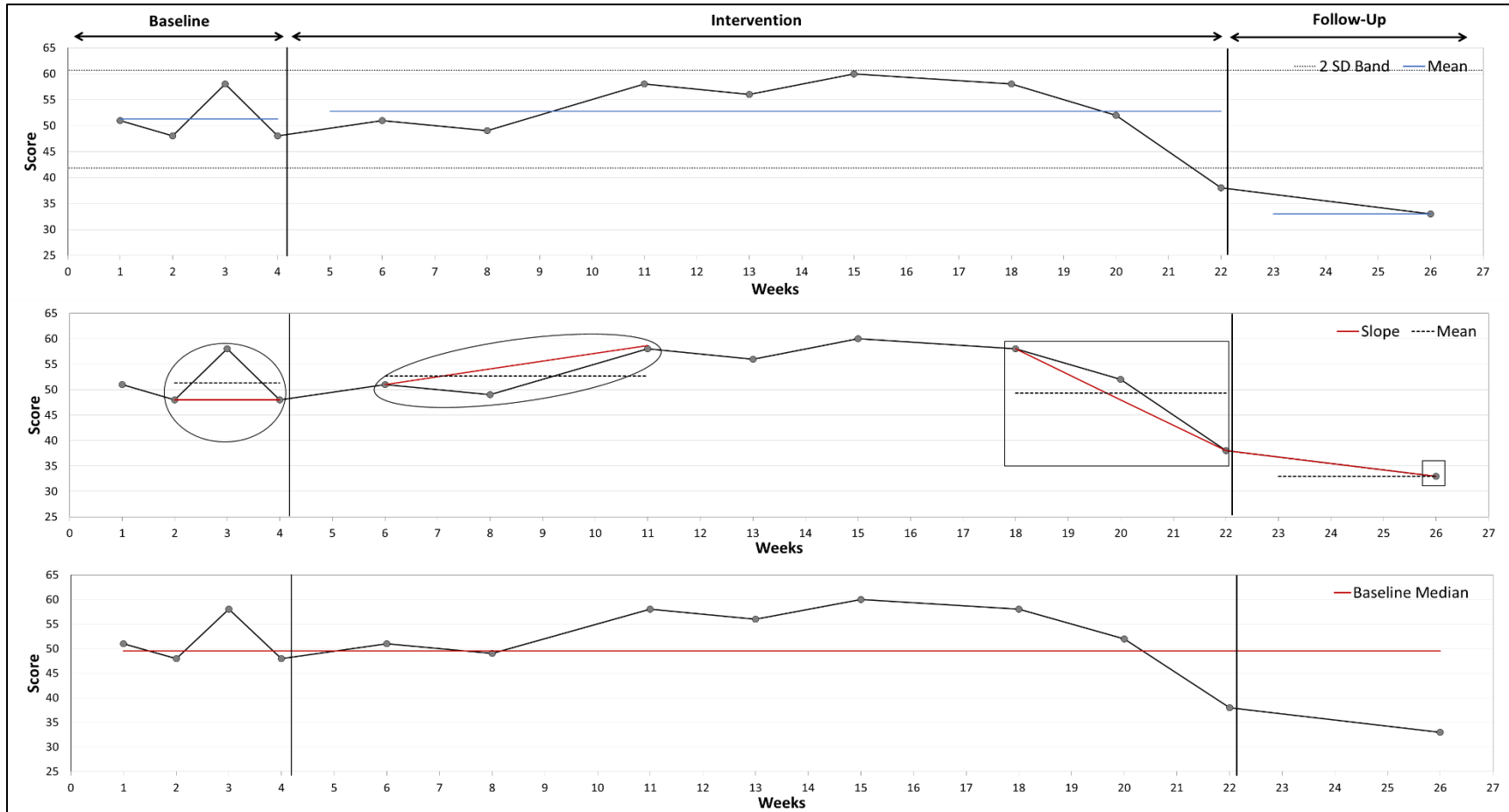


Figure BB1. Repeated measures data for case 8 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.



Figure BB2. Internalized Shame Scale (ISS)

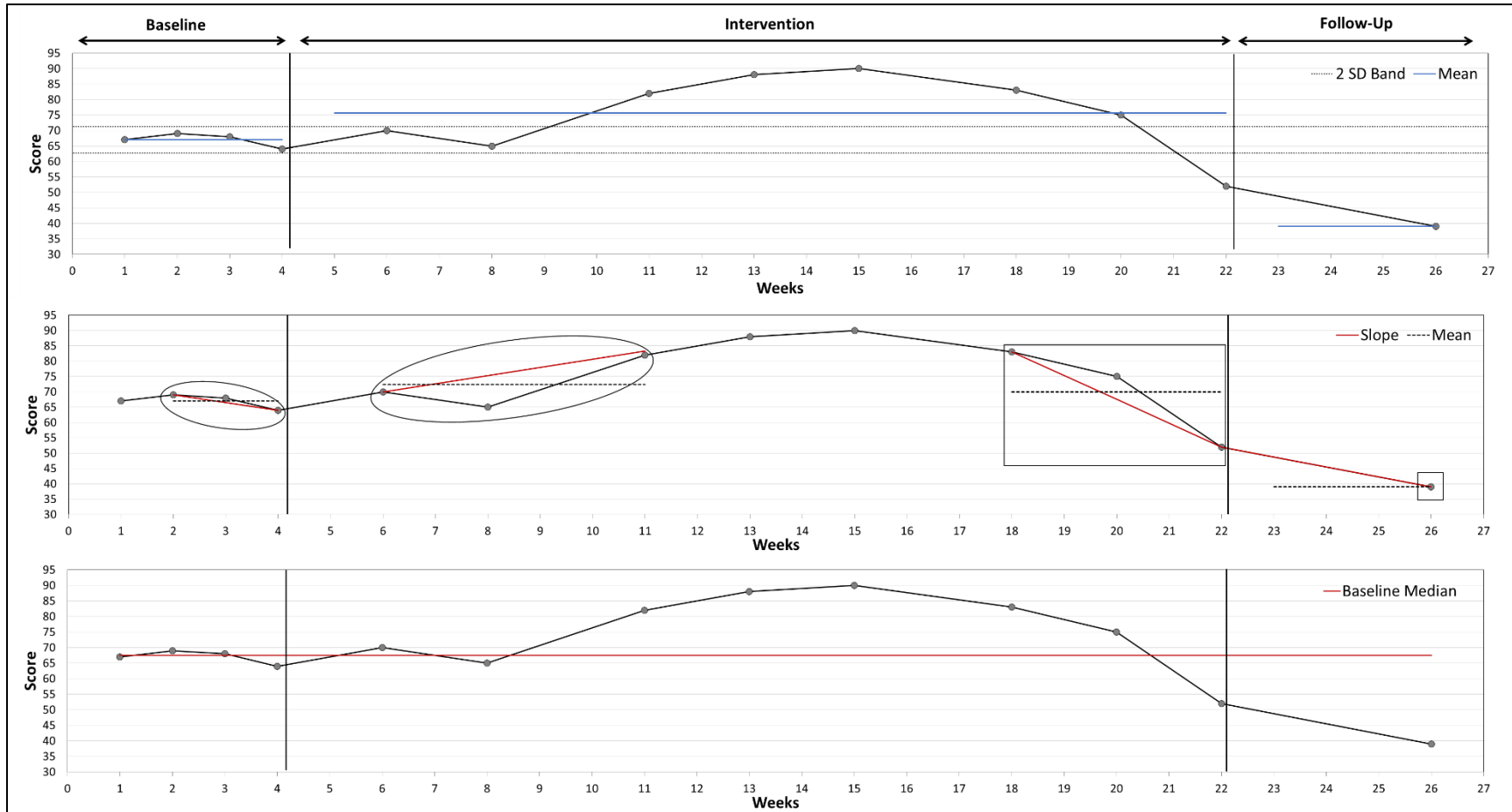


Figure BB2. Repeated measures data for case 8 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure BB3. Other As Shamer (OAS)

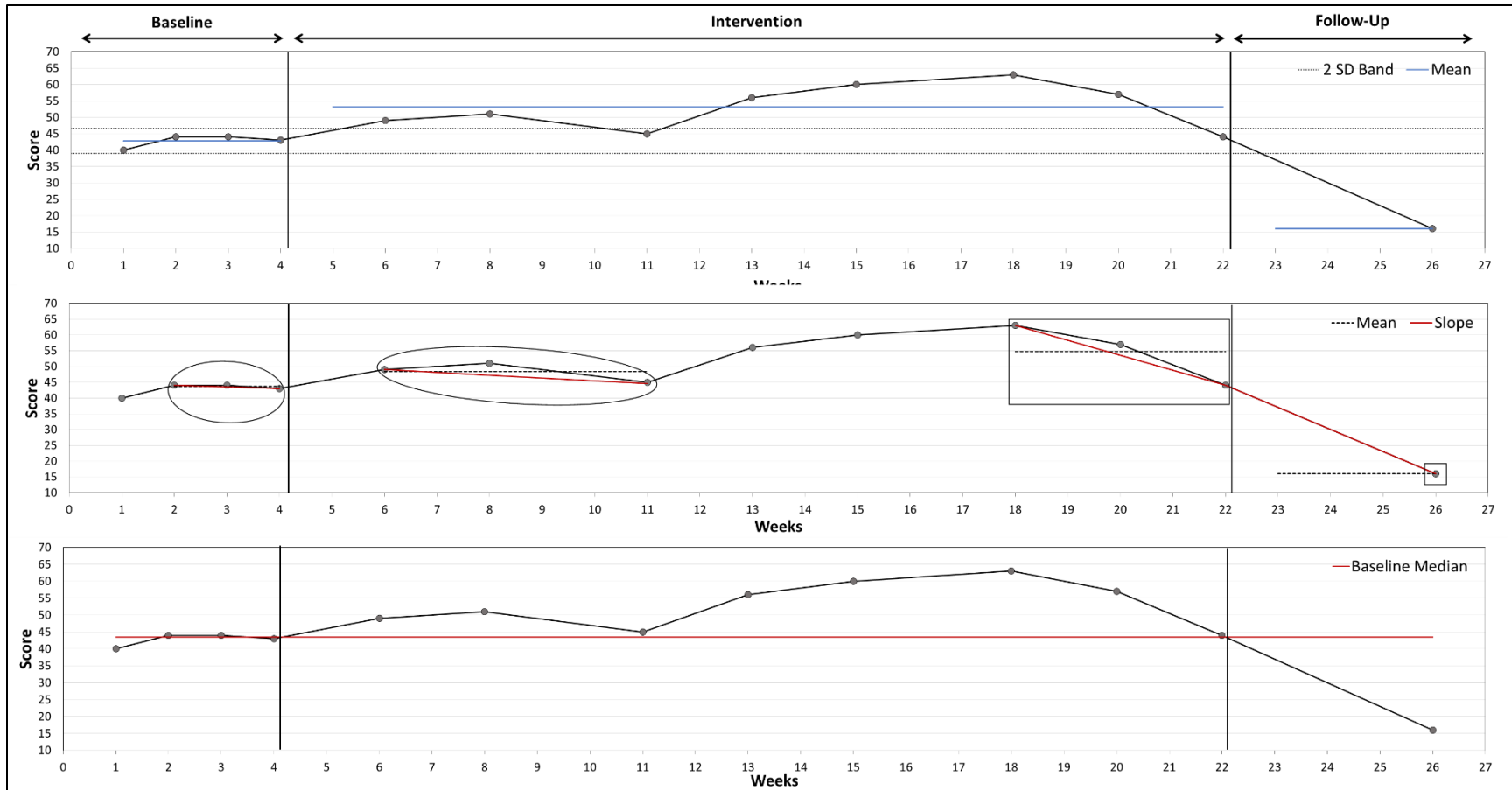


Figure BB3. Repeated measures data for case 8 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Appendix CC  
Visual Analysis for Case 9

Figure CC1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

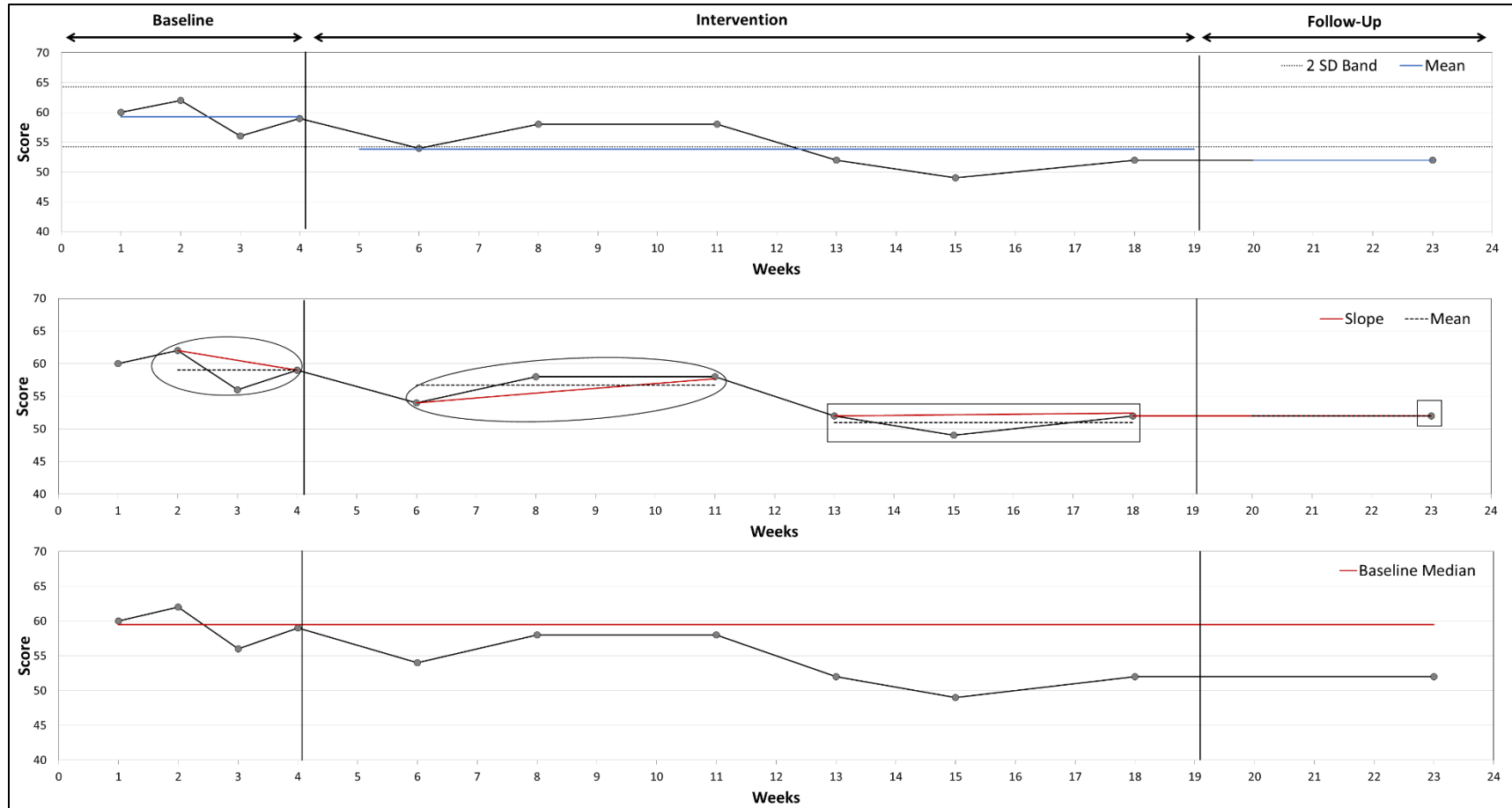


Figure CC1. Repeated measures data for case 9 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure CC2. Internalized Shame Scale (ISS)

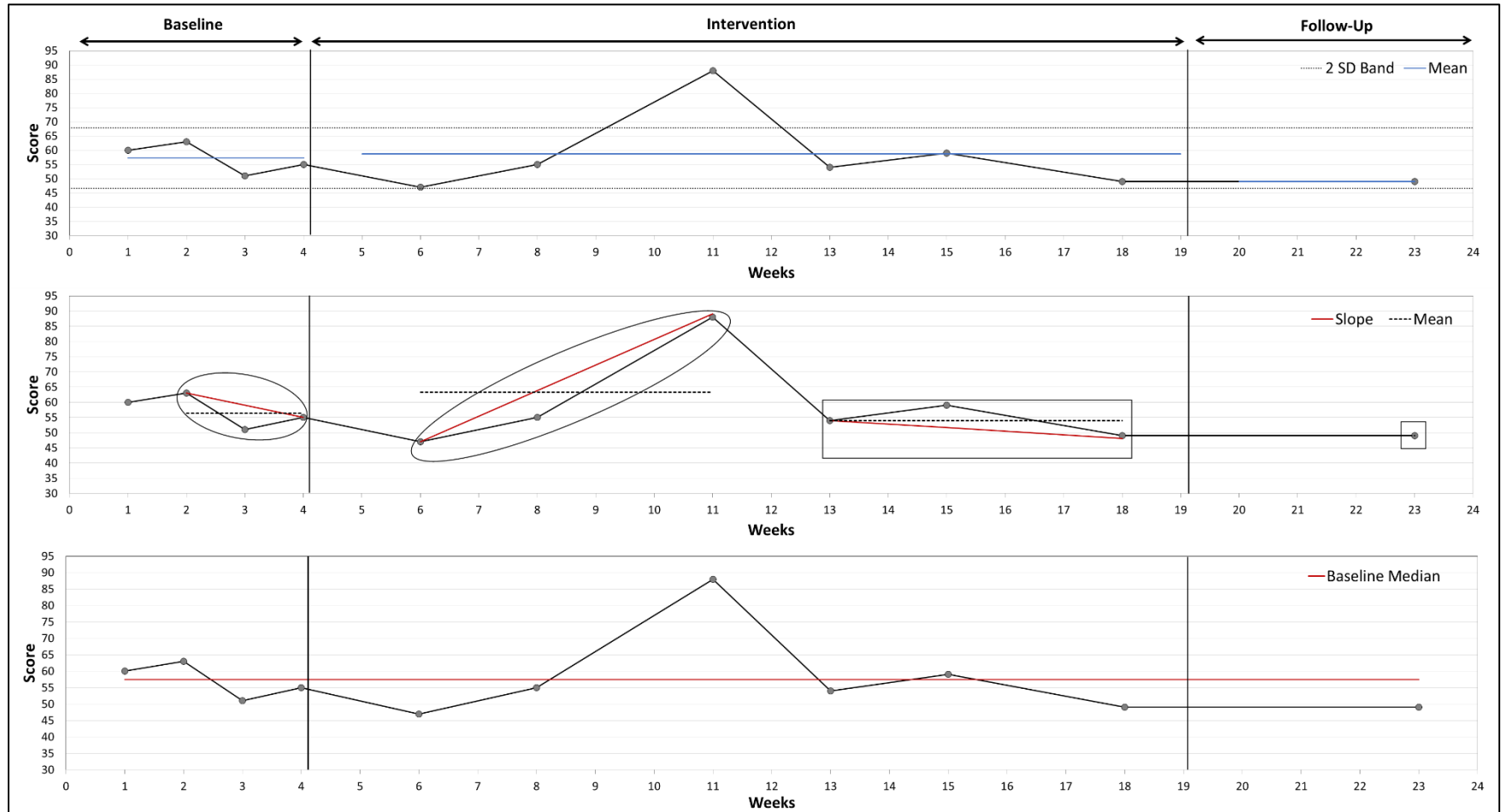


Figure CC2. Repeated measures data for case 9 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure CC3. Other As Shamer (OAS)

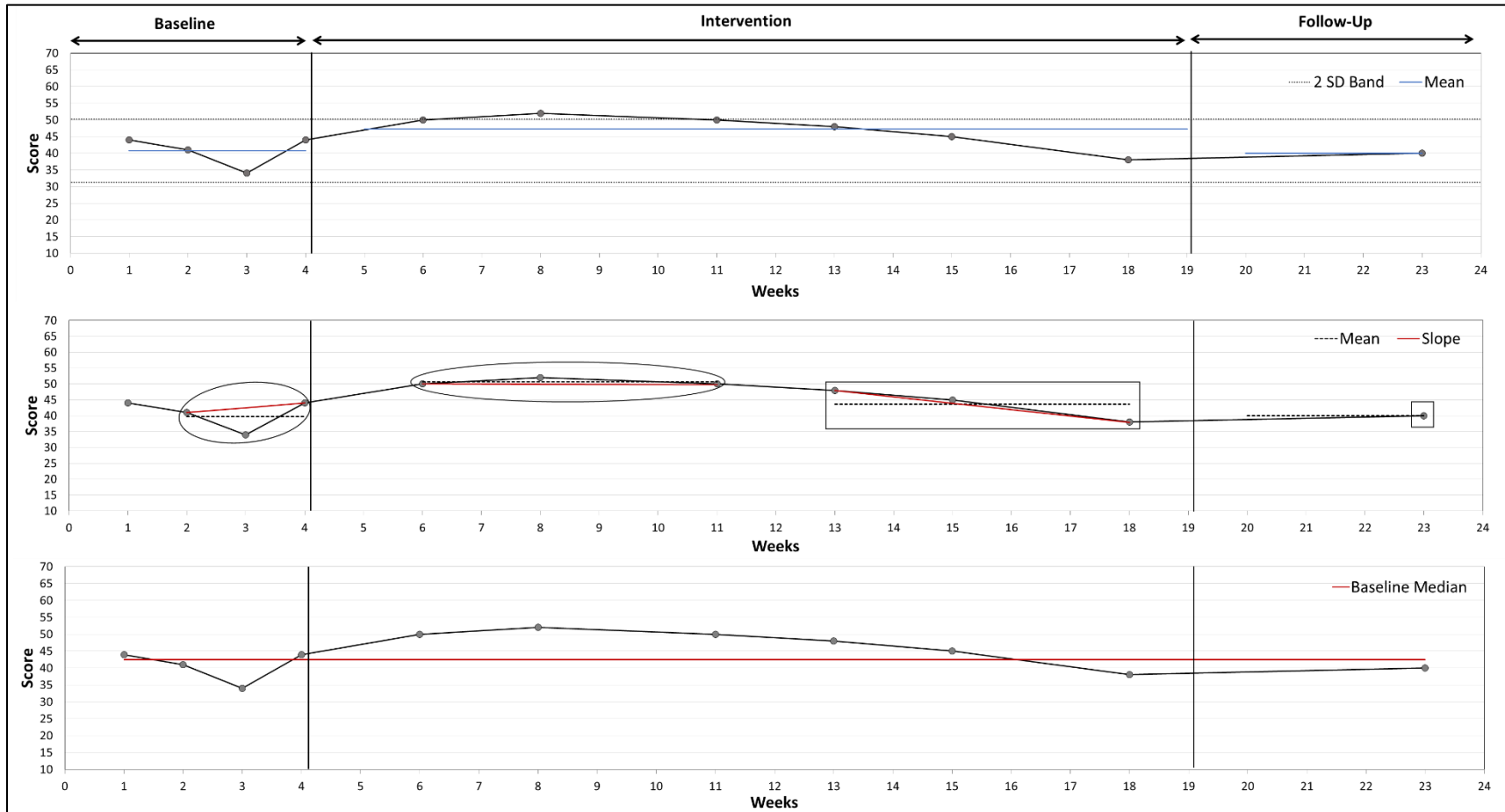


Figure CC3. Repeated measures data for case 9 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Appendix DD  
 Visual Analysis for Case 10

Figure DD1. Eating Disorder Inventory-3 (EDI-3) – Bulimia Scale

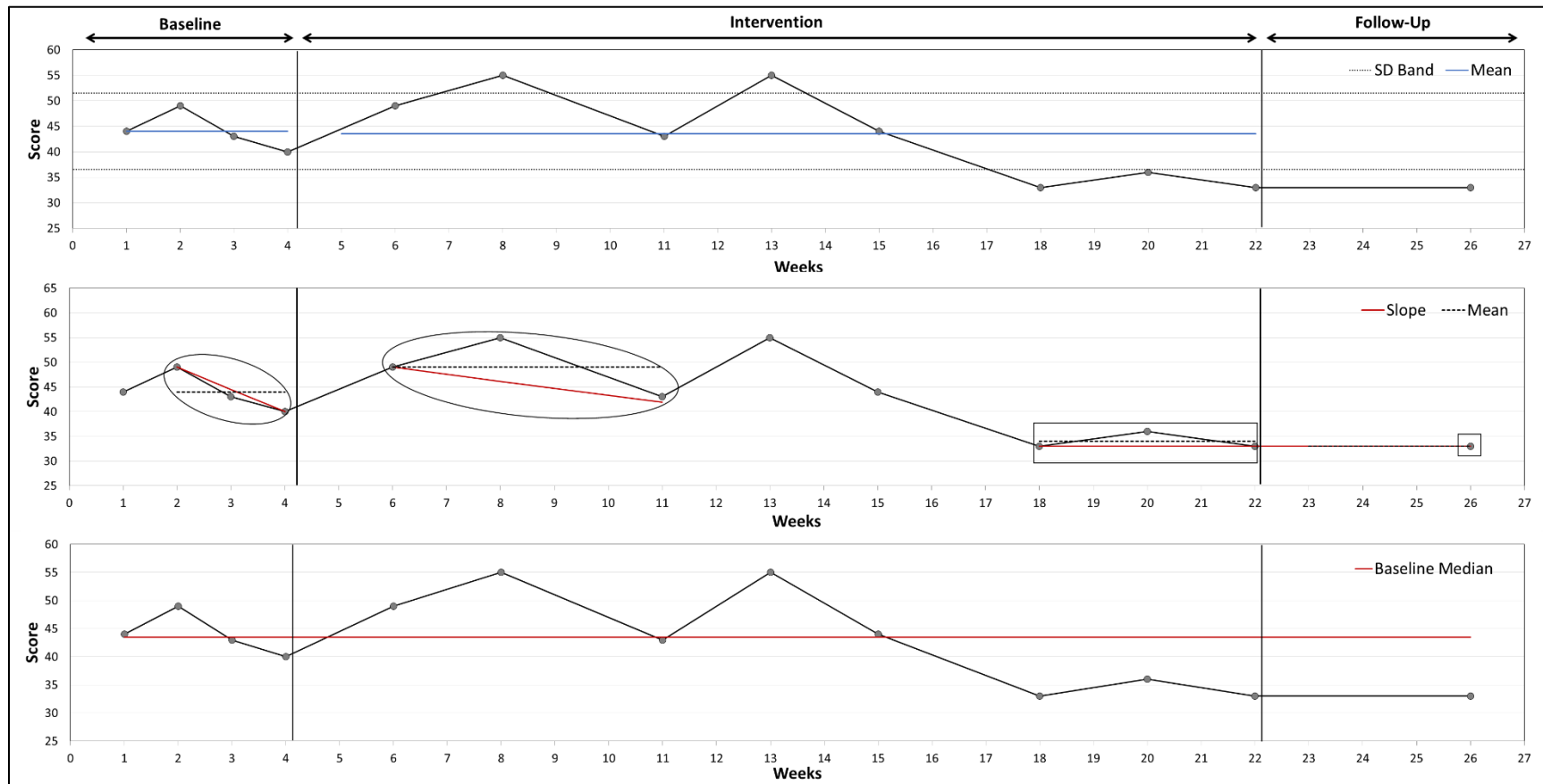


Figure DD1. Repeated measures data for case 10 on the Bulimia Scale (EDI-3) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure DD2. Internalized Shame Scale (ISS)

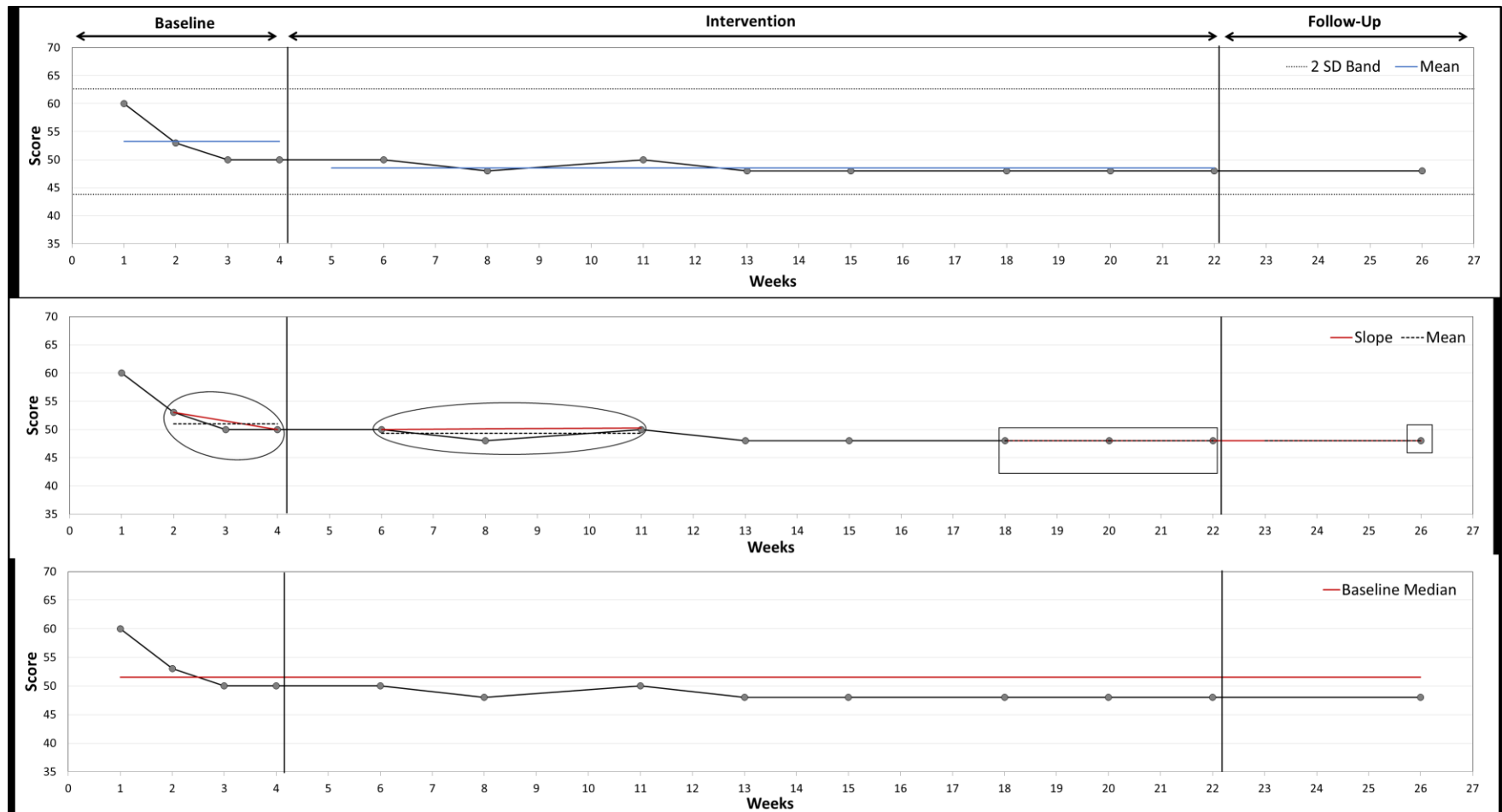


Figure DD2. Repeated measures data for case 10 on the Internalized Shame Scale (ISS) across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.

Figure DD3. Other As Shamer (OAS)

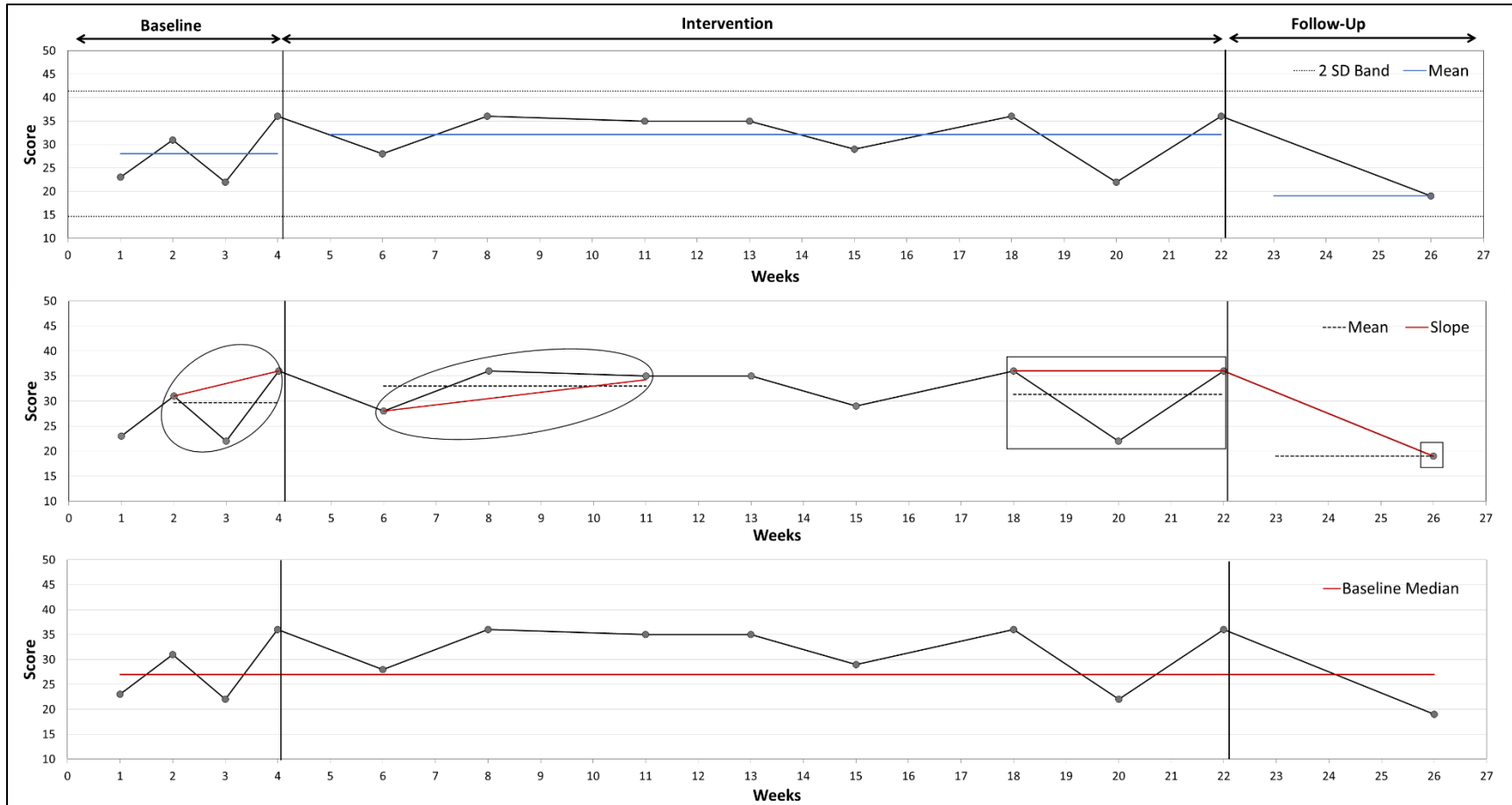


Figure DD3. Repeated measures data for case 10 on the Other As Shamer (OAS) scale across baseline, intervention and follow-up phases. Means are presented for each phase. Circles and squares highlight trends and means immediately before and after a new phase. 2 SD band = two standard deviations above and below the baseline mean.