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Why Do People Engage in Eating Disorder Behaviours?

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Supervisor: Bodell, Lindsay P., *The University of Western Ontario*A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Psychology
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Abstract

Eating disorders (EDs) are serious mental illnesses often with poor prognosis. Personalizing evidence-based treatments based on an individual's reasons for engaging in ED behaviours – or the functions of EDs – may improve treatment outcomes; however, no validated measures assessing these functions exist. The goal of this study was to complete the initial steps in developing a measure of ED functions. Individuals who engage in ED behaviours (n = 16) and clinicians who treat EDs (n = 14) were interviewed, and a thematic analysis was conducted to determine key functions of EDs. Four main functions of EDs were identified: 1) alleviating shape, weight, and eating concerns, 2) regulating emotions, 3) regulating one's self-concept/ maladaptive schemas, and 4) regulating interpersonal relationships/ communicating with others. Self-report items were developed based on these themes to create a 102-item measure of ED functions that will be further developed and validated in future research.

Keywords

Eating disorders; functions; reasons; binge eating; restricting; purging; clinicians; thematic analysis

Summary for Lay Audience

Eating disorders (EDs) are serious and deadly mental illnesses. However, our current treatments do not work for a substantial portion of patients. One reason why ED treatments do not work for everyone might be that these treatments take a "one-size-fits-all" approach. They do not necessarily treat the underlying reason why someone engages in ED behaviours. Thus, the field needs to understand the reasons why individuals engage in ED behaviours – or the functions of EDs. By measuring the functions of EDs, clinicians can personalize treatment to meet the needs of individuals. The goal of this study was to develop a measure to assess the functions of individuals' ED behaviours. Individuals who engage in ED behaviours (n = 16) and clinicians who treat EDs (n = 14) were interviewed, and they completed a checklist indicating various reasons people engage in ED behaviours. Responses from these interviews were categorized into broad categories to determine the key functions of EDs. Responses from these interviews and checklists were also used to create a list of questions for a measure of ED functions. Four main functions of EDs were identified from these interviews: 1) alleviating shape, weight, and eating concerns, 2) regulating emotions, 3) regulating one's self-concept and how they relate to the world, and 4) regulating interpersonal relationships or to communicate with others. With this information, a draft of a measure that clinicians can use to identify why their clients use ED behaviours was created. Once validated, clinicians can use this measure to determine the best type of treatment for a client. For instance, if the main function of a client's ED behaviours is to regulate their emotions, then this client might be advised to participate in a therapy designed to help with emotion regulation. Future research will validate this measure so that it can be used by clinicians and researchers.

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Chapter 1

1 Introduction

Eating disorders (EDs) are serious psychiatric conditions with the highest mortality rate of any mental illness (Arcelus et al., 2011). These disorders are characterized by dysregulated eating (e.g., extreme restriction, binge eating) and related behaviours (e.g., self-induced vomiting, excessive exercise), often with disturbances in perception and perceived importance of one's shape and weight (American Psychiatric Association, 2013). There are three main ED diagnoses included in the Diagnostic and Statistical Manual of Mental Disorders 5th edition, including anorexia nervosa, bulimia nervosa, and binge eating disorder, as well as categories for diagnoses that do not meet one of these three conditions but still represent clinically significant conditions (i.e., Other specified feeding and eating disorder; Unspecified feeding and eating disorder; APA, 2013). Prevalence rates of EDs in Canada vary based on population, with rates for the general population being three percent (Statistics Canada, 2016) and rates for women found to be as high as nearly 20% (Gauvin et al., 2009). Unfortunately, about 30% of people with an ED suffer for 10 or more years (Keel & Brown, 2010), and leading treatments are ineffective for more than two-thirds of patients with anorexia nervosa and more than half of non-underweight patients (Waller et al., 2019). One reason for this low response rate may be that current evidence-based treatments (e.g., cognitive behaviour therapy-enhanced) typically take a "one-size-fits-all" approach, despite significant heterogeneity in symptom presentation (Fairburn et al., 2003). Personalizing treatments to meet the needs of individual clients may improve outcomes (i.e., progressing towards precision mental health care; Bickman et al., 2016); however, this approach requires

individualized assessment and conceptualization to determine the most appropriate treatment for any given individual.

ED behaviours can be conceptualized as maladaptive behaviours in which an individual engages to attain some sort of goal (Wedig & Nock, 2010). From this perspective, individuals use ED behaviours because they serve a specific function.

Although it is well-accepted that EDs affect a heterogeneous population (Grilo, 2004; Schaumberg et al., 2017; Thompson-Brenner et al., 2008) and may arise from and be maintained by many explanatory variables (see Polivy & Herman, 2002 for a review), there is currently no formalized measure that assesses the specific reasons individuals engage in such behaviours – or the functions of EDs (Muehlenkamp et al., 2019).

Pinpointing the functions of ED behaviours (i.e., restricting, binge eating, and/or purging) may help clinicians determine specific intervention targets and treatment modalities to deliver (Wedig & Nock, 2010).

Currently, both the treatments for and assessments of eating disorders tend to focus on shape and weight as primary areas of concern. For example, the most commonly recommended treatment for EDs is Cognitive Behavioural Therapy – Enhanced (CBT-E; Hilbert et al., 2017), which uses cognitive and behavioural techniques to target behavioural manifestations of shape and weight overvaluation (e.g., restrictive eating, strict dietary rules, body checking, body avoidance, and "feeling fat"; Fairburn, 2008). Although a "broad" form of CBT-E focuses on additional maintaining factors such as perfectionism, low self-esteem, emotion dysregulation, and interpersonal difficulties, it is currently unclear when clinicians should prioritize targeting shape and weight concerns versus other factors. Furthermore, the most commonly used measures for assessing EDs,

such as the Eating Pathology Symptoms Inventory (EPSI; Forbush et al., 2013) and the Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 2008), focus on symptom severity and shape and weight concerns, body image, and fatphobic beliefs. As such, current individual assessments may not adequately capture the symptom conceptualizations for individuals who engage in ED behaviours primarily for reasons *other than* shape and weight concerns.

1.1 Functions of EDs

The ED literature indicates several factors that may be particularly important motivators for why individuals engage in ED behaviours, aside from shape and weight concerns. For example, several theories suggest that ED symptoms may regulate emotions (Berner et al., 2017; Haedt-Matt & Keel, 2011). Specifically, the affect regulation model posits that high negative emotion precedes binge eating, such that binge eating may be reinforced by a subsequent reduction in negative emotions. However, research does not seem to support the latter part of this model, suggesting more nuance is necessary when understanding the relation between affect and binge eating (Haedt-Matt & Keel, 2011). Relatedly, the escape theory of binge eating posits that people binge eat to escape critical self-awareness (Heatherton & Baumeister, 1991). Others have hypothesized that individuals' self-worth may be contingent on their ability to meet shape and weight ideals; thus, engagement in ED behaviours may be a way to give oneself a sense of worth. For example, restricting may promote a sense of self-efficacy and development of a new identity in some people (Bardone-Cone et al., 2020), suggesting that regulating one's self-concept may be an important reason for engagement in ED behaviours.

Finally, researchers have suggested that EDs may serve interpersonal functions. For example, dietary restraint may emerge as a direct response to family tensions (i.e., to exert control over one's environment when family decreases one's autonomy in other domains), body image concerns may arise from social contexts in which there is pressure for women to be thin and men to be muscular (i.e., within families, intimate relationships, or workplaces that place a high value on shape and weight), and binge eating may arise as an attempt to cope with interpersonal conflict (Fairburn et al., 2003). In other words, individuals may use ED behaviours as a way to cope with or respond to interpersonal struggles (see Arcelus et al., 2013 for a review). Similarly, individuals who feel they cannot express their emotions to others may use their ED behaviours as a method of interpersonal communication (Budd, 2007). For example, a qualitative study aimed at understanding women's experience with EDs indicated ED behaviours are a means of connecting with others and gaining a sense of control. Although this study provides important insight into experiences with EDs, the researcher did not focus on the functions of EDs, nor did they seek information from clinicians who treat EDs (Budd, 2007).

In sum, researchers have proposed and investigated various functions of EDs, including emotion regulation, self-concept regulation, and interpersonal regulation/communication. Understanding which of these functions are the most central within and across various ED presentations may be important for treatment selection and decision making. Rather than defaulting to shape and weight concerns as driving individuals' eating pathology, it may be useful to assess the functions EDs serve for each individual client.

1.2 Functional Assessments in Other Areas of Psychopathology

Intervening to offer alternatives that meet the functions of maladaptive behaviours is not a novel concept. For example, chain or functional analysis (i.e., examining the factors that lead an individual to engage in a maladaptive behaviour to determine an area for intervention) is a key tool in Dialectical Behaviour Therapy (Rizvi & Ritschel, 2014). Researchers also have developed measures to assess motives for drinking alcohol (Cooper, 1994) and eating palatable foods (Burgess et al., 2014). According to these models, individuals drink alcohol and eat palatable foods for normative and adaptive reasons as well as abnormal and maladaptive reasons (i.e., many people drink alcohol and eat palatable food to celebrate special occasions; Burgess et al., 2014). Other functional assessments focus on purely maladaptive and harmful behaviours, such as non-suicidal self-injury (NSSI).

Research tools assessing the functions of NSSI may effectively guide the development of a measure to assess ED behaviours. NSSI involves the direct and intentional injuring of oneself without suicidal intent (Nock, 2010). Some researchers consider NSSI and EDs to be on the same spectrum of self-harm that ranges from indirect forms (i.e., the effects of harm are delayed and may build over time) to direct self-harm (i.e., harm is intentionally inflicted in the moment and occurs immediately; Claes & Muehlenkamp, 2014). Behaviours at the indirect end of the spectrum include deliberate risk-taking, recklessness, and disordered eating behaviours, as these actions increase risk for bodily harm eventually and/or cumulatively. The direct end of the spectrum includes behaviours like deliberate cutting or burning, overdosing on substances, and suicide, as these behaviours are intended to cause harm and result in immediate bodily damage

(Skegg, 2005). Interestingly, Fox and colleagues (2019) found that participants who engage in ED behaviours reported doing so in order to inflict both short- and long-term injury/suffering for themselves. This suggests that the boundaries between direct self-harm and indirect self-harm are not necessarily clear.

Because the functions of NSSI and EDs may conceptually overlap, NSSI functional assessments may be able to be adapted for use among individuals with EDs. Three measures have been developed to assess functions of NSSI: the Inventory of Statements about Self-Injury (ISAS; Klonsky & Glenn, 2009), the Functional Assessment of Self-Mutilation (FASM; Lloyd, 1997) and the Functional Assessment of Maladaptive Behaviors (FAMB; Wedig & Nock, 2010). Below, these three measures will be reviewed along with how they will inform the development of a comprehensive assessment of ED functions. First, the ISAS assesses 13 potential functions of NSSI (Klonsky & Glenn, 2009). Researchers developed this scale after reviewing NSSI research, collaborating with other NSSI scientists, and reviewing websites that were designed by and for individuals who engage in NSSI. The ISAS assesses 13 potential functions of NSSI. Each function is measured by three statements, yielding a total of 39 items. Respondents indicate the degree to which each statement is relevant to them on a scale from zero (not relevant) to two (very relevant). An exploratory factor analysis yielded two factors: interpersonal functions and intrapersonal functions (Klonsky & Glenn, 2009).

Recent research with the ISAS has investigated relations between NSSI and ED behaviours. Muehlenkamp and colleagues (2019) assessed overlapping and distinct functions of ED and NSSI by administering the ISAS to participants who engaged in either NSSI or ED behaviours. The authors modified the NSSI statements to reflect ED

behaviours for the ED group. The aim of their research was to investigate the degree to which different functions are relevant to either or both NSSI and EDs. The authors found that eight out of the 13 functions were relevant to both NSSI and EDs. These included: affect regulation, anti-dissociation, marking distress, interpersonal boundaries, peer bonding, autonomy, interpersonal influence, and revenge. Importantly, when the authors compared latent means of function subscales, they found that these functions were not equally salient for both NSSI and EDs, suggesting some important differences between the functions of these behaviours (Muehlenkamp et al., 2019). Taken together, these results demonstrate the utility of the ISAS in assessing functions of self-harm behaviours across different maladaptive behaviours/diagnoses, or transdiagnostically; however, the ISAS was developed specifically for use in people with NSSI and not in those with EDs.

Researchers also have assessed functions of self-harm behaviours using the FASM. Lloyd (1997) developed the FASM based on the NSSI literature and administered it to 368 adolescents and young adults who engaged in NSSI. Nock and Prinstein (2004) tested the validity of the FASM using a sample of 108 adolescents. A confirmatory factor analysis indicated that FASM items mapped onto their theorized four-function model of motivations for self-harm. They labelled the factors "automatic-negative reinforcement," "automatic-positive reinforcement," "social-negative reinforcement," and "social-positive reinforcement," where the reinforcement of behaviours occurs on two dimensions: within oneself versus interpersonally and with the introduction of a favourable stimulus versus the removal of an aversive stimulus (Nock & Prinstein, 2004). For instance, social-positive reinforcement would refer to the function of seeking attachment or support (Nock & Prinstein, 2004). These results support the structural and construct validity of

the FASM by demonstrating its sensitivity to the higher-order motivational factors that differentially drive participants to engage in NSSI. As in the case of the ISAS, the FASM was developed specifically for use in samples with NSSI.

Wedig and Nock (2010) adapted the FASM into the FAMB to address the issue of using NSSI measures to assess EDs. The researchers retained and adapted several items from the original measure *and* created new items from open-ended interviews with participants with bulimia nervosa and clinicians who specialized in treating the disorder. The authors used this adapted measure to assess functions of binge eating and purging in 265 women. Results demonstrated that the four-factor structure was robust for both behaviours (Wedig & Nock, 2010). However, when directly assessing the functions of EDs (rather than all maladaptive behaviours, including NSSI and substance abuse), an alternative factor structure may be more useful. That is, EDs ostensibly serve some distinct functions from other maladaptive behaviours, such as relieving shape and weight concerns. These specific functions may not fit well into the categories of automatic-negative reinforcement, automatic-positive reinforcement, social-negative reinforcement, or social-positive reinforcement. Rather than trying to fit ED functions into this factor structure, an alternative should be considered.

1.3 Limitations of Current Functional Assessments Literature

Although researchers have made progress in understanding precipitating factors and functions of binge-eating and purging behaviours (e.g., Burton & Abbott, 2017; McManus & Waller, 1995; Redlin et al., 2002; Wedig & Nock, 2010), fewer efforts have been directed towards understanding the distinct functions of restrictive behaviours (Wang et al., 2020). Binge eating, purging, and restricting are central to ED diagnoses,

and these behaviours often occur in conjunction with each other. For instance, individuals with bulimia nervosa frequently engage in binge eating and then compensate for the binge episodes by restricting/fasting, self-inducing vomiting, abusing laxatives and/or diuretics, and/or exercising excessively. Similarly, individuals with the binge-purge subtype of anorexia nervosa use ED behaviours (i.e., restricting, exercising) to reach and maintain a low weight as well as engage in binge eating and compensatory behaviours (APA, 2013). At the same time, different forms of eating pathology have distinct etiological pathways, associated features, and patterns of comorbidity. For instance, individuals with bulimia nervosa tend to have higher trait impulsivity than those with anorexia nervosa (Farstad et al., 2016) and individuals who engage in purging endorse higher levels of self-criticism than individuals with EDs who do not purge (Zelkowitz & Cole, 2019). Additionally, binge-eating and purging are associated with personality pathology more often than restriction (Farstad et al., 2016). Thus, researchers should examine the functions of binge eating, purging, and restricting transdiagnostically (i.e., across all EDs) and separately, as each behaviour may serve a distinct function even within a given individual. For instance, a proposed function of restricting is to achieve control over at least some aspects of one's life (Slade, 1982; Wang et al., 2020). On the other hand, a function of binge eating is to decrease hunger, and a function of purging is to prevent weight gain after binge eating. However, many individuals binge eat even in the absence of hunger or purge in the absence of binge eating (e.g., in binge eating disorder and purging disorder, respectively; APA, 2013). As such, it is clear that there are not uniform functions across behaviours.

Even though the ISAS, FASM, and FAMB demonstrate utility in assessing shared functions of NSSI and EDs, there may be important benefits to creating a new measure for assessing ED functions. These existing measures (i.e., the ISAS, FASM, FAMB) were either developed for NSSI (i.e., the ISAS, FASM) or modified from measures that were developed for NSSI (i.e., the FAMB). For instance, Klonksy and Glenn (2009) developed the ISAS using information from the NSSI literature, specialists, and websites. Although NSSI and ED behaviours appear to share some functions (e.g., to mark distress, to regulate affect, and to establish autonomy; Muehlenkamp et al., 2019), certain functions may be specific to EDs and are not included in NSSI measures (e.g., to alleviate shape and weight concerns, to gain control, etc.; Slade, 1982; Wang et al., 2020; Wedig, 2014). Therefore, no existing measure comprehensively captures the primary functions of pathological eating (Clifton, 2019).

Furthermore, the ISAS, FASM, and FAMB have some psychometric issues that can be improved. Each measure uses a restricted Likert-style response scale, with the ISAS supplying three response options and the FASM and FAMB supplying four response options. These restricted options do not allow for variance in responses needed to discriminate between respondents on a more continuous distribution (Comrey, 1988). Research suggests rating scales with seven options are optimal (Comrey, 1988). Additionally, existing measures may be impractical for researchers who aim to investigate why individuals engage in multiple forms of self-harm. For instance, asking participants to complete a 39-item questionnaire like the ISAS multiple times (i.e., for each ED behaviour they engage in) is burdensome, may lead to participant boredom, and may prevent respondents from considering any differences in the functions of specific

behaviours. For this reason, it would be efficient for clinicians and/or researchers to administer one measure to clients or participants.

1.4 The Current Study

The ED field is in need of a functional assessment, as a psychometrically-sound measure will provide important data to guide treatment selection and administration, rather than relying on clinical judgement (i.e., Dawes et al., 1989; Grove & Meehl, 1996). Without collecting such data, clinicians may erroneously assume certain function(s) should be prioritized in treatment, when they are irrelevant to a particular individual. Although extant functional assessments have been used in people with EDs, these measures are limited for the following reasons: 1) they were not originally created for use in EDs; 2) they do not assess ED-specific functions; 3) they do not assess functions of multiple ED behaviours in one administration; and 4) they do not provide enough response options to discriminate between respondents. In addition to these limitations, no study to our knowledge has examined the functions of restricting, binge eating, and compensatory behaviours from the perspectives of people who engage in ED behaviours as well as clinicians who treat EDs. Information from multiple informants is necessary to gain a more comprehensive understanding of ED functions. For instance, clinicians treat a multitude of people with EDs and likely have insight into many functions of EDs from research, training, and their clients. People with EDs, on the other hand, are experts on their own lived experience.

Given the potential overlap in the functions of eating disorders and self-harm (Fox et al., 2019; Muehlenkamp et al., 2019), this study aimed to build off of prior NSSI assessments, the ED literature, and interviews with individuals affected by EDs to create

a novel measure of ED functions. As a preliminary step in the development of this assessment, the goal of the current study was to understand the functions of ED behaviours more comprehensively using a qualitative approach. Individuals who engage in ED behaviours and clinicians who treat EDs were interviewed. Qualitative methods, like semi-structured interviews, allow researchers to collect rich data about individuals' experiences that otherwise might be overlooked with quantitative methods; when integrated with quantitative methods, results provide a more insightful and holistic understanding of the phenomena of interest (Braun & Clarke, 2014). Similarly, using a post-positivist framework, researchers acknowledge that multiple realities, constructed through subjective experience, can exist and that research can never fully describe one truth (Clark, 1998; Crossan, 2003). Qualitative methods allow researchers to describe some of these multiple realities. Another strength of this design is the ability to gather data on the specific language that clinicians and individuals with EDs use to describe ED behaviours in order to develop items that are most salient to the individuals for whom this measure is intended.

Chapter 2

2 Methods

2.1 Participants

Participants in this study were individuals who engage in ED behaviours (n = 16) and clinicians who treat EDs (n = 14). Including these two different groups provided different perspectives on ED functions. Individuals who engage in ED behaviours spoke in detail about their lived experience with engagement in ED behaviours, whereas clinicians spoke about their experiences working with various clients with EDs.

Participants were recruited using various remote methods. Recruitment advertisements for participants who engage in ED behaviours were posted on a Western University Facebook page, as well as on a Reddit page dedicated to EDs (r/fuckeatingdisorders). Snowballing methods were used to recruit clinicians. A member of the research team emailed clinicians across Canada (with some of them being recruited through their *Psychology Today* profile), and they were asked to email other clinicians who treat EDs and to forward recruitment materials to their clients with EDs.

Participants in the ED group were mostly women (87.5%; n = 14), with 6.25% (n = 1) identifying as a man and 6.25% (n = 1) self-identifying as "uncomfortably female". All participants in the ED group self-reported engaging in ED behaviours to some degree. Criteria for participation were not strict, because the goal for this study was to sample from a broad range of individuals who experience specific ED behaviours and to increase the generalizability of findings beyond those 'officially' diagnosed with EDs. By selecting participants with a wide range of experience with EDs, their responses are

more representative of the various individuals who engage in ED behaviours (Magnusson & Marecek, 2015). Of the 16 participants, 100% (n = 16) engaged in restriction, 87.5% (n = 14) engaged in binge eating, and 62.5% (n = 10) engaged in some form of purging/compensatory behaviour (i.e., self-induced vomiting, laxative use, and/or excessive exercise). Most participants engaged in multiple behaviours. Participants' ages ranged from 18 to 32. Twelve participants in the ED group identified as White, and one participant each identified as Multi-Racial, Black or African American, Middle Eastern, and Asian. Participants' self-reported height and weight were used to calculate body mass indexes (BMI), which ranged from 17.9 to 51.7 (MBMI = 23.0; SD = 8.1). Thirteen people with EDs were recruited through online advertisements, and three clients with EDs were recruited by clinicians. ED group participants came from Canada, the United States, and the United Kingdom.

Clinicians in this study were required to have experience working with clients with EDs, with many specializing in ED treatment. The clinician group was comprised of clinical or counselling psychologists (n = 4), social workers (n = 4), dieticians (n = 2), psychiatrists (n = 2), and registered psychotherapists (n = 2). Clinicians' experience ranged from 1 to 39 years (n = 12.6; n = 11.9) working with EDs, and they delivered a range of different therapies (see Figure 1). Clinicians came from Canada and the United States.

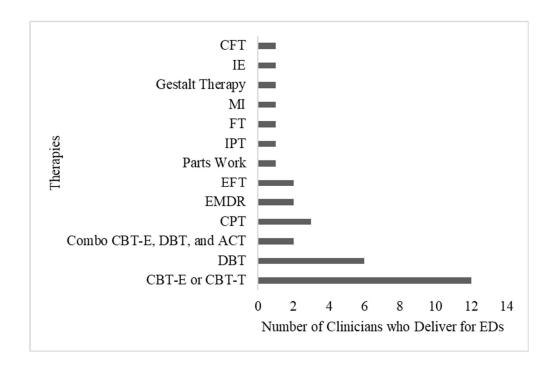


Figure 1: Therapies administered by clinician participants; These therapies are not mutually exclusive; CBT-T = CBT-Ten; DBT = Dialectical Behaviour Therapy; ACT = Acceptance and Commitment Therapy; CPT = Cognitive Processing Therapy; EMDR = Eye Movement Desensitization and Reprocessing; EFT = Emotion Focused Therapy; IPT = Interpersonal Psychotherapy; FT = Feminist Therapy; MI = Motivational Interviewing; IE = Intuitive Eating; CFT = Compassion-Focused Therapy.

2.2 Procedures and Materials

This study received approval from Western University's Research Ethics Board, and all participants provided informed consent. Participants completed a semi-structured interview, an ED functions checklist, and a demographics form as part of the study. Semi-structured interviews were scheduled and conducted between July and December 2020. Due to the COVID-19 pandemic, these interviews were conducted remotely. Although phone interviews were not conducive to the identification of non-verbal cues, they did allow for geographic variation in participants. Each interview was audio-

recorded and extensive notes were taken during each interview. All participants were given the option to enter their contact information in a raffle to win one of six \$25 prizes.

2.2.1 Clinical Interview

Participants who engage in ED behaviours were first asked if they restrict their food intake, engage in binge eating, self-induce vomiting, use laxatives, and/or engage in excessive amounts of exercise, as these are the physical ED behaviours that are key to an ED diagnosis. For each behaviour they endorsed, they were asked, "Can you tell me what this looks like for you?" Subsequently, participants were asked questions such as "Can you tell me all the reasons you might engage in each of these behaviours?" and "Why do you think other people might do this that may not apply to you?" Clinician participants were asked, "What do you think are the reasons people with eating disorders engage in the following behaviours: restriction, binge eating, self-induced vomiting, laxative use, and excessive exercise?" Due to their experience with numerous clients, clinicians often provided rich and lengthy responses. These interviews met the quality criteria outlined by Kvale (2008). That is, most interviews contained rich, specific, and relevant responses. Throughout the interviews, the interviewer attempted to verify understanding of responses by paraphrasing key points. Participant answers were followed up with additional questions to clarify the meaning of participant answers. The goal of attaining detailed responses was balanced with the need to respect participants' integrity (Kvale, 2008). If participants became distressed, they were reminded that they could terminate the interview at any time without penalty and were only probed to a necessary degree (i.e., when a response was unclear). Participants also were reminded of the list of resources that they received in the Letter of Information.

2.2.2 ED Functions Checklist

After participants completed the semi-structured interview, they completed a checklist of ED functions in an online survey. The checklist was drawn from extant functional assessments of maladaptive behaviours (i.e., the ISAS, FASM, and FAMB), literature on ED functions (e.g., Schwartz & Gay, 1993), and our research team (e.g., to lose weight and to change my body shape). To create this list, all items from the ISAS, FASM, and FAMB were combined, and items that were complete or near duplicates of other items were removed. Then, all items that were suggested in ED literature, primarily from Schwartz and Gay (1993), were added. Finally, items that are known to be functions of EDs, such as losing weight, changing body shape, and compensating for eating were added to this list. Participants who engage in ED behaviours checked all the functions that applied to them, and clinicians checked all of the functions they think are relevant to ED behaviours. The purpose of this checklist was to complement the interviews and understand whether participants forgot to mention some functions, whether some proposed functions are more relevant to ED behaviours than others, and whether some items are not relevant to ED behaviours.

Interview length averaged 23 minutes and 9 seconds for ED group participants and 20 minutes and 8 seconds for clinicians. Each semi-structured interview was transcribed verbatim by two research assistants (RAs) using Microsoft Word. The interviews were compared by a third RA (i.e., using the "compare" function in Word to identify discrepancies between the two documents) who reviewed the accuracy of these transcriptions. When discrepancies between the transcriptions were found, the RA listened to the audio-recorded interview to determine the correct language.

2.3 Data Analyses

First, a frequency count of checklist items was conducted to determine if any items from extant measures, ED literature, the research teams' items were irrelevant to ED behaviours. An irrelevant item would be one that no participant endorsed. Items that were not endorsed by any participant would be omitted from further analyses and the measure. Given that every item was endorsed by at least four participants, all checklist items were considered to be at least somewhat relevant to EDs. Next, all 30 sets of interview notes were reviewed, and a list of 66 ED functions was created using participant responses. Some of these functions were very similar in nature, but they were all included in order to capture the different language participants used to describe them. This method yielded a total of 158 potential functions of ED behaviours when combined with functions from extant measures, literature, and from the research team. All items were then sorted and grouped based on content: a list of all potential functions was printed, cut out, read through, and physically sorted into overarching categories and then into subcategories. Because a primary goal of this thematic analysis was to develop a comprehensive measure of ED functions, including transdiagnostic factors that have been previously validated, items from both the checklist and interviews were included in this task.

Although these functions were sorted inductively, the graduate researcher's knowledge of theories and mechanisms known to be related to EDs was also considered. For instance, when initially sorting through items there was a clear pattern of items related to emotion regulation (i.e., attempting to change one's internal affective state). Items related to interpersonal relationships were also distinct, as they described the goal

of managing relationships or communicating with others. Additionally, a large subset of functions were clearly directly related to ED symptoms, such as altering one's body to be accepted by society or physiological items related to eating. Finally, there was a subset of items remaining that seemed to be very deep-rooted and not "readily" amenable, such as core beliefs about the self. These categories were discussed and agreed upon by the principal investigator, two other lab members, and the student researcher. Disagreements in these categories were resolved by referring to the principal investigator's knowledge and expertise in the field of EDs and by coming to verbal agreement. This framework became the codebook for the thematic analysis of the semi-structured interviews.

A 'codebook' thematic analysis on the semi-structured interviews was conducted, using both a semantic and latent analytic approach (Braun & Clarke, 2020). Using the codebook, two RAs coded each interview. The RAs read through each interview transcript and selected any selection of text where a participant described a function of ED behaviours. Using the "comment" function in Microsoft Word, the RAs highlighted the relevant sections of text and assigned these sections one or multiple codes from the code book. RAs were instructed to take notes as they were coding and were told to indicate/highlight any responses that did not fit any of the themes in the code book. A third RA reviewed initial codes in the transcripts to ensure all potential functions were coded.

After coding was completed, another RA collated all coded sections from the Word documents into a Microsoft Excel sheet. The RA highlighted all inconsistencies between the coders. Inconsistencies occurred either when one coder highlighted and coded a section and the other coder did not code the section or when both coders

highlighted a section but did not agree on the code. Consensus meetings were held to ensure that there was sufficient agreement on the categorization of participants' responses. For all inconsistencies in coding, the two RAs and student researcher reviewed the coded section, referred to the codebook, and decided on the appropriate code(s). After all coding inconsistencies were resolved, the results were reviewed, and the themes of the data were identified.

The thematic analysis adhered to trustworthiness criteria of credibility, transferability, dependability, and confirmability outlined by Lincoln and Guba (1985). Trustworthiness was established at multiple stages on data analysis, following recommendations from Nowell and colleagues (2017). For instance, triangulation occurred between different data collection modes (i.e., the interviews and checklists), thoughts about codes and themes were documented, and data and interview notes were stored in well-organized formats. Researcher triangulation also occurred at many stages of the analysis, such as when developing the codebook, when reviewing coding discrepancies, and when reviewing final results. Additionally, the process of coding and analyzing data has been described above in extensive detail, and descriptions and excerpts of participant responses below include thick and rich information (Nowell et al., 2017). Finally, because analyses were conducted on the spectrum between latent and semantic analyses (Braun & Clarke, 2020), responses were often coded based on participants' explicit statements. Although through a post-positivist lens researchers inherently influence the research process and findings (Clark, 1998), results below largely represent participants' views (Nowell et al., 2017).

The ED functions measure was then created by compiling a final list of all 158 potential items sorted into their respective categories (i.e., the codebook). Redundant items were removed. When two items from the checklist were similar, the checklist frequency data were consulted, and the item with the fewest endorsements was removed. When items from participant responses were similar to other items, the item with the most informative yet simple language was retained (e.g., language that best described a subcategory of functions, not double-barreled, etc.).

Chapter 3

3 Results

3.1 Qualitative Results

Four key themes that characterize the functions of EDs were identified from the interviews. These themes are to alleviate shape, weight, and eating concerns, to regulate emotions, to regulate one's self-concept/maladaptive schemas, and to regulate interpersonal relationships/to communicate with others. Each of these four themes was divided into subthemes of more specific functions (See Figure 1). Although each of these themes was well-represented in the data, some themes were more frequently mentioned than others. The themes and subthemes are described below in the order of their frequency, from most to least frequent.

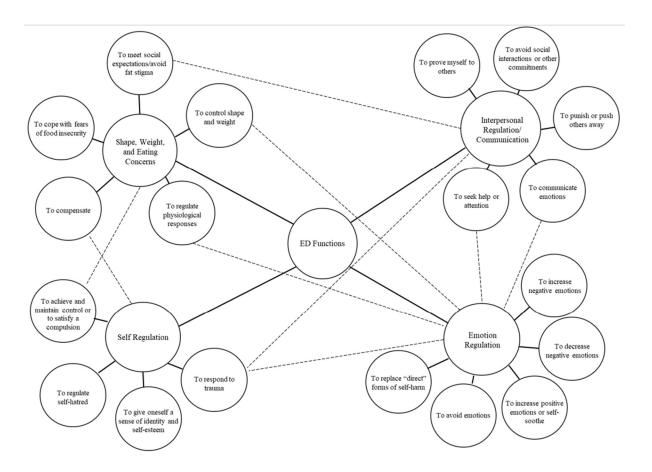


Figure 2. Themes constructed from interviews with 16 participants who engage in ED behaviours and 14 clinicians. Dashed lines represent functions that overlap between categories.

3.1.1 Shape, Weight, and Eating Concerns

The first key theme surrounding the functions of EDs is the role of shape, weight, and eating concerns. Subcategories within this larger theme include controlling shape and weight, meeting societal expectations and/or avoiding fat stigma, regulating physiological responses, compensating for behaviours, and coping with fears of food insecurity. These might be considered related to the core symptoms of EDs, as these functions are directly related to the effects of ED behaviours, such as losing weight or relieving uncomfortable

fullness. All 30 participants mentioned the function of alleviating shape, weight, and/or eating concerns in the interviews.

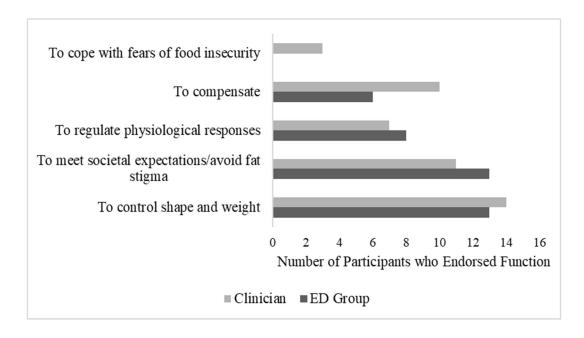


Figure 3. Frequency of Alleviation of Shape, Weight and Eating Concerns Functions in Interviews.

3.1.1.1 To control shape and weight

The desire and need to control one's shape and weight was identified as one of the most frequent functions of EDs. For instance, some participants in the ED group stated, "I feel like the main goal for all of them is to lose weight, like that's definitely the biggest issue," (ED Group Participant #1) and "That's kind of like the driving reason behind all of them, of like just wanting to look better and like lose weight" (ED Group Participant #3). This motivation seems to be more internal than external, with participants describing that they were not happy with their body or their appearance, rather than feeling pressure from others to change their shape/weight. Moreover, three participants in the ED group and one clinician mentioned that changing shape and weight was the original reason for

engaging in ED behaviours (e.g., "Not so much now, but when I was younger, I definitely used my eating disorder to control my weight" [ED Group Participant #9]).

Clinicians frequently mentioned losing weight and changing one's shape as the motivation to engage in ED behaviours. While some clinicians firmly believe that this is the key underlying function or core of ED behaviours, others did not agree. For example, one clinician mentioned that, "Once in a while - I wouldn't say this is the predominant thing, but once in a while, I have clients who whose main goal is to focus on body image; to look a certain way" (Clinician #2). Rather than being the true core of EDs, changing shape and weight may be the surface-level reason for engaging in ED behaviours:

Surface level ones would be managing weight, and I think that that's, if you would ask anybody who's kind of dealing with ED stuff and views of body image that would probably be on the top of their mind like, 'I restrict because I want to be thin or I purge because I want to be thin' and so that's certainly like a very, like surface level reason people do it but I think that there's a lot more under that (Clinician #9).

3.1.1.2 To meet societal expectations and avoid fat stigma

The goal of meeting societal standards (for women) and avoiding fat stigma was closely linked to the function of changing shape and weight. Whereas controlling shape and weight was motivated by more internal standards, societal perceptions and avoidance of fat stigma was associated with external cues. Participants in the ED group mentioned that engagement in ED behaviours helps individuals keep up with societal standards and

ideals for how women should look, some of which was reinforced through positive feedback from others in their lives:

Once I started to lose the, once I got back to [a place] and like lived with my friends and started to see more like social acquaintances...because they hadn't seen me in a long time, there was a lot of comments about how good I was looking...that felt good in a sense. Um, it also made me feel kind of bad though because I was like damn my, my eating disorder is really like, people are noticing that I've lost weight (ED Group Participant #11).

Other participants in the ED group noted their drive *away* from becoming fat or obese; they reported that they did not want to be the largest person in their friend group or "turn out like [their family members who are 'overweight']" (ED Group Participant #11). For some participants, this was the primary function of their ED, even though they mentioned being hesitant to admit it: "It feels like I have to do it...I do have this huge fear of being overweight or obese, like I just, I do. I don't want to ever admit that, but I have that fear" (ED Group Participant #15). Others simply nodded to this function, although it was not the most prominent function that their ED served.

Clinicians also mentioned meeting societal standards, with more of a focus on drive for thinness as opposed to avoidance of fat stigma. Several clinicians noted the importance of pressures to be thin in a close interpersonal context:

It's just external versus internal, so there's internal reasons that someone would want to lose weight, but then also people can have external. So by like parents, family members, partners telling them they should lose weight or saying

disparaging comments about their weight and so by doing things like restricting or vomiting or exercise or laxatives they feel that like relief by kind of doing what other people and kind of want or expect or, or what they think they should do (Clinician #1).

3.1.1.3 To regulate physiological responses

Individuals may also engage in ED behaviours to regulate uncomfortable physiological responses, which are often a result of ED behaviours. Participants in the ED group mainly discussed the regulation of physiological responses in the context of binge eating due to hunger: "But the bingeing that came afterwards, like it really was just a matter of like a consequence of the restricting...it's like, your body is saying like 'we need this food, like we, it's been way too long" (ED Group Participant #13). Additionally, one participant mentioned using laxatives because they did not think that their bowels would work otherwise.

Clinicians also described the hunger that accompanies restriction as a driving factor of binge eating. They often described purging behaviour (i.e., vomiting and using laxatives) as a way to relieve gastrointestinal distress or the distress that may follow eating. People with EDs may experience an increase in anxiety after eating, and rather than sitting through the anxiety, they may purge to feel like they are getting rid of the food. Another function of these purging behaviours is to feel physically empty and to decrease bloating.

One clinician emphasized the role of physiological responding in binge eating and purging behaviours, positing that this is the primary function of these behaviours:

It may look like the binge eating is driven by stress or you know, 'I'm an emotional eater or I had trauma when I was three.' I don't actually agree with those. In most cases, I don't agree that that's the cause. I think ...it's starvation, that then makes you susceptible to...not requiring many triggers...to binge eat (Clinician #6).

And:

I see restriction as the primary beginning of the eating disorder. I don't see a lot of people who come to me who say 'all of a sudden I started to use laxatives'...

Um, I don't see people 'all of a sudden I started to binge eat.' Most people... it's mainly, as a restrictor 'I couldn't maintain that restriction.' 'I feel like, like I lack willpower' or whatever (Clinician #6).

3.1.1.4 To compensate

Some individuals with ED behaviours noted that their behaviours functioned to compensate for binge eating or to punish themselves for not restricting or exercising enough. When people with EDs fail to meet these behavioural goals, they might compensate by restricting more or punish themselves through binge eating. Additionally, some participants – ED group and clinician – framed self-induced vomiting as a way to live a normal life, free from intense restriction and the symptoms that accompany restriction (i.e., dizziness, weakness):

So, instead of restricting for so long it was like, 'Great I can eat this at dinner time and just throw it back up' or 'I can eat the food that I was restricting for so

long that I didn't allow myself to have and then just purge it right back up.' Um, that was the initial main reason for that (ED Group Participant #13).

Some used the term "punishment," which can be difficult to distinguish between selfhatred. Self-hatred will be discussed later.

3.1.1.5 To cope with fears of food insecurity

Although participants who engage in ED behaviours did not cite fears of food insecurity as a reason for their engagement, a few clinicians noted this:

I see also a lot of, growing up, if food was restricted or...if you were food insecure and food was not readily available, those are big precursors to eating disorders, restriction and binge eating, because just the thought of not having food and then having it in abundance can be really hard to handle. Or if you were always told like you can't eat or when to eat or what to eat, it's really hard to manage that once you're on your own and have food available (Clinician #11).

Clinicians mentioned that this food scarcity could have been the result of poverty and/or views of food in the house growing up. Although this may be a risk factor, clinicians noted that this may become a general fear or worry and that individuals may engage in ED behaviours because they fear future inaccessibility of food.

3.1.2 Emotion Regulation

The next prominent theme that was identified in the data is emotion regulation. All 30 participants mentioned emotion regulation as a function of ED behaviours in the interviews. Twelve participants (n = 6 ED group; n = 6 clinicians) described ED behaviours as a uniform strategy to regulate emotions. Participants in the ED group described using ED behaviours to cope, with one noting that "[Binge eating and purging] is the most significantly helpful coping skill" (ED Group Participant #9). Many clinicians called ED behaviours a form of emotion regulation, and some distinguished between the type of emotion regulation, such as decreasing negative emotions, increasing positive emotions (self-soothing), and avoiding emotions.

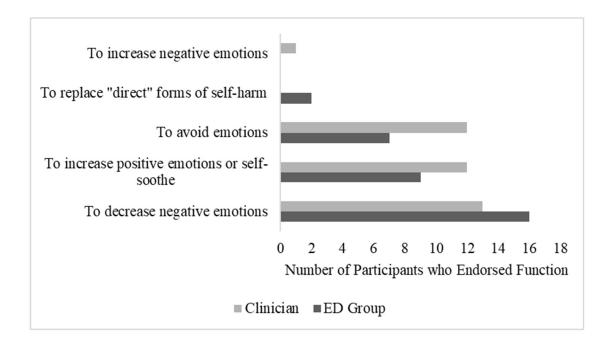


Figure 4. Frequency of Emotion Regulation Functions in Interviews.

3.1.2.1 To decrease negative emotions

All 16 participants in the ED group and all but one clinician stated that ED behaviours serve to decrease negative emotions. When describing emotion regulation, many people with EDs described their behaviours as a way to decrease stress and/or anxiety:

So, typically I binge and purge for stress related reasons. So, when I was younger when I first started being bulimic like when I was in middle school it was

primarily because of stress at home, and then when I got a little older it was because of school stress, and then as I got even older now it's work stress that kind of feeds my – it's kind of like the relief of it…it's a bad coping skill, but it's like, it's the most effective coping skill for me, even though I've like tried to break this habit and gone to treatment (ED Group Participant #9).

Participants in the ED group noted using ED behaviours to decrease specific negative emotions, such as loneliness, anger, guilt, and sadness. Clinicians also frequently cited decreasing stress or anxiety as a function of ED behaviours. Clinicians mentioned other strong negative emotion states, including overwhelm, loneliness, shame, disappointment, and boredom. Two clinicians specifically highlighted responding to anger as a function of EDs:

I think that people are more likely to talk about [anger] at themselves, but sometimes, sometimes they'll say it's just about others, like you know a family member, or person that has a relationship with...And even when it's kind of directed at their self, I think there's often some other element to it...But maybe they just might not be as forthcoming with...And maybe it's anger at somebody else...or something that happened...Or it could be something, you know it could just be their situation (Clinician #8).

3.1.2.2 To increase positive emotions or self-soothe

In addition to decreasing negative emotions, ED behaviours may increase positive emotions. Multiple participants in the ED group mentioned that they engage in ED behaviours to comfort themselves; however, the ways in which each behaviour

contributes to positive emotions may differ. For example, some participants reported that binge eating feels comforting like "a warm hug" (Clinician #12), whereas restricting might help to "mellow out" (ED Group Participant #16), provide a feeling of safety, or simply increase their energy and mood. One participant in the ED group said, "I felt incredible when I was restricting and when I was bingeing or had to use laxatives, I felt weaker" (ED Group Participant #7). Clinicians also noted the soothing function of ED behaviours, and they added that EDs are something that people can always count on to make them feel better when times are tough: "They can count on [the eating disorder], and it's hard for people to relinquish that, and to lose it can feel like a real significant loss to people when they decide to work on their eating disorder" (Clinician #7). Clinicians noted that eating, exercising, and vomiting can be positively reinforced through reward (i.e., endorphin release) and feelings of stimulation. While these behaviours can make some individuals feel numb, they can pull others out of dissociation:

Recently I had someone where we were trying to find other ways to increase her adrenaline kind of arousal. She was a thrill-seeker, but she's always done it through really unhealthy ways like driving without seatbelts and taking too much medication and stuff like that. A lot of her symptoms are kind of like... pushing herself and she gets like a kick out of it. So, uh specifically around bingeing and purging and exercise, that also seems like self-harm and whatnot. I'll often hear people say 'I just want to feel something,' and I think this is a little bit different than that but I suppose that's another function is some people will say 'I do it

to numb out' and other people will say 'I do it so that I can feel something' (Clinician #13).

3.1.2.3 To avoid emotions

Another function that ED behaviours serve is to avoid emotions completely, rather than directly address them. This is often accomplished through using the ED behaviours to make oneself feel numb and as a distraction. One participant in the ED group said, "I need to slow my brain down, like nothing else is working to do this. So, I can completely numb out by like bingeing and purging my face off" (ED Group Participant #8). Other participants (ED group and clinician) noted that restriction and exercise can be solutions to stress by making one emotionless. Clinicians often said that ED behaviours serve to numb and trigger a state of dissociation, with some drawing comparisons to self-harm:

But that gives them a different feeling so similar as you'd expect with like why someone might engage in self-harm, they're doing it to like block everything out so they can focus on this different sensation. And so, vomiting I would say is the same where it could be to experience that this kind of uh numbing out of other things and just kind of feeling uh the kind of after-effects of vomiting (Clinician #1).

Distraction was specifically noted as an avoidance strategy. One clinician stated that ED behaviours shift individuals' focus because:

As long as someone is thinking about calories or 'Should I have eaten this?' or 'Should I not have eaten this?' or 'Should I have thrown up?' or 'Will I throw up?' all those things, they aren't thinking about other issues (Clinician #10).

Notably, individuals might distract themselves in the moment through binge eating and/or purging or over time through restricting:

Well I think with that one you get into whether it's kind of an in-the-moment distraction or numbing or whether it's kind of changing the baseline, and so I would say that vomiting, laxatives, and exercise, and bingeing can be a momentary side-step or a distraction, like doing those things may distract you right now...whereas things like restricting or keeping yourself at a low weight...might be more of a, you know it takes longer and then it lasts longer...So you get yourself to a place where you can numb most of the time, more numbness than there would be otherwise...And then um, that's appealing...because you have lower feelings (Clinician #8).

One clinician claimed that ED behaviours might be used as a way to avoid positive emotions as well: "Uh and occasionally I hear people say that they do it to avoid pleasant feelings as well....Because they have some, I think they have some expectations that if there's a pleasant feeling, there's going to be a letdown" (Clinician #8).

3.1.2.4 To replace "direct" forms of self-harm

A less common function of ED behaviours is to replace other harmful behaviours and/or serve as a means to tolerate distress. Two participants in the ED group highlighted that

their ED behaviours prevent them from using substances, almost as a form of harm-reduction:

Originally, when I first started, it wasn't the case. But now, it's the case that it also helps prevent me from relapsing into drug use...And it's come back periodically but this latest one is absolutely driven partly, like, as a way to cope with life without going into drugs (ED Group Participant #12).

Although only two participants mentioned using ED behaviours to replace other maladaptive behaviours, this is important to note as it highlights the relation between maladaptive behaviours. Additionally, seven participants in the ED group and 11 clinicians endorsed "to respond to suicidal thoughts without actually attempting suicide" in the checklist at the end of the interview. Thus, participants did not think of/recall responding to suicidal thoughts as a function of ED behaviours during the semi-structured interview, but many of them identified that it was a function when it was presented to them.

3.1.2.5 To increase negative emotions

A final form of emotion regulation that ED behaviours may accomplish is increasing one's uncomfortable feelings. Although this function was only mentioned once in the interviews, it warrants mentioning. One clinician stated:

A lot of my clients if they go a day and they need a rest day, but they physically can't let themselves, they have a lot of guilt and shame which leads to either restricting throughout the day because they didn't work out or bingeing later on

because they already feel shameful and why not just keep that going? (Clinician #11).

Increasing these negative feelings might be one's way of validating their own emotions. For instance, 14 participants (n = 5 ED group; n = 9 clinician) endorsed "to prove to myself that my emotional pain is real" in the checklist, and 13 participants (n = 5 ED group; n = 9 clinician) endorsed "to make myself feel as bad physically as I do mentally."

3.1.3 Self-Regulation/Maladaptive Schema Response

Another overarching theme of ED functions that was identified is self-concept regulation or responding to maladaptive schemas. Individuals who engage in ED behaviours may have strong negative beliefs about themselves and their place in the world. Engaging in ED behaviours can help them uphold, cope with, and make sense of those beliefs. All 30 participants mentioned the theme of self-regulation/maladaptive schema response in their interviews.

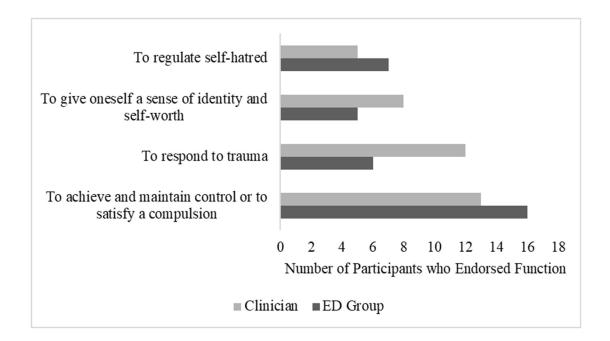


Figure 5. Frequency of Self-Regulation/Maladaptive Schema Response Functions in Interviews.

3.1.3.1 To achieve and maintain control or to satisfy a compulsion Participants in the ED group frequently said that they engage in ED behaviours to establish control over something in their lives, often using this exact wording (e.g., "I can control that aspect. I can control the numbers that go into me, even if I can't control anything else going on around me" [ED Group Participant #12]). One participant in the ED group discussed how she felt very out of control about her acne, and restricting would allow her to have some form of improvement in her physical appearance. Clinicians also commonly noted that individuals might use EDs as a way to exert control over something:

I suppose the overall theme as with most of my eating disorder clients is a perceived lack of control in their life, and then any [ED behaviour] becomes something that they can control. So, it can be something that they're able to do relatively easily, to be able to say, 'I'm going to control what's going into my body, what's coming out of my body.' Usually because they're in an environment where they feel like they can control nothing. I have a number of clients right now, who feel almost restriction in other areas, like, they have very domineering parents, for example, very domineering partner, but this is something that they believe is within their control, even though psychologically it often is outside of their control, once they begin (Clinician #2).

Another commonly cited function of ED behaviours within this subcategory is to satisfy a compulsion or continue a habit. One participant in the ED group simply said "*It*

just feels like I couldn't, I tried to imagine not, and I just can't" (ED Group Participant #15), and another stated that engaging in binge eating and purging is just the easiest way for her to eat (ED Group Participant #16). Another described this process in more detail:

If someone has an eating disorder, like you kind of get into those compulsive behaviours and it just, you get set in your ways and that's what makes it so difficult to break out of. So, I feel like sometimes if someone were to get like stuck in those compulsive ways, like 'oh I'm gonna eat this only' or 'I'm gonna do this,' like all these eating disorder rules, then I think that like once you get trapped in that cycle then it, it just kind of happens (ED Group Participant #9).

One clinician commented on this function by noting that ED behaviours do 'work' for people; when they work, they become more entrenched and embedded over time (Clinician #8). When this occurs, the ED behaviours become one's 'old faithful.' Similar to engaging in ED behaviours because of habit, clinicians discussed that some individuals engage in ED behaviours because it is routine and provides consistency for them:

The eating disorder can be...like a steady entity, where fixation on like calories or the body or numbers and that type of thing [is] like a predictable stable kind of thing that can be attached to, when the rest of strong attachment figures are not stable (Clinician #14).

However, one clinician specifically pushed against this idea, claiming that people often say EDs are used to maintain control, but that it would be more accurate to describe it as a need to control shape and weight (i.e., "It's for control and then it also is reducing

distress related to body image concerns at the same time" [Clinician #1]). This could be described as driven weight control, like a compulsion.

3.1.3.2 To respond to trauma

Many participants stated that ED behaviours might be a response to trauma and a method of managing trauma. Although there may be more specific functions within this subcategory, this seems to be deserving of its own category due to how prevalent this response was (n = 6 ED group; n = 12 clinicians). Indeed, many people with EDs gave this response for reasons why others might engage in ED behaviours. They noted how individuals might use ED behaviours to cope with trauma, including using ED behaviours to continue the cycle of abuse on their body or to match their mental playground:

Part of it could be just, feeling small, wanting to be small... it just matches the mental like, playground of the world that I have...like I, if you don't feel significant, then and part of like I guess an almost OCD reaction is like if I'm not going to feel significant, I'm gonna go all the way (ED Group Participant #12).

Others might engage in ED behaviours as an attempt to separate themselves from their body that was abused. Clinicians often mentioned EDs as a means to create safety either physically (i.e., through making one's body larger or smaller) or mentally (i.e., through numbing oneself). One clinician phrased it as, "We don't feel we're going to be hurt in the dissociative state" (Clinician #2). Another elaborated:

Trauma is a huge part of it too right, like that feeling of lacking safety or autonomy or control of your own body can certainly lead to ED behaviours,

because you know restricting, purging, bingeing, all these different things can totally numb us so it's a protective way of managing our trauma (Clinician #9).

In people with a history of relational trauma ED behaviours can be used to push others away. One clinician stated that others showing care could be threatening to individuals who have experienced abuse in relationships where there should have been care:

I think intimacy, vulnerability, I think any type like, 'I need to build basically a barrier from what I perceive as relational safety.' Sometimes if somebody's showing care, that could be threatening to somebody who's had abuse and within relationships where care was supposed to be there. I also think there can often be a pattern of, in not all clients, so this is just several, but there's a lot of chaos relationally. They're in and out of significant relational tornadoes and so I think there's – often seeing certain diagnoses – sometimes, so not always, but sometimes they think 'I'm going to wreck this relationship before you get too close,' so like 'I want to hurt you before you hurt me,' kind of thing. Or like fears of abandonment is a huge thing so, 'I feel like I'm getting close. I'm scared they're close, I'm scared they're gonna leave' so, the eating disorder helps pull people in to keep them there or it pushes them away, to not come near me because 'I'm too crazy' or something (Clinician #14).

3.1.3.3 To give oneself a sense of identity and self-worth

Both participants who engage in ED behaviours and clinicians stated that EDs can give someone a sense of identity and self-worth. Participants in the ED group described how ED behaviours are something they can be the best at (e.g., "Then it turned into a perfectionist type thing, where it's like I'm not good at anything else, but at least I'm good at this, and if I'm good at this, then I might as well be the best" [ED Group Participant #7]). This participant noted how the ED behaviours turned competitive:

Staying small or not eating it was a very—it turned very competitive. Where if it was me hanging out with some friends at school and one of them was complaining about being so hungry because they haven't eaten all day, in my head, I would either feel bad because I did eat that day, or I'd feel proud because I didn't eat at all that day and I feel fine, or I didn't eat at all that day plus the night before or if I saw other people eating, I would feel better than them to an extent because I had the willpower not to eat (ED Group Participant #7).

Clinicians used similar phrasing (e.g., "I'm not good at anything else, but I can sure count calories well" [Clinician #12]). Similar to the goal of feeling accomplished, ED behaviours also give individuals a sense of "purpose or an identity when you don't have a whole lot going on in your life or feel like overwhelmed" (ED Group Participant #16).

3.1.3.4 To regulate self-hatred

People who engage in ED behaviours and clinicians both discussed EDs as a way to regulate thoughts of self-hatred. ED behaviours can relieve thoughts of self-hatred or at least preoccupy individuals until the thoughts dissipate. Participants in the ED group often discussed ED behaviours as a method of enacting the self-hatred or punishing oneself because they deserve it:

Self-punishment. I guess if people maybe feel responsible for things or blame themselves for stuff that might happen in their lives, then some people like engage in behaviours that are harmful to themselves because you know they feel that they deserve it (ED Group Participant #2).

One participant in the ED group noted that ED behaviours feel like a good form of punishment when her self-worth is very low, and another stated that she feels physically ugly: "I'm just generally always feeling like an extremely ugly person and thinking that I like deserve to not eat because I'm that ugly kind of thing" (ED Group Participant #10). Clinicians often described this function of ED behaviours in a similar way, with some saying that it served self-harm purposes. For instance, one clinician said that some clients will binge eat and purposefully not purge in order to make themselves feel grotesque and hideous. A common phrase that participants used was "because I deserve it" (i.e., deserving to starve or to feel discomfort from these behaviours). One clinician offered an in-depth description of this function:

I think that [the eating disorder] sort of plays out different maladaptive schemas. So, if I feel like I am defective, um, defectiveness and shame is one of my schemas. It could be that I...punish myself with behaviours or that it somehow compensates for those maladaptive schemas. Then I also think that those, those cognitions sort of...in a cognitive behavioural way, perpetuate... 'I'm not good enough,' that may perpetuate the cycle of, 'so therefore I shouldn't eat this meal, because I, my body doesn't look good,' I don't know and, 'and then I feel better about myself' (Clinician #12).

Notably, however, some clinicians do not agree that this is a function of ED behaviours, with one claiming that there are many ways that people damage and punish themselves that are purely aversive, whereas food has some rewarding aspect to it. Another clinician said that they do not conceptualize ED behaviours as a form of self-harm.

3.1.4 Interpersonal Regulation and Communication

The final theme of ED functions that was identified was the goal of interpersonal regulation/ communication. Nineteen participants (n = 11 ED group; n = 8 clinicians) mentioned this function in their interviews. ED behaviours can be a way for individuals to manage their relationships and communicate with others. Importantly, clinicians were cautious to describe this as non-manipulative. Two clinicians described it as a way to pull people in and to push them out:

Almost like you have a relationship with your eating disorder that creates a substitute for real relationships. So that's the first way, that I can see that it's relational. The other thing is that I can see it used sometimes — and when I say this, I want to have some clarifying statements around it — but people can use any behaviours to push people away and pull people in. I don't think about it like, 'hehehe, I'm going to be super manipulative and really piss you off by using these behaviours.' I don't think it's, it's a manipulative kind of thing (Clinician 12).

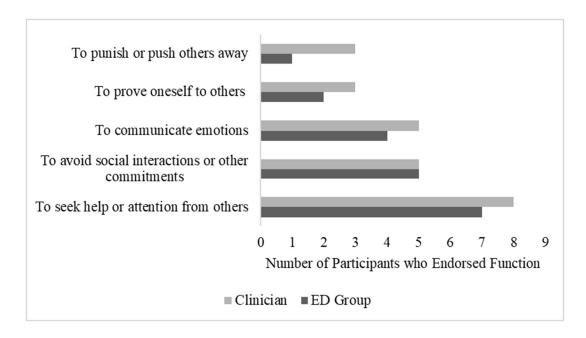


Figure 6. Frequency of Interpersonal Regulation/Communication Functions in Interviews.

3.1.4.1 To seek help or attention from others

Both participants in the ED group and clinicians discussed how ED behaviours can be a method of asking for help or communicating that an individual is "not okay." Participants in the ED group offered that the ED can be a way of trying to connect and ask for help without having to say it. Clinicians gave similar responses, describing how ED behaviours (and potential weight loss that might accompany the behaviours) can create a sense of worry and concern in others:

Restriction...I think it can also be a way of trying to subconsciously influence relationships so...wanting to maybe, again subconsciously play the sick role in order to have people maybe engage with them more or control kind of a relationship by kind of subconsciously engaging in symptoms in order to manage that relationship (Clinician #5).

Rather than "attention-seeking," some clinicians were cautious to describe the eating disorder as a means of seeking care and support and to have their needs met.

3.1.4.2 To avoid social interactions or other commitments

Participants in the ED group and clinicians both noted that ED behaviours can become a way to avoid sexual advances or attention. For instance, one clinician noted that some clients want to make themselves look less attractive or do not want the attention that comes with being small. For instance, one participant in the ED group said:

I do know for example some people who have experienced abuse, or even like some kind of unwanted attention — like one of the biggest reasons that I did develop a huge insecurity about my chest size was because a boy in college had commented on it, out of the blue. Like I was just talking to him asking him a question in class and he was like 'oh but like, I'm so sorry like I didn't hear anything you said, I was busy staring at your chest.' And that was something that was like, you didn't need to comment that. I didn't even want to know you were thinking that…three years later, here I am, you know (ED Group Participant #13).

Relatedly, ED behaviours were reported to prevent individuals from vulnerability, intimacy, and relationships. For example, one participant in the ED group stated, "Sometimes I use it as an excuse of like well like I'm crazy and like super eating disordered, so there's no reason for me to bring another person into a relationship" (ED Group Participant #8).

Participants in the ED group and clinicians also discussed how ED behaviours could be used to procrastinate or avoid responsibilities/commitments. One participant in

the ED group claimed, "I've done it to get out of even certain situations...or to avoid someone" (ED Group Participant #13), and another said that when they become the sick person it lowers everyone's expectations for them (ED Group Participant #16).

3.1.4.3 To communicate emotions

Moving beyond seeking care, clinicians (more than participants in the ED group) added that EDs could also serve to communicate one's emotions. One participant in the ED group said that they use their ED behaviours to communicate their anger (e.g., "If it's like, 'Well I want to eat here,' and they're like, 'No', then I can just be like, 'Well fine, since you make me feel fat for wanting to eat there, I just won't eat at all'" [ED Group Participant #7]). Clinicians noted that the ED behaviours can be a voice for clients when they feel like they cannot communicate pain, distress, and difficult emotions otherwise. Clinicians also described the ED as a form of communicating anger:

I think it's a way to communicate anger and sort of an 'eff you' to people, and so if I sort of binge and purge in my spouse's bathroom or something like that, you know, it's a way to kind of communicate that message and push them away in that way. Or I guess it could activate them. I'm not sure, but I think that, or maybe that's a better way to say, it is a form of communication, and with that form of communication it can either pull people in or push them away (Clinician #12).

3.1.4.4 To prove oneself to others (and demonstrate other qualities) Participants in the ED group said restriction can be used to prove to others that they have self-control:

I felt like in that relationship I consistently had to like prove that like I had some sort of like self-control and like maturity because I was dating somebody older than me and like I felt like he...was like testing my ability to like be ready to date a man his age. And he never like specifically said those things...but he was like very obvious and like the way that things went down (ED Group Participant #11).

This subcategory also includes functions of demonstrating that one is separate from others and proving to others that they do not need to rely on anyone for help. Although participants did not mention these in the semi-structured interviews, they did endorse these functions on the checklist that followed the interview.

3.1.4.5 To punish or push others away

Finally, punishing others or pushing others away was identified as another subcategory of ED functions within the broader theme of interpersonal regulation and communication. Interestingly, one participant in the ED group described how ED behaviours can be used to punish others (i.e., in response to others make the individual who engages in ED behaviours feel poorly) more than pushing them away. A few people who engage in ED behaviours noted that the ED behaviours can feel like a form of revenge towards their parents. For example, one participant in the ED group said, "They would make me feel worthless, so I want to punish them by punishing myself, because I knew they would feel guilty over me punishing myself" (ED Group Participant #7). On the other hand, clinicians spoke more about pushing others away than punishing them:

I think I often see, thinking about attachment, there can often be like a kind of a push-pull dynamic of interpersonal communication with individuals. We actually

see a lot of this play out in the treatment world of, and it's kind of a mere replica of attachment wounds from you know growing up. There's kind of like a push, you know, 'I want to be loved so much so like eating disorder brings people in but then as like when people get too close there's like a push away of like please don't come near me,' and the eating disorder kind of ends up being like an 'eff you' or a way to create distance relationally. So there's kind of a push-pull pattern interpersonally with the client with an eating disorder and the function of like negotiating safety in relationships (Clinician #14).

3.2 Measure Development

Out of 158 total items that were identified from extant measures, ED literature, the research team, and the interviews, 56 were removed because they were less frequently endorsed by participants than similar items or because they did not have as much perceived utility as other items. Thirty of these removed items originated from the original checklist (i.e., items from extant measures, the ED literature, and the research team; see Appendix F for checklist data), and 26 of these removed items were derived from the interviews. The current draft of the measure contains 102 items (see Appendix G for a full draft of this measure). This is a larger set of items than anticipated for the final measure; this larger item pool will permit the removal of items that do not perform well throughout the validation of the measure. The current measure draft includes approximately 25 items per theme (*Shape, weight and eating concerns*: 21 items; *Emotion regulation*: 28 items; *Self-regulation*: 25 items; *Communication/social regulation*: 28 items).

The scale has seven response options, which will allow researchers and clinicians to make more nuanced comparisons between the relevance of functions within and between individuals (Comrey, 1988). In order to avoid instructing respondents who engage in multiple ED behaviours to complete the same measure multiple times, items are listed by function. For each function, respondents will record which behaviour they engage in and how often they engage in the behaviour for the listed reason.

Chapter 4

4 Discussion

The goal of this study was to conduct preliminary steps for the development of a measure of ED functions. The first step was to identify and confirm functions of EDs through a review of the extant measures and ED literature, development of an initial checklist of functions, and interviews with people who engage in ED behaviours and clinicians who treat EDs. Using the information from these interviews, four main functions of ED behaviours were identified: 1) to alleviate shape, weight, and eating concerns, 2) to regulate emotions, 3) to regulate one's self-concept/ maladaptive schemas, and 4) to regulate interpersonal relationships or to communicate with others. These four themes provide support for the maintenance factors in the transdiagnostic model of CBT-E 'broad' (i.e., core low self-esteem, perfectionism, mood dysregulation, and interpersonal difficulties; Fairburn et al., 2003). However, core low self-esteem and perfectionism have been combined into one theme in the current study: selfregulation/maladaptive schema response. Each of these overarching functions was divided into at least four subcategories, giving rise to 19 lower-order functions of ED behaviours.

Although many of these lower-order functions fit well into their overarching theme, some of these subcategories overlapped considerably between higher-order themes. For instance, participant responses regarding control were often related to control over shape and weight. Similarly, when discussing anxiety, some responses related to anxiety about eating, shape and weight. Thus, responses related to control over and anxiety about food, shape, and weight could have been assigned to the broad category of

shape and weight concerns rather than self-regulation and emotion regulation, respectively. However, because participants stated that the goal was to have control over *something* – because individuals do not have control over other aspects of their lives – this function fit better under self-concept regulation.

Additionally, the lower-order response to trauma function was placed under the self-concept regulation theme, but this function overlapped considerably with the emotion regulation and interpersonal regulation/communication categories of functions. It was placed within the self-concept regulation category, because this theme seems more informative than the latter two themes. When constructing the self-concept regulation theme, the goal of treatment assignment was considered. For instance, would trauma, a need for control and structure, search for identity, and self-hatred be best treated using emotion regulation techniques, or might other modalities be more effective? Finally, some interpersonal functions overlapped with emotion regulation functions (e.g., communication of emotion and seeking help). The goal of assigning clients to treatment modalities or modules was also considered when outlining this theme. Importantly, all four of these themes – or factors – were constructed through the physical sorting task and thematic analysis. Although this four-factor structure seems to accurately represent broad functions of EDs, not all functions fit perfectly into each category, and the items may cluster differently in a factor analysis with a large sample. Investigating how ED functions cluster quantitatively will be a next step for the measure development process.

Another goal of this study was to gain a greater understanding of which ED functions may need to be prioritized during treatment for an ED. For some participants in the ED group, shape and weight concerns were the primary motivators for their ED

behaviours; other participants in the ED group said that this was not a function of their ED behaviours, although it may have been the initial reason for their engagement in ED behaviours. There was also tension in clinician responses regarding shape and weight concerns as the main function of ED behaviours. Some clinicians claimed that this is the core of all EDs, and others said that this function is relatively rare or that shape and weight concerns may be the surface-level function of ED behaviours.

The tension surrounding shape and weight concerns as the primary function of ED behaviours may exist for a few reasons. First, the general public has a skewed view towards media and the perpetuation of unrealistic body standards as a cause of EDs (Salafia et al., 2015), and many lay people believe that only young, white women experience EDs (Gordon et al., 2002; O'Hara et al., 2007). Thus, some people with EDs may be hesitant to report that this is the function of their EDs; they may not want to appear vapid and hyper-concerned about their appearance. Second, clinicians' theoretical orientations may be related to their endorsement of shape and weight concerns as the primary function of ED behaviours. For instance, the clinicians in the present study who noted that alleviating shape and weight concerns is the core function of ED behaviours practice CBT-E. Other clinicians who explicitly stated that shape and weight concerns are not the core function of EDs noted that they use CBT techniques but that they aim to treat underlying functions later in treatment or that the treatment varies from client to client. However, clinicians in the study were not explicitly asked to rank the prominence of ED behaviour functions, so the majority of clinicians did not specify whether they believed shape and weight concerns were the key functions of EDs.

Third, as noted at the outset, it is likely that functions vary between individuals; the function of one's ED behaviours may consistently be to regulate emotion, and the function of another's ED behaviours may consistently be to change their shape and/or weight. Finally, it is also possible that the initial function of EDs is to change shape and weight, and that the functions change over time. This explanation is consistent with habit formation theory. According to this theory, individuals begin restricting to lose weight and are intermittently reinforced for this weight loss. As a result, restricting becomes more extreme, automatic, and entrenched over time as the behaviour becomes rewarding in and of itself (Walsh, 2013). In this case, we may expect that individuals in earlier stages of the development of their eating disorder or behaviours may be more likely to endorse shape/weight concerns, whereas someone later in their illness may be more likely to endorse the function of compulsion. However, given the age range of the sample and lack of data collected on age of onset of ED behaviours, these questions could not be addressed in the current study.

Another aim of this study was to learn more about ED-specific functions, separate from functions of other maladaptive behaviours. Although one unique function of ED behaviours is to change one's shape and weight, this study highlighted the variety of reasons/motivations underlying changing shape and weight. For many individuals, the reason for changing their shape and weight is to alleviate concerns regarding societal and personal beauty standards. On the other hand, some individuals may aim to change their bodies for personal safety or to avoid attention from others. Along with using ED behaviours to cleanse or purify oneself, "to disappear," and to avoid intimacy, the finding that individuals may engage in ED behaviours to protect themselves provides further

support for suggestions from previous researchers and clinicians that EDs may arise to cope with trauma (Root & Fallon, 1989; Schwartz & Gay, 1993). Additionally, the function of control seems to be quite prominent and unique to ED behaviours (Budd, 2007; Polivy & Herman, 2002; Wang et al., 2020). Finally, some individuals' ED behaviours may be directly related to gastrointestinal symptoms, and ED behaviours may be perpetuated because they at least temporarily relieve gastrointestinal distress (e.g., Frank et al., 2021; Sato & Fukudo, 2015). Moreover, ED behaviours also are unique in that we must eat in order to survive, and abstaining from eating is not possible. ED behaviours represent a maladaptive form of a behaviour that everyone must carry out to survive, and for some people who engage in ED behaviours, disordered eating is reportedly the easiest way for them to eat.

Although we identified some unique functions of EDs, this study confirmed some known transdiagnostic functions, such as emotion regulation and interpersonal regulation/communication (Muehlenkamp et al., 2019; Prefit et al., 2019). The fact that ED behaviours serve both ED-specific and transdiagnostic functions is consistent with previous research (Fazzino et al., 2018; Muehlenkamp et al., 2019). Interestingly, findings from the checklist also support recent research which demonstrated that some individuals engage in ED behaviours to respond to suicidal thoughts or to avoid the impulse to attempt suicide (Fox et al., 2019). However, the fact that no participant mentioned this function in their interview suggests that the function of responding to suicidal thoughts may be under-discussed in both people with EDs and clinicians who treat EDs; this function might also be less salient than other ED functions. In addition to this, no clinicians noted that clients might use ED behaviours to avoid substance (ab)use.

The finding that some participants in the ED group engage in ED behaviours to avoid relapsing into substance use is interesting and highlights the importance of identifying transdiagnostic functions of maladaptive behaviours. Transdiagnostic functions are particularly important, because recent research indicates a subset of people with EDs experience symptom shifting; that is, they may decrease engagement in ED behaviours and increase engagement in NSSI or substance use (Garke et al., 2019). As such, extinguishing ED behaviours without addressing the function of the behaviour may result in a client shifting towards NSSI and/or substance use in order to meet that need, especially if the function of the ED behaviour can be fulfilled by other maladaptive behaviours (Garke et al., 2019).

Indeed, it is possible to treat ED behaviours without directly addressing the behaviours themselves (i.e., if a client's health is not at immediate risk of being compromised or once eating has been stabilized). For instance, although it does not impact ED symptoms as quickly or strongly as CBT-E, Interpersonal Psychotherapy is the leading alternative treatment to CBT-E for non-underweight patients. In this therapy, the focus is placed on interpersonal difficulties rather than on ED symptoms (Fairburn et al., 2015; Murphy et al., 2012). For clients whose ED serves interpersonal functions, Interpersonal Psychotherapy may be more effective at addressing the root of their problems and preventing symptom shifting. Conversely, many people with EDs experience elevated shame and self-criticism, and this may be the driving force behind some clients' ED behaviours. These negative views of the self and maladaptive schemas might be best treated by Compassion-Focused Therapy for EDs (Goss & Allan, 2014).

therapies, including Dialectical Behaviour Therapy and Acceptance and Commitment Therapy, may also be particularly useful in addressing ED functions related to regulation of the self (Bardone-Cone et al., 2020).

Furthermore, even when shape and weight concerns are the primary driving force of one's ED behaviours, CBT-E may not focus on the key issues. For instance, perhaps learning more about fat acceptance/activism would help with the fear of becoming fat, and offering feminist perspectives might help women who feel as though they must meet societal standards for women (Holmes, 2016; Matacin & Simone, 2019). Learning about self-objectification, rather than conducting behavioural experiments that reinforce objectification (e.g., showing a client's pictures to others and inquiring about the first thing others notice about them) might directly address the function that the ED behaviours serve (Tiggemann, 2013). Similarly, teaching clients that they can tolerate the discomfort of living in a larger body might also address this fear of weight gain (Schaumberg et al., 2021).

The final goal of this study was to create the assessment of ED behaviour functions. An initial draft of this measure was created using information from the interviews and frequency counts from checklists. This tool will likely be useful for clinicians in determining the best treatment for clients. If clinicians can identify the underlying function of one's ED behaviours, then they can target those functions in treatment, perhaps through standalone treatments or modular treatments. For clinicians who already identify the functions of their clients' ED behaviours, this measure may save them time and standardize their approach. Additionally, once validated, this measure of ED functions will allow researchers to further investigate the functions of EDs and

integrate these findings into treatment. Finally, as stated by two clinicians, individuals engage in ED behaviours for valid reasons. When we understand the reason behind the behaviours, the behaviours 'make sense.' Rather than being irrational behaviours that one can simply stop if they wanted to, ED behaviours serve an important purpose in one's life. Identifying functions can likely be validating for people with EDs, and we may be able to improve ED treatment by finding other methods of meeting those needs.

4.1 Strengths and Limitations

This study has a number of strengths, the primary one being that both people who engage in ED behaviours and clinicians who treat EDs were interviewed. Individuals who engage in ED behaviours provided direct insight into their lived experience. Clinicians provided a breadth of detail, discussing all ED behaviours and their functions across clients. These two groups therefore complemented each other. Another strength is the remote nature of the study, which allowed participants from across Canada and internationally to be interviewed. Clinicians also had a range of experience in terms of their professions, the therapy they deliver, and their years of experience. Finally, rigorous methods were used to draft a measure of ED functions, as measure items were taken from extant measures, developed from the ED literature, and extracted from interviews with clinicians and individuals who engage in ED behaviours.

Although this study has several strengths, it also has limitations to acknowledge.

Relatively few participants in the ED group engaged in compensatory behaviours.

However, clinicians provided details on the functions of compensatory behaviours.

Additionally, clinicians were not asked about demographic information beyond their professional experience. Finally, participants in the ED group were primarily adult white

women; this lack of diversity led to minimal information about functions of EDs for adolescents/children, men, or people from racialized groups. As a result, functions that are more specific to individuals from minoritized and marginalized groups may not have been identified by this study, which limits the breadth and potential generalizability of the current measure draft.

4.2 Future Directions

The next step of the measure development is to solicit peer feedback on the current items and the structure of the measure created as a result of this study. Using this feedback, items will be removed or edited to ensure that the measure captures ED functions most effectively without overburdening respondents. Subsequently, the measure will be administered to approximately 10 participants per item in order to investigate the factor structure (Boateng et al., 2018). Alongside the measure, participants also will complete measures related to the four major themes identified in the thematic analysis in order to determine convergent and discriminant validity. After these steps, the ED functions measure could be further validated using an ecological momentary assessment protocol. Ecological momentary assessment allows researchers to capture real-time data while participants are in more naturalistic environments (e.g., self-report on a smart phone), decreasing retrospective reporting bias. This protocol is useful in understanding the stability of cognitions and behaviours over time and across contexts (Shiffman, 2007). As such, we can investigate the context in which eating disorder behaviours are occurring (e.g., binge eating in response to negative emotion) and how these findings map on to responses on the functions measure (i.e., high endorsement of emotion regulation functions).

Moreover, this measure could inform future studies on the specific functions of EDs and how functions may change over time. To accomplish this, researchers would need a larger age range of participants and to assess age of onset and duration of illness. Longitudinal data would be necessary to determine whether ED functions change within individuals over time. In addition to examining the stability of ED functions over time, future research should investigate the prominence of alleviating shape and weight concerns as an ED function. Clinicians could complete the ED functions measure for their 'average' client as well as supplementary questionnaires about their experience and therapeutic orientation to determine what factors are related to their beliefs about this function versus other ED functions. Relatedly, it will be imperative that this measure be assessed and validated in diverse populations in order to increase generalizability and usefulness of the measure. The inclusion of additional items that capture diverse experiences may be necessary to better serve all individuals with EDs and not just white women. Finally, future research should investigate whether directly targeting ED functions with current psychotherapy approaches results in more beneficial outcomes for clients with EDs. Once validated, this measure could be administered by clinicians to directly inform treatment.

Chapter 5

5 Conclusion

EDs present a significant health risk to people across the population of Canada; yet, current treatments like CBT-E are ineffective for many clients. Personalizing treatment by targeting the functions of one's ED behaviours may provide a promising alternative to a "one-size-fits-all" approach. This approach requires an empirical method for assessing the functions of ED behaviours. As such, the goal of the current study was to conduct the first steps in developing an assessment of the functions of ED behaviours. ED functions were identified and confirmed through interviews with people who engage in ED behaviours and clinicians who treat EDs. Four key themes were constructed from the data, and these themes were then used to guide the development of the structure and content of the ED functions measure. Future studies will be conducted to validate this new measure of ED functions. These studies will be used to determine the factor structure, convergent and discriminant validity, and reliability of the measure. Ultimately, it also will be imperative to test the clinical utility of the measure via clinician perspectives and treatment outcome data.

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Appendices

Appendix A: ED Group Letter of Information.



Letter of Information

Project Title

Development of the Functional Assessment of Eating Disorders

Principal Investigator

Dr. Lindsay Bodell, Ph.D, Clinical Psychology

The University of Western Ontario,

Graduate Researcher

Abbigail Kinnear

The University of Western Ontario,

Funding

This study is being funded by Dr. Bodell's research laboratory.

Invitation to Participate

You are being asked by a Western University researcher to participate in research, because you currently identify as engaging in eating disorder behaviours and are at least 18 years old.

Purpose of Study

The purpose of this study is to examine the reasons why individuals engage in eating disorder behaviours (such as binge eating, restricting, and purging) and to ultimately create a self-report measure that can assess these reasons in individuals. This study is being conducted to satisfy the requirements for a Master's degree.

You will only be eligible to participate if you self-identify as engaging in eating disorder behaviours and are at least 18 years old.

Study Duration

The study will require approximately 30 to 60 minutes to complete.

Study Design and Procedure

If you agree to participate in this study, you will be given a link to an online survey where you will begin by completing a demographics questionnaire (e.g. age, gender

identity). Then, a researcher will ask you questions about your eating behaviours in an interview format. First, you will be asked which behaviours you engage in, and then you will be asked what these behaviours do for you, or why you engage in them. Your responses to these questions will be audio-recorded. Finally, in the online survey you will be given a list of other reasons why people might engage in these eating disorder behaviours, and you will be asked to check off all behaviours that are relevant to you. We anticipate approximately 60 participants will be involved in this study.

Risks and Discomforts

You may experience distress while answering questions regarding your eating disorder behaviours. You may choose not to answer any questions and stop the study at any time.

Benefits

You may not benefit directly from this study. However, the study may provide a benefit for society as the information may provide insight into how we can help treat individuals with eating disorders.

Voluntary Participation

Your participation in this study is voluntary. You may decide not to be in this study, or to be in the study now and then change your mind later. You may refuse to answer any question you do not want to answer.

Confidentiality and Records

Both the survey data and audio records will be stored and analyzed on a server and OneDrive only accessible to researchers on the study that is password-protected. Identifiable information will be stored on a Master List separate from the de-identified study data, and a unique study number will be assigned to all participants. Identifiable study data will be stored for 7 years, after which institutional policy on permanent data destruction will be followed. If the results of the study are published, your name will not be used.

Representatives of Western University's Health Sciences Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

Compensation

As compensation for your time/effort, you may enter your name in a draw to receive 1 of 6 cash prizes (\$25).

Future Use Statement

The de-identified data may be used for future research studies or distributed to another investigator for future research studies without additional informed consent from you or your substitute decision maker.

Participant Rights

Your participation in this study is voluntary. Even after consenting to the study you have the right not answer any questions or to withdraw from the study at any time. Choosing

not to complete the study will have no effect on your treatment or relationship with Western.

At any time of the session you may choose to withdraw from the study and request to have the information collected about you be withdrawn. If you choose to have your information removed please inform the researcher.

We will tell you about significant new information that may affect your willingness to stay in this study. No legal rights are waived by consenting to participate.

More Questions?

If you have questions about this research study please contact Dr. Lindsay Bodell,

If you have any questions about the conduct of this study or your rights as a research participant you many contact The Office of Human Research Ethics

Resources

Canadian Mental Health Association https://cmha.ca/mental-health/understanding-mental-illness/eating-disorders Find Your CMHA

National Eating Disorder Information Centre https://nedic.ca/help-for-yourself/
Toll Free Helpline:
Toronto Helpline:

Hope's Garden Eating Disorders Support

hopeseds.org

Canadian Association for Suicide Prevention https://suicideprevention.ca/need-help/Crisis Lines in Canada

Appendix B: Clinician Letter of Information



Letter of Information

Project Title

Development of the Functional Assessment of Eating Disorders

Principal Investigator

Dr. Lindsay Bodell, Ph.D, Clinical Psychology

The University of Western Ontario,

Graduate Researcher

Abbigail Kinnear

The University of Western Ontario,

Funding

This study is being funded by Dr. Bodell's research laboratory.

Invitation to Participate

You are being asked by a Western University researcher to participate in research, because you have experience in treating individuals who engage in eating disorder behaviours.

Purpose of Study

The purpose of this study is to examine the reasons why individuals engage in eating disorder behaviours (such as binge eating, restricting, and purging) and to ultimately create a measure that can assess these functions in individuals. This study is being conducted to satisfy the requirements for a Master's degree.

You will only be eligible to participate if you have experience in treating individuals who engage in eating disorder behaviours.

Study Duration

The study will require approximately 30 minutes to complete.

Study Design and Procedure

If you agree to participate in this study, you will be given a link to an online survey where you will begin by completing a demographics questionnaire. Then a researcher will conduct a semi-structured interview with you in order to understand why your clients have engaged in eating disorder behaviours. This interview will be recorded. Next, you

will be given a list of reasons why people might engage in these eating disorder behaviours, and you will be asked to check off all behaviours that you believe are relevant to clients in the online survey. We anticipate approximately 30 clinician participants will be involved in this study.

Risks and Discomforts

Risks might include experiencing fatigue from being asked questions about your experiences working with clients with eating disorders. You may choose not to answer any questions and stop the study at any time.

Benefits

You may not benefit directly from this study. However, the study may provide a benefit for society as the information may provide insight into how we can help treat individuals with eating disorders.

Voluntary Participation

Your participation in this study is voluntary. You may decide not to be in this study, or to be in the study now and then change your mind later. You may refuse to answer any question you do not want to answer.

Confidentiality and Records

Both the survey data and audio records will be stored and analyzed on a server and OneDrive only accessible to researchers on the study that is password-protected. Identifiable information will be stored on a Master List separate from the de-identified study data, and unique study number will be assigned to all participants. Identifiable study data will be stored for 7 years, after which institutional policy on permanent data destruction will be followed. If the results of the study are published, your name will not be used.

Representatives of Western University's Health Sciences Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

Compensation

As compensation for your time/effort, you may enter your name in a draw to receive 1 of 6 cash prizes (\$25).

Future Use Statement

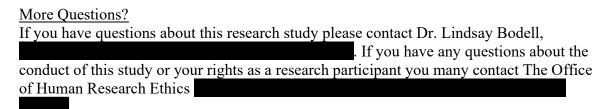
The de-identified data may be used for future research studies or distributed to another investigator for future research studies without additional informed consent from you.

Participant Rights

Your participation in this study is voluntary. Even after consenting to the study you have the right not answer any questions or to withdraw from the study at any time. Choosing not to complete the study will have no effect on your treatment or relationship with Western.

At any time of the session you may choose to withdraw from the study and request to have the information collected about you be withdrawn. If you choose to have your information removed please inform the researcher.

We will tell you about significant new information that may affect your willingness to stay in this study. No legal rights are waived by consenting to participate.



Appendix C: ED Group Interview Script

We are interested in learning more about the reasons why people engage in disordered eating behaviours, or ways of eating that cause problems for you. Some people intentionally restrict their food intake or eat very little food on purpose. Some binge eat, or experience a loss of control and eat a lot of food in a short period of time - much more than their bodies need. Some people purge or get rid of their food by throwing it up, taking laxatives, or exercising too much. In order to assess the reasons why people do these behaviors, we want to understand what restricting, binging, and purging *does* for you - what functions do these actions serve. We are developing a measure that will ask individuals to check off and rate all the functions that are relevant to them. Before we make the list of these functions, we want to ask you about your perspective on why you engage in specific behaviours. First, I would like to understand which behaviours you engage in.

Do you restrict your food intake?

Participant responds Yes or No:

If yes: Can you tell me what this looks like for you?

Do you engage in binge eating, in which you eat a large amount of food in a short period of time and feel a sense of loss of control while eating?

Participant responds Yes or No:

If yes: Can you tell me what this looks like for you?

Do you self-induce vomiting?

Participant responds Yes or No:

If yes: Can you tell me what this looks like for you?

Do you use laxatives?

Participant responds Yes or No:

If yes: Can you tell me what this looks like for you?

Do you engage in excessive amounts of exercise?

Participant responds Yes or No:

If yes: Can you tell me what this looks like for you?

Regarding each of these behaviours that you said "yes" to, can you tell me all the reasons you might engage in each of these behaviours? You can list reasons that are relevant to one or multiple of the behaviours.

Participant responds:

Prompt (if necessary):

"Examples of these reasons might be to lose weight, to regulate your emotions, or to punish yourself."

"Are there any other reasons you can think of which might lead you to engage in any of the eating disorder behaviours you discussed?"

Why do you think other people might do this that may not apply to you? Participant responds:

Finally, do you think that the functions of eating disorder behaviours have changed for you (and/or others) during COVID-19? That is, do you think you (and/or others) might engage in these behaviours for different reasons during this time?

Participant responds Yes or No:

If Yes: How do you think these functions have changed?

Participant responds:

Have you received treatment for your eating disorder? Yes or No

If yes: Please describe the kinds of treatment you have received, what did you do in treatment, do you know what the treatment was called?

Do you feel like your responses have been influenced by the treatment you have received? Or by media you've consumed (e.g. books, forums)?

Thank you for sharing these reasons. This type of research really helps us to better understand how we can help people in the future. We also have an ongoing list of functions on the survey so that you can check off all of the reasons that apply to you. This will help us get a sense of any functions you might have forgotten and what functions are not relevant to you.

Would you please complete this checklist now and let me know when you have finished?

Participant completes checklist:

Thank you for completing that. This is the end of the study. Would you like to be entered into our draw to win one of six prizes for participating? If so, I will enter your information into a password-protected document, separate from your data. Once we have fully completed our data collection we will draw names from this list and contact you if you are selected.

Appendix D: Clinician Interview Script

We are interested in learning more about the reasons why people engage in eating disorder behaviours, such as restricting, binge eating, and purging. In order to assess these reasons, or the functions that eating disorders may serve, we are developing a measure that will ask individuals to check off and rate all functions that are relevant to them. Before we make the list of these functions, we want to ask you about your perspective on why individuals engage in eating disorder behaviours.

What do you think are the reasons people with eating disorders engage in the following behaviours: restriction, binge eating, self-induced vomiting, laxative use, excessive exercise?

Clinician responds:

Prompt (if necessary): Examples of these reasons might be to lose weight, to regulate emotions, or to punish oneself.

Do you think the reasons your patients/clients believe they engage in these behaviours is different from what you have listed? If so, please describe what those differences are.

Finally, do you think that the functions of eating disorder behaviours has changed for patients during COVID-19? That is, do you think individuals might engage in these behaviours for different reasons during this time?

Clinician responds Yes or No:

If Yes: How do you think these functions have changed?

Clinician responds:

What treatments do you most often use for individuals with eating disorders?

Thank you. Now we have an ongoing list of functions on the survey so that you can check off all of the functions that you think are relevant to eating disorder behaviours. This will help us get a sense of any functions you might have forgotten or what functions you think are not relevant at all.

Would you please complete this checklist now and let me know when you have finished?

Thank you for completing that. This is the end of the study. Would you like to be entered into our draw to win one of six prizes for participating? If so, I will enter your information into a password-protected document, separate from your data. Once we have fully completed our data collection we will draw names from this list and contact you if you are selected.

Appendix E: Demographic Table of Participants

Descriptive Statistics among Total Sample

	N	M / %	SD	Range
ED Group	16			
Age	16	24.38	5.19	18-32
Gender				
Woman	14	87.5		
Man	1	6.25		
'Uncomfortably Female'	1	6.25		
Race/Ethnicity				
White	12	75.0		
Asian	1	6.25		
Black of African American	1	6.25		
Middle Eastern	1	6.25		
Multi-Racial	1	6.25		
Body Mass Index (BMI)	16	23.0	8.1	17.9-51.7
Behaviours Endorsed				
Restriction	16	100.0		
Binge Eating	14	87.5		
Compensatory Behaviours	10	62.5		
Clinician Group	14			
Profession				
Clinical or Counselling Psychologist	4	28.57		
Social Worker	4	28.57		
Dietician	2	14.28		
Psychiatrist	2	14.28		
Registered Psychotherapist	2	14.28		

Appendix F: ED Functions Checklist Results

Item	Category	Free	Frequency Count			
		ED Group	Clinician	Total		
to cope with/relieve stress	Emotion Regulation	16	14	30		
to lose weight	Shape and Weight	15	14	29		
to escape/avoid/stop bad feelings	Emotion Regulation	14	14	28		
to get control of a situation	Self-Regulation	13	13	26		
to release emotional pressure that has built up	Emotion Regulation	12	13	25		
inside of me						
to relieve feeling "numb" or empty	Emotion Regulation	12	12	24		
to reduce anxiety, frustration, anger, or other	Emotion Regulation	11	13	24		
overwhelming emotions						
to punish myself for eating a "bad" food	Shape and Weight	11	13	24		
to change my body shape	Shape and Weight	12	12	24		
to numb myself	Emotion Regulation	10	13	23		
to punish myself	Self-Regulation	10	13	23		
to feel relaxed	Emotion Regulation	11	12	23		
to react to feeling unhappy with myself or	Emotion Regulation	11	12	23		
disgusted with myself						
to distract myself	Emotion Regulation	9	13	22		
to prevent bad feelings	Emotion Regulation	11	11	22		
to slow down racing thoughts	Emotion Regulation	10	12	22		
to dissociate from intrusive thoughts, feeling,	Emotion Regulation	9	12	21		
images						
to sedate myself	Emotion Regulation	9	11	20		
to calm myself down	Emotion Regulation	8	12	20		
to give myself a sense of identity and self	Self-Regulation	8	12	20		
esteem						
to punish my body	Shape and Weight	7	12	19		
to look like people I see on TV, movies, or on	Shape and Weight	5	13	18		
social media						
to comfort/nurture myself	Emotion Regulation	7	11	18		

to gain/maintain predictability and structure	Self-Regulation	8	10	18
because I felt compelled to/like I have no	Self-Regulation	6	12	18
choice				
to express anger towards myself for being	Emotion Regulation	7	11	18
worthless or stupid				
to gain/maintain control and power	Self-Regulation	7	11	18
to release tension	Emotion Regulation	6	12	18
to get rid of guilt	Emotion Regulation	8	10	18
to give yourself something to do when with	Interpersonal Regulation	5	13	18
others				
to fit in with others	Interpersonal Regulation	6	11	17
to discharge anger	Emotion Regulation	6	11	17
to look more feminine	Shape and Weight	5	11	16
to get other people to understand or notice me	Interpersonal Regulation	4	12	16
to let others know how desperate I was feeling	Interpersonal Regulation	6	10	16
to get help	Interpersonal Regulation	5	11	16
to feel something at all	Emotion Regulation	5	11	16
to give myself something to do when I am	Emotion Regulation	6	10	16
bored				
to respond to suicidal thoughts without	Emotion Regulation	5	11	16
actually attempting suicide				
to create small body for protection	Interpersonal Regulation	5	11	16
to get attention	Interpersonal Regulation	4	11	15
to attempt "to disappear"	Self-Regulation	5	10	15
to look like someone I admire	Shape and Weight	4	11	15
to ground myself/return from a dissociative	Emotion Regulation	6	9	15
state				
to let others know the extent of my emotional	Interpersonal Regulation	6	9	15
pain				
to cleanse of purify myself	Self-Regulation	5	10	15
to give myself something to do when I am	Emotion Regulation	5	9	14
alone				
to prove to myself that my emotional pain is	Emotion Regulation	5	9	14
real				

to avoid being with people	Interpersonal Regulation	3	11	14
to avoid school, work, or other activities	Interpersonal Regulation	3	11	14
to communicate to others how badly I feel inside	Interpersonal Regulation	5	9	14
to try to get a reaction from someone, even if its a negative reaction	Interpersonal Regulation	3	11	14
to avoid the impulse to attempt suicide	Emotion Regulation	7	7	14
to keep a loved one from leaving or	Interpersonal Regulation	3	11	14
abandoning me				
because I was hungry	Shape and Weight	5	9	14
to avoid having to do something unpleasant	Interpersonal Regulation	4	9	13
that I don't want to do				
to get my parents to understand or notice me	Interpersonal Regulation	2	11	13
to seek care or help from others	Interpersonal Regulation	3	10	13
to establish a barrier between myself and others	Interpersonal Regulation	5	8	13
to put a stop to suicidal thoughts	Emotion Regulation	4	9	13
to make myself feel as bad physically as I do mentally	Emotion Regulation	6	7	13
to establish that I am autonomous/independent	Self-Regulation	7	6	13
to be like someone I respect	Self-Regulation	3	9	12
to make a romantic interest like me	Shape and Weight	2	10	12
to create a physical sign that I feel awful	Interpersonal Regulation	4	8	12
to avoid intimacy	Interpersonal Regulation	2	10	12
to prove "I am bad" instead of blaming others	Self-Regulation	4	8	12
to create a physical sign that I feel awful	Interpersonal Regulation	4	8	12
to look less feminine	Interpersonal Regulation	2	10	12
to feel energized	Emotion Regulation	4	7	11
To receive more attention from family and	Interpersonal Regulation	1	10	11
friends				
to feel special	Self-Regulation	1	10	11
to prove I am tough	Self-Regulation	6	4	10
to demonstrate I am tough or strong	Self-Regulation	5	5	10

to do something to generate excitement or	Emotion Regulation	2	8	10
exhilaration				
to rebel	Interpersonal Regulation	2	8	10
to demonstrate that I am separate from other	Interpersonal Regulation	3	7	10
people				
to get other people to act differently or change	Interpersonal Regulation	1	9	10
to get back at someone	Interpersonal Regulation	1	8	9
to push my limits in a manner akin to skydiving	Self-Regulation	4	5	9
or other extreme activities				
to demonstrate that I do not need to rely on	Interpersonal Regulation	4	5	9
others for help				
to create a large body for protection	Interpersonal Regulation	0	9	9
to try to hurt someone close to me	Interpersonal Regulation	1	7	8
to maintain helplessness	Self-Regulation	2	6	8
to establish psychological space re-enactment	Self-Regulation	2	6	8
of abuse (repetition/compulsion)				
to prove I can take the physical pain	Self-Regulation	3	5	8
to avoid punishment or paying the	Interpersonal Regulation	2	5	7
consequences				
to make others angry	Interpersonal Regulation	1	6	7
to see if I can stand the pain	Self-Regulation	2	4	6
to entertain myself or others by doing	Interpersonal Regulation	1	4	5
something extreme				
to gain weight	Shape and Weight	1	3	4

Note: N = 30

Appendix G: Functions of EDs Measure Draft

Which eating disorder behaviour(s) do you engage in? Check all boxes that apply.	
☐ Restricting food intake (i.e., purposefully eating less than your body needs)	

Binge-eating (i.e., eating a large amount of food in a short period of time while experiencing a loss of control over eating)

☐ Compensating (e.g., self-induced vomiting, abusing laxatives, excessively exercising)

☐ Other: _____

People engage in eating disorder behaviours for various reasons. For each of the following reasons listed, circle how often you engage in an eating disorder behaviour for that reason. If you engage in multiple behaviours, respond for all of those behaviours. If you do not engage in some of the listed behaviours, do not circle an option for those behaviours.

For example, if you engage in both restricting and binge-eating, and you often restrict your food intake to seek help and never binge-eat to seek help your response would look like this:

I _____ to seek help.

	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	(5)	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
	_ 1	2	3	4	5	6	7

Please answer the following questions regarding the reasons why you engage in eating disorder behaviours: 1. I to avoid school, work, or other activities. Never Usually Not Rarely Sometimes Often Usually Always Restrict Binge-eat Compensate 1 Other:_____1 2. I _____ to avoid being with people. Never Usually Not Rarely Sometimes Often Usually Always Restrict Binge-eat Compensate Other: 1 3. I to look less attractive to others. Never Usually Not Usually Rarely Sometimes Often Always Restrict Binge-eat Compensate 1 Other: 1 4. I _____ to look less feminine. Never Usually Not Rarely Sometimes Often Usually Always Restrict Binge-eat Compensate 1

Other:_____1

5. I	to avoid	l being a burden to	others.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
6. I	to creat	e a large body for	protection.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
7. I		e small body for p		G	0.0		A.1
D a saturi sat		Usually Not	Rarely 3	Sometimes 4	Often	Usually	Always 7
Restrict	1	2	3	4	5 5	6	7
Binge-eat Compensate		2	3	4	5	6	7
-		2	3	4	5	6	
Other:	1	2	3	4	3	O	7
8. I	to creat	e a substitute for o	ther relation	ships.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

9. I	to push	people away.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
10. I	to low	er other people's e.	xpectations f	or me.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
11. I		to hurt someone cle		Samatinaa	Office	Havelly	Almana
Restrict	Never 1	Usually Not	Rarely 3	Sometimes 4	Often 5	Usually 6	Always 7
		2	3	4	5	6	7
Binge-eat Compensate		2	3	4	5	6	7
_					5		
Other:	1	2	3	4	3	6	7
12. I	to mak	ke other people feel	l guilty for ho	ow they treated m	e.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

13. I	to get o	attention.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
14. I	to get i	help.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
15. I	to fit in	n with others.					
		n with others. Usually Not	Rarely	Sometimes	Often	Usually	Always
	Never		Rarely 3	Sometimes 4	Often 5	Usually 6	Always 7
	Never 1	Usually Not				•	-
Restrict	Never 1 1	Usually Not	3	4	5	6	7
Restrict Binge-eat	Never 1 1 1	Usually Not 2 2	3	4	5 5	6	7
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1	Usually Not 2 2 2	3 3 3 3	4 4 4 4	5 5 5	6 6 6	7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1 1 to get of	Usually Not 2 2 2 2 2	3 3 3 3 derstand or n	4 4 4 4 outice me.	5 5 5	6 6 6	7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1 1 to get of	Usually Not 2 2 2 2 2 other people to uno	3 3 3 3 derstand or n	4 4 4 4 eotice me.	5 5 5 5	6 6 6	7 7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1 1 Never 1	Usually Not 2 2 2 2 2 other people to und Usually Not	3 3 3 3 derstand or n Rarely	4 4 4 4 anotice me. Sometimes	5 5 5 5	6 6 6 6 Usually	7 7 7 7 Always
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1 1 1 Never 1 1 1	Usually Not 2 2 2 2 2 other people to und Usually Not 2	3 3 3 derstand or n Rarely 3	4 4 4 4 ootice me. Sometimes 4	5 5 5 5 Often 5	6 6 6 6 Usually	7 7 7 7 7 Always

17. I	to keep	a loved one from	leaving or a	bandoning me.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
18. I	to ensu	ıre my needs are n	net by others.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
19. I	to let o	thers know how d	esperate I wa	ıs feeling.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
20. I	to crea	te a physical sign	that I feel aw	vful.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

21. I	to help	people understan	d how much	I'm hurting.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
22. I	to dem	onstrate that I do	not need to re	ely on others for	help.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
23. I	to esta	blish a barrier bet	ween myself	and others.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
24. I	to show	w others that I've c	accomplishea	l something.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

25. I	to prov	ve that I have self-c	control.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
26. I	to avoi	id appearing lazy.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
27. I	to dem	onstrate to others	that I don't r	need food like the	y do.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
28. I	to give	myself something	to do when v	vith others.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

29. I	to atte	mpt "to disappear	".				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
30. I	_ to cope	e with fears of gro	wing up.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	_ 1	2	3	4	5	6	7
<i>31. I</i>	to rein	force that I am sm	all and insign	nificant.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
		2	3	4	3	6	7
		L	3	4	3	0	/
32. I		inue the cycle of p			3	o	/
	to cont		unishing my	body.	Often		Always
	to cont	inue the cycle of p	unishing my	body.			
	to cont Never	inue the cycle of p	nunishing my Rarely	body. Sometimes	Often	Usually	Always
Restrict	to cont Never 1 1	inue the cycle of p Usually Not 2	nunishing my Rarely 3	body. Sometimes 4	Often 5	Usually 6	Always 7

33. I	to gair	n back autonomy o	f my body.						
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
34. I	to feel	safe.							
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
35. I	to clea	inse or purify myse	elf.						
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
36. I because I felt compelled to/like I have no choice.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

37. I	. I to gain/maintain control and power.								
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
38. I	to gain	/maintain predicto	ability and st	ructure.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
39. I	to get (control of a situati	on.						
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
40. I because it's a habit.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

41. I because it's the easiest way for me to eat.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
42. I to push my limits in a manner akin to skydiving or other extreme activities.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
43. I	to be l	ike someone I resp	ect.						
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
44. I to be successful in life. Never Usually Not Rarely Sometimes Often Usually Always									
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

45. I	to pro	ve I am tough.							
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
46. I to feel superior to others.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
47. I	to give	e myself a sense of	identity and	self-esteem.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
48. I to prove I can take the physical pain.									
	Never	Usually Not		Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate		2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

49. I	to feel	like I've accompli	shed somethi	ing.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
50. I	to esta	blish that I am aut	onomous/ina	lependent.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
51. I	to relie	eve thoughts of selj	f-hatred.						
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
52. I	52. I to prove that I am a bad person.								
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

53. I	to pun	ish myself.							
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
54. I so others/society see me in a positive way.									
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
55. I		se I don't want oth Usually Not			ely because o	f my looks. Usually	Always		
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		
56. I because I feel too large to deserve food. Never Usually Not Rarely Sometimes Often Usually Always									
Restrict	1	2	3	4	5	6	7		
Binge-eat	1	2	3	4	5	6	7		
Compensate	e 1	2	3	4	5	6	7		
Other:	1	2	3	4	5	6	7		

Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 Other: 1 2 3 4 </th <th>57. I</th> <th>_ to avoi</th> <th>id gaining weight.</th> <th></th> <th></th> <th></th> <th></th> <th></th>	57. I	_ to avoi	id gaining weight.					
Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other:1 1 2 3 4 5 6 7 Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other:1 1 2 3 4 5 6 7 59. I	-	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Compensate 1 2 3 4 5 6 7 58. I	Restrict	1	2	3	4	5	6	7
Other: 1 2 3 4 5 6 7 58. I because other people are paying attention to my weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	Binge-eat	1	2	3	4	5	6	7
58. I	Compensate	1	2	3	4	5	6	7
Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	Other:	_ 1	2	3	4	5	6	7
Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7								
Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other:	58. I	_ becaus	se other people are	paying atter	ntion to my weigh	t.		
Binge-eat 1 2 3 4 5 6 7 Compensate 1 2 3 4 5 6 7 Other: 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	-	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Compensate 1 2 3 4 5 6 7 Other:1 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	Restrict	1	2	3	4	5	6	7
Other: 1 2 3 4 5 6 7 59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	Binge-eat	1	2	3	4	5	6	7
59. I to lose weight. Never Usually Not Rarely Sometimes Often Usually Always Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	Compensate	1	2	3	4	5	6	7
NeverUsually NotRarelySometimesOftenUsuallyAlwaysRestrict1234567Binge-eat1234567	Other:	_ 1	2	3	4	5	6	7
NeverUsually NotRarelySometimesOftenUsuallyAlwaysRestrict1234567Binge-eat1234567								
Restrict 1 2 3 4 5 6 7 Binge-eat 1 2 3 4 5 6 7	59. I	_ to lose	weight.					
Binge-eat 1 2 3 4 5 6 7	-	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
	Restrict	1	2	3	4	5	6	7
Compensate 1 2 3 4 5 6 7	Binge-eat	1	2	3	4	5	6	7
-	Compensate	1	2	3	4	5	6	7
Other: 1 2 3 4 5 6 7	Other:	_ 1	2	3	4	5	6	7
60. I to look like people I see on TV, movies, or on social media.	60. I	_ to look	t like people I see o	on TV, movie	s, or on social me	edia.		
Never Usually Not Rarely Sometimes Often Usually Always	-	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict 1 2 3 4 5 6 7	Restrict	1	2	3	4	5	6	7
Binge-eat 1 2 3 4 5 6 7	Binge-eat	1	2	3	4	5	6	7
Compensate 1 2 3 4 5 6 7	Compensate	1	2	3	4	5	6	7
Other: 1 2 3 4 5 6 7	Other:	_ 1	2	3	4	5	6	7

61. I	to char	nge my body shape	2.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	: 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
62. I	to look	more feminine.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	2 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
63. I	to mail	ntain my weight.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	2 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
64. I	to gain	n weight.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

65. I	to get	rid of bloating.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
66. I	becaus	se the act of eating	gives me an:	xiety.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
67. I	to get	rid of an uncomfor	table fullnes.	s.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
68. I	becaus	se I was hungry.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

69. I	to feel	"empty".					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
70. I	to pun	ish my body.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
71. I	to pun	ish myself for eatir	ng a "bad" fo	ood.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
72. I	so that	t I don't have to re	strict.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

73. I	to mak	xe up for being ugl	y.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
74. I	becaus	se I'm afraid of no	t being able t	o access certain	foods again.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
75. I	to gro	und myself/return j	from a dissoc	riative state.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
76. I	to reli	eve feeling "numb'	or empty.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

77. I	to redu	ace anxiety, frustro	ation, anger, o	or other overwhe	lming emotio	ns.	
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
78. I	to prev	ent bad feelings.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
79. I	to cope	e with/relieve stres	S.				
	Never	Usually Not	•		Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat							
	1	2	3	4	5	6	7
Compensate		2 2	3	4	5 5	6	7 7
Compensate Other:	1						
Other:	1 1 to relec	2 2 ase emotional pres	3 3 ssure that has	4 4 s built up inside o	5 5 of me.	6	7 7
Other:	1 1 to release Never	2 2 ase emotional pres Usually Not	3 3 ssure that has Rarely	4 4 5 built up inside of Sometimes	5 5 of me. Often	6 6 Usually	7 7 Always
Other: 80. I Restrict	1	2 2 ase emotional pres Usually Not 2	3 3 ssure that has Rarely 3	4 4 5 built up inside of Sometimes 4	5 5 of me. Often 5	6 6 Usually 6	7 7 Always 7
Other: 80. I Restrict Binge-eat	1	2 2 ase emotional pres Usually Not 2 2	3 3 ssure that has Rarely 3 3	4 4 5 built up inside of Sometimes 4 4	5 5 of me. Often 5 5	6 6 Usually 6 6	7 7 Always 7 7
Other: 80. I Restrict	1	2 2 ase emotional pres Usually Not 2	3 3 ssure that has Rarely 3	4 4 5 built up inside of Sometimes 4	5 5 of me. Often 5	6 6 Usually 6	7 7 Always 7

81. I	to get i	rid of guilt.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
82. I	to feel	relaxed.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
83. I	becaus	se I can (always) c	ount on it to	make me feel bett	ter.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
84. I	to com	fort/nurture mysel	f.				
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
D .	1	2	3	4	5	6	7
Binge-eat	1	_	·				
Binge-eat Compensate		2	3	4	5	6	7

85. I	to feel	something at all.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
86. I	to feel	energized.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
87. I	to imp	rove my mood.					
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
88. I	to resp	ond to suicidal the	oughts withou	ıt actually attemp	oting suicide.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	2	4	5		_
	1	2	3	4	5	6	7

89. I	to avoi	id the impulse to a	ttempt suicid	e.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	2 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
90. I	becaus	e it's a better way	of coping the	an using substand	ces or self-inj	uring.	
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	2 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
91. I	to dire	ct anger towards i	nyself when I	feel like I can't e	express it to o	thers.	
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	2 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
92. I	to disc	harge anger.					
92. I	to disc.	harge anger. Usually Not	Rarely	Sometimes	Often	Usually	Always
92. I			Rarely 3	Sometimes 4	Often 5	Usually 6	Always 7
	Never	Usually Not	•			•	_
Restrict	Never 1 1	Usually Not	3	4	5	6	7

93. I	to exp	ress anger towards	myself for b	eing worthless or	r stupid.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
94. I	to reac	ct to feeling unhap	py with myse	lf or disgusted wi	ith myself.		
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
95. I	to mak	xe myself feel as ba	d physically	as I do mentally.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
96. I	to pro	ve to myself that m	y emotional _l	pain is real.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

97. I	to avoi	id pleasant feeling	s so that I do	n't have to deal v	vith the event	ual "let down".	
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
98. I	to diss	ociate from intrus	ive thoughts,	feeling, images.			
	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	e 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7
99. I	to num	ab myself.					
99. I		ab myself. Usually Not	Rarely	Sometimes	Often	Usually	Always
			Rarely 3	Sometimes 4	Often 5	Usually 6	Always 7
	Never	Usually Not	•			·	
Restrict	Never 1 1	Usually Not	3	4	5	6	7
Restrict Binge-eat	Never 1 1 1	Usually Not 2 2	3	4	5 5	6	7 7
Restrict Binge-eat Compensate	Never 1 1 1	Usually Not 2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 1 e 1 1	Usually Not 2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 1 e 1 1	Usually Not 2 2 2 2 2 etract myself.	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 e 1 1 to dis	Usually Not 2 2 2 2 2 etract myself.	3 3 3 3	4 4 4 4	5 5 5 5	6 6 6	7 7 7 7
Restrict Binge-eat Compensate Other:	Never 1 1 e 1 1 to dis Never 1	Usually Not 2 2 2 2 2 stract myself. Usually Not	3 3 3 3 Rarely	4 4 4 4 Sometimes	5 5 5 5 Often	6 6 6 6 Usually	7 7 7 7 Always
Restrict Binge-eat Compensate Other:	Never 1 1 1 1 1 1 to dis Never 1 1	Usually Not 2 2 2 2 2 stract myself. Usually Not 2	3 3 3 3 Rarely 3	4 4 4 4 Sometimes 4	5 5 5 5 Often 5	6 6 6 6 Usually	7 7 7 7 Always 7

101. I	_to escape/avoid/stop	bad feelings.
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	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	: 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

102. I _____ to give myself something to do when I am bored.

	Never	Usually Not	Rarely	Sometimes	Often	Usually	Always
Restrict	1	2	3	4	5	6	7
Binge-eat	1	2	3	4	5	6	7
Compensate	: 1	2	3	4	5	6	7
Other:	1	2	3	4	5	6	7

Curriculum Vitae

EDUCATION

Candidate for Master of Science

Clinical Science and Psychopathology at Western University in London, Ontario from September 2019 – Present

Master's Thesis: Why Do People Engage in Eating Disorder Behaviours?

Supervisor: Dr. Lindsay Bodell

Bachelor of Arts

Psychology - Research Intensive Specialization, Honours at the University of Waterloo in Waterloo, Ontario from September 2015 – June 2019

Honours Thesis: The Effect of Social Threat on Physical Appearance Concerns in Social

Anxiety

Supervisor: Dr. David Moscovitch

AWARDS AND SCHOLARSHIPS

Canadian Psychological Association Student Research Grant, 2020 – 2021

Ontario Graduate Scholarship (OGS), 2020 – 2021

Canada Graduate Scholarship – Masters (SSHRC), 2019 – 2020

Ontario Graduate Scholarship (OGS) – Declined, 2019 – 2020

Departmental Award for Distinguished Academic Achievement in an Honours program, 2019

Currie Memorial Award for Outstanding Honours Psychology Student, 2019

St. Jerome's Graduating Student Award – University Life Award, 2019

MANUSCRIPTS IN PREPARATION

Kinnear, A., Withnell, S.J., Witte, T.K., Smith, A.R., Szczyglowski, K., & Bodell, L.P. (In Preparation). Presence and impact of weight misperception in women seeking eating disorder treatment.

PRESENTATIONS

(* represents shared authorship)

- Kinnear, A., Bianchini, G., & Bodell, L. P. (2021, June 10-12). Functions of Eating Disorders during COVID-19: A qualitative study of individuals with Eating Disorder Behaviours and Clinicians who Treat Eating Disorders [Poster session]. The International Conference on Eating Disorders (ICED) 2021. Virtual conference.
- **Kinnear, A.*** & Withnell, S.J.* (2021, February 13). *Our Focus on Weight is Bad for Our Health*. Public talk at Western Clinical Psychology's 2021 Advocacy Through Action Virtual Lecture Series.

- **Kinnear, A.,** Szczyglowski, K., Bodell, L. (2020, July 6-August 28). *Presence and impact of weight misperception in women seeking eating disorder treatment*. Paper within a symposium at the Canadian Psychological Association's 2020 Virtual Series.
- Milovanov, A., Tran, E., **Kinnear, A.,** Daljeet, S., Finch, K., Capobianco, K., Keleher, B., Mittelstaedt, W., & Oakman, J.M. (2020, May 21-24). *Personality predictors of psychotherapy preferences in depressed undergraduate students* [Poster session]. APS 2020 Annual Convention, Chicago, IL, USA. (Conference cancelled).
- **Kinnear, A.,** Romano, M., Moscovitch, D.A. (2019, May 3-4). *The effects of social threat on physical appearance concerns in social anxiety*. Poster session presented at the annual meeting of The Canadian Association of Cognitive and Behavioural Therapies CACBT, Montreal, QC.

WORKSHOPS AND ADDITIONAL TRAINING

Workshops

Brief therapy and Single Sessions, by Drs. Naomi Wiesenthal and Jared French, April 2021

Emotion, Spirituality, and Psychedelic Medicine by Drs. Adele Lafrance & Joe Tafur, February 2021

Suicide Assessment by Dr. Marnin Heisel, December 2020

Indigenous Canada Course by University of Alberta with certificate, July – September 2020

Knowledge Exchange School Expanded Workshop: Tips for Improving Writing for Academic Publications by Dr. Mark Goldszmidt, July 2020

Constructing Your First Peer Review by Dr. Blake E. Butler, May 2020

Exposure Therapy for Eating Disorders by Dr. Glenn Waller, January 2020

Brief Cognitive Behavioural Therapy for Eating Disorders by Dr. Glenn Waller, January 2020

Emotion-Focused Therapy by Dr. Carey Ann DeOliveira, December 2019

RELEVANT EXPERIENCE

Cognitive Behaviour Therapy Self-Help Coach (Volunteer)

iAIM EDU Study, Healthy Minds Network – Research on Adolescent and Young Adult Mental Health, January 2021 – Present

• Guide users through a self-help CBT program for anxiety, depression, and/or eating disorders

- Complete 15-minute phone calls with users to discuss their goals and needs for the program
- Provide individualized feedback on completed sessions and tools; direct users to modules that address comorbid concerns

Letter Writing Committee Member (Volunteer)

Advocacy Through Action Lecture Series, Western University Clinical Psychology, Western University, London, Ontario, January 2021

 Constructed a letter for talk attendees to email their local and provincial government representatives to ask for better mental health supports in Ontario communities

Project Co-Leader

Equity, Diversity, and Inclusion Committee of Graduate Students, Western University Psychology, Western University, London, Ontario, September 2020 – present

- Participated in creation of committee structure, guidelines for members, and project proposal process
- Proposed and co-lead a program evaluation of the committee and its impact on the Psychology department

Panelist - Pursuing Graduate School

Introduction to Clinical Psychology Course, University of Waterloo, Waterloo, Ontario, November 2020

- Participated in a panel discussion for undergraduate Psychology students at the University of Waterloo on admission to graduate programs
- Answered student questions about how I decided where to apply to graduate school
- Discussed my process of applying to Clinical Psychology graduate programs and how I prepared throughout my undergraduate degree at the University of Waterloo

Lab Co-Coordinator

Psychobiology of Eating and Related Disorders Lab, Western University, London, Ontario, September 2019 – Present

- Manage research project which investigates how brain responses to social evaluation during adolescence may influence susceptibility to eating disorders
- Recruit, select, and train undergraduate research assistants to conduct eligibility phone screens and to run studies in the lab
- Conduct clinical interviews to improve validity of studies

Clinical Research Associate (Volunteer)

EQ4 Suicide Postvention Project, London Family Court Clinic, London, Ontario, February 2020 – Present

- Deliberate and create characters for four different role play scenarios in which core team members from relevant agencies (e.g., CMHA) would have to identify youth at risk for suicide after a suicide in the community
- Debriefed with team members and clinical psychologist at the London Family Court Clinic; supplied feedback in order to evaluate the suicide postvention program

Clinical Psychology Student Liaison (Volunteer)

Psychology Graduate Student Association, Western University, July 2020 - present

- Spearheaded initiative to collaborate with the Counselling Psychology program in the Faculty of Education
- Plan social orientation event for incoming students
- Relay information to Clinical Psychology Students

Lab Manager (Volunteer)

Psychological Intervention Research Team Lab, University of Waterloo, Waterloo, Ontario, September 2017 – August 2019

- Managed recruitment of research assistants; correspond with graduate students and research assistant applicants to determine availability of volunteer positions
- Corresponded with professor and lab members to determine most practical and favourable meeting times

Research Assistant

Self-Attitudes Lab, Waterloo, Ontario, January 2019 – August 2019

- Scheduled and ran participants in an interactive study using SONA, PSYCpool, Calendly, and Qualtrics
- Screened participants for a potential diagnosis of Bulimia Nervosa via phone calls in order to determine eligibility for an online study
- Coded responses to sensitive qualitative data and specified trends for graduate student