PUTTING WEIGHT IN CONTEXT: ACCEPTANCE AND COMMITMENT THERAPY (ACT) GUIDED SELF-HELP FOR WEIGHT SELF-STIGMA

by

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ABSTRACT

Putting Weight in Context: Acceptance and Commitment Therapy (ACT) Guided Self-Help for Weight Self-Stigma

by

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Utah State University, 2018

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Obesity is a serious public health issue within the U.S. and minimal long-term success is found with standard behavioral weight-loss treatments. Typical weight-loss interventions do not acknowledge psychological factors, such as weight-related stigma, which may play a role in the development and maintenance of poor coping behaviors, such as unhealthy eating patterns. Individuals who are obese may often experience weight-related stigma present in society and are ultimately at risk for weight self-stigma, which is related to poor health behaviors and increased psychological distress. Acceptance and commitment therapy (ACT), which has been shown to be effective for treating numerous mental health presentations, might also be effective in decreasing weight self-stigma and improving health behaviors. Individuals struggling with weight self-stigma do not often seek treatment due to challenging experiences with previous weight-loss efforts. Guided self-help is a promising format for providing treatment
targeting weight self-stigma. This approach may be particularly attractive to individuals struggling with weight self-stigma because it allows for greater flexibility and personal choice. There have been no previous randomized controlled trials evaluating guided self-help for weight self-stigma and health behavior change in obese populations.

This study reports the results of a randomized controlled trial of ACT guided self-help for weight self-stigma comparing two versions of guided self-help with varying levels of support ($n = 33$) versus waitlist control ($n = 15$). Each active condition provided unique levels of guided self-help to evaluate whether phone coaching enhanced the program overall. Results showed both active conditions were highly acceptable, although greater satisfaction with support and greater follow-through with book reading was found for those who received phone coaching. There were significant improvements at post in binge eating, physical activity, psychological distress, weight self-stigma, and weight-related psychological flexibility for both active conditions versus waitlist. Mediational analyses showed significant treatment effects, such that weight self-stigma and weight-related psychological flexibility fully and separately accounted for the relation between ACT guided self-help and binge eating behavior. The findings from this study provide the first randomized controlled trial data of an effective intervention for weight self-stigma. Clinical implications, limitations, and future directions are discussed.

(213 pages)
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DEDICATION

This dissertation is dedicated to my family and friends who have loved and supported me throughout this journey of graduate school. My parents, Bud and Renee Potts, have provided endless support, guidance, and encouragement during each step of the way. My partner, Dustin McHenry, has supported me with his consistent humor, reality checks, and often a push to go on an outdoor adventure. My brother, Tripp Potts, and my Aunt Mary Potts, have both never failed to provide me with comic relief from the seriousness of graduate school. My dear friend and fellow river-lover, Tim Gaylord, has always encouraged me to create my version of a healthy life-work balance. I am so appreciative of my family at Holiday River Expeditions because I do not think I would have been as positive or excited about my graduate training without having Southern Utah as my reset button. My strong grandmothers, Rosemary Rezac and Mary Jane Potts, have both given me such unconditional love and support throughout the trials and tribulations of graduate school. Finally, a special dedication of this dissertation is for my grandfathers who are also two of my favorite men: Clarence Rezac (d. May 31, 2018) and R.E. Potts (d. January 7, 2018). Although they are unable to be with me in person as I reach this milestone, their hard-working nature, enthusiasm for life, and optimism have been continuous sources of motivation that will continue with me throughout my life.

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Sarah A. Potts
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CHAPTER I
INTRODUCTION

Obesity is a serious public health issue impacting the U.S. and other westernized countries and is becoming a more complex diagnosis than previously recognized (Mackey, Olson, DiFazio, & Cassidy, 2016; Puhl & Brownell, 2006). While obesity rates are likely to plateau, the cost associated with obesity is likely to continue rising in following years (Flegal, Kruszon-Moran, Carroll, Fryar, & Ogden, 2016). Significant research has determined BMI and poor health behaviors predict physical health concerns, such as, premature mortality risk, type II diabetes, metabolic complications, and cardiovascular risk (Bell & Hamer, 2016; Cornier et al., 2011; Kopelman, 2007; Solomon & Manson, 1997).

Standard behavioral treatment (SBT) aims to lower through diet, exercise, and cognitive-behavioral techniques and is considered the first line of weight-loss treatment for individuals who are overweight (Jensen et al., 2014; Pi-Sunyer et al., 1998). SBT is characteristic of poor long-term weight-loss maintenance (Jeffery et al., 2000; Wadden, Butryn, Hong, & Tsai, 2014) and has not acknowledged the gravity of impact of psychological factors, such as weight discrimination, that may play a role in providing sustainable treatment (Puhl & Brownell, 2001; Rokholm, Baker, & Sorensen, 2010).

Individuals who are overweight and obese are at risk for experiencing weight-related stigma (Brownell, Puhl, Schwartz, & Rudd, 2005), which is strongly linked to decreased health-related quality of life, poor health behaviors, increased sedentary behavior, and eating problems (Brownell, 2010; Lillis, Levin, & Hayes, 2011; Lillis,
Luoma, Levin, & Hayes, 2010; Palmeira, Pinto-Gouveia, & Cunha, 2016). While there is an established link between weight self-stigma and key mental and physical health outcomes, minimal research has examined the impact of interventions targeting weight self-stigma for obese populations (Lillis et al., 2011). However, the data that does exist is promising and suggests an acceptance-based intervention, such as Acceptance and Commitment Therapy (ACT), might be effective for decreasing weight self-stigma and impacting health-related behaviors in overweight and obese individuals who struggle with weight self-stigma (Levin, Potts, Haeger, & Lillis, 2017; Lillis et al., 2010; Palmiera, Pinto-Gouveia, & Cunha, 2017). Guided self-help interventions are a promising format for disseminating weight self-stigma treatment. They allow for patient flexibility, accessibility, and lower overall cost-demands (Bower, Richards, & Lovell, 2001) and may be attractive to individuals who would not otherwise seek treatment, a common theme among individuals who are overweight or obese (Lillis, Hayes, Bunting, & Masuda, 2009; Lillis & Wing, 2015). However, there has been little research evaluating the efficacy of self-help treatment for weight self-stigma and health behavior change in obese populations.

The focus of this literature review includes obesity prevalence, cost, health risk, and associated poor health behavior risk; standard behavioral treatment (SBT) for weight-loss; challenges associated with SBT, weight-normative vs. weight-inclusive; weight-related discrimination and weight stigma; Acceptance and Commitment Therapy (ACT) as an alternative treatment; a comprehensive review of ACT for stigma; primer on self-help and guided self-help; and review of ACT guided self-help interventions.
CHAPTER II
REVIEW OF THE LITERATURE

Prevalence of Obesity

Obesity is a serious public health issue impacting the U.S. and other westernized countries (Puhl & Brownell, 2006), and it is becoming a more complex diagnosis than previously recognized. The definition of obesity is excess body fat or adiposity, and the most common anthropometric (e.g., human measurement) technique for determining obesity is measured by excess body weight via body mass index (BMI; obese = BMI ≥ 30 kg/m² and overweight = BMI ≥ 25 kg/m²). The recognition of obesity as a physical health issue has grown tremendously in the past 30 years (Andreyeva, Sturm, & Ringel, 2004; Bell & Hamer, 2016), as characterized by a 37% adult obesity prevalence (Flegal et al., 2016; Kim & Basu, 2016) and nearly a 70% adult overweight and obesity combined prevalence (Ogden, Carroll, Kit, & Flegal, 2012).

Cost of Obesity

Approximately 5% to 10% of total U.S. healthcare costs are spent on obesity, overweight interventions, and associated complications (Mackey et al., 2016). Increased healthcare costs are spent on overweight and obese persons than average-weight individuals. For example, the incremental obesity-related healthcare cost between 2008 and 2010 in the U.S. was $1,723 greater for obese than non-obese individuals (Tsai, Williamson, & Glick, 2011). Data currently suggests that while obesity rates are likely to
Table 1

**BMI Range Classification**

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<tr>
<td>Underweight</td>
<td>$\leq 18.50$</td>
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<tr>
<td>Average</td>
<td>18.50 to 24.99</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.00 to 29.99</td>
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<tr>
<td>Obese Class I – obese</td>
<td>30.00 to 34.99</td>
</tr>
<tr>
<td>Obese Class II - severely obese</td>
<td>35.00 to 39.99</td>
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<tr>
<td>Obese Class III - very severely</td>
<td>$\geq 40$</td>
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plateau, the cost associated with obesity is likely to continue growing (Flegal et al., 2016). In 2006, the annual medical cost associated with obesity was estimated at $40 billion (Finkelstein, Trogdon, Cohen, & Dietz, 2009). The estimated cost for obesity in 2010 rose to $86 billion and now more recent analyses provide estimates of $209.7 billion (Spieker & Pyzocha, 2016). These estimates do not include the indirect costs associated with obesity, which are currently estimated at $66 billion per year (Cawley & Meyerhoefer, 2012; Spieker & Pyzocha, 2016).

Medicare has recently placed specific attention on behavioral health interventions for obesity and more specifically the cost-effectiveness associated in providing weight-loss treatments (Jacques, Syrek, Schafer, McClain, & Chin, 2011). These efforts have focused particularly on the cost and short-term outcome of programs rather than theoretical foundation supporting proposed treatments and factors maintaining obesogenic lifestyles, which may be the most important area to shift (Hoerger et al., 2015). With increased funding directed for weight-related efforts, it is imperative to develop and examine effective treatments that produce changes in overall health.
Obesity and Related Health Risk

Obesity, as measured by BMI, is associated with a myriad of physical health concerns, such as premature mortality risk, type II diabetes, metabolic complications, and cardiovascular disease (Bell & Hamer, 2016; Cornier et al., 2011; Kopelman, 2007; Solomon & Manson, 1997). Risk of premature mortality is particularly significant for individuals who have a BMI of 30 or greater with two or more co-occurring cardiovascular diagnoses (Solomon & Manson, 1997). A review from Guh et al. (2009) found BMI to be positively correlated with 20 chronic health diagnoses and comorbidities. Significant relationships with obesity included type II diabetes, most cancers, all cardiovascular diseases, asthma, gallbladder disease, osteoarthrosis, and chronic back pain.

Poor Health Behaviors and Related Health Risk

While obesity has been accepted as a lead predictor of risk for premature mortality, health-behaviors contributing to obesity, such as poor diet and sedentary behavior, have also gained considerable attention (Forman & Butryn, 2015; Wang, Li, Chiuve, Hu, & Willett, 2015). Reviews have examined presence of health behaviors in predicting premature mortality and other health risks. In a review of 31 studies examining physical activity and overall health, higher amounts of sedentary behavior, independent of BMI, were linked to a number of negative health risks, including increased risk of premature mortality and cardiovascular disease (Katzmarzyk, Janssen, & Ardern, 2003). Conversely, routine physical activity predicts psychological well-being as well as
physical health benefits, such as important metabolic changes related to decreased diabetes type II risk (e.g., increased high-density lipoprotein cholesterol, decreased low-density lipoprotein cholesterol, lowered blood pressure, weight loss; Mozaffarian, Wilson, & Kannel, 2008).

Adherence to recommended dietary recommendations has been associated with decreased risk for premature mortality (Kant, Leitzmann, Park, Hollenbeck, & Schatzkin, 2009). Even in smaller “doses,” changes in dietary behaviors has shown significant decreases in risk for premature mortality, suggesting health benefits are not only characteristic of larger behavior changes. In an examination of dietary quality and premature death instances among 33,885 U.S. adults, Wang et al. (2015) found increases in diet quality (e.g., greater intake of plant sources of fats, fish, nuts, whole grains) resulted in fewer cardiovascular disease cases (-8.6% of cases), cancer cases (-1.3% of cases), and type II diabetes cases (-12.6% of cases).

Loef and Walach (2012) found the presence of at least four health behaviors (e.g., physical activity, recommended diet or healthy dietary pattern, nonsmoking, alcohol in moderation) was negatively related to risk of premature mortality. In their review, they also found that obese individuals who adopt a healthy lifestyle for at least five to ten years may dramatically alter their acquired risk for premature mortality (Loef & Walach, 2012). These data also suggest the importance for targeting health behaviors, such as eating behaviors and physical activity, as an important route for impacting larger health concerns, such as decreasing risk for cardiovascular disease, diabetes mellitus, and more distal outcomes like risk for premature mortality (Mozaffarian et al., 2008). Given the
relationship to adverse health risk, targeting health behaviors is an important route for increasing overall health in individuals who are obese.

**Behavioral Treatment: The Current Gold-Standard for Weight-Loss**

Standard behavioral treatment (SBT) is considered the gold-standard and first line of treatment for weight-loss for individuals who are overweight and obese (Jensen et al., 2014; Pi-Sunyer et al., 1998) and is considered the most effective treatment in comparison to alternative psychological weight-loss treatments (Shaw, O'Rourke, Del Mar, & Kenardy, 2005). SBT is a well-known and established treatment that is currently given *strong empirical research support* as a weight-loss treatment for obesity and overweight as indicated by the American Psychological Society of Clinical Psychology, Division 12 (Chambless et al., 1998; Franz et al., 2007).

SBT uses a skills-based approach with roots in Learning Theory, which suggests behavior modification can occur when the consequences and antecedents surrounding the behavior is altered (Wing, 1998). This is done in SBT by using stimulus control techniques to change the context in which behaviors occur in an effort to increase the likelihood of goal behavior change, such adherence recommended diet and exercise. Weight-loss is targeted with behavioral techniques by encouraging maladaptive behaviors, such as overeating and sedentary behaviors, to be replaced with healthier behaviors, such as decreased caloric intake and exercise (Butryn, Webb, & Wadden, 2011). Treatment involves establishing clearly-stated goals, problem solving, self-assessment, stimulus control (e.g., noticing internal and external cues), and monitoring
related to diet and physical activity (Butryn et al., 2011; Foster, Markris, & Bailer, 2005).

Meaningful weight-loss as a result of SBT usually ranges from 8% to 10% of initial body weight, which meets the National Institute of Health criteria of favorable change (loss of 5-10% total body weight; Wadden, Butryn, & Wilson, 2007). However, this percent in weight loss often does not indicate a meaningful change for many obese individuals (Kushner, 2014). If a female who weighs 215 pounds, is 5’6” and has a BMI of 34.7 (obese range) loses 8% of body weight (-17.2 lbs.), her new weight of 197.8 changes her BMI to 31.9, which still falls in the obese BMI range.

**Short- Versus Long-Term Standard Behavioral Treatment Outcomes**

Individuals engaging fully with SBT (e.g., controlled trials, specialized clinics) generally experience short-term weight loss (Booth, Prevost, Wright, & Gulliford, 2014; Butryn et al., 2011). However, in one to five years posttreatment, the majority of SBT completers also experience significant weight re-gain characterized by returning to or exceeding pretreatment weight (Jeffery et al., 2000; Wadden et al., 2014).

Wadden et al. (2014) completed a systematic review of SBTs in primary care settings and found short-term success (6-month loss of .6 lbs. to 13.2 lbs.) followed by significant weight gain at 12-24 months post-treatment. Similar results were found in another review of behavioral treatments for weight-loss in primary care settings. Booth et al. (2014) found that even the *most potent* weight-loss treatment, a combination of behavioral treatment, focused diet, and increased physical activity, was still characteristic of poor long-term weight-loss. The most successful long-term weight-loss program
documented in the literature followed individuals for seven years and found 25% of the participants had successfully maintained weight loss of 10% of initial pretreatment body weight (Anderson, Vichitbandra, Qian, & Kryscio, 1999). However, these results are likely inflated because follow-up at seven years was only completed by 35% of participants. More recently, Gilmartin and Murphy (2015) reviewed long-term follow-up for SBT for weight-loss maintenance and found limited evidence to suggest sustained weight-loss after 3 years post-treatment.

In sum, decades of research have shown support for SBT; however, follow-up data is inconsistent and suggest that long-term weight-loss or behavioral gains are unlikely (Stunkard & Penick, 1979). In a review almost thirty years ago, it was noted, “It is only the rate of weight regain, not the fact of weight regain that appears open to debate” (Garner & Wooley, 1991 p.740). It is rather disheartening that consistent efforts to create meaningful weight-loss changes over the past 40 years are predominantly characterized by poor long-term weight-loss.

**Proposed Explanations for Poor Long-Term Weight-Loss**

The majority of individuals who successfully complete a course of SBT (e.g., they lose weight) encounter *nonadherence* to recommended diet and exercise behaviors (Forman & Butryn, 2015; Lowe, 2003). Understandably, following a rigid diet and exercise plan is challenging work that often brings discomfort and increased distress related to internal experiences, such as thoughts and feelings (e.g., “this is too much” or “what I am doing is not really helping” or “I just can’t exercise today”). Additionally,
since SBT primarily targets weight-loss and not a *broader* set of mental and physical health behaviors, significant effort related to diet and exercises that produce only small changes in weight might induce feelings of failure and lead to giving up.

**Experiential avoidance.** Research suggests the construct of experiential avoidance may be a maintaining factor for obesity and treatment nonadherence (Elfhag & Rossner, 2005; Lillis & Kendra, 2014; Teixeira et al., 2004; Wing & Phelan, 2005). Experiential avoidance has been shown to be an important variable that contributes to a myriad of mental and behavioral health challenges (Hayes et al., 2004c) and more recent attention has been given to understand the relationship between experiential avoidance and weight-loss (Forman et al., 2007; Hooper, Sandoz, Ashton, Clarke, & McHugh, 2012; Lillis et al., 2009). Experiential avoidance, which will be covered in greater detail later in this document, refers to responses that function to escape, avoid, or change unpleasant internal experiences (e.g., thoughts, feelings, emotions, memories, sensations). Examples of behaviors reflecting experiential avoidance are *engaging in a binge eating episode* after experiencing feelings of failure regarding treatment goals (e.g., painful internal experience) or *engaging in compensatory behaviors*, such as fasting or incorrect laxative use, following a binge eating episode. In both examples, experiential avoidance is likely successful in the short-term for distraction from feelings of failure; this ineffective long-term coping behavior is characterized by behaviors that push someone further away from actually desired long-term behavior change.

**Personal values.** Individuals who lack more personally motivated reasons for behavior change may also have a greater susceptibility for engaging in experiential
avoidance (Forman & Butryn, 2015; Lillis & Kendra, 2014). Researchers have begun to focus on the processes supporting increased motivation for change. Formulating and acknowledging personally meaningful values while engaging in weight-loss interventions might have important implications for adherence (Forman & Butryn, 2015). With a deeper connection to the purpose of weight-related treatment, individuals may have greater ability to follow through with diet and exercise behaviors when challenging internal experiences arise (Lillis & Kendra, 2014).

**Generalizations of treatment concepts.** With SBT so closely tied to a set of behaviors around prescribed diet and exercise, stimulus control, and self-monitoring, it is not surprising that individuals exhibit strong treatment adherence while in a controlled setting and struggle after needing to generalize treatment concepts in their uncontrolled home environments (Forman & Butryn, 2015). Since SBT does not specifically target personal values during goal-setting, the shift from treatment to maintenance may be particularly challenging.

**Consequences of Poor Weight-Loss Maintenance**

There are additional risks associated with poor long-term weight-loss maintenance. Individuals who return to pretreatment weight after treatment do not benefit from the decreased health risks associated with weight-loss (Bacon & Aphramor, 2011). Poor weight-loss maintenance may also produce unintended consequences, such as weight-cycling, binge eating behaviors, and greater weight stigmatization. Weight-cycling is associated with as much as 50% greater risk for premature mortality (Andres,
Muller, & Sorkin, 1993), increased morbidity as a result of coronary heart disease (Lissner et al., 1991), significant increases in cardiovascular complications (Rzehak et al., 2007), and possibly increases in type II diabetes risk, although longitudinal research for clinical populations has not confirmed this (Kruger, Galuska, Serdula, & Jones, 2004). Individuals who adhere poorly to diet recommendations (e.g., “break the diet”) often engage in binge-eating behavior which may be followed by feelings of inadequacy and/or subsequent compensation behaviors such as fasting or laxative use (Stice, 2002). Lastly, individuals who re-gain weight after successful weight-loss often feel responsible and may more willingly accept and internalize unfair weight-related stereotypes represented throughout society (Schafer & Ferraro, 2011).

**A Shift in the Obesity Agenda: Weight Inclusive Approach**

The existence of poor weight-loss maintenance questions the effectiveness and overall benefit of behavioral weight-loss treatment. Furthermore, the health risks associated with poor weight-loss maintenance suggest unintended, yet harmful consequences of weight-focused interventions. These conclusions support the case for shifting away from the current weight normative approach to a weight inclusive approach in developing treatment that do not view weight-loss as the primary outcome. A weight normative approach emphasizes weight-loss as an important factor for increasing overall health. A weight inclusive approach views health as multifaceted and acknowledges the negative impact societal pressures may have on obese individuals in addition to the importance for increasing health behaviors to impact overall health (Tylka et al., 2014).
Health at Every Size

A recent intervention model that aligns with the weight inclusive approach is Health at Every Size (HAES), which views the importance for health behavior change without emphasizing weight-loss (Bacon & Aphramor, 2011; Burgard, 2006). This includes building body acceptance, teaching intuitive eating (e.g., eating in the presence of hunger), encouraging flexibility in food choices, promoting enjoyable physical activity rather than regimented exercise (Watkins, Ebbeck, & Levy, 2014). Rather than following specific course of treatment, HAES-based interventions follow a set of guiding principles (see Table 2). Within these principles, stigma and weight-related discrimination are main targets. While greater explanation of these variables will be provided later in this document, it is important to note briefly that the HAES approach places importance in

Table 2

Principles of HAES from Bacon and Aphramor (2011)

<table>
<thead>
<tr>
<th>Ethical and cultural standards</th>
<th>Intervention standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions should meet ethical standards. They should focus on health, not weight, and should not be marketed as “obesity prevention.” Interventions should be careful to avoid weight-related discrimination and stigma.</td>
<td>Interventions should focus only on modifiable behaviors where there is evidence that such modification will improve health. Weight is not a behavior and therefore not an appropriate target for behavior modification.</td>
</tr>
<tr>
<td>Interventions should be constructed from a holistic perspective, where consideration is given to physical, emotional, social, occupational, intellectual, spiritual, and ecological aspects of health.</td>
<td>Lay experience should inform practice, and the political dimensions of health research and policy should be articulated.</td>
</tr>
<tr>
<td>Interventions should seek to change major determinants of health that reside in inequitable social, economic and environmental factors, including all forms of stigma and oppression.</td>
<td>Lifestyle-oriented elements of interventions that focus on physical activity and eating should be delivered from a compassion-centered approach that encourages self-care rather than as prescriptive injunctions to meet expert guidelines.</td>
</tr>
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acknowledging the impact weight-related discrimination (e.g., negative treatment of people due to group membership) has had on individuals who are obese and overweight (Brownell et al., 2005; Sue et al., 2007).

**Results and Implications of Health at Every Size Interventions**

Given the weight-inclusive approach is relatively new in obesity literature, there are only four published studies to date examining the effectiveness of HAES interventions for obese and overweight populations. Bacon, Stern, Van Loan, and Keim (2005) examined a 6-month group HAES intervention in comparison to a group diet condition for individuals who were obese or overweight. Participants in the diet condition evidenced weight-loss ($M = 5.2$ kg, $SD = 7.3$ kg) at posttreatment, although most returned to pretreatment weight at 1-year follow-up, demonstrating typical outcomes of weight-loss programs. Participants in the HAES condition steadily maintained initial weight from pretreatment to posttreatment and pretreatment to 1-year follow-up. Most importantly, those in the HAES condition evidenced significant increases in metabolic health at 1-year follow-up (cholesterol and blood pressure), decreases in binge eating behavior, and increases in self-esteem, suggesting health behaviors, mental health variables, and overall health can be positively impacted regardless of weight-loss.

Gagnon-Girouard et al. (2010) examined the effectiveness of a 14-week group HAES intervention for overweight and obese females with significant diet history. The HAES intervention was more effective than the social support and waitlist control group as measured by decreased binge eating behavior from pretreatment to posttreatment and
pretreatment to follow-up. Increased psychological functioning was significantly related to a trend for steady weight-loss at follow-up for those in the HAES intervention. These results suggest HAES may support long-term behavior change and even small weight changes apart from weight-loss as a treatment focus.

Another study compared dietary change outcome differences between a 14-week group HAES intervention, social support group, and control group for overweight females (Leblanc et al., 2012). Only participants in the HAES intervention showed a trend for weight-loss in addition to decreases in food intake that were maintained at 6-month follow-up. Fifty-one females participated in a HAES study with randomization to HAES intervention or control condition (Watkins et al., 2014). Participants in the HAES condition reported high program satisfaction and engagement. The HAES condition has significant increases physical activity and mental health functioning, both of which occurred in the absence of weight-loss.

Preliminary research suggests HAES-based interventions have promise as a psychological treatment. Increased time spent in intervention condition (24 versus 14 weeks) did not produce significantly different treatment outcomes, although differences in measurement do not allow for adequate study comparison (Bacon et al., 2005). Changes in weight-related stigmatization were not documented, but might be important to measure given treatment targets (Carr & Friedman, 2005). Lastly, studies only included female participants who were predominately White, questioning applicability of program for male and non-White individuals. Additional empirical studies are needed to establish treatment effectiveness (Penney & Kirk, 2015).
However, preliminary data suggest the treatment targets and approach within HAES interventions are acceptable for obese and overweight female populations. Significant increases in health behavior, physical health, and mental health outcomes occurred independent of weight status, which is important given the current climate of weight-loss interventions with a weight normative approach (e.g., weight-loss as primary goal). The results from these preliminary HAES interventions suggest support for continued weight-inclusive intervention research, an approach that considers the importance for impacting health behaviors without emphasizing weight-loss while also acknowledging the significance of weight-related inequities that are ever-present in society.

**Weight-Related Discrimination**

The experience of being overweight or obese can often come along with uncontrollable, unpleasant, and undeserving consequences due to being overweight. Discrimination is defined as negative treatment of people due to their membership in a particular group (Sue et al., 2007) and this is evident across the lifespan towards individuals who are overweight and obese (Burmeister & Carels, 2014). The presence of not only unfavorable but demeaning and cruel weight-related discrimination is common in almost every aspect of life (e.g., workplace, education, healthcare, interpersonal) and is correlated with greater psychological distress, poor coping strategies, and decreased social support (Brownell et al., 2005; Carels et al., 2013; Kessler, Mickelson, & Williamson, 1999; Puhl & Heuer, 2009).
Individuals with body weight in the top two BMI categories (very obese and severely obese) are 40 to 50% more likely to report discrimination in general when compared with reports from average-weight individuals (Carr & Friedman, 2005). The U.S. prevalence of weight-related discrimination reported in 2005/2006 by obese individuals (BMI ≥ 30) was estimated at 20.6% for females and 6.1% for males ($p < .01$) (Puhl, Andreyeva, & Brownell, 2008). A greater magnitude of this same relationship was seen for individuals with severe and very severely obese BMI ranges (BMI ≥ 35+), which was estimated at 45.4% for females and 28.1% for males ($p < .05$).

Prevalence rates for overall weight-related discrimination in U.S. adults rose from 7% to 12% between 1995/1996 and 2005/2006 (Andreyeva, Puhl, & Brownell, 2008). Although newer statistics are not available, the current prevalence is estimated to be equivalent to or even exceeding racial discrimination rates (Puhl & King, 2013). These rates are expected continue rising due to lack of significant policy change, such as nonexistent antidiscrimination laws for weight-based discrimination (Equal Employment Opportunity Commission of the United States [EEOC], 2016; Puhl & Heuer, 2010).

**Weight Stigma**

Weight-related discriminatory behaviors are capable of generating weight stigma, which is prevalently held towards individuals who are obese (Andreyeva et al., 2008). The Merriam-Webster Dictionary defines stigma as “a set of negative and often unfair beliefs that a society or group of people have about something” and a stigma was historically used to refer to a mark or a brand designating someone who was inferior (Jones, 1987). This same concept of stigma is represented today by the disapproving
attitudes and beliefs held towards individuals who are of particular *stigmatized* groups (e.g., racial minorities, individuals in same-sex relationships, HIV patients, individuals with mental health diagnoses, and individuals who are overweight/obese) (Livingston, Milne, Fang, & Amari, 2012).

Many who hold stigmatized attitudes towards particular groups may be unaware of their biases. For example, when an Implicit Association Test was used to measure automatic “antifat” bias in providers with obesity specialization, results suggested providers associated obese patients with negative attributes, as well as less motivation in comparison to thin patients (Puhl & Heuer, 2009). In a study examining the presence of weight-related stigma in over 620 primary care providers, over half of the sample perceived obese patients as “awkward, unattractive, ugly, and noncompliant” and one-third as “weak-willed, sloppy, and lazy” (Foster et al., 2003). Obese-related stigma is also present in the attitudes and beliefs of many nurses, medical students, fitness coaches, and dieticians, which *are noticeable* to overweight and obese patients (Puhl & Brownell, 2006).

**Weight Self-Stigma**

When an obese individual adopts weight-based stigmatizing attitudes, identifies their own belonging to the stigmatized group, and also applies stigmatizing attitudes *towards oneself*, the result is *weight self-stigma* (Lillis et al., 2010; Link & Phelan, 2001). Weight self-stigma is different from stigma, which focuses on those who actually do the discriminating, rather than the result of the discrimination on an individual level (Goffman, 1963) weight self-stigma has been conceptualized as containing two major
components: “self-devaluation” and “fear of enacted stigma that results from one’s identification with a stigmatized group” (Lillis et al., 2010, p. 971). An individual is likely to internalize negative weight-related experiences and may also fear similar future situations (Link & Phelan, 2001).

**Impact of Weight Self-Stigma on Physical and Mental Health**

Individuals who experience greater weight self-stigma are less likely to engage in treatment and more likely to experience failure in weight-loss attempts and weight-related behaviors (Brownell, 2010), deceased health-related quality of life (Latner, Durso, & Mond, 2013; Palmeira et al., 2016), psychological distress (Major, Hunger, Bunyan, & Miller, 2014), rates of depression and decreased psychological functioning (Lillis et al., 2010), physical inactivity and eating problems (Puhl & Suh, 2015), avoidance behaviors around weight (Durso et al., 2012), and decreased motivation for valued behavior (Tomiyama, 2014), increased sedentary behavior and increased calorie intake (Major et al., 2014), and are less likely to make healthy lifestyle choices (Palmeira et al., 2016).

**Weight Self-Stigma and Health Behaviors**

Weight self-stigma may play a larger role in weight gain, treatment-seeking behaviors, and maintenance of weight than previously expected (Puhl & Brownell, 2006; Puhl & Brownell, 2009). In a study by Puhl and Brownell (2006), individuals who reported long history of weight challenges characterized by failed weight-loss efforts reported higher levels of weight self-stigma, suggesting those who struggle with weight throughout their lifetimes have a greater risk for also experiencing weight self-stigma.
Binge-eating behavior was significantly related to weight self-stigma in obese individuals with binge-eating disorder, suggesting weight self-stigma might be an important contribution in problematic eating patterns (Puhl & Brownell, 2006). In a sample of 1013 females, weight self-stigma was significantly correlated with refusal for dieting behavior, such that individuals who reported greater levels of weight self-stigma were less likely to engage in dieting (Puhl, Moss-Racusin, & Schwartz, 2007). Authors suggest this relationship may exist because individuals with greater weight self-stigma may not believe they could lose weight if they tried because they have internalized negative weight-based stereotypes.

Palmeira et al. (2016) examined weight self-stigma in a group of 282 obese women with binge eating symptoms and found weight self-stigma significantly predicted weight-related experiential avoidance. In a sample of 100 female undergraduates (Vartanian & Shaprow, 2008), weight self-stigma was significantly related to exercise avoidance and decreased physical activity levels for individuals who were overweight and obese. Lillis et al. (2011) found weight self-stigma to significantly predict health-related quality of life in a predominantly female sample (N = 87). In the same dataset, weight self-stigma and experiential avoidance were found to be significant mediators for the relationship between BMI and health-related quality of life, which suggests health-related quality of life is more dependent upon weight self-stigma and experiential avoidance than BMI. Weight self-stigma is clearly an important and complex variable to consider in relation to weight-related treatments and the weight agenda more broadly (Latner et al., 2014; Lillis et al., 2010).
Interventions for Weight Self-Stigma

Targeting weight self-stigma in individuals who are obese or overweight and struggle with weight self-stigma appears to be an appropriate treatment aim given the national prevalence of weight-based discrimination and the “toxic” impact it is capable of creating at the individual level. As mentioned, weight-loss treatments (e.g., standard behavioral treatments) with a weight-normative approach (e.g., weight-loss as primary goal for increasing health) have poor long-term maintenance, which may also lead to increased risk. These treatments have not been shown to decrease weight self-stigma for individuals and may actually be harmful in contributing to a weight normative agenda (Foster et al., 2003; Puhl & Heuer, 2009). Currently, there are few well-researched treatment options that acknowledge the impact of weight self-stigma for overweight and obese individuals.

Only three known studies have sought to impact weight self-stigma and both have used an Acceptance and Commitment Therapy (ACT) intervention, an acceptance-based intervention that will be covered in more detail in this document. Lillis et al. (2009) implemented a one-day ACT intervention versus control for weight stigma in a sample of 84 individuals who had completed at least 6-months of their weight-loss program. Results at 3 months post-study showed statistically significant changes in general and weight-related acceptance-based outcomes, increased distress tolerance, decreases in weight self-stigma, and a trend for decreased weight for the ACT condition in comparison to the control condition.

A second study used a randomized control trial design (active versus control
group) to evaluate a 10-week group ACT and self-compassion group intervention targeting weight self-stigma and eating patterns for obese women with elevated weight self-stigma (Palmeira Pinto-Gouveia, & Cunha, 2017). Participants in the active condition reported high acceptability and engagement and significant group differences were found after conclusion of the intervention. Significant differences were present at post for the active condition in comparison to control group, such as decreased weight self-stigma, unhealthy eating behaviors, BMI, self-criticism, weight-related psychological inflexibility, and mental health symptoms, as well as increased health-related quality of life and physical exercise.

More recently, a pilot study examined an ACT guided self-help intervention for overweight/obese individuals ($N = 13$) who reported elevated levels of weight self-stigma (Levin et al., 2017). Participants engaged in a seven-week intervention utilizing a self-help ACT book *The Diet Trap* (Lillis, Dahl, & Weineland, 2014), weekly 5- to 10-minute phone coaching calls, and weekly journaling and quizzes. This study evidenced positive results, including strong program engagement, high program satisfaction, and significant pre to post changes in outcome and process variables, including weight self-stigma, health-related quality of life, emotional eating, and key health behaviors (physical activity and dietary choice). There was also a trend for decreased weight from pre to post, with a mean weight-loss of 4.18 pounds ($SD = 6.14$, Range = 1.60 to 16.40). Interestingly, weight self-stigma continued to decrease between post to follow-up assessment, which suggests ongoing treatment effects after completion of intervention. Given this was a small pilot intervention, future research examining the overall utility of
ACT guided self-help for obese and overweight individuals with weight self-stigma is needed.

These three preliminary studies suggest promise in using an acceptance-based intervention to target weight self-stigma for obese individuals. Targeting weight self-stigma may have a broad impact on overall mental and physical health, health-behaviors, and possibly even weight without weight-loss as a primary treatment goal (Forman et al., 2007; Forman et al., 2013; Lillis, Hayes, Bunting, & Masuda, 2009).

Acceptance and Commitment Therapy

ACT (Hayes, Strosahl, & Wilson, 2011) is an acceptance-based cognitive behavioral therapy (CBT) that has growing support for weight-related applications (Forman et al., 2013; Forman, Butryn, Manasse, & Bradley, 2015; Lillis et al., 2009; Lillis & Kendra, 2014). ACT highlights the importance for choosing behaviors that align with personally relevant values, even when doing so is accompanied by uncomfortable internal experiences (e.g., thoughts, feelings, sensations). ACT and other acceptance-based interventions promote behavior change by increasing awareness for the present moment and willingness for all internal experiences, regardless of content (e.g., quality, importance, and veracity). Contrarily, treatments developed from a more traditional CBT perspective, including SBTs for weight-loss, utilize behavior change techniques, but pay close attention to the content of thoughts, and aim to modify negative thoughts and feelings. An example demonstrating acceptance and willingness for content of thoughts is a mother who is obese and fears people negatively judge her due to her body size, but still
makes the choice to attend a child’s tennis match because attending the match is a behavior driven by personal values. Engaging in valued-based behaviors regardless of undesirable associated internal experiences often leads to living a more meaningful life. From this therapeutic perspective, the aim is to impact the function behind one’s experiences (so that they are not barriers to valued action) rather than the content in the experiences.

ACT is based on relational frame theory (RFT), an approach to language and cognition (Barnes-Holmes, Hayes, Barnes-Holmes, & Roche, 2002). RFT is rooted in behavioral analysis and provides an explanation for how natural learning and normal use of language can have dysfunctional consequences. Even without painful stimulus, language can produce psychological pain. Experiential avoidance may be particularly helpful in understanding how obese individuals may handle difficult weight-stigmatizing situations (Lillis & Hayes, 2008; Lillis et al., 2011; Lillis et al., 2010; Weineland, Hayes, & Dahl, 2012). For example, a woman’s memory of being teased for her weight might be as salient and painful as an actual instance. This same memory could arise at any time as well, such as joining up with friends at a party, going to the doctor’s office, or weighing herself on a scale. Although no direct punishing consequences are present in the moment, these instances may bring painful internal experiences (e.g., thoughts and feelings).

It is only natural that people want to avoid painful internal experiences and often in pursuit of avoiding the painful internal experiences, people also avoid important direct experiences. Following the example above, if the woman wants to be certain not to experience the fear of feelings of judgment related to the possibility of how others may
view her, she will not attend the party with her friends, will not visit the doctor, and will not weight herself. These example behaviors in the context of avoiding a painful internal experience are considered experiential avoidance and have a significant contribution to poor health behaviors and decreased quality of life in individuals who are overweight and obese (Elfhag & Rossner, 2005; Lillis & Kendra, 2014; Teixeira et al., 2004; Wing & Phelan, 2005). While behaviors aimed at experiential avoidance often successfully decrease anxiety and fear in the moment (e.g., avoiding a friend’s party), they likely narrow a person’s world and create additional suffering.

ACT uses acceptance, mindfulness, and behavior change strategies to increase psychological flexibility. In essence, psychological flexibility is the ability to be fully-present in the moment and engage in behaviors that truly serve personally-chosen values (Hayes et al., 2011). Experiential avoidance, which is inversely related to psychological flexibility, is defined as responses that function to escape, avoid, or change unpleasant internal experiences (e.g., thoughts, feelings, emotions, memories, sensations). This “unwillingness” to stay in contact with unwanted internal experiences often lead to behaviors that an incompatible with personal values (e.g., avoiding child’s soccer game due to painful emotions or fear for painful emotions).

In ACT, six core processes are used to decrease engagement in experiential avoidance and encourage psychological flexibility: present moment awareness, acceptance, cognitive defusion, self-as-context, values, and committed action. Present moment awareness encourages attention and nonjudgmental awareness for the current experience. Acceptance refers to acknowledging the present moment and the private
events associated, without attempting to change them. **Cognitive defusion** techniques seek to reduce the literal, evaluative functions of thoughts. **Self-as-context** helps one establish that experiences are distinct from the self. Personally constructed and personally meaningful **values** are identified. **Committed action** describes the patterns of ongoing behavior that are aligned with personally meaningful values. These processes aim to foster the broadening of responses that are likely limited in one’s repertoire due to experiential avoidance. New perspectives are fostered through experiential exercises and in-the-moment processing of behaviors.

**Acceptance and Commitment Therapy Treatment for Stigma**

ACT has shown significant clinical utility in both short-term and long-term follow-up, suggesting importance for maintenance of treatment effects (Hayes et al., 2004a; Weineland, Arvidsson, Kakoulidis, & Dahl, 2012). Clients who have shown treatment refractory history also have experienced significant gains from this treatment (Forman et al., 2013; Twohig, 2009), suggesting it may be an appropriate treatment for individuals who have experienced ongoing struggles. In a systematic review of interventions for reducing stigma towards stigmatized groups, ACT was found to have significant support for positively impacting stigma (Krafft, Ferrell, Levin & Twohig, 2018; Livingston et al., 2012). All studies known to date that examine ACT for stigma and self-stigma are provided in chronological order.

Hayes et al. (2004a) completed an RCT comparing the utility of a day-long workshop adhering to ACT or multicultural training for increasing acceptance and
decreasing stigma towards patients with addictions within a healthcare setting. ACT was more effective and also significantly decreased rigidity around previously held stigmatizing attitudes. Another workshop targeted mental health stigma and randomized college students to an ACT or education condition (Masuda, Hayes, Fletcher, & Bunting, 2007). The ACT condition produced greater reductions in mental health stigma, and psychological flexibility played an important role in the magnitude of stigma change. Individuals who exhibited greater levels of psychologically flexible at baseline were also more likely to experience greater decreases in stigmatizing attitudes of mental health.

Luoma, Kohlenberg, Hayes, Bunting, and Rye (2009) implemented an uncontrolled pilot consisting of six one-hour long ACT workshops to impact substance abuse self-stigma (e.g., stigma towards self) in 88 residential treatment patients. Results from the workshop included significant decreases in substance abuse and self-stigma, significant increases in psychological flexibility, and general program satisfaction. Results from a follow-up study (Luoma, Kohlenberg, Hayes, & Fletcher, 2012) suggest participants randomized to the ACT condition experienced prolonged benefits, such as larger reductions in shame, fewer days of substance use, and higher treatment attendance at follow-up sessions.

A small pilot study ($N = 5$) showed ACT was helpful in decreasing stigma associated with same-sex attraction (Yadavaia & Hayes, 2012). A second small pilot trial examined the effect of ACT for reducing HIV self-stigma in a group of five males with HIV-stigma who identified as gay or bisexual (Skinta, Lezama, Wells, & Dilley, 2015). Each participant in the trial reported significant decreases in HIV self-stigma which were
maintained for 2-months post intervention.

Results from studies examining ACT for stigma and self-stigma suggest ACT as a promising intervention for impacting both stigmatic responses/attitudes towards others and stigma experienced towards self. However, more research is warranted to better understand the impact of ACT for stigma for diverse populations.

**A Revised Treatment Agenda for Obesity**

Treatments viewing weight-loss as the primary goal are unsustainable and incur additional risk when taking into account the reality that most people do not keep weight off in the long-term (Foster et al., 2003; Puhl & Heuer, 2009). However, health behavior changes are considered an appropriate treatment target, as shown by significant decreases of overall health risk related to the adoption of key health behaviors (e.g., diet and physical activity). Weight-loss as a primary treatment goal is also problematic because it contributes to a weight normative agenda that does not take into account a broader view of health and consideration of cultural impacts (Tylka et al., 2014). The cultural impacts of weight have tragic consequences that are reflected by an alarmingly high (and rising) discrimination prevalence. Targeting weight self-stigma in individuals who are obese or overweight and struggle with weight self-stigma is also an appropriate treatment aim given the national prevalence of weight-based discrimination, the “toxic” impact it is capable of creating at the individual level (Forman & Butryn, 2015; Forman et al., 2013; Lillis & Kendra, 2014), and the preliminary research that suggests weight self-stigma can be altered when targeted in treatment (Lillis et al., 2009). This suggests the importance
for setting aside weight-reduction, acknowledging the cultural impacts of obesity today, and highlighting the importance for increasing overall health in future efforts to support individuals who are overweight and obese (Lillis et al., 2011).

An appropriate treatment for impacting health behavior change and weight self-stigma is ACT. ACT places the majority of treatment emphasis on process and function, making it particularly beneficial for individuals struggling with weight self-stigma (Masuda et al., 2007). This might occur through identifying personally relevant values and associated values-based behaviors (Lillis et al., 2009; Wilson & Murrell, 2004), increasing awareness for one’s own experience (Forman & Butryn, 2015), and learning to tolerate discomfort or distress (Byrne, Cooper, & Fairburn, 2003; Forman & Butryn, 2015; Hayes, Follette, & Linehan, 2004). However, there are currently only two studies targeting weight self-stigma in overweight and obese individuals (Levin et al., 2017; Lillis et al., 2009), suggesting need for further examination in this area.

**Self-Help Interventions**

Self-help treatments allow for patient flexibility, accessibility, choice in the extent of connection to provider, scalability, and lower overall cost-demands (Bower et al., 2001). Currently, psychological treatments that can stand alone, or are program-led interventions, are being given more attention because of the importance for wide and effective dissemination (Fairburn, 2014). Examples of self-help formats include web-based, app-based, and book-based (bibliotherapy), among others. Self-help is an important research avenue for weight-related interventions given the estimated rise in
weight-related healthcare cost (Flegal et al., 2016). Self-help is particularly attractive as psychological treatments because evidence does not suggest there are significant differences in comparison with traditional treatments (e.g., face-to-face treatments) as suggested by a meta-analysis of self-help versus face-to-face psychotherapy (Cuijpers, Donker, van Straten, Li, & Andersson, 2010). Self-help treatments have been shown to be equally effective as traditional treatments (Bower & Gilbody, 2005; Wadden, Foster, & Brownell, 2002).

While there are a number of reasons self-help is attractive, it is important to also acknowledge the challenges associated. Self-help programs that do not include a guided component may also evidence poor treatment adherence (Latner, Wilson, Stunkard, & Jackson, 2002). Individuals engaging in self-help treatments may “lose steam” and not complete or not find desired results through participation, resulting in memories of an ineffective experience. In an effort to impact adherence for self-help, it has been important to measure program acceptability, such as program satisfaction, expected program usage, or significant changes on study variables (Cuijpers et al., 2010; Nordgreen et al., 2012). Results identifying treatment gaps provide a direction for increasing acceptability in future interventions which may lead to stronger adherence and more meaningful impact if disseminated. Another method for increasing adherence in self-help treatment includes the incorporation of a guided component within the program (Cuijpers et al., 2010; Lovell et al., 2008).

Guided Self-Help

Individuals who might not usually continue self-help treatment or lose interest in
the program often benefit from guided components, which can take a number of formats, such as email, text, and phone coaching (Coote & MacLeod, 2012; Fledderus, Bohlmeijer, Pieterse, & Schreurs, 2012; Nordgreen et al., 2012; Palmqvist, Carlbring, & Andersson, 2012). Guided self-help treatments may also be referred to as minimal contact therapies, which involve less involvement from a therapist than standard treatment (Newman, Szkodny, Llera, & Przeworski, 2011).

Results from a systematic review of 31 studies implementing guided self-help for anxiety disorders suggest uniformity among the outcomes of guided self-help and face-to-face interventions, including non-statistically different drop-out rates (Lewis, Pearce, & Bisson, 2012). Echoing the results from Lewis’ review, Cuijpers et al. (2010) identified self-help as more effective in comparison to waitlist control and slightly less effective than face-to-face therapy in their meta-analysis of guided self-help. However, no significant differences in effect sizes were found between guided self-help and face-to-face treatments. In an effort to provide the most useful human support, Mohr, Cuijpers, and Lehman (2011), developed supportive accountability as a model for increasing adherence, monitoring outcome, and providing guidance in self-help (see Table 3). From this model, a coach impacts treatment adherence and engagement by demonstrating trust, benevolence, and expertise while providing check-ins via e-mail, text message, or phone.

While check-ins framed around supportive accountability do not have to follow a specific format, they must align with particular factors believed to impact adherence, including the following: accountability, social presence, clarity of expectations within
process and outcome, goal-setting, performance monitoring, legitimacy, expertise, reciprocity, trustworthiness, and benevolence (Mohr et al., 2011). Guided self-help treatments following a model for communication often have greater outcomes and adherence, which provides substantial evidence for using a supportive accountability model in guiding support provided in self-help (Andersson & Titov, 2014). While supportive accountability provides a useful model for communication, it does not provide recommendations for frequency of communication, an area that may need additional research.

**Challenges in Guided Self-Help**

There is currently no clear “dose-response” for the relationship between outcome and level of support provided in guided components (Andersson & Titov, 2014; Palmqvist et al., 2012). Guided components within the self-help literature can vary dramatically between studies, with guidance described as “an email or text prompt” to
“30-minute weekly phone calls with a licensed therapist.” Additionally, necessary resources for guided components of guided self-help (e.g., time on behalf of mental health provider) may not be dramatically different from those needed for standard treatments, leading to similar costs of guided self-help and standard treatment (Fairburn, 2014). This appears as a problem since a major characteristic and an attractive quality of self-help is its relationship to scalability and cost-effectiveness (Cuijpers et al., 2010; Fairburn, 2014).

These concerns have more recently been addressed with methods of task shifting, such as the train-the-trainer model (Cooper & Bailey-Straebler, 2015; Herschell, Kolko, Baumann, & Davis, 2010; Zandberg & Wilson, 2013). In this model, an expert trains and supervises a number of individuals in providing a specific type of support to a greater number of clients and has been shown to be effective in web-based training format as well (Levin, Pistorello, Hayes, Seeley, & Levin, 2015). However, there are also significant increased costs associated with this method and also risk the compromised quality of care (Cooper & Bailey-Straebler, 2015). Examining outcomes related to varied levels of therapist support in guided self-help interventions, such as “minimal contact,” has been another avenue in identifying a possible “dose-response.”

A review of self-help in mindfulness treatments found that varying levels of therapist support were significantly related to increased outcome but did not examine specific differences between varying levels of therapist guidance (e.g., <90 min of therapist support and >90 min of therapist support but less than standard therapeutic interventions; Cavanagh, Strauss, Forder, & Jones, 2014). A recent review found guided
self-help for generalized anxiety disorder with minimal therapist contact (<90 min; “minimal contact”) evidenced equivalent outcomes to those of standard treatment (e.g., face-to-face treatment), while guided-self-help for trichotillomania was only as effective as standard treatment with more extensive therapist contact (>9 hours; Newman et al., 2011). Taken together, clear support is provided for clinical implications for guided self-help in comparison to self-help, but there are no established data for appropriate “dose-response (e.g., support and outcome). There is limited data that support different outcomes between extensive or minimal support and more research is needed in this area (Andersson & Titov, 2014; Palmqvist et al., 2012).

While the study methodology and theoretical basis (e.g., no use of coaching model) in Fledderus et al. (2012) has some limitations, methods in this study provide a thorough explanation of procedures between two self-help guided conditions that may deserve further examination. In this study, a minimal email support condition consisted of a weekly email prompt sent by a counselor (e.g., trained graduate student) that contained a review of chapter content from the previous week and a prompt for the participant to respond regarding completion of weekly tasks (e.g., Did you finish all exercises for the week?). Participants were then expected to return an email to their counselor answering whether they had completed appropriate tasks. The counselors then sent a positive and encouraging email back to the participant. No additional email correspondence was provided for this condition.

An extensive email support condition involved a weekly email prompt sent by the counselor as well. This was similar to the first condition but included questions regarding
the participant’s experience (e.g., What did you experience when you performed the exercises?). Participants were then expected to return an email within two days and were also invited to ask questions regarding the book and associated exercises. The counselor responded to participant questions. Results from this study evidenced significant positive changes for both conditions and no significant differences in outcomes between groups (Fledderus et al., 2012).

The importance in providing discussion of the study procedure from (Fledderus et al., 2012), albeit its limitations, is the focus in creating a more structured approach to guided self-help. In a review of guided self-help, it was recommended for guided components to contain a supportive stance throughout communication, evidence accountability for supporting completion of program tasks, and have strong adherence to scripts in order to decrease variability in quality and nature of contact (Andersson & Titov, 2014). More research is needed to determine the different outcomes associated in minimal guidance (e.g., email prompting) and increased guidance (Palmqvist et al., 2012). Further, better understanding the outcomes associated with greater or lesser support (e.g., time) provided by therapists might also hold important implications for cost and feasibility for greater dissemination.

**ACT Guided Self-Help for Weight Self-Stigma**

More recently, ACT self-help interventions have been introduced for increasing health behaviors and also for a number of psychological diagnoses, including depression, anxiety, binge eating, and smoking cessation. A guided self-help program might be
particularly attractive for individuals struggling with weight self-stigma, as treatment seeking is commonly lower in this group and this format would allow for minimal face-to-face interaction (Lillis et al., 2009; Lillis & Wing, 2015; Norcross, 2008). Two well-designed studies are discussed.

Levin et al. (2015) developed and tested a prototype ACT-based guided self-help intervention as an adjunctive treatment for college students currently receiving psychotherapy at a college counseling center. Therapists were trained in using the system and providing guided self-help through web-based training provided as a part of the intervention. Participants \((N = 82)\) showed high program acceptability and significant reductions in depression, anxiety, stress, and psychological inflexibility, as well as increases in mindfulness ability and values.

Another ACT guided self-help intervention targeted psychological distress, depression, and overall mental health in the general population (Fledderus et al., 2012). Participants \((N = 376)\) were randomized to one of three conditions: bibliotherapy and online modules with minimal email support, bibliotherapy and online modules, or waitlist control. Individuals in both active conditions evidenced significant decreases in depression and psychological distress and no significant differences were found between active groups. This suggests ACT is efficacious as a self-help intervention and also suggests can be sufficiently delivered with email-support, an important distinction given the differences found among guided self-help interventions.

There is currently only one known study that has examined the utility of a guided self-help intervention for weight self-stigma in individuals who are overweight or obese
(Levin et al., 2017). Results suggest future research examining the overall utility of ACT guided self-help for obese and overweight individuals with weight self-stigma is needed.

Summary

It appears important to engender a change in the treatment aims for increasing overall mental and physical health for individuals who are obese or overweight and struggle with weight self-stigma (Brownell, 2010; Jensen et al., 2014). An intervention targeting health behaviors and weight self-stigma would likely be beneficial regardless of outcome in weight change (Lillis et al., 2011), given the risks associated with poor health behaviors and high levels of weight self-stigma. A possibly useful intervention would incorporate a multifaceted perspective of health by adopting a weight-inclusive approach (e.g., weight-loss not primary goal) that emphasizes sustainable health behavior change connected to personally meaningful values while acknowledging impacts of weight stigma that are ever-present in society. The current study proposed is an ACT guided self-help program targeting health behavior change and weight self-stigma for individuals who are obese or overweight and struggle with weight self-stigma. The proposed intervention aligns with a weight inclusive approach, which views overall health as multifaceted. This perspective provides a less emphasized weight agenda with a greater emphasis on health behavior change and acknowledgment for cultural impacts of obesity.

Research Aim

The primary purpose of this study is to evaluate an ACT-guided self-help program for weight self-stigma and health behavior change relative to a waitlist control. In an
effort to contribute to self-help literature, this study will compare two versions of guided self-help (phone coaching versus email-prompt) in order to assess differences that may be associated with varied levels of assistance in guided components. Investigating the utility of the intervention proposed is important given the history of weight-loss treatment and the lack of available research for interventions with a weight-inclusive approach.

This study aims to answer the following research questions.

- RQ 1: Is ACT guided self-help acceptable and does phone coaching enhance overall program acceptability?
- RQ 2: Does ACT guided self-help produce greater changes in self-report outcome measures of psychological distress, BMI, and health behaviors?
- RQ 3: Does ACT guided self-help produce greater changes in self-report process measures of weight self-stigma, weight-related psychological flexibility, and general psychological flexibility?
- RQ 4: Are program effects mediated by weight self-stigma or weight-related psychological flexibility?
CHAPTER III

METHODS

Design

This study utilized a randomized controlled trial examining two ACT guided self-help programs in comparison to a \textit{waitlist control}. The two ACT guided self-help conditions varied in level of guidance provided. An \textit{ACT guided self-help phone prompting condition} (GSH-P) provided greater assistance with greater personalization throughout the program and an \textit{ACT guided self-help email prompt condition} (GSH-E), \textit{which} provided less assistance and personalization throughout the program. The \textit{waitlist control} condition received no active program between study assessment time points.

Inclusionary/Exclusionary Criteria

Individuals who identified as overweight or obese and struggled with weight self-stigma were recruited for this study to test the utility of a guided self-help program for decreasing weight self-stigma and strengthening health behaviors. Study inclusion criteria included: age between 18 and 64, a BMI of 27.5 or greater, and presence of weight self-stigma, as measured by a score of 36 or higher on the Weight self-stigma Questionnaire (WSSQ; Lillis et al., 2010), which is associated with distress due to weight self-stigma. Participants were excluded from the study if they were currently pregnant, were currently experiencing chest pain, dizziness, and/or Cardiovascular Diseases, or confirmed a previous diagnosis with a serious psychological disorder that could have interfered with
participation in the self-help program (e.g., bipolar disorder, schizophrenia, suicidality, or eating disorder).

**Participants**

The total sample consisted of 48 participants who consented and enrolled in the study. The sample was 87.5% female and the mode age was 42 years ($M = 39.04$, $SD = 12.68$; see Table 4). By race and ethnicity, the majority of participants identified as White/Caucasian (93.8%) and non-Hispanic or Latino ethnicity (89.6%). Table 4 includes baseline descriptive statistics for each group, as well as weight-related patterns, such as time at current weight, weight pattern throughout the past year, and difficulty in maintaining weight.

Relationship status data indicated 22.9% of participants were single, 62.5% of participants were married or in a domestic partnership, 4.2% of participants were divorced, 2.1% of participants were separated, and 8.3% of participants were involved in a significant relationship with someone. For employment status, most participants reported being employed for wages (68.8%), while other reported student status (14.6%), self-employment (4.2%), or homemaker (12.5%)

**Procedures**

Prospective participants were recruited through flyers posted throughout the community, coordination with the USU Extension Services, and an online research interest form through the USU CBS Lab. Flyers were posted at college health and mental
### Table 4

**Demographics at Baseline Assessment by Group**

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Guided self-help (phone)</th>
<th>Guided self-help (email)</th>
<th>Guided self-help (waitlist)</th>
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<td>%</td>
<td>M</td>
</tr>
<tr>
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<td>0.0</td>
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<tr>
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<td>12.5</td>
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</tr>
<tr>
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<td>36.65</td>
</tr>
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<td>BMI a</td>
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<td>Income</td>
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<td>Weight maintain d</td>
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<tr>
<td>Weight satisfaction e</td>
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<tr>
<td>Total past strategies f</td>
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<td></td>
<td>4.00</td>
</tr>
<tr>
<td>Total current strategies g</td>
<td></td>
<td></td>
<td>1.19</td>
</tr>
</tbody>
</table>

*a Body mass index.

*b Years at current weight.

*c Weight lost throughout last year in pounds.

*d Challenge in maintaining current weight.

*e Current weight satisfaction.

*f Number of past weight-loss strategies.

*g Number of current weight-loss strategies.
health facilities, such as the USU Student Health Center and Counseling Center, and community areas around Cache, Salt Lake, and Grand counties, such as grocery stores, coffee shops, laundromats, gas stations, and supercenters (see Appendix A for Recruitment Materials). Recruitment efforts were coordinated with USU Extension Service supervisors. (USU Extension Services provide support to underserved populations throughout the state of Utah.) The USU Contextual Behavioral Sciences Lab screener was also used to gather additional study interest from individuals who were interested in the lab’s available research studies or those who were specifically interested in participating in the weight-related study. All study recruitment efforts clearly stated the study was USU IRB-approved, affiliated with the Contextual Behavioral Sciences Lab, and identified appropriate research personnel involved.

All prospective participants were invited to complete an initial online screening via the Qualtrics Survey Research Suite, a web-based tool available for data collection, to determine study eligibility before completing the IRB informed consent process. Study eligibility was assessed with age, weight, height, weight self-stigma (via WSSQ), pregnancy, psychological diagnoses, and presence of chest pain/dizziness/cardiovascular disease. Prospective participants were contacted if any further follow-up questions were required for confirmation of eligibility. Eligible participants were sent an informed consent form link and a baseline assessment link via Qualtrics. After IRB informed consent was completed, participants completed baseline assessment and were randomized to one of three study groups via the Qualtrics randomization function. Participants received emails with next steps specific to their assignments.
Study Groups

The study consisted of three study groups: guided self-help with phone prompting (GSH-Phone), guided self-help with email prompting (GSH-Email; comparative condition with decreased interactive support), and waitlist control (inactive).

**Program content.** The two active conditions, GSH-Phone and GSH-Email, contained identical features with regards to the self-help book, journaling, and quizzes. The GSH-Phone condition received phone prompting and the GSH-Email received email prompting as a format to support the guided self-help program. Participants in the GSH-Phone condition received less time and support than what would be provided with a face-to-face intervention. Participants were mailed a study packet with all necessary materials, including a book, journal, and welcome letter (see Appendix E). Materials were provided for participants to keep, and the books and journals were not collected after the study.

**Self-help book.** Participants in both active conditions read the self-help book, *The Diet Trap* (Lillis, Dahl, & Weineland, 2014), which applies Acceptance and Commitment Therapy for individuals who are struggling with weight self-stigma and have a history of weight struggles. This book was also used in a previous open pilot trail examining the utility of guided self-help (Levin, Potts, & Haeger, 2017). The book contains seven chapters and one chapter was assigned each week for the first seven weeks of the study.

**Journaling.** Participants in both active conditions engaged with a journal which outlined all journaling activities throughout the book. Engagement with journal entries was encouraged, but no journals were the collected as part of the study.

**Quizzes.** Participants in both active conditions completed weekly chapter quizzes.
on Qualtrics Survey Research Suite, a web-based tool available for data collection. Quizzes used in the study were developed specifically for the study in an effort to monitor engagement, support adherence, and strengthen understanding of chapter material (see Appendix C). Evaluative feedback was automatically provided after completion of each quiz. Participants were able access quizzes anytime throughout the study and were also allowed multiple attempts. Given the aim of the quizzes was to support engagement, adherence, and understanding, chapter quiz scores were not evaluated throughout the study.

**Phone-check-in.** Participants in the GSH-Phone condition engaged in weekly phone check-ins with a master’s level graduate student in the combined clinical/counseling Ph.D. program. Phone check-ins were provided to support program engagement, assess experience, and monitor/increase engagement (see Appendix D). Check-ins followed a coaching protocol (see Appendix D) created with the supportive accountability model developed by Mohr et al. (2011). Components of supportive accountability highlight coach qualities (i.e., person providing support), program characteristics, and involvement (see Table 3). Additionally, fidelity within phone prompting was measured by adherence to protocol (e.g., checkmark of items covered in phone call) and time spent (e.g., 10 +/-2 minutes per check-in). During the initial phone session, which lasted approximately 30 minutes, the researcher established reasons for engaging, benefits in changing behaviors, and perceived barriers to continuing the program in addition to determining a schedule of weekly check-ins for the following seven weeks for the program. Prior to each weekly check-in, the researcher sent an email
reminder to complete the chapter reading and related tasks in addition to a prompt of the
next scheduled phone check-in. Phone check-ins 2-7 reinforced and addressed program
adherence, elicited motivation for continued participation, and answered any questions
relating to the book’s concepts and exercises. Check-ins 2-7 lasted approximately 5-10
minutes each.

Final check-ins during weeks 7 and 8 reviewed gains, addressed program
concerns and maintenance plans, and supported continued personally identified values-
based behavior change. The final phone check-in during week 8 lasted approximately 30
minutes and was used to process the program. This final check-in did not specifically
consist of new specific program content (e.g., no chapter to review, no assigned
journaling. This final week was included in this study per program feedback from
participants in the pilot study (Levin et al., 2017). It was suggested by pilot study
participants that an additional week could allow for greater time to generalize skills and
perspectives after completion of book and total program. Researcher time spent in
providing support in this condition was estimated at approximately 220 minutes to each
participant (preparation, tracking, email, scheduling, phone check-ins) throughout the
study in this condition (e.g., initial and final session: 30 minutes each, sessions 2-7: 10
minutes each). Time of researcher contact with participants in this condition was
estimated at approximately 120 minutes. This allocation of time is considered to be less
than what would be required by standard face-to-face treatment as suggested by the
Center for Medicare and Medicaid Services website (www.cms.hhs.gov).

**Email prompting.** Participants in the GSH-Email condition received a simple
weekly email reminder to complete the tasks for the week (see Appendix F). This condition was aimed at supporting engagement with very limited time required on behalf of the researcher. This was an important guided self-help alternative to include given there are currently few studies measuring outcomes associated with varied levels of assistance in guided components (e.g., phone prompting vs. email prompting). In a previous study program using guided self-help support, “minimal email-support condition” was found to have equivalent outcomes in comparison to an “extensive support condition,” thus only a minimal support condition was compared to the GSH-Phone condition in this study (Fledderus et al., 2012).

The email prompt component, provided by the graduate student researcher, included a weekly email with a chapter introduction and instructions for the weekly tasks (chapter, journaling, and quiz) and a genuine, positive statement (e.g., *It takes work to read and do these exercises, it really seems like you’re putting in effort.*). If a participant failed to complete a quiz on time, as indicated by Qualtrics submission, researcher sent an email reminder to complete the tasks for the week (e.g., reading, journaling, and quiz), a supportive statement such as, “*I encourage you to stay on-track even though things come up that might make it challenging*” with a prompt to set a new due-date for the late tasks, such as, “*It am here to support you in this program. Would you like an extra 3 days to work on this chapter?*” If a participant did not respond to the reminder email within three days, another similar email prompt was sent to check-in. If no response was received from the participant for the second completion prompt, no other emails were sent for that chapter and the next scheduled chapter prompt was sent. Research time spent in
providing support in this condition was estimated at approximately 90 minutes to each participant throughout the study (preparation, tracking, and email), which is suggested as “minimal support” in previous literature (Fledderus et al., 2012).

**Waitlist group.** Participants in the waitlist group were sent a Qualtrics link for post assessment eight weeks after baseline completion. Participants were later invited to begin the program by choosing either phone support or email support (as outlined in previous two conditions). Participants received the book and journal in the mail. Materials were provided for participants to keep, and the books and journals were not collected during or after program engagement.

**Study Assessment Schedule**

There were two assessments altogether for all participants: baseline assessment at week 1 and post assessment at 8 weeks after baseline. Both assessments were completed using Qualtrics. All measures are located in Appendix B.

**Measures**

All outcome and process measures were assessed at each time point (i.e., baseline, post assessment) for each study group (i.e., GSH-Phone, GSH-Email, and waitlist control).

**Outcome Measures**

Eating Disorder Examination Questionnaire-Binge (EDE-Binge; Fairburn & Beglin, 1994). The EDE-Binge is a 6-item subscale of the EDE, a self-report scale used
to identify frequency and severity of behaviors characteristic of eating disorders and eating-related concerns. The EDE-Binge subscale measures binge eating behavior by occurrence of objective and subjective binge episodes. Participants respond to the items by reporting the occurrence for the situation described in the item prompt. This measure yields single item values rather than a total score. Responses are count variables in nature and higher scores indicate more frequent binge eating behavior.

The EDE and contained subscales, including the Binge subscale, demonstrates strong test-retest reliability and shows good convergent and discriminative validity (Fairburn & Beglin, 1994). The subscale item used in later analyses was frequency of binge eating assessed by reported number of days throughout the past 28 days in which a binge eating episode occurred (i.e., days consumed an unusually large amount of food + experienced loss of sense of control). The mean for female individuals who are obese binge eaters is 2.3 ($SD = 1.0$) and the mean for normal weight female bulimia patients on this subscale is 2.6 ($SD = 0.9$; Wilson & Smith, 1989). More recently updated age-range norms of the EDE-Binge for females are provided by (Mond, Hay, Rodgers, & Owen, 2006). The mean for 18-22 years is 0.87 ($SD = 1.13$), 23-27 years is 0.81 ($SD = 1.10$), 28-32 years is 0.78 ($SD = 1.07$), 33-37 years is 0.69 ($SD = 1.04$), and 38-42 years is 0.61 ($SD = 0.94$). The binge-eating baseline mean for this sample, which has a mean age of 39.04 ($SD = 12.68$), was 3.08 instances throughout the last 28 days ($SD = 5.28$) and reflective of similar past research.

**Dutch Eating Behavior Questionnaire-Emotional Eating** (DEBQ-EE; Van Strien et al., 1986). The DEBQ-EE is a 13-item questionnaire of severity of emotional
eating. The items are rated on a 5-point Likert-scale (1 = Never to 5 = Very Often). A total score is summed by adding the individual totals for each item. The DEBQ-EE demonstrates adequate reliability, strong test-retest reliability, and shows good convergent and discriminative validity. Excellent internal consistency was found in the current sample (baseline Cronbach’s $\alpha = .93$, post assessment: Cronbach’s $\alpha = .96$).

**International Physical Activity Questionnaire – Short Form** (IPAQ-SF; Craig, 2003). The IPAQ-SF is a 4-item assessment of physical activity within the previous week. Items rate activity in four dimensions: intensity, frequency, duration, and energy expenditure, in four domains: leisure time, occupational, transportation, and household. Items are converted into metabolic equivalents (MET levels) based on time and type of activity (e.g., slow, moderate, vigorous). MET levels are calculated as duration x frequency per week X MET intensity for each activity domain. An estimate of total physical activity is also calculated by (MET X min X week$^{-1}$). The IPAQ-SF is developed from a longer version of the same instrument, the IPAQ-Long Form. The IPAQ-Long Form demonstrates high internal consistency, good test-retest reliability, good convergent and discriminative validity, and has been validated in a number of populations (e.g., clinical, non-clinical, and 18- to 65-year-old respondents) and languages.

In general, recall of more vigorous physical activities have shown stronger test-retest reliability when compared to more objective measures of physical activity assessments (e.g., accelerometer). It has been proposed that individuals often remember more vigorous exercise than sedentary behavior, suggesting vigorous activity may be over reported and more sedentary behavior and slow activity may be under reported.
However, this variance among physical activity recall does not significantly impact correlations for total physical activity. There is adequate concurrent validity between the IPAQ Long Form and IPAQ-SF (pooled $p = 0.67$). The IPAQ-SF demonstrates high internal consistency ($\alpha = .89$), good test-retest reliability (75% of correlations observed at 0.65 or higher) and good convergent and discriminative validity. Internal consistency found in the current sample was poor to questionable (baseline: Cronbach’s $\alpha = .59$ post assessment: Cronbach’s $\alpha = .65$). The IPAQ-SF showed less than favorable internal consistency given previous research has shown the IPAQ-SF to have higher levels of reliability (i.e., 0.66 to 0.88; Craig et al., 2003; Deng et al., 2008; Dinger, Behren, & Han, 2006; Lee, Macfarlane, Lam, & Stewart, 2011).

**Weight Control Strategies Scale** (WCSS; Pinto et al., 2013). The WCSS is a 30-item measure assessing frequency of specific behaviors believed to facilitate weight loss. The items are rated on a 5-point Likert-scale (0 = Never to 4 = Always). Subscales include dietary choice (DC), self-monitoring (SM), physical activity (PA), and psychological coping (PC). Higher scores indicate engagement of more weight loss behaviors. The mean at baseline in a previous study of obese and overweight individuals who evidenced struggling with weight self-stigma was 70.20 ($SD = 13.77$). The WCSS demonstrates good internal consistency, strong test-retest reliability, and shows good convergent and discriminative validity. Internal consistency found in the current sample ranged from good to excellent (baseline Cronbach’s $\alpha = .87$, post assessment: Cronbach’s $\alpha = .89$).

**General Health Questionnaire** (GHQ; Banks, 1983). The GHQ is a 12-item
questionnaire of psychological impairment or distress and is appropriate for use in nonclinical and community settings (Hardy, Shapiro, Rick, & Haynes, 1999). The items are rated on a 4-point Likert-scale (4 = Better than Usual to 1 = Much Less than Usual). All items are phrased negatively, except for the first item, which is reverse-scored. A total score is summed by adding the individual totals for each item after reverse-scoring item 1 and subtracting 12. Scores range from 0 to 36 and lower scores indicate a greater level of psychological distress.

The GHQ has adequate sensitivity ($\alpha = .73$) and specificity ($\alpha = .88$) with a threshold score of 3/4 when validated in a sample of hospital employees (Hardy et al., 1999). No means were provided in the original validation article assessing 17-year-olds or the secondary validation assessing hospital employees. Data from an alternative comparison group is provided. In a study mean for female individuals who were overweight or obese, the mean score was 11.97 ($SD = 4.39$; Farhangi et al., 2016). The GHQ demonstrates high internal consistency ($\alpha = .89$), good test-retest reliability and good convergent and discriminative validity. Good internal consistency was found in the current sample (baseline Cronbach’s $\alpha = .82$, post assessment: Cronbach’s $\alpha = .87$).

**Body Mass Index (BMI).** Body mass index was calculated through self-reported weight in pounds and height in inches.

**Process Measures**

**Weight Self-Stigma Questionnaire** (WSSQ; Lillis et al., 2010). The WSSQ is a 12-item questionnaire of weight self-stigma developed specifically for obese and overweight populations. Two correlated subscales are included in the measure: fear of
enacted stigma (ES) and weight-related self-devaluation (SD). The items are rated on a 5-point Likert-scale (1 = Completely Disagree to 5 = Completely Agree). A total score is summed by adding the individual totals for each item. Scores range from 12 to 60 and higher scores indicate greater level of weight self-stigma. Individuals who experience distress due to weight self-stigma generally report scores of 36 or higher (Lillis et al., 2010). The total scale mean for non-treatment-seeking individuals is 26.46 (SD = 9.19) and the mean for treatment-seeking individuals is 36.98 (SD = 8.69; Lillis et al., 2010). The WSSQ demonstrates strong test-retest reliability (α = .79) and shows good convergent and discriminative validity. Good to excellent internal consistency was found in the current sample (baseline Cronbach’s α = .85, post assessment: Cronbach’s α = .91).

**Acceptance and Action Questionnaire for Weight-Related Difficulties** (AAQW; Lillis & Hayes, 2008). The AAQW is a 22-item questionnaire of psychological inflexibility or experiential avoidance for weight-related experiences. The items are rated on a 7-point Likert-scale (1 = Never True to 7 = Always True). A total score is summed by adding the individual totals for each item. Scores range from 22 to 154 and higher scores indicate greater level of psychological inflexibility associated with weight-related experiences. The AAQW demonstrates good internal consistency (α = .83) strong test-retest reliability and shows good convergent and discriminative validity. Good to excellent internal consistency was found in the current sample (baseline Cronbach’s α = .82, post assessment: Cronbach’s α = .90).

**Comprehensive Assessment of Act Processes** (CompACT; Francis, Dawson, &
Golijani-Moghaddam, 2016). The CompACT is a 23-item questionnaire of core ACT processes and a general measure of psychological flexibility. The items are rated on a 7-point Likert-scale (0 = Strongly Disagree to 6 = Strongly Agree). There are three subscales: Openness to Experience (OE) with score range of 0-60, Behavioral Awareness (BA) with score range of 0-30, and Valued Action (VA) with score range of 0-48. After score reversal for 12 items, subscale items are summed and the total score is calculated by summing all subscales. Total scores range from 1-138 and higher scores indicate greater psychological flexibility.

The CompACT demonstrates adequate internal consistency as rated by inter-item consistency ($\alpha = .34$; adequate for inter-item is considered .15 to .50), strong test-retest reliability and strong discriminative validity. The CompACT has been compared against the Acceptance and Action Questionnaire-II (AAQ-II) (Bond et al., 2011), which is a validated measure of psychological inflexibility, a related construct to this measure, and exhibited good convergent validity for Openness to Experience subscale ($r = .79$). Good to excellent internal consistency was found in the current sample (baseline Cronbach’s $\alpha = .90$, post assessment: Cronbach’s $\alpha = .88$).

**Program Satisfaction and Engagement**

Questions created for program satisfaction and engagement measured overall participant experience at post and follow-up assessments for participants in both active conditions. Items were rated on a 6-point Likert scale (1-Strongly Disagree, 6-Strongly Agree). This set of items assessed experience with reading the book, completing journaling and quizzes, and coaching or email prompting support. These items were
adapted from similar research using guided self-help (Levin et al., 2015).

**Analysis Plan**

**Power Analysis**

Two apriori power analyses using G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007), with an alpha level of 0.05 and a power of 0.80 were conducted to (1) identify an appropriate sample size required to detect differences across all three study groups (i.e., GSH-Phone, GSH-Email, and waitlist), (2) to identify an appropriate sample size for detecting differences across only two study groups (i.e., active versus waitlist groups), and (3) to determine the level of detectable effect in the study.

The first power analysis determined appropriate sample size for detecting differences between three conditions with repeated measures ANCOVA tests (3 groups, 2 time points, \( \eta^2 = .20, p < .05, 2\text{-tailed} \)). This suggested allocating \( n = 81 \) to each group and a grand total sample size of \( N = 243 \) as appropriate for detecting differences between all three conditions: phone-prompting guided self-help (GSH-Phone), email-prompted guided self-help (GSH-Email) and waitlist control. With an expected dropout rate of 30% \( (n = 27) \), a total of 316 participants would have been needed to detect medium to large effects, while planning for dropout.

The second power analysis determined appropriate sample size for detecting differences between two conditions with independent \( t \) tests (active conditions combined (GSH-Phone and GSH-Email) versus waitlist control, \( d = .5, p < .05, 2\text{-tailed} \)). This suggested allocating \( n = 64 \) to each group and a grand total sample size of \( N = 128 \) as
appropriate for detecting differences between two conditions: GSH-Phone and GSH-Email combined versus waitlist control. With an expected dropout rate of 30% (n = 27), a total of 167 participants would have been needed to detect medium effects, while planning for dropout.

Enrollment for this study started on 2/20/2017, final post assessment was completed by 11/2/2017, including a total of 48 consented participants. The third power analysis used the obtained sample size to determine the minimal detectable effect for identifying differences between active conditions combined versus waitlist at post assessment. This suggested that the sample of N = 48 (n = 33 in active conditions, n = 15 in waitlist condition), would be powered to detect medium to large effects (d = .89, p < .05, 2-tailed).

**Preliminary Analyses**

All data were analyzed in IBM SPSS Version 22.0. Data were checked for normality by assessing for skewness, kurtosis, and linearity, as well as checking for presence and impact of outliers. Univariate outlier screening was completed to identify any influential cases. Standardized values (z scores) were saved as variables and descriptive variables were calculated with new z scores. Scores greater than z = +/-3.29 were identified and assessed as outliers. Data transformations (i.e., square root, logarithmic) were conducted for any variables that were identified as having non-normal distributions.

Descriptive statistics were calculated for each study group and differences in demographic variables, outcome measures, and process measures were assessed with
independent *t* tests and chi square tests to determine differences between study groups as baseline assessment. Reliability estimates (i.e., Cronbach’s alpha) were calculated for each measure at each time point.

All data were analyzed using an intent-to-treat (ITT) analysis, which allows for all dropout participants to be included in all analyses. Potential presence of patterns in missing data were assessed with Little’s MCAR test. A nonsignificant Little’s MCAR test determines whether data are missing completely at random (Little, 1988; Schlomer, Bauman & Card, 2010). Multiple imputation (MI) with the Markov Chain Monte Carlo method (20 iterations) was used to impute missing data to include all randomized participants at baseline. This method of imputation replaces the missing data with values that would be most likely occur given the available data. Managing missing data with MI provides unbiased estimates, allows for all available data to be used in later analyses, can be used with typical statistical analyses after “likely” datasets are calculated, and allows for simple interpretation (Graham, 2009; McCleary, 2002). The MI technique is accomplished by creating a specified number of additional “likely” imputed data sets. While the amount of likely datasets modeled often range from three to 25 sets, an MI analysis using five likely datasets is adequate for samples smaller than *N* = 100 (Graham, Olchowski, & Gilreath, 2007). The MI approach for missing data works particularly well for smaller datasets (e.g., *N* = 50) that are missing up to 50% missing data at a follow-up assessment (Graham, 2009; Schafer & Graham, 2002). SPSS Version 22.0 was used to generate five sets of imputed complete data sets using the Markov Chain Monte-Carlo method (Graham, 2009; Schafer, 1999).
Study Analyses

Research questions addressed four primary study objectives for a sample of participants who struggle with weight self-stigma, including (1) assessing acceptability and engagement with an ACT guided self-help program, (2) measuring changes in self-reported psychological distress and health behaviors after completion of ACT guided self-help, (3) measuring changes in self-reported weight self-stigma, weight-related psychological flexibility, and general psychological flexibility after completion of ACT guided self-help, and (4) exploring the extent to which significant process variables (i.e., weight self-stigma- WSSQ, weight-related psychological flexibility-AAQW) mediate the relationship between the guided-self-help ACT program and significant outcome variables (i.e., binge eating—EDE-Q-BE, physical activity—WCSS-PA, psychological distress—GHQ).

**Research Question #1: Is ACT guided self-help acceptable and does phone coaching enhance overall program acceptability?** The first research question addressed (1) acceptability by measuring satisfaction and engagement for the ACT guided self-help program conditions and (2) compared acceptability between the active conditions. Descriptive statistics were examined for participant satisfaction variables, participant engagement variables, and completion percentages for reading completion (i.e., overall program engagement). To determine whether the program was more acceptable with the addition of phone coaching, independent t tests were calculated to compare satisfaction and engagement between two active conditions. Effect size Hedges’ g was calculated to determine magnitude of differences between conditions. Although
Cohens $d$ is a commonly used measure of effect size, it can increase bias given it does not account for differences in group $n$ or groups with significantly different standard deviations (Durlak, 2009). Hedges’ $g$, is calculated using a weighted standard deviation, making it a particularly appropriate measure of effect size for unequal sample sizes and samples with significantly different standard deviations.

**Research Question #2: Does ACT guided self-help produce greater changes in self-report outcome measures of general psychological distress, BMI, and health behaviors?** The second research question addressed impact of ACT guided self-help program on outcome measures. This was accomplished by conducting three sets of one-way between subjects ANCOVA tests. First, between-subjects effects were calculated for (a) all three groups (GSH-P vs. GSH-E vs. Waitlist) to compare change in process variables between each group. Next, both active conditions were merged into one active group in order to identify an overall difference between active and control groups. Between-subjects’ effects were calculated for (b) active and waitlist comparisons (GSH-P + GSH-E vs. Waitlist). Finally, the most concentrated condition was compared to waitlist control by calculating between-subjects’ effects for the (c) GSH-P condition and waitlist group.

Within each ANCOVA test, the dependent variable was designated as the outcome variable at post assessment and was adjusted for differences in baseline scores (e.g., covariate = outcome variable at baseline). Missing data were accounted for with multiple imputation to include all participants who consented at baseline in analyses. Each outcome variable (WCSS, DEBQ-EE, EDE-Q-BE, GHQ, BMI) was assessed with a
one-way between subjects ANCOVA test. Pairwise comparisons were conducted to examine differences between conditions for each significant $F$ test (post hoc analyses were only interpreted for tests including three groups as the fixed factor variable) using the least significant difference (LSD) method, which calculates a $t$ test between each pair of group means. ANCOVA and post hoc analyses for each variable within each imputed dataset were then averaged to produce a single ANCOVA test result and associated pairwise comparison for each outcome variable.

**Research Question #3: Does ACT guided self-help produce greater changes in self-report process measures of weight self-stigma, psychological flexibility, and motivating factors for weight loss?** The third research question addressed impact of ACT guided self-help program on process measures. Three sets of one-way between subjects ANCOVA tests were conducted to identify differences between study conditions. First, between-subjects’ effects were calculated for (a) all three groups (GSH-P vs. GSH-E vs. Waitlist) to compare change in process variables between each condition/group. Next, in order to identify an overall difference between active and control conditions, both active groups were merged into one active group. Between-subjects’ effects were calculated for (b) active and waitlist comparisons (GSH-P + GSH-E vs. Waitlist). Finally, the most concentrated condition was compared to waitlist control by calculating between-subjects’ effects for the (c) GSH-P condition and waitlist group.

Within each ANCOVA test, the dependent variable was designated as the process variable at post assessment and was adjusted for differences in baseline scores (e.g., covariate = process variable at baseline). Missing data were accounted for with multiple
imputation to include all participants who consented at baseline in analyses. Each process variable (AAQW, WSSQ, CompACT) was assessed with a one-way between subjects ANCOVA test. Pairwise comparisons were conducted to examine differences between conditions for each significant F-test (post hoc analyses were only interpreted for tests including 3-groups as the fixed factor variable) using the least significant difference (LSD) method. ANCOVA and post hoc analyses for each variable within each imputed dataset were then averaged to produce a single ANCOVA test result and associated pairwise comparison for each process variable.

Research Question #4: Are program effects mediated by weight self-stigma or weight-related psychological flexibility? The final research question sought to test hypothesized mediators of the ACT guided self-help program. The product of coefficients approach was used to test mediation of between group differences on outcome variables (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). This approach was used rather than the causal method for determining mediation (Baron & Kenny, 1986), which requires three separate tests of significance that decreases overall power, and cannot be adjusted to violate assumptions of normality (Preacher & Hayes, 2004).

Process variables that demonstrated significant between-group differences at post-assessment (i.e., WSSQ and AAQW) were explored as a potential, separate mediators (see Figure 1 for proposed mediational model). Outcome measures that demonstrated significant between-group differences at post-assessment (i.e., binge eating—EDE-Q-BE, physical activity—WCSS-PA, general psychological distress—GHQ) were used as dependent variables in the mediational models. The ACT guided self-help conditions
were merged to provide an active versus waitlist independent variable, or predictor variable within the model.

*Figure 1*. Proposed indirect effect of study condition on study variables through separate mediators.
CHAPTER IV
RESULTS

Participants

A total of 48 participants completed the baseline assessment, with 10 (66.7%) completing post assessment in the GSH-Phone condition, 12 (66.7%) in the GSH-Email condition, and 12 (80%) in the waitlist condition (see Figure 2). There were 16 individuals who were screened as ineligible given exclusionary criteria. Of the 61 individuals who were deemed eligible and provided information to complete study consent, 13 participants did not complete consent to participate. Given previous guided self-help research and previous pilot data with similar population and program targets, a drop-out of less than or equal to 30% was considered average.

Figure 2. Participant flow diagram.
(Cuijpers et al., 2010; Levin et al., 2017). There were no differences for post assessment completion rates between each group, chi square = .024, \( p = .90 \).

**Preliminary Analyses**

Data were checked for normality by assessing for skewness, kurtosis, and linearity, as well as presence and impact of outliers. Square root transformations were calculated for the EDE-Q-BE and IPAQ-SF variables due to significant skewness and kurtosis (EDE-Q-BE: raw data: skewness = 1.87, \( SE = .34 \), kurtosis = 2.33, \( SE = .67 \), adjusted: skewness = 0.98, \( SE = .15 \), kurtosis = 1.82, \( SE = .55 \); IPAQ-SF: raw data: skewness = 1.65, \( SE = .34 \), kurtosis = 1.83, \( SE = .67 \); adjusted: skewness = 1.13, \( SE = .32 \), kurtosis = 1.73, \( SE = .56 \)). Univariate outlier screening was completed to identify any influential cases. Standardized values (z scores) were saved as variables and descriptive variables were calculated with new z-scores. Scores greater than \( z = +/-3.29 \) were identified and assessed as outliers. Outliers were identified within the IPAQ-SF variable, but none were determined to be problematic given all scores were within acceptable ranges.

Descriptive statistics were calculated for each study group. Reliability estimates (i.e., Cronbach’s alpha) were calculated for each measure at each time point using available data at post-assessment (e.g., reliability not assessed using multiple imputation; see Table 5). Poor internal consistency was found for the IPAQ-SF variable during baseline assessment (Cronbach’s alpha = .59) and previous research has shown the IPAQ-SF to have higher levels of reliability (i.e., 0.66 to 0.88; Lee, Macfarlane, Lam, &
Table 5

Repeatability for All Scales at Baseline and Post-Assessment

<table>
<thead>
<tr>
<th>Scales/subscales</th>
<th># of items</th>
<th>Baseline (n = 48)</th>
<th>Post (n = 34)</th>
<th>Cronbach’s alpha (α)</th>
<th>Cronbach’s alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>Cronbach’s</td>
<td>M</td>
</tr>
<tr>
<td>WCSS</td>
<td>30</td>
<td>39.33</td>
<td>14.72</td>
<td>.867</td>
<td>80.59</td>
</tr>
<tr>
<td>WCSS-DC</td>
<td>10</td>
<td>20.08</td>
<td>6.06</td>
<td>.719</td>
<td>33.35</td>
</tr>
<tr>
<td>WCSS-SM</td>
<td>7</td>
<td>4.50</td>
<td>4.90</td>
<td>.842</td>
<td>14.79</td>
</tr>
<tr>
<td>WCSS-PA</td>
<td>7</td>
<td>7.48</td>
<td>5.03</td>
<td>.782</td>
<td>15.47</td>
</tr>
<tr>
<td>WCSS-PC</td>
<td>7</td>
<td>7.63</td>
<td>4.58</td>
<td>.748</td>
<td>18.76</td>
</tr>
<tr>
<td>DEBQ-EE</td>
<td>13</td>
<td>45.51</td>
<td>10.42</td>
<td>.928</td>
<td>44.71</td>
</tr>
<tr>
<td>IPAQ-SF</td>
<td>6</td>
<td>41.21</td>
<td>29.04</td>
<td>.587</td>
<td>41.12</td>
</tr>
<tr>
<td>GHQ</td>
<td>12</td>
<td>14.77</td>
<td>5.35</td>
<td>.817</td>
<td>14.21</td>
</tr>
<tr>
<td>WSSQ</td>
<td>12</td>
<td>44.75</td>
<td>7.48</td>
<td>.854</td>
<td>38.18</td>
</tr>
<tr>
<td>AAQW</td>
<td>22</td>
<td>97.67</td>
<td>17.04</td>
<td>.824</td>
<td>77.62</td>
</tr>
<tr>
<td>CompACT</td>
<td>23</td>
<td>71.30</td>
<td>20.80</td>
<td>.895</td>
<td>84.35</td>
</tr>
<tr>
<td>CompACT -OE</td>
<td>10</td>
<td>26.90</td>
<td>10.31</td>
<td>.799</td>
<td>34.50</td>
</tr>
<tr>
<td>CompACT -BA</td>
<td>5</td>
<td>12.64</td>
<td>7.58</td>
<td>.888</td>
<td>15.53</td>
</tr>
<tr>
<td>CompACT -VA</td>
<td>8</td>
<td>32.28</td>
<td>7.78</td>
<td>.832</td>
<td>34.32</td>
</tr>
</tbody>
</table>

*Available data were used for reliability measurement (MI data were not used).

Stewart, 2011). The IPAQ-SF was not included in quantitative analyses in the current study given considerable reliability concerns at baseline and post assessment. All other reliability estimates were within an acceptable range for each scale and subscale.

Missing Data

There were no missing data at baseline assessment; however, there were missing data at post assessment due to participant dropout (29.2% missing for all post assessment items). To assess whether data was missing completely at random (MCAR) during baseline, Little’s MCAR test was calculated (Bennett, 2001). The Little’s MCAR test
resulted in a chi-square = 5.844 ($df = 313; p = 1.00$), which indicates no identifiable pattern of missingness and that data is likely to be missing completely at random ($p$-value of 1.00 indicates no observable patterns of missing dating throughout the entire dataset).

Omnibus group differences were calculated for completers and non-completers on several demographic variables and all outcome and process variables to examine the sample generalizability and to assess whether data was missing at random (MAR). It is unlikely that any differences between completers and non-completers would greatly change findings for this sample given there were no significant differences regarding age, BMI, and all outcome and process variables (see Table 6).

Table 6

Analysis of Between Group Differences of Post-Assessment Completers and Noncompleters

<table>
<thead>
<tr>
<th>Variables</th>
<th>Noncompleters ($n = 14$)</th>
<th>Completers ($n = 34$)</th>
<th>Mean difference</th>
<th>Independent samples $t$ test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SE$</td>
<td>$M$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Age $^a$</td>
<td>37.43</td>
<td>3.72</td>
<td>39.71</td>
<td>2.11</td>
</tr>
<tr>
<td>BMI $^b$</td>
<td>39.65</td>
<td>2.12</td>
<td>35.06</td>
<td>1.33</td>
</tr>
<tr>
<td>EDE-Q-BE</td>
<td>1.63</td>
<td>0.41</td>
<td>0.81</td>
<td>0.21</td>
</tr>
<tr>
<td>DEBQ-EE</td>
<td>44.71</td>
<td>2.05</td>
<td>45.68</td>
<td>2.06</td>
</tr>
<tr>
<td>WCSS</td>
<td>32.28</td>
<td>3.76</td>
<td>40.66</td>
<td>2.70</td>
</tr>
<tr>
<td>GHQ</td>
<td>15.21</td>
<td>1.38</td>
<td>14.69</td>
<td>1.10</td>
</tr>
<tr>
<td>WSSQ</td>
<td>44.71</td>
<td>1.15</td>
<td>44.59</td>
<td>1.53</td>
</tr>
<tr>
<td>AAQW</td>
<td>97.57</td>
<td>3.17</td>
<td>97.97</td>
<td>3.33</td>
</tr>
<tr>
<td>CompACT</td>
<td>66.62</td>
<td>4.56</td>
<td>71.23</td>
<td>3.85</td>
</tr>
</tbody>
</table>

$^a$ Age in years.

$^b$ Body mass index.

$^c$ Standard error of the mean difference.
Given no patterns among missing data at baseline were identified (i.e., nonsignificant Little’s MCAR test), multiple imputation (MI) with the Markov Chain Monte Carlo method was used to impute missing data to include all randomized participants at baseline.

This method of imputation replaces the missing data with values that would be most likely occur given the available data. The MI technique involves creating a specified number of additional “likely” imputed data sets. SPSS Version 22.0 was used to generate five sets of imputed complete data sets using the Markov Chain Monte-Carlo method with 20 iterations (Graham, 2009; Schafer, 1999). The multiple imputation analysis created five separate “likely” datasets given the available data and allowed all consented participants to be included in all post assessment analyses. Multiple imputation is considered as one of the two “gold-standard” accepted analyses for missing data, with maximum likelihood being another widely accepted procedure (Graham, 2009). Since the underlying assumptions are similar between each method, the decision to use either of these approaches is largely impacted by the nature of the data and the analysis plan. Maximum likelihood is often incorporated into growth curve analyses (e.g., MMRM models) while multiple imputation is often used with ANCOVA and regression.

After data were screened, cleaned, and imputed, basic descriptive statistics were calculated for each study variable at post assessment to assess for differences between the original and intent-to-treat datasets (see Table 7). Results suggest minimal differences between dataset descriptive statistics. Imputed post assessment data were used for quantitative analyses to allow for all consented participants to be included in analyses.
Table 7

*Scales at Post-Assessment with Available Sample Data and MI Intent-to-Treat Data*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Original (n = 34)</th>
<th>Intent-to-treat (n = 48)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>EDE-Q-BE</td>
<td>1.88</td>
<td>4.18</td>
</tr>
<tr>
<td>DEBQ-EE</td>
<td>44.71</td>
<td>12.14</td>
</tr>
<tr>
<td>IPAQ</td>
<td>41.21</td>
<td>29.04</td>
</tr>
<tr>
<td>WCSS</td>
<td>80.59</td>
<td>17.40</td>
</tr>
<tr>
<td>GHQ</td>
<td>14.21</td>
<td>6.61</td>
</tr>
<tr>
<td>WSSQ</td>
<td>38.18</td>
<td>10.45</td>
</tr>
<tr>
<td>AAQW</td>
<td>77.62</td>
<td>22.62</td>
</tr>
<tr>
<td>CompACT</td>
<td>84.35</td>
<td>20.16</td>
</tr>
</tbody>
</table>

<sup>a</sup> MI pooled mean and standard deviation were used.

Presence of baseline differences in demographic variables, outcome measures, and process measures between conditions were assessed with independent *t*-tests and chi square tests (see Tables 8 and 9). Since ANOVA and chi square tests revealed no significant baseline differences at *p* < .05 between conditions for any outcome or process variables, groups were considered similar at baseline.

**Research Question #1: Is ACT Guided Self-Help Acceptable and Does Phone Coaching Enhance Overall Program Acceptability?**

The first research question examined whether ACT guided self-help could be an acceptable program for individuals who are overweight and experience weight self-stigma and whether phone coaching (versus email prompting) enhanced acceptability. Self-report program satisfaction and engagement variables from both active conditions at post assessment were used to characterize overall program acceptability.
### Table 8
**Between Group Comparisons for Demographic Variables at Baseline**

<table>
<thead>
<tr>
<th>Heading</th>
<th>Guided self-help (phone)</th>
<th>Guided self-help (email)</th>
<th>Guided self-help (waitlist)</th>
<th>$X^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>13 86.7 1</td>
<td>14 77.8</td>
<td>15 100.0</td>
<td></td>
<td>3.73</td>
</tr>
<tr>
<td>Male</td>
<td>2 13.3 4</td>
<td>15 8.8</td>
<td>0 0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>15 100.0</td>
<td>16 88.9</td>
<td>14 93.3</td>
<td></td>
<td>0.73</td>
</tr>
<tr>
<td>Black/African American</td>
<td>0 0.0 1</td>
<td>1 5.6</td>
<td>0 0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Race</td>
<td>0 0.0 1</td>
<td>1 5.6</td>
<td>1 6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>2 13.3 1</td>
<td>1 5.6</td>
<td>1 13.3</td>
<td></td>
<td>2.71</td>
</tr>
<tr>
<td>Non-Hispanic/Latino</td>
<td>13 86.7 17</td>
<td>13 86.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>37.00 14.79</td>
<td>37.33 12.28</td>
<td>43.13 10.58</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>BMI (^a)</td>
<td>36.15 6.92</td>
<td>37.39 7.08</td>
<td>37.90 6.81</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>3.33 4.00</td>
<td>3.00 2.50</td>
<td>2.80 2.24</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Years at current weight</td>
<td>2.13 3.04</td>
<td>1.89 1.00</td>
<td>2.07 3.81</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Weight (in pounds) lost</td>
<td>2.20 2.00</td>
<td>2.67 3.00</td>
<td>1.87 1.30</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>Current weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty in maintaining current weight.</td>
<td>3.87 4.00</td>
<td>4.22 4.00</td>
<td>4.33 1.84</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Current weight satisfaction.</td>
<td>1.87 2.00</td>
<td>1.83 1.00</td>
<td>1.73 1.79</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Number of past weight-loss</td>
<td>3.73 4.00</td>
<td>4.50 2.18</td>
<td>4.87 1.81</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>strategies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of current weight-loss</td>
<td>1.27 1.00</td>
<td>0.67 0.91</td>
<td>1.20 1.37</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>strategies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Body mass index.
Table 9

*Group Comparisons for Baseline Outcome and Process Measures at Baseline by Group*

<table>
<thead>
<tr>
<th>Measures</th>
<th>GSH-Phone</th>
<th></th>
<th>GSH-Email</th>
<th></th>
<th>Waitlist</th>
<th></th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>WCSS</td>
<td>40.80</td>
<td>10.09</td>
<td>34.33</td>
<td>17.57</td>
<td>43.87</td>
<td>13.92</td>
<td>1.37†</td>
</tr>
<tr>
<td>DEBQ-EE</td>
<td>48.38</td>
<td>10.18</td>
<td>42.13</td>
<td>11.16</td>
<td>46.07</td>
<td>9.46</td>
<td>.70</td>
</tr>
<tr>
<td>EDE-Q-BE</td>
<td>1.24</td>
<td>1.42</td>
<td>.87</td>
<td>1.36</td>
<td>1.22</td>
<td>1.46</td>
<td>.36</td>
</tr>
<tr>
<td>GHQ</td>
<td>14.63</td>
<td>5.93</td>
<td>14.53</td>
<td>2.62</td>
<td>15.20</td>
<td>7.06</td>
<td>.93</td>
</tr>
<tr>
<td>IPAQ-SF a</td>
<td>38.45</td>
<td>29.06</td>
<td>28.10</td>
<td>18.52</td>
<td>52.98</td>
<td>35.82</td>
<td>2.21†</td>
</tr>
<tr>
<td>WSSQ</td>
<td>44.25</td>
<td>6.43</td>
<td>44.24</td>
<td>6.13</td>
<td>45.87</td>
<td>9.91</td>
<td>.61</td>
</tr>
<tr>
<td>AAQW</td>
<td>98.06</td>
<td>13.38</td>
<td>94.53</td>
<td>17.44</td>
<td>100.80</td>
<td>20.30</td>
<td>.70</td>
</tr>
<tr>
<td>CompACT</td>
<td>65.13</td>
<td>17.27</td>
<td>73.31</td>
<td>18.71</td>
<td>76.40</td>
<td>25.45</td>
<td>.33</td>
</tr>
</tbody>
</table>

a Square root transformations were used for determining baseline differences.
† p < .10 for ANOVA comparing group differences at baseline.

Program Satisfaction

Program satisfaction was measured by post assessment satisfaction questionnaire items. Independent sample *t* tests were calculated for each program satisfaction variable by condition (see Table 10). Participant satisfaction items were rated on a 6-point rating scale (1-strongly disagree, 6-strongly agree). A mean score of at least 4 “slightly agree” was used for determining adequate program satisfaction. Item 12, agreement of helpfulness of program *without* coaching or prompting, was phrased negatively, thus a mean score of at most 3 “slightly disagree” was used for determining adequate program satisfaction. All 13 participant satisfaction variables for both active study conditions met adequate ratings (i.e., rating of at least 4-“slightly agree” for 12 items and 3-“slightly disagree” for the negatively phrased item). Results indicated participants in both conditions were satisfied with the program and all components.
Table 10

Program Satisfaction for Active Conditions at Post Assessment

<table>
<thead>
<tr>
<th>Program satisfaction variables</th>
<th>GSH-Phone</th>
<th>GSH-Email</th>
<th>Independent t-test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>1. Overall, I was satisfied with the quality of the book.</td>
<td>5.33</td>
<td>0.71</td>
<td>5.00</td>
</tr>
<tr>
<td>2. The book was helpful to me.</td>
<td>5.44</td>
<td>0.73</td>
<td>4.92</td>
</tr>
<tr>
<td>3. I was able to understand the concepts presented in the book.</td>
<td>5.67</td>
<td>0.50</td>
<td>5.58</td>
</tr>
<tr>
<td>4. I felt the book was made for someone like me.</td>
<td>5.22</td>
<td>1.20</td>
<td>5.00</td>
</tr>
<tr>
<td>5. Overall, I was satisfied with the quality of the coaching sessions/email prompts.</td>
<td>6.00</td>
<td>0.00</td>
<td>5.33</td>
</tr>
<tr>
<td>6. The coaching sessions/email prompts were helpful to me.</td>
<td>6.00</td>
<td>0.00</td>
<td>4.33</td>
</tr>
<tr>
<td>7. The coaching sessions/email prompts were an important part of the program.</td>
<td>5.89</td>
<td>0.33</td>
<td>4.67</td>
</tr>
<tr>
<td>8. The journaling tool was helpful to me.</td>
<td>4.78</td>
<td>0.97</td>
<td>4.58</td>
</tr>
<tr>
<td>9. I would like to use the entire program again in the future.</td>
<td>5.22</td>
<td>1.09</td>
<td>4.50</td>
</tr>
<tr>
<td>10. I think the program would be helpful for others struggling with weight-related issues.</td>
<td>5.67</td>
<td>0.71</td>
<td>4.92</td>
</tr>
<tr>
<td>11. I would recommend the program to others struggling with weight-related issues.</td>
<td>5.56</td>
<td>0.88</td>
<td>4.83</td>
</tr>
<tr>
<td>12. The book would have been just as helpful without any phone coaching or email prompting.</td>
<td>2.33</td>
<td>1.00</td>
<td>3.83</td>
</tr>
<tr>
<td>13. I intend to continue using the skills and concepts I learned in the program.</td>
<td>5.56</td>
<td>0.73</td>
<td>4.42</td>
</tr>
</tbody>
</table>

Note. Program satisfaction items were rated on a 6-point rating scale (1-strongly disagree, 6-strongly agree).

* Item reverse scored.
† † = p < .10.
* = p < .05.
**p < .01.
There were significant differences between active conditions for phone=email prompting variables, such that perceived helpfulness of prompting support (Item #6) and perceived importance of prompting support related to importance of program (Item #7) were significantly greater in the GSH-Phone condition. Additionally, overall satisfaction with prompting support (Item #5) was higher at a trend towards significance for the GSH-Phone condition. The GSH-Phone condition, in comparison to the GSH-Email condition, more strongly disagreed that the book would have been just as helpful without any prompting (Item #12). Participants who received phone coaching more likely to continue using skills and concepts they learned in the program than participants in the GSH-Email condition (Item #13). Results suggest that while both conditions evidenced adequate satisfaction, the participants who received phone coaching felt greater satisfaction and/or support with prompting relative to those who received only email prompting.

Program Engagement

Overall program engagement was assessed by self-report at post. Independent sample t tests for each program engagement variable by condition are provided in Table 11. Participant engagement items were rated on a 6-point rating scale (1-not at all, 6-very much) or 5-point rating scale (1-never, 6-very much). A mean score of at least 4 “moderately” was used for determining adequate program engagement for the items rated on a 6-point rating scale and a mean score of 3 “somewhat” was used for determining adequate program engagement for the item on a 5-point rating scale (see Table 11 key for item descriptions).

Program engagement for reading and exercise completion was relatively high for
Table 11

Program Engagement by Guided Self-Help Condition

<table>
<thead>
<tr>
<th>Program engagement variables</th>
<th>GSH-Phone</th>
<th>GSH-Email</th>
<th>Independent t-test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>How much of the Diet Trap book did you read? a</td>
<td>98.33</td>
<td>3.54</td>
<td>77.33</td>
</tr>
<tr>
<td>How carefully did you read the book? b</td>
<td>5.00</td>
<td>0.71</td>
<td>4.92</td>
</tr>
<tr>
<td>What percentage of the activities/exercises for the Diet Trap did you complete? a</td>
<td>78.33</td>
<td>11.18</td>
<td>71.58</td>
</tr>
<tr>
<td>How much did you engage in exercises? b</td>
<td>4.56</td>
<td>0.88</td>
<td>4.17</td>
</tr>
<tr>
<td>How often did you write in the journal? c</td>
<td>3.44</td>
<td>0.73</td>
<td>3.25</td>
</tr>
</tbody>
</table>

a Item refers to percentage of book read and percentage of exercises completed (0-100%).
b Items were rated on a 6-point rating scale (1-not at all, 6-very much).
c Item was rated on a 5-point rating scale (1-never, 5-very much).
d Item refers to number of journal pages completed (0-35 pages).

* p < .05.

Both conditions. All engagement variables for both active study conditions met adequate ratings (i.e., rating of at least 4-“moderately” for two items and 3-“somewhat” for the 5-point rating item). Results indicated participants in both conditions reported acceptable engagement in the components of the program. All participants in the GSH-Phone condition reported reading at least 90% of the book (78% of participants in the GSH-P condition reported reading 100% of the book) and 83% of participants in the GSH-Email condition reported reading at least half of the book (50% of participants in the GSH-Email condition reported reading 100% of the book), suggesting strong overall program engagement for both conditions. Results from both conditions indicate adequate
engagement with journal prompts, indicating that participants had completed some of the journaling prompts (>3 – “somewhat”). These results suggest relatively high journal engagement given journaling was encouraged, yet optional.

There was a significant difference between the two active conditions for book reading completion, such that participants in the GSH-Phone condition reported significantly greater reading completion in comparison to those in the GSH-Email condition. Results suggest the addition of phone coaching enhanced book reading completion relative to email prompting alone, but did not significantly impact journaling and exercise engagement.

**Research Question #2: Does ACT Guided Self-Help Produce Greater Changes Than Waitlist in Psychological Distress, BMI, and Health Behaviors?**

The second research question assessed effects of the ACT guided self-help program as measured by changes in outcome measures of general psychological distress (GHQ), health behaviors (WCSS, DEBQ-EE, EDE-Q-BE), and BMI. Means and standard deviations for each condition at each assessment are included in Table 12.

Three sets of one-way between-subjects’ analysis of covariance tests were conducted to assess for differences in outcome variables between conditions at post assessment (see Table 13). Analyses compared (a) all three conditions (i.e., GSH-Phone, GSH-Email, waitlist), (b) active conditions to waitlist, and (c) GSH-Phone to waitlist. In each analysis, baseline outcome scores were controlled for by including the baseline scores as the covariate. Analyses in SPSS GLM accounted for unequal n between study
Table 12

All Scales and BMI at Baseline and Post-Assessment by Condition with Intent-to-Treat Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>GSH-Phone</th>
<th>GSH-Email</th>
<th>Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Post</td>
<td>Baseline</td>
</tr>
<tr>
<td>EDE-Q-BE</td>
<td>1.24 1.42</td>
<td>0.20 0.42</td>
<td>0.87 1.36</td>
</tr>
<tr>
<td>DEBQ</td>
<td>48.38 10.18</td>
<td>43.97 9.37</td>
<td>42.13 11.16</td>
</tr>
<tr>
<td>WCSS</td>
<td>40.80 10.09</td>
<td>85.68 14.77</td>
<td>34.33 17.57</td>
</tr>
<tr>
<td>WCSS-DC</td>
<td>20.61 4.24</td>
<td>35.49 5.07</td>
<td>18.61 6.87</td>
</tr>
<tr>
<td>WCSS-SM</td>
<td>4.53 4.79</td>
<td>14.98 5.28</td>
<td>3.67 5.18</td>
</tr>
<tr>
<td>WCSS-PA</td>
<td>8.00 4.57</td>
<td>17.13 4.52</td>
<td>6.22 6.03</td>
</tr>
<tr>
<td>BMI</td>
<td>36.15 6.92</td>
<td>34.36 5.49</td>
<td>37.39 7.08</td>
</tr>
</tbody>
</table>

Note. Descriptive statistics at post assessment are provided with averaged multiple imputation datasets.

Table 13

One-Way Between Subjects Effects Analysis of Covariance Results for Outcome Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>GSH-P vs. GSH-E vs. WL</th>
<th>Active vs. WL</th>
<th>GSH-Phone vs. WL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>η²</td>
<td>F</td>
</tr>
<tr>
<td>EDE-Q-BE</td>
<td>3.76*</td>
<td>.14</td>
<td>6.78*</td>
</tr>
<tr>
<td>DEBQ-EE</td>
<td>1.64</td>
<td>.07</td>
<td>2.20</td>
</tr>
<tr>
<td>WCSS</td>
<td>1.76</td>
<td>.07</td>
<td>1.82</td>
</tr>
<tr>
<td>WCSS-DC</td>
<td>2.60†</td>
<td>.11</td>
<td>0.56</td>
</tr>
<tr>
<td>WCSS-SM</td>
<td>0.12</td>
<td>.01</td>
<td>0.20</td>
</tr>
<tr>
<td>WCSS-PA</td>
<td>3.44*</td>
<td>.14</td>
<td>5.80*</td>
</tr>
<tr>
<td>WCSS-PC</td>
<td>1.47</td>
<td>.06</td>
<td>2.60†</td>
</tr>
<tr>
<td>GHQ</td>
<td>2.16†</td>
<td>.09</td>
<td>4.17*</td>
</tr>
<tr>
<td>BMI</td>
<td>2.43†</td>
<td>.10</td>
<td>4.74†</td>
</tr>
</tbody>
</table>

Note. Descriptive statistics at post assessment are provided with averaged multiple imputation datasets.

* Square root transformation was used for this variable.
† p < .10, * p < .05.
conditions and ANCOVA assumptions were met (i.e., assumptions for normality, linearity, homogeneity of variance and regression, and reliability of covariates).

**EDE-Q-BE.** After controlling for baseline binge eating (covariate), post assessment binge eating (DV) varied between study conditions when comparing all three conditions. Post hoc analyses using the least significant difference method (LSD) showed binge eating was significantly lower at post for the GSH-Phone condition versus waitlist condition \((MD = -0.89, SE = .31, p < .05, CI = -1.42\text{ to }-0.11)\) and there was a trend towards significance for lower binge eating at post for the GSH-Email condition versus waitlist condition \((MD = -0.51, SE = .32, p < .10, CI = -1.72\text{ to }0.13)\), but there was no significant difference at post between GSH-Email and GSH-Phone conditions \((MD = -0.15, SE = .30, p = .53, CI = -.87\text{ to }0.42)\). Similar significant differences were found at post for binge eating, when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist and when comparing GSH-Phone and waitlist conditions.

**DEBQ-EE.** There were no between group differences at post for emotional eating, controlling for baseline DEBQ-EE, when comparing all three conditions or when comparing between the two active conditions versus waitlist. When comparing only the GSH-Phone and waitlist conditions, emotional eating behavior improved at post in the GSH-Phone condition such that non-statistically significant improved emotional eating was reported at post in the GSH-Phone condition.

**WCSS total score.** There were no between group differences at post for weight control strategies, controlling for baseline WCSS total score, when comparing all three conditions or when comparing active conditions combined versus waitlist. However,
differences between GSH-Phone and waitlist approached significance, such that there were greater, yet nonstatistically significant, weight control strategies being used in the GSH-Phone condition at post.

**WCSS-DC.** After controlling for baseline weight-related dietary control (covariate), dietary control (DV) varied at a trend toward significance at post between study conditions when comparing three conditions. Post hoc analyses (LSD) showed dietary control was significantly higher at post for the GSH-Phone condition versus GSH-Email condition ($MD = 3.92, SE = 1.82, p < .05, CI = 0.27 to 7.92$) and there was a trend towards significance for higher dietary control at post for the GSH-Phone condition versus waitlist ($MD = 3.13, SE = 1.89, p < .10, CI = -0.85 to 5.30$). However, there was no difference at post between GSH-Email and waitlist conditions ($MD = 1.52, SE = 1.86, p = .72, CI = -4.31 to 3.18$). This non-significant pattern for reported dietary control was no longer present when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist and when comparing GSH-Phone to waitlist.

**WCSS-SM.** There were no differences between conditions for any of the ANCOVAs for overall weight-related self-monitoring at post.

**WCSS-PA.** After controlling for baseline physical activity related to weight control strategies (covariate), post assessment physical activity (DV) varied between conditions when comparing all three groups. Post hoc analyses (LSD) showed physical activity was significantly greater at post for GSH-Phone versus waitlist ($MD = 3.43, SE = 1.284, p < .05, CI = .75 to 5.23$), as well as a trend towards significance for greater physical exercise at post for the GSH-Email versus waitlist ($MD = 2.04, SE = 1.33, p <
.10, CI = -0.35 to 4.94). However, there was no difference at post between the GSH-Phone and GSH-Email conditions ($MD = .52, SE = 1.21, p = .31, CI = -1.03 to 2.77$).

Similar significant differences were found at post for physical activity, when combining both GSH-Phone and GSH-Email (active conditions) versus waitlist and when comparing GSH-Phone to waitlist, such that greater physical activity was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist.

**WCSS-PC.** There were no significant differences found between groups at post for weight-related psychological coping when comparing all three groups. However, differences between both active conditions at post and differences between GSH-Phone and waitlist conditions at post approached significance, such that greater, yet non-significant, psychological coping was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist conditions.

**GHQ.** After controlling for baseline general psychological distress (covariate), psychological distress (DV) varied between all three conditions at post. Although not statistically significant, post hoc analyses (LSD) revealed differences between GSH-Phone and waitlist approached significance at post, such that non-significantly lower psychological distress was found for GSH-Phone at post, as compared to waitlist ($MD = 3.92, SE = 1.94, p < .10, CI = -0.73 to 7.61$). There was also a trend towards significance for lower psychological distress at post for the GSH-Email versus waitlist ($MD = 2.51, SE = 1.92, p < .10, CI = -0.94 to 6.45$), and there was no difference at between the GSH-Phone and GSH-Email conditions ($MD = 1.10, SE = 1.95, p = .65, CI = -0.38 to 4.66$). Similar, yet significant, differences were found at post for general psychological distress
when combining both GSH-Phone and GSH-Email (active conditions) versus waitlist and when comparing GSH-Phone to waitlist, such that lower psychological distress was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist.

**BMI.** After controlling for baseline BMI (covariate), post BMI (DV) varied at a trend toward significance between study conditions when comparing three conditions. Post hoc analyses (LSD) showed BMI was not significantly lower at post for any particular group: GSH-Phone versus waitlist condition \((MD = 2.23, SE = 1.24, p = .08, CI = -5.75 to 0.13)\), GSH-Email versus waitlist condition \((MD = 1.48, SE = 1.24, p = .12, CI = -4.63 to 0.47)\), or GSH-Phone versus GSH-Email condition \((MD = 0.52, SE = 1.37, p = .70, CI = -3.24 to 2.21)\). BMI was lower at a trend towards significance when comparing both active conditions combined versus waitlist and when comparing GSH-Phone versus waitlist at post, such that there was lower, yet non-statistically significant, reported BMI for the active conditions relative to waitlist (using available data: GSH-Phone mean BMI change of -0.67 points, \(SD = 0.94\), Range = +0.55 to -2.22 points; GSH-Email mean BMI change of -0.31 points, \(SD = 1.82\), Range = +2.48 to -4.29; waitlist mean BMI change of -0.01 points, \(SD = 1.03\), Range = +2.10 to -1.13 points).

**Research Question #3: Does ACT Guided Self-Help Produce Greater Changes Than Waitlist in Weight Self-Stigma, Psychological Flexibility, and Weight-Related Psychological Flexibility?**

The third research question assessed effects of the ACT guided self-help program
as measured by changes in process measures of weight self-stigma (WSSQ), weight-related psychological flexibility (AAQW), and core ACT processes (CompACT). All means and standard deviations for each process variable at each assessment are included in Table 14.

Similar to the second research question, three sets of between subjects ANCOVA tests were conducted to assess for differences in process variables between groups at post assessment (see Table 15). Analyses compared (a) all three conditions (i.e., GSH-Phone, GSH-Email, waitlist), (b) active conditions to waitlist, and (c) GSH-Phone to waitlist. In each analysis, each process variable at post was controlled for by including the baseline scores as the covariate.

**WSSQ.** After controlling for baseline weight self-stigma (covariate), post assessment weight self-stigma (DV) significantly varied between study conditions when

### Table 14

**Process Measures at Baseline and Post-assessment by Group with Intent-to-Treat Sample**

<table>
<thead>
<tr>
<th>Scales</th>
<th>GSH-Phone Baseline</th>
<th>GSH-Phone Post</th>
<th>GSH-Email Baseline</th>
<th>GSH-Email Post</th>
<th>Waitlist Baseline</th>
<th>Waitlist Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSSQ</td>
<td>44.25 6.43</td>
<td>36.04 7.58</td>
<td>44.24 6.13</td>
<td>36.18 10.52</td>
<td>45.87 9.91</td>
<td>43.75 10.56</td>
</tr>
<tr>
<td>WSSQ-SD</td>
<td>23.75 3.51</td>
<td>18.48 4.26</td>
<td>23.53 2.81</td>
<td>19.36 5.52</td>
<td>23.73 4.33</td>
<td>23.73 6.37</td>
</tr>
<tr>
<td>WSSQ-ES</td>
<td>20.50 4.80</td>
<td>17.56 4.05</td>
<td>20.71 5.49</td>
<td>16.82 6.49</td>
<td>22.13 6.33</td>
<td>21.33 6.17</td>
</tr>
<tr>
<td>AAQW</td>
<td>98.06 13.38</td>
<td>69.53 14.72</td>
<td>94.53 17.40</td>
<td>73.17 22.67</td>
<td>100.80 20.30</td>
<td>94.33 19.20</td>
</tr>
<tr>
<td>CompACT</td>
<td>65.13 17.27</td>
<td>82.93 16.18</td>
<td>73.31 18.71</td>
<td>84.46 7.01</td>
<td>76.40 25.45</td>
<td>85.50 21.28</td>
</tr>
<tr>
<td>COMP-OE</td>
<td>24.63 8.84</td>
<td>33.75 10.93</td>
<td>26.83 11.80</td>
<td>35.32 10.04</td>
<td>29.40 10.08</td>
<td>34.13 7.48</td>
</tr>
<tr>
<td>COMP-VA</td>
<td>30.33 8.39</td>
<td>34.91 6.10</td>
<td>33.65 5.41</td>
<td>33.00 11.79</td>
<td>32.67 9.42</td>
<td>35.37 7.94</td>
</tr>
</tbody>
</table>

*Note.* Descriptive statistics at post assessment are provided with averaged multiple imputation datasets.
Table 15  

One-Way Analysis of Covariance Results for Process Variables Using Intent-to-Treat Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>GSH-P vs. GSH-E vs. WL</th>
<th>Active vs. Waitlist</th>
<th>GSH-Phone vs. Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>$\eta^2$</td>
<td>$F$</td>
</tr>
<tr>
<td>WSSQ</td>
<td>3.68*</td>
<td>0.14</td>
<td>7.10**</td>
</tr>
<tr>
<td>WSSQ-SD</td>
<td>2.64†</td>
<td>0.11</td>
<td>4.43*</td>
</tr>
<tr>
<td>WSSQ-ES</td>
<td>2.76†</td>
<td>0.11</td>
<td>5.33*</td>
</tr>
<tr>
<td>AAQW</td>
<td>7.42**</td>
<td>0.25</td>
<td>13.59***</td>
</tr>
<tr>
<td>CompACT</td>
<td>0.14</td>
<td>0.01</td>
<td>0.17</td>
</tr>
<tr>
<td>CompACT-OE</td>
<td>0.37</td>
<td>0.01</td>
<td>0.57</td>
</tr>
<tr>
<td>CompACT-BA</td>
<td>0.23</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>CompACT-VA</td>
<td>1.21</td>
<td>0.05</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Note. Analyses are conducted with averaged multiple imputation datasets.  
† $p < .10$.  
* $p < .05$.  
** $p < .01$.  
*** $p < .001$

comparing three conditions. However, post hoc analyses (LSD) showed weight self-stigma was non-significantly lower at post for the GSH-Phone condition versus waitlist condition ($MD = -5.88, SE = 2.16, p < .01, CI = -8.79 to 2.78$), for the GSH-Email condition versus waitlist condition ($MD = -4.43, SE = 2.36, p < .05, CI = -9.39 to 5.14$), and between the two active conditions ($MD = -1.65, SE = 2.29, p = .49, CI = -2.98 to 5.13$). Similar significant between-group differences were found at post for weight self-stigma when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist and when comparing GSH-Phone to waitlist, such that significantly lower weight self-stigma was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist.

WSSQ-SD. After controlling for baseline weight-related self-devaluation
(covariate), post assessment weight-related self-devaluation (DV) varied at a trend towards significance between all three study conditions. Post hoc analyses (LSD) revealed self-devaluation was significantly lower at post for GSH-Phone versus waitlist ($MD = -3.81, \ SE = 1.58, p < .05, CI = -7.13$ to $-0.40$); however, no differences were found in post self-devaluation for GSH-Email versus waitlist ($MD = -2.76, \ SE = 1.61, p = .35, CI = -6.31$ to $0.59$) or GSH-Phone versus GSH-Email ($MD = -2.476, \ SE = 1.62, p = .23, CI = -2.17$ to $4.26$). Significant differences were found for lower weight-related self-devaluation at post, when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist and when comparing GSH-Phone to waitlist, such that lower weight-related self-devaluation was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist.

**WSSQ-ES.** After controlling for baseline weight-related enacted stigma (covariate), post assessment weight-related enacted stigma (DV) varied at a trend towards significance between all three study conditions. Post hoc analyses (LSD) showed enacted stigma was significantly lower at post for GSH-Email versus waitlist ($MD = -2.33, \ SE = 1.17, p < .05, CI = -4.68$ to $-0.08$) and a trend towards significance was found for lower enacted stigma at post for GSH-Email versus waitlist ($MD = -2.60, \ SE = 1.12, p < .10, CI = -7.13$ to $-0.40$), but no significant difference was found at post between active conditions ($MD = .51, \ SE = 1.22, p = .54, CI = -1.86$ to $2.72$). A similar, yet significant relationship was found at post for weight-related enacted stigma when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist, such that significantly lower weight-related enacted stigma was reported at post for the active conditions versus
waitlist. Differences between GSH-Phone and waitlist conditions approached significance, such that enacted stigma was not significantly lower at post.

**AAQW.** After controlling for baseline weight-related psychological flexibility, as measured and controlled by baseline AAQW scores (covariate), post assessment weight-related psychological flexibility (DV) varied between all three study conditions. Post hoc analyses (LSD) showed weight-related psychological flexibility was significantly lower at post for GSH-Phone versus waitlist ($MD = 18.70$, $SE = 5.27$, $p < .001$, CI = -30.67 to -8.72) and for GSH-Email versus waitlist ($MD = -15.95$, $SE = 5.26$, $p < .01$, CI = -25.13 to -2.68), but there was no significant difference between the two active conditions (GSH-Phone vs. GSH-Email: $MD = -15.95$, $SE = 5.26$, $p = .35$, CI = -15.69 to 5.62). A similar significant difference was found for weight-related psychological flexibility at post when combining both GSH-Email and GSH-Phone (active conditions) versus waitlist and when comparing GSH-Phone to waitlist, such that significantly greater weight-related psychological flexibility was reported at post for the active conditions versus waitlist and for the GSH-Phone versus waitlist.

**CompACT and Subscales.** There were no differences between conditions in any of the ANCOVAs on overall general psychological flexibility and included subscales at post.

**Research Question #4: Are Program Effects Mediated by Weight Self-Stigma or Weight-Related Psychological Flexibility?**

The final research question sought to test hypothesized mediators of the ACT
guided self-help program. The product of coefficients approach was used to test mediation of ACT guided self-help (merged active conditions vs. waitlist condition) on outcome variables that evidenced significant between group differences at post assessment (i.e., EBE-Binge, WCSS-PA, and GHQ). Process variables that demonstrated significant between-group differences for active conditions combined (GSH-Phone and GSH-Email) versus waitlist at post-assessment (i.e., WSSQ and AAQW) were explored as potential, separate mediators (see Table 16). Given the multicollinearity between AAQW and WSSQ scales (baseline: $r = .781, < .001$; post: $r = .830, < .001$), a combined mediational effect was not explored.

Table 16

**Mediation Analyses for Process and Outcome Measures**

<table>
<thead>
<tr>
<th>Mediation models</th>
<th>a path X-M</th>
<th>b path M(X)-Y</th>
<th>c path X-Y</th>
<th>c’ path X(M)Y</th>
<th>Point estimate</th>
<th>SE</th>
<th>Bootstraping 95% CI</th>
<th>Products of coefficients</th>
<th>Proportion mediated (%) (1-c’/c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAQW mediation model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDE-Q-Binge</td>
<td>3.64***</td>
<td>3.00***</td>
<td>2.45*</td>
<td>0.89</td>
<td>0.21</td>
<td>0.09</td>
<td>0.07, 0.43</td>
<td>64.00</td>
<td></td>
</tr>
<tr>
<td>WCSS-PA</td>
<td>3.62***</td>
<td>-0.87</td>
<td>-2.40*</td>
<td>-1.70†</td>
<td>-0.27</td>
<td>0.36</td>
<td>-1.22, 0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHQ</td>
<td>4.86***</td>
<td>-0.54</td>
<td>-2.71**</td>
<td>-2.03</td>
<td>0.71</td>
<td>0.41</td>
<td>-1.05, 0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSSQ mediation model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDE-Q-Binge</td>
<td>2.75***</td>
<td>1.70*</td>
<td>2.45*</td>
<td>1.63</td>
<td>0.10</td>
<td>0.07</td>
<td>0.02, 0.28</td>
<td>33.47</td>
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</tr>
<tr>
<td>WCSS-PA</td>
<td>2.44**</td>
<td>-1.31</td>
<td>-2.40*</td>
<td>-1.69†</td>
<td>-0.27</td>
<td>0.29</td>
<td>-1.21, 0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHQ</td>
<td>3.51***</td>
<td>-0.61</td>
<td>-2.71**</td>
<td>-2.27</td>
<td>0.16</td>
<td>0.36</td>
<td>-0.89, 0.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Analyses are conducted with averaged multiple imputation datasets. AAQW = Acceptance and Action Questionnaire for Weight-Related Difficulties. EDE-Q-Binge = Eating Disorder Exam Questionnaire – Binge Eating. WCSS-PA = Weight Control Strategies Scale – Physical Activity. GHQ = General Health Questionnaire. WSSQ = Weight Self-Stigma Questionnaire. X-M = study condition and mediator, M(X)-Y = Mediator and outcome controlling for study condition, X-Y = study condition and outcome, X(M)Y = Study condition and outcome controlling for mediator. t-test values are reported for paths tested.

† $p < .10$.
* $p < .05$.
** $p < .01$.
*** $p < .001$. 
**Binge eating.** Significant mediational effects were found for WSSQ and AAQW as separate mediators for binge eating (EDE-Q-BE; see Table 16). Both weight-related psychological flexibility (AAQW) and weight self-stigma (WSSQ), separately, fully accounted for the relation between ACT guided self-help and binge-eating behavior (see Figure 3 for explained model). Proportion mediated effect sizes for the AAQW model was 64% and 33.47% for the WSSQ model.

![Diagram showing indirect effect of study condition on binge eating through AAQW and WSSQ](image)

*Figure 3.* Indirect effect of study condition on binge eating through AAQW and WSSQ (separately).
Physical activity. There were no mediational effects found for weight-related psychological flexibility (AAQW) or weight self-stigma (WSSQ) as separate mediators for physical activity (WCSS-PA).

Psychological distress. There were no mediational effects found for weight-related psychological flexibility (AAQW) or weight self-stigma (WSSQ) as separate mediators for general psychological distress (GHQ).
CHAPTER V
DISCUSSION

Outcomes

The present study addressed the following four primary research objectives: (1) to assess the acceptability of two versions of an ACT guided self-help program and to explore the extent to which phone coaching enhances acceptability, (2) to assess differences at post between ACT guided self-help and waitlist conditions for psychological distress, health behaviors, and BMI, (3) to assess differences at post between ACT guided self-help and waitlist for weight self-stigma, weight-related psychological flexibility, and general psychological flexibility, and (4) to explore the extent to which significant process variables (i.e., weight self-stigma, weight-related psychological flexibility) mediate the relationship between the guided-self-help ACT program and significant outcome variables (i.e., binge eating, physical activity, general psychological distress).

ACT Guided Self-Help Program
Acceptability

Participants in both active conditions reported high program satisfaction and engagement. However, participants in the GSH-Phone condition reported significantly greater satisfaction for helpfulness of prompting support, as well as greater perceived importance of prompting as related to the entire program. Participants in the GSH-Phone condition also reported significantly greater engagement with reading the book and
interest in continuing to use skills after termination of the program as compared to the GSH-Email condition. There were no other significant differences between conditions for other satisfaction and engagement variables. Participant satisfaction and engagement results suggest participants who received phone prompting were more satisfied with their phone coaching and viewed their version of support more importantly than participants who only received email prompting. It is possible that phone coaching provided a greater level of supportive accountability and allowed for more opportunities to consolidate book material, thus encouraging more consistent reading (higher rates of engagement) and impactful check-ins. Phone prompting was designed to provide a stronger personalized experience while the email prompting was created to be more “automated” with minimal customization (i.e., a personal greeting and salutation). Participants who received phone coaching may have felt a greater connection to the program given the weekly check-in and in-the-moment responses regarding potentially painful content (e.g., exploring myths of weight-loss, creating timeline of weight struggles throughout life). In summary, while both versions of the ACT guided self-help were acceptable, phone coaching enhanced overall engagement and satisfaction with support.

**Impact of ACT Guided Self-Help on Psychological Distress and Health Behaviors**

A few outcome variables were significantly different between groups (i.e., active conditions combined versus waitlist condition) at post assessment. Binge eating (EDE-Q-BE), general psychological distress (GHQ), and physical activity (WCSS-PA) were significantly lower at post assessment for both active conditions, as compared to waitlist.
This suggests that both versions of the ACT guided self-help were equally effective for increasing physical activity and decreasing binge eating behaviors and general psychological distress. When comparing only the GSH-Phone and waitlist conditions, emotional eating behavior significantly improved at post for the GSH-Phone condition. No other significant differences were found between active conditions for any outcome variables.

The ACT guided self-help program did not outline specific behavioral goals and was highly idiosyncratic; thus, it is understandable that not few outcome variables changed equally during the 8 weeks of the program. The program instead allowed for participants to apply ACT processes in their lives according to their unique, personally chosen valued-directions. A hallmark of ACT is that it can be applied as a transdiagnostic treatment (i.e., treatment that applies the same principles across patient presentations) and directs participants to change behavior only after it is connected to their personal values. For some participants in the current study, this was characterized by increased family engagement (e.g., attending child’s soccer game) or improved self-care, while for others, the personally-valued direction included practicing a more consistent meal-prep or exercise routine. Taken together, the significant differences at post for psychological distress, binge eating, and physical activity, along with the lack of specific symptom or behavioral program targets, suggest the ACT guided self-help program improved health behaviors and symptoms more indirectly through processes such as weight self-stigma or weight-related psychological flexibility.
Impact of ACT Guided Self-Help on Process Variables

The most significant pre to post changes among all outcome and process variables were found for weight self-stigma (WSSQ) and weight-related psychological flexibility (AAQW). Participants in active conditions reported significantly lower weight self-stigma and decreased weight-related psychological flexibility at post in comparison to the waitlist condition. No significant differences at post for were found between the two active conditions, suggesting both ACT guided self-help versions successfully impacted key program processes: weight self-stigma and weight-related psychological flexibility. While post assessment differences in weight-related psychological flexibility between active conditions and waitlist were significant, general psychological flexibility, as measured by the CompACT measure, did not evidence the same pattern. This suggests the ACT guided self-help program did not impact general psychological flexibility, but did impact the specific/tailored process of weight-related psychological flexibility. This might also suggest the two psychological flexibility measures gathered unique constructs (e.g., differences between general and weight-related psychological flexibility). Given participants reported significant history of experiential avoidance related to weight (e.g., inconsistent follow-through with exercise and diet plans, avoidance of social events), it is likely the tailored psychological flexibility measure (i.e., AAQW) was able to capture and assess for changes in experiential avoidance often experienced by individuals with obesity and weight self-stigma. In summary, these results suggest the ACT guided self-help program significantly improved weight self-stigma and weight-related psychological flexibility.
Mediation of Program Effects

Given weight self-stigma and weight-related psychological flexibility were key program targets and were significantly different between groups at post, mediation of ACT guided self-help on program outcomes was an important assessment. Results suggest weight self-stigma and weight-related psychological flexibility, separately, accounted for a portion of the relation between ACT guided self-help and binge eating. No mediational effects were found for other significant outcome variables (i.e., general psychological distress and physical activity), suggesting binge eating, more than other health-related behaviors, may be particularly sensitive to weight-related intervention targeting weight self-stigma and psychological inflexibility, even when the binge eating behavior is not specifically targeted. Previous research has indicated a similar pattern, such that ACT targeting weight self-stigma is particularly sensitive to changes in binge eating and other unhealthy eating patterns, above other health-related behaviors (e.g., Levin et al., 2017; Palmeira et al., 2017).

Lessons Learned with Implementation

Guided self-help is a newer therapeutic format in the field of psychology. There were a number of challenges related to delivering this program within a community sample, as well as considerations for future guided self-help programming. Widespread recruitment efforts increased access for individuals who lived in metro and rural areas throughout Utah, New Mexico, Arizona, Idaho, and Colorado. This far-reaching recruitment plan was used due to the challenges in obtaining an adequate sample size in the previous pilot study (i.e., \( N = 13 \), Levin et al., 2017). While obtaining a community
sample was a positive aspect, individuals in the study were often experiencing unique challenges in their own lives. There were often inconsistent lines of communication, such that participants reported changes in living arrangements, employment, quality of phone service, or access to internet. These changes often impacted the ability for participants to engage as scheduled or sometimes continue any participation, even when they indicated significant interest in continuing the program. In order to continue providing supportive accountability, the researcher’s responses often required creativity, flexibility, and additional time, such as regularly changing scheduled check-in times or using an alternative phone number.

When developing similar programming, ease of internet and phone access should be considered, especially if the program targets a remote or rural population (e.g., programming that seeks to increase access to care) or supports individuals with lower socioeconomic status. As a positive note, these characteristics are likely representative of many patients that might utilize guided self-help in behavioral health settings and provide highly generalizable findings.

**Empirical and Clinical Implications**

There is a longstanding history of inherent challenges associated with weight-related treatments for individuals with obesity, such as poor long-term follow-up, lack of acknowledgment for psychological factors related to weight concerns, and predicted increased cost associated with obesity healthcare. This study, along with previous research (Levin et al., 2017; Lillis et al., 2010; Palmiera et al., 2017), provides support for
ACT as an effective acceptance-based intervention for decreasing weight self-stigma and impacting health-related behavior for individuals with obesity. The unique format of guided self-help allows for greater dissemination, more flexibility on behalf of the healthcare professional and patient, and potentially less cost associated with a service that would usually take place face-to-face or through a typical office encounter.

On a similar note, the method of task shifting, such as the train-the-trainer model (Cooper & Bailey-Straebler, 2015; Herschell et al., 2010; Zandberg & Wilson, 2013), may also be an important consideration when seeking to evaluate and disseminate ACT guided self-help programming. While ACT guided self-help may not be a “stand-alone” intervention for a growing obesity epidemic, the acceptance-based qualities of ACT may be a key factor for initial weight-related programming. Given the significant changes in outcome and process variables for participants in active conditions, it is possible that initial weight-related health behavior change can be enhanced by first acknowledging one’s challenges related to weight stigmatization, as well as evaluation of personal values and commitment to personally-identified behavioral commitments.

Supportive accountability features might be tested in future studies by including a group component option within similar weight-related programming. A peer supportive accountability group may reduce reliance on mental health professionals and increase opportunity for face-to-face connections with others with similar histories. This might be a particularly interesting component to include if less frequent phone check-ins are provided and the participants are geographically closer.

Results of the study are promising and hold meaningful implications for both
clinical practice and weight-related research. Previous research using ACT as a treatment for individuals with obesity is limited (Forman et al., 2013; Forman et al., 2015; Lillis et al., 2009; Lillis & Kendra, 2014). While ACT has been shown to be an effective treatment for many presenting concerns (e.g., Ruiz, 2010), there are only three studies to-date targeting weight self-stigma in overweight individuals (i.e., Levin et al., 2017; Lillis et al., 2009; Palmiera et al., 2017). Additionally, only one study has previously examined the utility of a guided self-help intervention for weight self-stigma in overweight individuals (Levin et al., 2017). Guided self-help may be a particularly appropriate method for individuals in geographically-restricting settings or those who prefer to complete a program on their own.

Flexibility and autonomy throughout one’s program involvement has been shown to be an important consideration when creating weight-related interventions (e.g., Ciao et al., 2012). Individuals who experience weight self-stigma and have participated in multiple weight-loss programs may be less likely to seek treatment for weight-related concerns due to feeling stigmatized from previous interventions (e.g., “will this next program be just like the others?” or “will I be unsuccessful like the other times?”). A guided self-help program, such as the current study, may appear less intensive and may even present fewer barriers for individuals who would not otherwise seek or expect benefits from a weight-related intervention.

This study represents the third study in the ACT literature to target weight self-stigma, and the first study utilizing a randomized controlled-trial design to evaluate a guided self-help program for overweight individuals with elevated weight self-stigma.
Results from this study suggest ACT guided self-help with phone or email prompting support can be an effective program that supports individuals with obesity and weight self-stigma in making meaningful life changes (e.g., increased physical activity, decreased binge eating). Results from this study are aligned with findings from previous research (Levin et al., 2017; Lillis et al., 2009; Palmiera et al., 2017). The unique aspects of the current study were the use of a community sample, randomization to control condition, comparison of supportive accountability levels (phone/email), and an eight-week active program.

The overall study attrition rate was 29.16%, which is considerably low given this program included no face-to-face component, and average dropout rates across a similar length of weight-loss programming are higher (e.g., 39.3%; Moroshko et al., 2011). The ACT guided self-help program also received high program satisfaction ratings and engagement. The transdiaagnostic nature of ACT may be particularly suitable for individuals struggling with obesity because it is process-based, inherently flexible, and allows for more individuality, such as engagement with personally-identified values. The tailored components of the active conditions in the current study, such as personalized greetings in emails or scheduled phone check-ins with the same phone coach throughout the study, may have augmented the inherently flexible qualities of ACT and fostered more independence within the program. Prompting delivered within a supportive accountability framework and a researcher who was well-versed in ACT were elements that likely encouraged participants through support, connection, and accountability for continued study engagement or exploration of personal change.
Every participant in this study reported past history of weight-loss attempts, such as dieting, exercise programming, etc. Participants’ past goals were consistently characterized by efforts to decrease weight in the attempt to change one’s internal experience (e.g., *If I change my weight, I will feel better about myself.*) and to satisfy perceived expectations of others, among other reasons. The function of most participants’ past weight-related programming was to lose weight and this was conversely related to the goals of this program, which did not specifically target weight-loss. The program supported increased awareness for one’s experience (i.e., thoughts, emotions around weight), identification of personally-relevant values, approaching emotional experiences with self-compassion and flexibility, and broadening of perspectives around weight and health (e.g., weight-inclusive versus weight-normative agenda), among other objectives. Taken together, this guided self-help program likely provided a new opportunity for participants—that encouraged discovering personally-identified values, focused on life engagement, and encouraged more effective responses to painful internal experiences (e.g., weight self-stigma). This study, in combination with existing ACT research, provides support for the appropriateness and tailored application of ACT for obesity and weight self-stigma.

**Limitation and Future Directions**

There are a number of limitations and considerations that must be addressed within this study. First, the sample size was not adequate for identifying small effects between active versus waitlist conditions (i.e., GSH-Phone+GSH-Email versus waitlist),
nor was it adequately powered for comparisons between all three conditions. A larger sample would increase the level of precision and increase overall power to identify small effects between conditions. The medium to large effect sizes found in this study for a number of three-group and two-group comparisons suggest that a larger sample may provide a better representation of between group differences at post assessment. A larger sample would also allow for additional analysis between subgroups, such as exploring differences in outcome or process variables for participants coded as “high engagers” or “highly satisfied.”

A second limitation in this study was the delivery of assessment and program components. All active study condition components (i.e., emails, reminders, phone calls) and all assessment time points were administered by the same researcher. Random assignment to multiple researchers, similar to previous pilot study (Levin et al., 2017), might have been a helpful factor in controlling for individual differences between researchers. This might have also been useful in providing greater flexibility for phone check-in times for participants who were randomized to the GSH-Phone condition. There were no specific program integrity checks, such as coded recordings of initial phone meetings or weekly check-ins with participants in the GSH-Phone condition. Coding of recorded calls would have provided a measurement of adherence to the supportive accountability model and general check-in scripts. Furthermore, assessment time points were delivered by the same researcher who provided the entire program. It is possible that an independent assessor in addition to the main researcher, or even an alternative email correspondence for all assessment time points, might have reduced the potential of
socially-desirable responding during post-assessment.

An additional measurement limitation that could have been strengthened is the inclusion of a measurement method other than self-report for health behaviors. An observational or external measure might have provided a greater understanding for behavior change during the course of the study. Although previous research suggests moderate to high agreement between online self-reported weight and measured weight in adult samples (Pursey, Burrow, Stanwell, & Collins, 2014), there are concerns with obtaining only self-report data and limited behavioral or observational data (Smyth & Stone, 2000). Throughout the study period, it may have been helpful to collect data in other formats, such as measured weight through an electronic scale with Bluetooth capability to connect with a smartphone or smart wearable app or an objective measure of physical activity through an electronic application (e.g., smart wearable or smartwatch).

In addition to collecting data on BMI/weight, a smart wearable could also be programmed to collect data on general activities, such as wake-sleep schedule, water consumption, and other principal health factors.

Along with study design considerations, future research may consider altering the configuration of guided self-help conditions. The two active conditions (GSH-Phone and GSH-Email) were distinct in order to test for differences between a more personalized prompting support (i.e., phone coaching) and a less-intensive support (i.e., email prompting). However, an important, yet separate factor may be participant choice. It may be helpful to evaluate outcomes related to participant program choice (e.g., choice of phone or email prompting) or greater general flexibility on behalf of the researcher in
delivering email or phone support throughout a course of programming. This may be an especially important factor to understand given lack of personal choice and independence within weight-related programming have been shown to be treatment-seeking barriers for obese populations (Moroshko et al., 2011). Future research might evaluate a hybrid phone and email prompting condition, in which weekly email prompting is provided and a few phone check-ins are provided, such as an initial call aiming to gain participant buy-in, a mid-program call to assess and support engagement, and a post-program call to encourage continued valued direction.

The current study was developed from the initial pilot study (Levin et al., 2017), which provided considerable participant feedback on program components. Participant feedback from the pilot study included dissatisfaction regarding the final book chapter, which provided educational weight-loss content for diet and exercise. This final chapter provided a stark contrast to the first six chapters of the book, which do not emphasize traditional weight-related psychoeducation, such as diet and exercise. Similar to the previous pilot study, participants in the current study often reported the weight-related agenda provided in the final chapter felt unnecessary and out of place. This feedback suggests an ACT guided self-help program targeting weight self-stigma may function successfully without inclusion of more standard diet and exercise education, which is in alignment with previously identified barriers to treatment-seeking for overweight populations (Moroshko et al., 2011). For example, a previous ACT and self-compassion intervention that included no diet and exercise-related content was found to be more effective at decreasing weight self-stigma and BMI in comparison to an active control
condition, which included medical and nutritional counseling (Palmeira et al., 2017).

Decreased weight self-stigma and significant changes in behavior can result from interventions targeting weight self-stigma, rather than specific diet and exercise recommendations. This suggests that behavior change (and the awareness of values behind meaningful behavior change) for individuals who struggle with weight self-stigma and obesity may involve a more nuanced path. Future research might evaluate the utility of an initial ACT guided self-help program as a foundational process characterized by psychological flexibility and greater weight acceptance prior to administering a more traditional weight-related program (e.g., standard behavioral treatment for weight loss) or a weight-related program with a weight-inclusive approach. Evaluation of such a program could be an important contribution in the pursuit of creating sustainable weight-related health interventions that acknowledge weight self-stigma and encourage personally-valued action.

However, increasing access to care, especially to people who would not otherwise seek treatment, requires increased resources (e.g., cost, personnel, time). This represents a practical challenge in providing low-intensity interventions, such as guided self-help. This challenge speaks to the importance for developing a functional framework for utilizing train-the-trainer models to incorporate other healthcare professionals without formal mental health training by means of train-the-trainer models (Clark, 2011). Although there have been mixed findings regarding safety in such task-shifting efforts in medical settings, a low-intensity mental health intervention that is implemented at an early level within a stepped care model (e.g., healthcare model that allocates appropriate
services for specific needs; Haaga, 2000) may be an important area to explore (i.e., early intervention or preventative mental healthcare; Ho, Yeung, Ng, & Chan, 2016). There is currently no specific framework that provides development or implementation guidance for guided self-help care, especially as it relates to weight-related programming. Increasing clarity of guided self-help components (e.g., 3 to 6 “sessions” with healthcare professional, literature or online content, self-study or exercises) would assist healthcare professionals in providing more effective guided self-help. It is recommended for future research to continue examining ingredients, such as phone coaching components, of effective guided self-help for weight-related concerns. In identifying the important ingredients of guided self-help for weight-related concerns, future efforts may also be spent in developing a framework to guide development and implementation of guided self-help programming.

Given the cost associated with obesity is forecasted to continue rising in following years (Flegal et al., 2016), it is crucial to identify alternatives to, or perhaps tailoring to, standard behavioral treatments and the weight-normative approach (i.e., approach that identifies weight as a definition of health). Taken together, it is possible that targeting weight self-stigma and psychological flexibility might serve an important role in later health-related changes, including changes in BMI or possibly metabolic profiles (a more accurate definition of physical health; Durward, Hartman, & Nickols-Richardson, 2012; Mozaffarian et al., 2008). Given ACT has been shown to be particularly appropriate treatment for long-term health and medical challenges that are inherently inescapable, such as diabetes or chronic pain (Dindo, Van Liew, & Arch, 2017), it may be a suitable
treatment for individuals with obesity and weight self-stigma.

Once one is overweight, being overweight is not only *unavoidable*, but also *unconcealable* in most every daily interaction (e.g., body avoidance is unlikely feasible when in public places). ACT is transdiagnostic (e.g., applicable for more than one presenting concern) and individuals who have obesity and report elevated weight self-stigma often report mental health concerns, such as depression and anxiety (Luppino et al., 2010). This transdiagnostic quality of ACT makes it a particularly appropriate treatment for obesity and weight-self-stigma. It is possible that the inherently flexible approach of ACT and its aim for individuals to engage in behaviors characterized by personally-identified values is an important factor in future health change efforts for individuals with obesity and weight self-stigma. Specifically, ACT may be an important step in creating a foundation for sustainable health behavior change.

**Conclusions**

In summary, the current study used a randomized controlled trial design to evaluate an eight-week ACT guided self-help program targetting weight self-stigma with 48 participants who reported elevated BMI and weight self-stigma. Randomziation to one of three study conditions allowed for comparison of two active conditions (GSH-Phone, GSH-Email) versus waitlist control. The two active conditions differed in the supportive accountability provided; the GSH-Phone condition included weekly phone coaching while the GSH-Email condition provided weekly email prompting. The study-wide attrition rate was 29.16% and findings are generalizable given the characteristics of the
community sample (e.g., multiple weight-loss attempts, metro and rural, life changes). The guided self-help program resulted in high acceptability (i.e., satisfaction and engagement) for both active conditions. Overall satisfaction regarding prompting support, including overall perceived importance of prompting support, was significantly higher for the GSH-phone condition. However, there were no significant differences between active conditions for satisfaction and engagement variables regarding book satisfaction, journaling, and exercises. While participants who received phone coaching reported more satisfaction their prompting support and engaged more fully with book reading, the majority of program components were rated as equally satisfactory between conditions, suggesting ACT guided self-help with either phone or only email support is acceptable.

Participants assigned to either active condition improved significantly on measures of binge eating, physical activity, psychological distress, weight self-stigma, and weight-related psychological inflexibility at post. Only participants in the GSH-Phone condition (in comparison to waitlist) reported improvement for emotional eating at post. While post-hoc comparisons suggested stronger effects for GSH-Phone versus waitlist conditions in comparison to GHP-Email versus waitlist conditions, there were no significant differences between both active conditions for all outcome and process variables except for emotional eating. Significant mediational effects were found, such that weight self-stigma and weight-related psychological flexibility, separately, fully accounted for the relation between ACT guided self-help and binge eating. Results provide preliminary support for ACT guided self-help as an effective intervention for weight self-stigma.
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APPENDICES
Appendix A

Recruitment Materials
Flyers for Study
(Full-size PDF and PNG versions in IRB Recruitment Section)

**MY BODY MY HEALTH STUDY**

Do you feel your weight makes it hard to do the things you want?
Have you ever judged yourself because of your body?
Do your weight-loss efforts put you in that same place after a while?
Do you ever wonder what it would be like to create an accepting relationship with yourself?

We are currently looking for people who:
- are 18 to 70 years old
- have a BMI between 27.5 and 40
- struggle with weight self-stigma
  - Exclusion criteria: pregnancy, cardiovascular diseases or serious psychological diagnoses

**My Body My Health** Study tests a guided self-help program targeting stigma around weight and supports building a relationship with yourself.

**Participation includes:**
- random assignment to study condition
- 8-week program in the comfort of your own home!
- 3 online assessments over 20 weeks
- reading a book (we provide it for you)
- coaching activities, custom online tools
- We appreciate your time! Choose between donating $20 to Utah non-profit or a $20 Amazon gift card.

**Study Coordinator:** Sarah Potts, MS
sarah.potts@aggiemail.usu.edu or 435-414-9848

**Study PI:** Mike Levin, PhD
mike.levin@usu.edu

Interested? Go to: www.mybodymyhealthstudy.weebly.com

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**Questions?**

Study Coordinator: Sarah Potts, MS
sarah.potts@aggiemail.usu.edu or 435-414-9848

Study PI: Mike Levin, PhD
mike.levin@usu.edu

**Utah State University**

IRB-approved Study Protocol #7971
Announcement

My name is Sarah Potts and I am a graduate student in the Doctoral Psychology Program (or research assistant and title). We are currently running an IRB-approved study testing a program for individuals who are overweight or obese and struggle with the way they view their bodies. Sometimes the way people judge their bodies can actually get in the way of living a meaningful life and that is what this particular study is seeking to impact. There is support that shows the self-stigma of being overweight or obese has connections with overall mental and physical health functioning and can broadly get in the way of living a healthy lifestyle.

The purpose of this study is to test a new self-help intervention that might be acceptable for obese or overweight individuals take their lives back into their own hands. The study will involve reading a book for eight weeks, receiving guidance, and completing associated tasks. There will be 3 assessments in this study: at week one, week 8, and week 20. This study is open to anyone between the ages of 18 and 64 years old, with a BMI of 27.5 or greater, and who struggle with weight self-stigma (as determined by a validated measure - WSSQ).

If you are interested in participating or know of someone who might be a good fit for this study, you can complete or share this webpage on the sheet I am sharing. The first step is to complete an interest screener for the study, then you will be contacted to complete study eligibility. This study is approved by USU IRB. Confidentiality will be respected and all data collected will be protected and maintained in encrypted files accessed only by individuals approved by USU IRB.

If you have questions, please contact program coordinator Sarah Potts at sarah.potts@aggiemail.usu.edu or call 435-414-9848.

(Researcher will hand out flyer squares with study information: http://studyforhealthandlife.weebly.com/ with link to screener and interest Qualtrics survey: https://usu.co1.qualtrics.com/jfe/form/SV_6YEDkivDpzTLckl)
Appendix B

Survey Instruments
Demographics

1. What is your age?

2. What is your birthdate? ___/____/____

3. What is your gender?
   a. Male
   b. Female
   c. Transgender
   d. Prefer not to say

4. What is your ethnic background?
   a. Hispanic or Latino
   b. Not Hispanic or Latino

5. What is your racial background? (list all that apply)
   a. American Indian/Alaska Native
   b. Asian
   c. Native Hawaiian or other Pacific Islander
   d. Black or African American
   e. White or Caucasian
   f. Other – please specify: _____________________

6. Relationship Status (Please circle one)
   a. Single (not involved)
   b. Married or domestic partnership
   c. Divorced
   d. Separated
   e. Involved in a significant relationship with someone

7. For your primary household, please estimate the gross annual income (before taxes) for the last year. If unknown, choose unknown.
   a. Less than $20,000
   b. $20,000 - $39,999
   c. $40,000 - $59,999
   d. $60,000 - $79,999
   e. $80,000 - $99,999
   f. $100,000 or more
   g. Unknown
8. Employment status (Please circle one)
   a. Employed for wages
   b. Self-employed
   c. Out of work and looking
   d. Homemaker
   e. Student
   f. Military
   g. Retired
   h. Unable to work

9. What is your current height? ____ ft. ____ inches

10. What is your current weight? ______________lbs.

11. How long have you been at this current weight (+/- 5 lbs.)? ____ years & ____ months

12. Which best describes your weight pattern during this past year? (check only 1)
   __ I have gained weight over the past year
   __ I have lost weight over the past year
   __ My weight has been stable (+/- 5 pounds) over the past year
   __ I have experienced a series of gains and losses over the past year

13. How difficult is it for you to maintain your weight at present? (check one)

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<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td></td>
<td>Extremely Easy</td>
<td>Very Easy</td>
<td>Easy</td>
<td>Moderate</td>
<td>Hard</td>
<td>Very Hard</td>
<td>Extremely Hard</td>
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</tbody>
</table>

14. How satisfied are you with your current body weight?

<table>
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<tr>
<td>Very unsatisfied</td>
<td>Very satisfied</td>
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</table>

15. Please indicate which of the following strategies you have used before to lose weight. (check all that apply)
   __ Commercial program (e.g., Weight Watchers, Jenny Craig).
   __ Self-help group (OverEaters Anonymous, TOPS).
   __ Individual contact with psychologist or counselor (do not include therapy
received as part of participation in a commercial program).

__ Individual contact with registered dietician (do not include contact received as part of participation in a commercial program).

__ Individual contact with a personal exercise trainer (do not include contact received as part of participation in a commercial program).

__ Individual contact with a physician (do not include contact received as part of participation in a commercial program).

__ Exercise classes as means for weight loss.

__ Increasing exercise/physical activity outside of a structured class as means for weight loss.

__ Prescription medication or over-the-counter diet pills.

__ Surgical procedure. Date of surgery (month/year): ____/____
If reversed, date of reversal (month/year): ____/____

__ Followed diet program obtained from a book, magazine, or another person (e.g., friend, physician).

__ Limited/changed diet outside of a structured diet program.

__ Hypnosis.

__ Other (please describe):

__ None. I have not tried losing weight in the past.

16. Are you currently using any of these methods to try to lose weight? Yes  No
   a. If so, please select which methods you are currently using to lose weight below

   __ Commercial program (e.g., Weight Watchers, Jenny Craig).

   __ Self-help group (OverEaters Anonymous, TOPS).

   __ Individual contact with psychologist or counselor (do not include therapy received as part of participation in a commercial program).

   __ Individual contact with registered dietician (do not include contact received as part of participation in a commercial program).

   __ Individual contact with a personal exercise trainer (do not include contact
received as part of participation in a commercial program).

__ Individual contact with a physician (do not include contact received as part of participation in a commercial program).

__ Exercise classes.

__ Increasing exercise/physical activity outside of a structured class

__ Prescription medication or over-the-counter diet pills.

__ Surgical procedure. Date of surgery (month/year): _____/____
  If reversed, date of reversal (month/year): _____/____

__ Followed diet program obtained from a book, magazine, or another person (e.g., friend, physician).

__ Limited/changed diet outside of a structured diet program.

__ Hypnosis.

__ Other (please describe):

17. Think back over the last month. How many times have you had five or more drinks* at one sitting? (*A drink is a beer, a glass of wine, a shot glass of liquor, or a mixed drink.)
   a. None
   b. Once
   c. Twice
   d. 3-5 times
   e. 6-9 times
   f. 10 or more times

18. If you use tobacco, (i.e., smoke or oral use), how many servings* do you consume throughout one day? (*One serving = 1 cigarette or that equivalent of oral tobacco product such as Snuff).
   a. None
   b. One
   c. Less than 6
   d. 7-19 servings
   e. 20 or more servings (one pack or more)
**WCSS**

**Instructions:** The following statements describe strategies and behaviors that individuals may engage in when they are trying to lose weight or maintain their weight loss. Using the scale below, circle the number that best describes how often you did each of the following during the past month. Please respond to every item.

<table>
<thead>
<tr>
<th></th>
<th>Never (0)</th>
<th>Occasionally (1)</th>
<th>About half the time (2)</th>
<th>Most of the time (3)</th>
<th>Always (4)</th>
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</thead>
<tbody>
<tr>
<td>1. I set daily calorie goals for myself.</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>2. I had several servings of fruits and/or vegetables each day.</td>
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<td>□</td>
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<tr>
<td>3. I kept a record of the type and amount of food I ate.</td>
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<tr>
<td>4. I set exercise goals for myself.</td>
<td>□</td>
<td>□</td>
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<tr>
<td>5. If I overate, I thought about what led up to my overeating.</td>
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<tr>
<td>6. I kept high calorie, high fat foods (e.g., chips, cookies, cakes) out of sight so they would not tempt me.</td>
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<td>7. I avoid fried foods.</td>
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<td>8. I had plans for getting my exercise in if the weather was bad and I couldn’t exercise outside.</td>
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<tr>
<td>9. If I overate on one day, I made up for it by eating less the next day.</td>
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<tr>
<td>10. I kept low-calorie foods (e.g., fruit, raw vegetables unbuttered popcorn) accessible for a healthy snack.</td>
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<td>11. I engaged in moderate-intensity exercise like brisk walking or something similar to brisk walking for at least 30 minutes a day.</td>
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<tr>
<td>12. I weighted and/or measured the foods I ate.</td>
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<td>□</td>
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</tr>
<tr>
<td></td>
<td>Never (0)</td>
<td>Occasionally (1)</td>
<td>About half the time (2)</td>
<td>Most of the time (3)</td>
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<tr>
<td>13. I limited my intake of regular soda.</td>
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<tr>
<td>14. When I reached my calorie goal for the day but still felt hungry I tried a pleasant activity to take my mind off the hunger.</td>
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<tr>
<td>15. I kept a record of the calories and fat in the foods I ate.</td>
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<td>16. I kept a record of my minutes of exercise.</td>
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<td>17. I ate lower-fat meats (e.g., chicken, turkey, fish) or meat substitutes (e.g. lentils).</td>
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<tr>
<td>18. If I got track with my eating or exercise, I encouraged myself by thinking positively.</td>
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<tr>
<td>19. When eating dairy products (e.g., milk, yogurt, cheese), I chose reduced or fat free options.</td>
<td>☐</td>
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<tr>
<td>20. When I met a goal related to my eating, exercise or weight loss, I rewarded myself with something special that did not involve food.</td>
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<tr>
<td>21. I ate meats, fish, or vegetables that were baked broiled or grilled.</td>
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<tr>
<td>22. If I missed exercising one day, I made up for it by exercising longer another day.</td>
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<tr>
<td>23. I weighed myself daily.</td>
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</tr>
<tr>
<td>24. I scheduled exercise into my day.</td>
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<tr>
<td>25. If I had negative thoughts about my weight loss progress, I tried to catch myself and stop that kind of thinking.</td>
<td>☐</td>
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<tr>
<td>26. I kept my exercise clothes or shoes where I could see them as a reminder to exercise.</td>
<td>☐</td>
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<tr>
<td></td>
<td>Never (0)</td>
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<td>About half the time (2)</td>
<td>Most of the time (3)</td>
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<tr>
<td>27. I chose low-calorie and/or low-fat foods to eat instead of higher calorie options.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>28. I kept a graph or my weight.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>29. If I regained weight, I thought about my past successes and reminded myself that I could get back on track.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>30. I ate high-fiber foods (e.g. whole grain breads or cereals, fruit and vegetables).</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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</tbody>
</table>
Below you will find a list of statements. Please rate how true each statement is for you by circling a number next to it. Use the scale below to make your choice.

1 2 3 4 5
Never Seldom Sometimes Often Very often

1. Do you have a desire to eat when you have nothing to do?  
2. Do you have a desire to eat when you are depressed or discouraged?
3. Do you have a desire to eat when you are feeling lonely?
4. Do you have a desire to eat when somebody lets you down?
5. Do you have a desire to eat when you are cross?
6. Do you have a desire to eat when you are approaching something unpleasant to happen?
7. Do you get the desire to eat when you are anxious, worried or tense?
8. Do you have a desire to eat when things are going against you or when things have gone wrong?
9. Do you have a desire to eat when you are frightened?
10. Do you have a desire to eat when you are disappointed?
11. Do you have a desire to eat when you are emotionally upset?
12. Do you have a desire to eat when you are bored or restless?
13. Do you have the desire to eat when you are irritated
EDE-Q-BE

The following questions ask about any binge episodes that you might have had during the past month. A binge episode has two parts: 1) eating an unusually large amount of food and 2) experiencing a sense of loss of control.

An unusually large amount of food is definitely more than most people would eat under similar circumstances. Some examples might be: 1) eating two full meals; 2) eating three main courses; or 3) eating an unusually large amount of one food or combination of foods.

A sense of having lost control while eating might be experienced by different people in different ways: 1) feeling driven or compelled to eat; 2) not being able to stop eating once you’ve started; 3) not being able to keep yourself from eating large amounts of certain kinds of food in the first place; or 4) giving up on even trying to control your eating because you know that, no matter what, you’re going to overeat.

Example of a BINGE:
After work one evening, Dina ate 2 pieces of chicken, a 16-ounce package of frozen vegetables, 3 cups of rice, 1/4 of a coffee cake and a piece of fruit. This is an unusually large amount of food. While she ate, Dina felt completely out of control, ate more quickly than usual, and ate until she felt uncomfortably full. Unusually large amount of food AND loss of control.

Examples of episodes that do NOT meet the definition of a binge:
1. UNUSUALLY LARGE BUT NO LOSS OF CONTROL. Several times a week, JoAnne ate lunch at McDonald’s with 2 coworkers. Her usual order was a Big Mac, a fish fillet sandwich, 2 large orders of fries, and a large chocolate shake. This is an unusually large amount of food. Although she ate somewhat more than her friends did and knew she was eating a lot of high-fat food, she did NOT feel out of control while eating or feel upset afterwards about how much she’d eaten.

2. LOSS OF CONTROL BUT NOT UNUSUALLY LARGE. Carol ate 2 doughnuts someone brought into the office one morning. She had started a diet that day and planned to skip breakfast. Carol initially refused the doughnuts, but later couldn’t stop herself from eating them. She felt very guilty and ashamed afterwards and hated feeling so out of control of her eating, resolving to start dieting again the next day. Although Carol felt bad about eating the doughnuts, this was NOT an unusually large amount of food, so it would not be considered a binge.
13. Over the past 28 days, how many times have you eaten what most people would regard as an unusually large amount of food (given the circumstances)?


14. On how many of these times did you have a sense of having lost control over your eating (at the time that you were eating)?


15. Over the past 28 days, on how many days have such episodes of overeating occurred (i.e., you have eaten an unusually large amount of food and have had a sense of loss of control at the time)?


16. Over the past 28 days, how many times have you had a sense of having lost control, but did not eat an unusually large amount of food?


17. Over the past 28 days, how many times have you made yourself sick (vomit) as a means of controlling your shape or weight?


18. Over the past 28 days, how many times have you taken laxatives as a means of controlling your shape or weight?
IPAQ-SF

1a. During the last 7 days, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling? Think about only those physical activities that you did for at least 10 minutes at a time. 

_______ days per week  or  ________ NONE

→ 1b. How much time in total did you usually spend on one of those days doing vigorous physical activities?  ____ hours  _____ minutes

2a. Again, think only about those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or double tennis? Do not include walking.

_______ days per week  or  ________ NONE

→ 2b. How much time in total did you usually spend on one of those days doing moderate physical activities?  ____ hours  _____ minutes

3a. During the last 7 days, on how many days did you **walk** for at least 10 minutes at a time? This includes walking at work and at home, walking to travel from place to place, and any other walking that you did solely for recreation, sport, exercise, or leisure?

_______ days per week  or  ________ NONE

→ 3b. How much time in total did you usually spend walking on one of those days?  ____ hours  _____ minutes

The last question is about the time you **are sitting** on weekdays while at work, at home, while doing coursework, and during leisure time. This includes time spent sitting at a desk, visiting friends, reading, traveling on a bus, or sitting or lying down to watch television.

4. During the last 7 days, how much time in total did you usually spend sitting on a **week day**?

___ hours  ____ minutes
**GHQ-12**

We would like to know if you have had any medical complaints, and how your health has been in general, *over the past few weeks*. Please answer ALL questions by circling the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

Have you recently:

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<th></th>
<th>Better than usual</th>
<th>Same as usual</th>
<th>Less than usual</th>
<th>Much less than usual</th>
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<tr>
<td>1. been able to concentrate on whatever you’re doing?</td>
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<td>2</td>
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<td>2. lost much sleep over worry?</td>
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<td>3. felt that you are playing a useful part in things?</td>
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<td>3</td>
<td>2</td>
<td>1</td>
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<td>4. felt capable of making decisions about things?</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>5. felt constantly under strain?</td>
<td>4</td>
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<td>6. felt you couldn’t overcome your difficulties?</td>
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<td>1</td>
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<td>7. been able to enjoy your normal day-to-day activities?</td>
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<td>8. been able to face up to your problems?</td>
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<td>9. been feeling unhappy and depressed?</td>
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<td>Question</td>
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<td>10. been losing confidence in yourself?</td>
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<td>11. been thinking of yourself as a worthless person?</td>
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<td>12. been feeling reasonably happy, all things considered?</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tbody>
</table>
Below you will find a list of statements. *Please rate how much you agree with each statement as it applies to you.* Use the following scale to make your choice.

<table>
<thead>
<tr>
<th></th>
<th>Completely disagree (1)</th>
<th>Mostly disagree (2)</th>
<th>Neither Agree nor disagree (3)</th>
<th>Mostly agree (4)</th>
<th>Completely agree (5)</th>
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</thead>
<tbody>
<tr>
<td>1. I'll always go back to being overweight.</td>
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<td>2. I caused my weight problems.</td>
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<td>3. I feel guilty because of my weight problems.</td>
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<td>4. I became overweight because I'm a weak person.</td>
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<td>5. I would never have any problems with weight if I were stronger.</td>
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<td>6. I don't have enough self-control to maintain a healthy weight.</td>
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<td>7. I feel insecure about others' opinions of me.</td>
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<td>8. People discriminate against me because I've had weight problems.</td>
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<td>9. It's difficult for people who haven't had weight problems to relate to me.</td>
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<td>10. Others will think I lack self-control because of my weight problems.</td>
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<td>11. People think that I am to blame for my weight problems.</td>
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<td>12. Others are ashamed to be around me because of my weight.</td>
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AAQ-W

Below you will find a list of statements. *Please rate the truth of each statement as it applies to you.* Use the following scale to make your choice.

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<td></td>
<td>Never True</td>
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<td>Always True</td>
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</tbody>
</table>

1 2 3 4 5 6 7 1. It’s OK to feel fat

1 2 3 4 5 6 7 2. When I have negative feelings, I use food to make myself feel better

1 2 3 4 5 6 7 3. I try to suppress thoughts and feelings that I don’t like about my body or weight by just not thinking them

1 2 3 4 5 6 7 4. I am not in control of what I eat

1 2 3 4 5 6 7 5. I try hard to avoid feeling bad about my weight or how I look

1 2 3 4 5 6 7 6. I am in control of how much physical activity I do

1 2 3 4 5 6 7 7. When I evaluate my weight or my appearance negatively, I am able to recognize that this is just a reaction, not an objective fact.

1 2 3 4 5 6 7 8. In order to eat well and do physical activity, I need to feel like it

1 2 3 4 5 6 7 9. I need to feel better about how I look in order to live the life I want to

1 2 3 4 5 6 7 10. Other people make it hard for me to accept myself

1 2 3 4 5 6 7 11. If I’m overweight, I can’t live the life I want to
12. If I feel unattractive, there is no point in trying to be intimate

13. If I gain weight, that means I have failed

14. I’m in control of my eating behavior

15. I don’t have what it takes to be healthy for life

16. My eating urges control me

Imagine that the following thoughts occurred to you right now. How valid or believable would each be? For each question, please circle a number from 1 through 7.

1 2 3 4 5 6 7 17. I need to get rid of my eating urges to eat better

1 2 3 4 5 6 7 18. I am a stable person

1 2 3 4 5 6 7 19. If I eat something bad, the whole day is a waste

1 2 3 4 5 6 7 20. I should be ashamed of my body

1 2 3 4 5 6 7 21. I need to avoid social situations where people might judge me

1 2 3 4 5 6 7 22. I will always be overweight
### CompACT

Please rate the following 23 statements using the scale below:

<table>
<thead>
<tr>
<th></th>
<th>0 Strongly disagree</th>
<th>1 Moderately disagree</th>
<th>2 Slightly disagree</th>
<th>3 Neither agree nor disagree</th>
<th>4 Slightly agree</th>
<th>5 Moderately agree</th>
<th>6 Strongly agree</th>
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</table>
Program Satisfaction/Engagement Questions

Please answer the following questions regarding the Diet Trap book, coaching sessions and journal.

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
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<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Mostly Disagree</td>
<td>Slightly Disagree</td>
<td>Slightly Agree</td>
<td>Mostly Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. _____ Overall, I was satisfied with the quality of the book.

2. _____ The book was helpful to me.

3. _____ I was able to understand the concepts presented in the book.

4. _____ I felt the book was made for someone like me.

5. _____ Overall, I was satisfied with the quality of the coaching sessions.

6. _____ The coaching sessions were helpful to me.

7. _____ The coaching sessions were an important part of the program.

8. _____ The journaling tool was helpful to me.

9. _____ I would like to use the entire Diet Trap program again in the future.

10. _____ I think the Diet Trap program would be helpful for others struggling with weight-related issues.

11. _____ I would recommend the Diet Trap program to others struggling with weight-related issues.

12. _____ The book would have been just as helpful without any phone coaching.

13. How much of the Diet Trap book did you read? (answer from 0% to 100% - all 7 chapters) _____

14. How carefully did you read the book?
   1 (not at all)  2 (a little)  3 (somewhat)  4 (moderately)  5 (quite a bit)  6 (very much)
15. What percentage of the activities/exercises for the *Diet Trap* did you complete?

(answer from 0% to 100%) ____________

16. How much did you engage in exercises?
1 (not at all) 2 (a little) 3 (somewhat) 4 (moderately) 5 (quite a bit) 6 (very much)

17. How often did you write in the journal?

1

Never

2

Seldom

3

Sometimes

4

Often

5

Very often

18. Approximately how much did you write in the journal? ________ number of pages written

19. Do you intend to continue using the skills and concepts you learned in the *Diet Trap* program?

1

Strongly disagree

2

Mostly disagree

3

Slightly disagree

4

Slightly agree

5

Mostly agree

6

Strongly agree

20. If you did not read the entire book please describe why (check all that apply).

☐ I knew it already

☐ Not interested

☐ Not enough time

☐ The program was not engaging enough

☐ It did not seem helpful

☐ Other (explain): ________________________________

__________________________________________

☐ I went through the entire program

21. What was the most important thing you learned from this program?

__________________________________________

__________________________________________
22. What did you like least about the program? Why did you like this the least?


23. Do you have any other comments or suggestions regarding our program?


Appendix C

Weekly Quizzes to Accompany Guided Self-Help Conditions
Weekly Quizzes

Chapter 1: The Weight Loss Agenda is the Problem

How much of *this chapter* have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities *for this chapter*?
1 2 3 4 5 6 7 8 9 10
Not at all Very much so

1. The “weight loss agenda” may be part of the problem. **True** or False

   If True: “That’s correct. This book examines what hasn’t been working including the possibility that narrowly and rigidly focusing on weight loss, though sometimes successful in the short term, may actually be contributing to some of the longer-term struggles with weight and related issues.”

   If False: “That’s incorrect. It makes total sense that you would want to lose weight and focus on efforts to do so and you likely know someone (personally or through the media) that has been able to do this. However, look to your experience and see whether this approach to weight loss has been working for you in the long term. Maybe part of the issue is in the very agenda, not that you couldn’t lose weight, but that a narrow, rigid focus may make long term weight maintenance and life satisfaction difficult.”

2. The statement “I really need to focus on changing what’s wrong inside me. Once I fix that, I can do what’s important.” Is an example of
   a. The “motivation principle”
   b. Self-compassion
   c. **The “fix me” trap**
   d. The “priority” rule

   If c: “That’s correct. This is a common thought related to the fix-me trap: requiring thoughts, feelings, bodily sensations (such as cravings), or memories to change or go away in order to live the way you want to. In other words, first you need to think and feel a certain way, then you can do things that matter to you.”

   If a, b or d: “That’s incorrect and the correct answer was c. It makes sense you might think that given it’s a common message in our society but consider whether this approach has really been working for you. We often find it doesn’t in the long term, which is why we call it the “fix me” trap: requiring thoughts, feelings, bodily sensations (such as
cravings), or memories to change or go away in order to live the way you want to."

3. According to the book, thoughts and feelings:
   a. Can be controlled with willpower
   b. **Are hard to control**
   c. Are easy to control when you try hard enough
   d. Are controllable once you have the right strategy

   If b: "That’s correct. Thoughts and feelings seem, at best, hard to control. Most people find that trying not to think about something, actually causes them to think about it, or at the very least takes extreme effort that can only be kept up for so long. Also, if you want to avoid something, you have to constantly be looking for it to make sure you’re avoiding it, ultimately making it more central to your life.”

   If a, c or d: "That’s incorrect and the correct answer was b. We’re often told that willpower, hard work and having the right strategies can allow us to have full control over our thoughts and feelings. Consider though, if this was true, why do you still struggle with these thoughts and feelings at times? Maybe that’s not really how our thoughts and feelings work. Maybe trying not to think about something, just leads to it being more central in our life. Don’t take our word for it, but continue to notice for yourself, can you really control what you think and feel on command?"

4. If you feel more disgusted with yourself, then you are more likely to make changes. **True or False**

   If True. “That’s incorrect. While it may seem that harsh self-criticism will motivate you to change, the opposite is often true and it is especially unlikely to support long term success. For people who struggle with weight, disgust and self-judgment often lead to emotional eating. The majority of people simply cannot hate themselves thin. In fact, this type of motivation typically gets in the way of making changes, as it lands you back in the fix-me trap.”

   If False. “That’s correct. While it may seem that harsh self-criticism will motivate you to change, the opposite is often true and it is especially unlikely to support long term success. For people who struggle with weight, disgust and self-judgment often lead to emotional eating. You simply cannot hate yourself thin. In fact, this type of motivation typically gets in the way of making changes, as it lands you back in the fix-me trap.”

5. Which of the following is **NOT** a weight loss myth as detailed in *The Diet Trap*?
   a. To achieve weight loss, you have to focus on the task of weight loss at the expense of other priorities until you reach your goal weight
   b. **Physical activity is easy once you start doing it regularly**
   c. If you lose weight, you’ll be happier and think good thoughts
   d. You eat because you are hungry
If b. “That’s correct. This chapter highlighted a number of weight loss myths that are false, but common messages in our society. These myths can contribute to difficulties with weight loss and getting stuck in the “fix me” trap. Each of these options are a myth except the statement about physical activity, which many find to actually get easier once you overcome initial inertia and make it a habit and routine in your life.”

If a, c or d. “That’s incorrect and the correct answer is b. This chapter highlighted a number of weight loss myths that are false, but common messages in our society. These myths can contribute to difficulties with weight loss and getting stuck in the “fix me” trap. Each of these options are a myth except the statement about physical activity, which many find to actually get easier once you overcome initial inertia and make it a habit and routine in your life.”

Chapter 2: Self-Compassionate Weight Loss

How much of this chapter have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for this chapter?
1 2 3 4 5 6 7 8 9 10
Not at all Very much so

1. Trying to lose weight to fix what’s going on inside of you is:
   a. Unlikely to lead to satisfying changes over the long term
   b. A way to practice self-compassion
   c. A necessary, but not sufficient, factor in losing weight
   d. An effective method for making meaningful changes and improving your life

   If a. “That’s correct. Losing weight to change or get rid of unwanted thoughts and feelings is a classic fix-me trap. This often pulls for trying to “hate yourself thin”, which often results in quick behavior changes that don’t last long, as well as added feelings of shame, inadequacy, or disgust. In order to be successful in the long term, you need to build a foundation on something more stable and vital. You need to build it on self-compassion.”

   If b, c or d. “That’s incorrect and the correct answer was a. Losing weight to change or get rid of unwanted thoughts and feelings is a classic fix-me trap. This often pulls for trying to “hate yourself thin”, which often results in quick behavior changes that don’t last long, as well as added feelings of shame, inadequacy, or disgust. In order to be successful in the long term, you need to build a foundation on something more stable and vital. You need to build it on self-compassion.”
2. The purpose of the exercise Exploring the Enduring You was to
   a. Feel more relaxed and content
   b. Connect with a stable sense of self that is more than your thoughts, feelings, weight, life challenges, etc.…
   c. Prove to yourself that you are good enough, strong enough and people should like you
   d. Prove that you have the endurance and willpower to lose weight and feel better about yourself, no matter what
   e. All of the above

   If b. “That’s correct. The word “enduring” means lasting and durable. Through all of the challenges and changes in your life, there’s an essence of you that’s stable and lasting, no matter what. The exercise sought to help you connect with the perspective that you are much more than your feelings and thoughts. Maybe they don’t need to be fixed for you to be fundamentally okay and valid as a person.”

   If a, c, d or e. “That’s incorrect and the correct answer was b. The word “enduring” means lasting and durable. Through all of the challenges and changes in your life, there’s an essence of you that’s stable and lasting, no matter what. The exercise sought to help you connect with the perspective that you are much more than your feelings and thoughts. Maybe they don’t need to be fixed for you to be fundamentally okay and valid as a person.”

3. Which of the following are ways to practice self-compassion?
   a. participate in activities that are meaningful to you.
   b. Extending gratitude to your body
   c. act toward yourself as you might toward a loved one who’s struggling.
   d. Open up to your pain
   e. all of the above

   If e. “That’s correct. All of these methods are ways of practicing self-compassion. Keep in mind the variety of ways you can bring a compassionate stance towards yourself, being kind to yourself, doing what matters, opening up to the pain that is there, etc.…”

   If a, b, c, or d. “That’s incorrect and the correct answer was e. All of these methods are ways of practicing self-compassion. Keep in mind the variety of ways you can bring a compassionate stance towards yourself, being kind to yourself, doing what matters, opening up to the pain that is there, etc.…”

4. Cynthia is practicing her mindful awareness, which of the following is she most likely doing?
   a. Observing her experiences in the moment without judgment
   b. Focusing on relaxing and feelings of calm contentment
   c. Rushing to help a friend in need
   d. Clearing her mind of all thoughts and distractions
If a. “That’s correct. Mindfulness is the process of noticing your experiences in the present moment, including thoughts and feelings as well as experiences happening in the world around you, in a way that acknowledges them without judging them as good or bad, right or wrong, etc….”

If c, d or e. “That’s incorrect and the correct answer was a. Mindfulness is not focused on changing your mood and although meaningful activities like helping a friend can be important, it isn’t practicing mindfulness per se. Rather, mindfulness is the process of noticing your experiences in the present moment, including thoughts and feelings as well as experiences happening in the world around you, in a way that acknowledges them without judging them as good or bad, right or wrong, etc….”

5. At the end of the chapter (page 53), you were asked to list your reasons for living a healthier lifestyle (such as engaging with family and friends more, doing activities you find difficult currently, setting an example for others, being more nurturing, etc…). What are your self-compassionate reasons for living a healthier lifestyle? Please write whatever reasons you feel comfortable sharing.

________________________________________________________________________
________________________________________________________________________

Chapter 3: Don’t Change your Thoughts, Change your Behavior

How much of this chapter have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for this chapter?

1 2 3 4 5 6 7 8 9 10
Not at all Very much so

1. According to the book, it’s more helpful to ________________________ than to try to change your thoughts.
   a. Change what you are attending to (distract from your thoughts)
   b. Give in to your thoughts
   c. Get rid of your thoughts
   d. Change your relationship to your thoughts

   If d. “That’s correct. We suggest you sidestep the fix-me trap by changing your relationship to your thoughts, rather than trying to change the actual thoughts. This means experiencing it as a thought and nothing more. In a sense, you’re allowing that thought to be there without being so attached to the content of the thought or its meaning.”
If a, b or c. “That’s incorrect and the correct answer was d. We encourage you to let go of trying to distract or get rid of these thoughts, which may lead to getting more stuck in them, but this also doesn’t mean giving in to your thoughts. We suggest you sidestep the fix-me trap by changing your relationship to your thoughts, rather than trying to change the actual thoughts. This means experiencing it as a thought and nothing more. In a sense, you’re allowing that thought to be there without being so attached to the content of the thought or its meaning.”

2. Which of the following is true about your mind according to the book
   a. It isn’t always your friend
   b. It is constantly running
   c. It tends to focus on the negative
   d. All of the above

   If d. “That’s correct. All of these are features of the mind. Minds are constantly running, but they tend to focus on finding the negative, in part because they are trying to keep us safe. When this becomes dominant in our life, we can feel stuck and leads to the saying “your mind isn’t always your friend.”
   If a, b or c. “That’s incorrect and the correct answer is d. Minds are constantly running, but they tend to focus on finding the negative, in part because they are trying to keep us safe. When this becomes dominant in our life, we can feel stuck and leads to the saying “your mind isn’t always your friend.”

3. How is the thought “I’m weak” similar to “seedless watermelon”
   a. They are not similar
   b. You acquired both simply by living your life and being exposed to words
   c. You can change both of them to a more desired thought
   d. They both are negative thoughts your mind uses to criticize you

   If b. “That’s correct. Although we just introduced the “seedless watermelon” thought as part of a silly exercise, it highlights a key part of how minds work. You acquired both thoughts by simply living your life. The difference is in how you relate to these thoughts. One seems silly and random, the other not. However, both are automatic thoughts, just echoes from your history that show up from time to time.”
   If a, c or d. “That’s incorrect and the correct answer is b. Although we just introduced the “seedless watermelon” thought as part of a silly exercise, it highlights a key part of how minds work. You acquired both thoughts by simply living your life. The difference is in how you relate to these thoughts. One seems silly and random, the other not. However, both are automatic thoughts, just echoes from your history that show up from time to time.”

4. Based on what was discussed in this chapter, an effective way to respond to the thought “I’ve already blown it; what’s another couple of cookies?” is to
   a. eat another couple cookies
   b. Compromise and only eat one cookie
c. Say to yourself, *I’m noticing having a self-sabotaging thought right now.*
d. Challenge the thought by reminding yourself that you didn’t blow it and eating more cookies won’t help
e. Try to change what you are thinking about

If c. “That’s correct. The key to start relating differently to these self-sabotaging thoughts is to step back and notice them for what they are. This will start to give you the space to acknowledge them as just a thought rather than challenging, suppressing or giving in to them.”

If a, b, d or e. “That’s incorrect and the correct answer was c. The key to start relating differently to these self-sabotaging thoughts is to step back and notice them for what they are. This will start to give you the space to acknowledge them as just a thought rather than challenging, suppressing or giving in to them.”

5. The point of the reason brigade exercise in chapter 3 was to
   a. **Step back and notice your mind’s amazing ability to generate reasons**
   b. Identify why you want to lose weight and what is important to you about doing so
   c. Remind yourself why you are overweight
   d. Show how these reasons are not true or valid

   If a. “That’s correct. This exercise sought to help you notice the process of how quickly, intensely and imaginatively your mind can generate reasons for your actions. We aren’t arguing that these reasons are true or untrue and the point wasn’t to come up with “good” reasons you can use or how to challenge the reasons that come up.”

   If b, c, d. “That’s incorrect and the correct answer is a. This exercise sought to help you notice the process of how quickly, intensely and imaginatively your mind can generate reasons for your actions. We aren’t arguing that these reasons are true or untrue and the point wasn’t to come up with “good” reasons you can use or how to challenge the reasons that come up.”

**Chapter 4: Choosing Healthy Living Even When It’s Hard**

How much of *this chapter* have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for *this chapter*?

1 2 3 4 5 6 7 8 9 10
Not at all Very much so
1. The problem with emotional eating (eating to cope with difficult emotions) is that
   a. The relief it provides is short-lived
   b. It leaves us wanting more
   c. It encourages us to engage in more avoidance behaviors
   d. All of the above

   If d. “That’s correct. Emotional eating is a form of experiential avoidance. Like many avoidance strategies, we engage in them in large part because they seem to work in the short term, giving some immediate relief. However, in the long term, these strategies often leave us wanting more and, like a big hungry T-rex, demands that we keep feeding the avoidance cycle.”

   If a, b, or c. “That’s incorrect and the correct answer is d. Emotional eating is a form of experiential avoidance. Like many avoidance strategies, we engage in them in large part because they seem to work in the short term, giving some immediate relief. However, in the long term, these strategies often leave us wanting more and, like a big hungry T-rex, demands that we keep feeding the avoidance cycle.”

2. Which of the following are most directly under our control?
   a. Our attitudes
   b. Our emotions
   c. What others do
   d. Our behavior
   e. None of these

   If d. “That’s correct. Although we’re often told that we can control our attitudes and emotions, and it may even seem like we can for a short time, many people ultimately find that these aspects of experience have a life of their own. Similarly, we sometimes act as if we can fully control what others do, not noticing the limitations there. Sometimes we focus so much on trying to control these parts of our lives that we forget to focus on the part we can control, our behavior and how we act in any given moment.

   If a, b, c or e. “That’s incorrect and the correct answer is d. Although we’re often told that we can control our attitudes and emotions, and it may even seem like we can for a short time, many people ultimately find that these aspects of experience have a life of their own. Similarly, we sometimes act as if we can fully control what others do, not noticing the limitations there. Sometimes we focus so much on trying to control these parts of our lives that we forget to focus on the part we can control, our behavior and how we act in any given moment.

3. What is willingness according to the text?
   a. An attitude or feeling of acceptance
   b. **Allowing yourself to feel whatever you feel while doing what matters to you**
   c. Learning to fully enjoy and even desire feeling unpleasant experiences
d. Wallowing in your emotions and giving in to them, letting them control your actions

e. All of the above

If b. “That’s correct. Willingness isn’t an attitude or feeling. It also isn’t liking or even desiring unpleasant experiences. Lastly, it isn’t surrendering to your emotions. Instead it is about compassionately acknowledging and allowing your experiences to be there, while continuing to take actions in line with what is important to you.”

If a, c, d or e. “That’s incorrect and the correct answer is b. Willingness isn’t an attitude or feeling. It also isn’t liking or even desiring unpleasant experiences. Lastly, it isn’t surrendering to your emotions. Instead it is about compassionately acknowledging and allowing your experiences to be there, while continuing to take actions in line with what is important to you.”

4. Which of the following are examples of people acting with willingness?
   f. Sue is going to the beach even though she is scared others might judge her.
   g. Joe is making a healthy food choice despite noticing powerful cravings.
   h. Jane is seeking physical intimacy while feeling disgusting, fearful, and shameful.
   i. All of the above
   j. None of the above

   If d. “That’s correct. All of these are examples of acting with willingness in which people are taking meaningful actions, even though difficult thoughts and feelings are showing up.”

   If a, b, c or e. “That’s incorrect and the correct answer is d. All of these are examples of acting with willingness in which people are taking meaningful actions, even though difficult thoughts and feelings are showing up.”

2. Why do the authors suggest you “seek out” discomfort, such as cravings or unwanted feelings?
   a. Feeling uncomfortable is a part of life and the authors think that there is a minimal amount of discomfort you need to have in your life
   b. Feeling uncomfortable allows you to later appreciate feeling more comfortable again
   c. Feeling uncomfortable can be a necessary part of pursuing things that deeply matter to you
   d. Feeling uncomfortable now means you will feel less uncomfortable later

   If c “That’s correct. Willingness can be an important skill to practice for those times where meaningful, valued actions also mean experiencing uncomfortable thoughts, feelings and cravings. Seeking this discomfort out can help you to learn a new way to
relate to these experiences, so that you continue to do what matters to you, even when
difficult feelings and cravings come up.”

If a, b or d “That’s incorrect and the correct answer is c. Willingness can be an
important skill to practice for those times where meaningful, valued actions also mean
experiencing uncomfortable thoughts, feelings and cravings. Seeking this discomfort out
can help you to learn a new way to relate to these experiences, so that you continue to do
what matters to you, even when difficult feelings and cravings come up.”

Chapter 5: Healthy Values to Build Healthy Habits

How much of this chapter have you read so far?

1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for this chapter?

1 2 3 4 5 6 7 8 9 10
Not at all Very much so

1. The book cares about weight loss only in so far as
   a. It is connected with living the life you want to live
   b. You are able to keep the weight off and maintain a slimmer figure
   c. You lose a lot of weight
   d. It leads to feeling self-confident and better about yourself

   If a. “That’s correct. From the perspective of the book, looking back on your life,
your weight isn’t nearly as important as how you lived your life; the relationships you
had, how you connected with others, how you developed and grew intellectually and
emotionally, and the joy you created in your life. We want you to live a life that matters
to you. The question for you is how healthy living (and by extension, a healthy weight)
fits into living the life you want to live.”

   If b, c, d. “That’s incorrect and the correct answer is a. Although this is a common
goal in weight loss programs, The Diet Trap takes a unique approach. From the
perspective of the book, looking back on your life, your weight isn’t nearly as important
as how you lived your life; the relationships you had, how you connected with others,
how you developed and grew intellectually and emotionally, and the joy you created in
your life. We want you to live a life that matters to you. The question for you is how
healthy living (and by extension, a healthy weight) fits into living the life you want to live.”

2. From the perspective of The Diet Trap, what might be considered problematic about
   having a values epitaph that states “Here lies Julie She felt really self-confident and
didn’t doubt herself”

- People won’t know whether she really felt self-confident or not
- Not everybody thinks being self-confident is important
- It’s wrong to want to feel self-confident
- **Feelings easily change and tend to be a poor guide for behavior**
- All of the above

If d. “That’s correct. There’s nothing wrong with feeling self-confident, and we certainly wouldn’t discourage it. However, we’ve found it to be a poor guide for behavior. It’s simply too easy to turn from “feeling self-confident” to “not feeling self-confident” and to get too rigidly stuck on controlling these feelings, despite the costs. A well-lived life will include feeling self-confident and, by necessity, sometimes not feeling self-confident. After all, new challenges will bring doubts. A life free of self-doubt probably is a life free of challenge, and that’s not a vital and satisfying way to live.”

If a, b, c or e. “That’s incorrect and the correct answer was d. There’s nothing wrong with feeling self-confident, and we certainly wouldn’t discourage it. However, we’ve found it to be a poor guide for behavior. It’s simply too easy to turn from “feeling self-confident” to “not feeling self-confident” and to get too rigidly stuck on controlling these feelings, despite the costs. A well-lived life will include feeling self-confident and, by necessity, sometimes not feeling self-confident. After all, new challenges will bring doubts. A life free of self-doubt probably is a life free of challenge, and that’s not a vital and satisfying way to live.”

3. How are values like directions on a compass?

- Other people give you this “compass” and tell you what direction you should move in
- Values tell you where you need to go to finish working on your values
- **Values continuously guide you in a direction**
- Values tell you what you should and have to do

If c. “That’s correct. Like the direction “East” on a compass, your values serve as a guide for making choices and the directions you want to head in life. You never finish working on your values, just like you never arrive at “East.” Values are not about what you “should do”, but rather what you choose to and what matter to you to do in your life.”

If a, b, d. “That’s incorrect and the correct answer is c. Like the direction “East” on a compass, your values serve as a guide for making choices and the directions you want to head in life. You never finish working on your values, just like you never arrive at “East.” Values are not about what you “should do”, but rather what you choose to and what matter to you to do in your life.”

4. If there is an activity that you find difficult and feel obligated to do we recommend you

- Remind yourself that “you must do the activity no matter what because you just have to do it”
b. **Connect with why the activity is important to you and think about how that activity relates to your core values.**
   c. Stop doing the activity immediately because you should only do those things that matter to you and that you enjoy
   d. Continue doing it until your mentality changes on its own.

If b. “That’s correct. Values work can help you is learning to shift from an “I” must” mentality to an “I choose” mentality. A good place to start is to consider how this activity fits with your values and to bring more of a sense of choice and meaning to what you are doing. We are not saying you should avoid doing these obligations, rather it’s about finding ways to expand your perspective and see how these activities fit with living a meaningful life.”

If a, c, or d. “That’s incorrect and the correct answer is b. Values work can help you is learn to shift from an “I” must” mentality to an “I choose” mentality. A good place to start is to consider how this activity fits with your values and to bring more of a sense of choice and meaning to what you are doing. We are not saying you should avoid doing these obligations, rather it’s about finding ways to expand your perspective and see how these activities fit with living a meaningful life.”

5. Which of the following is NOT one of the four key areas of values identified in the chapter?
   a. feelings
   b. health
   c. personal interests
   d. relationships
   e. these are the four values outlined in the chapter

If a. “That’s correct. Feelings was not one of the key areas of living. Values are focused on the meaningful actions you take in domains of your life such as health and relationships. Values focus less on feelings, since they are fickle, difficult to control and easily lead to getting stuck in the “fix me” trap. If b, c, d or e. “That’s incorrect and the correct answer is d. Feelings was not one of the key areas of living. Values are focused on the meaningful actions you take in domains of your life such as health and relationships. Values focus less on feelings, since they are fickle, difficult to control and easily lead to getting stuck in the “fix me” trap.

6. Based on the exercises completed in this chapter (identifying your values, writing your epitaph, creating your values statement), write down some of your most important values *(...whatever you are comfortable sharing).*
Chapter 6: Putting It All Together

How much of this chapter have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for this chapter?
1 2 3 4 5 6 7 8 9 10
Not at all Very much so

1. The “mischief makers” in the new life story exercise
   a. Have good intentions to help you, but end up getting in the way
   b. Are the external barriers you might run into such as friends and family?
   c. Are bad and out to hurt you
   d. Are easy to get rid of if you just focus on pushing them out of your mind

   If a. “That’s correct. From the perspective of the book these “mischief makers”
   (thoughts, feelings, cravings, and other internal experiences that pull for values-
   inconsistent actions) are not trying to hurt you. These experiences are well meaning and
   even useful in some settings (often serving to try to protect you from harm). It’s just that
   they are the wrong tool for the job (like being handed a hammer to write a letter).”

   If b, c, or d. “That’s incorrect and the correct answer is d. From the perspective of the
   book these “mischief makers” (thoughts, feelings, cravings, and other internal
   experiences that pull for values-inconsistent actions) are not trying to hurt you. These
   experiences are well meaning and even useful in some settings (often serving to try to
   protect you from harm). It’s just that they are the wrong tool for the job (like being
   handed a hammer to write a letter).”

2. If you have a week in which you feel “off-track” from your values, what can you do?
   a. Open up to and practice willingness with your mischief makers
   b. Reorient to your values
   c. Set some goals
   d. Step back from and become more mindful of your thoughts
   e. All of the above

   If e. “That’s correct. At times you will find yourself off track. When this happens,
   you can use all of the strategies you learned in this book to help get back to acting in line
   with your values. This includes using willingness and mindfulness with your mischief
   makers as well as orienting to your values and setting some concrete goals to start
   moving forward.”

   If a, b, c, or d. “That’s incorrect and the correct answer is e. At times you will find
yourself off track. When this happens, you can use all of the strategies you learned in this book to help get back to acting in line with your values. This includes using willingness and mindfulness with your mischief makers as well as orienting to your values and setting some concrete goals to start moving forward.”

3. Explanations for your behavior
   a. Are always untrue
   b. Can become a trap
   c. Are important so you know how to act differently next time
   d. Are essential for self-compassion
   e. All of the above

   If b. “That’s correct. Sometimes actions need explanation, but more often, whether something was done is really all we need to know. Unfortunately, the explanation often becomes a trap that lead to continuing with actions that are inconsistent with your values: If only I had been more motivated (smarter, better, kinder…) But I wasn’t, and now I must accept my fate. We aren’t saying that explanations are necessarily untrue. Rather, it’s that they obscure what’s really important if you want to change your behavior.”

   If a, c, d or e. “That’s incorrect and the correct answer is b. Sometimes actions need explanation, but more often, whether something was done is really all we need to know. Unfortunately, the explanation often becomes a trap that lead to continuing with actions that are inconsistent with your values: If only I had been more motivated (smarter, better, kinder…) But I wasn’t, and now I must accept my fate. We aren’t saying that explanations are necessarily untrue. Rather, it’s that they obscure what’s really important if you want to change your behavior.”

4. From the perspective of the book, the following are forms of cheating:
   a. Eating something unhealthily
   b. Non-adherence to your exercise plans
   c. Lying to others about how much you are dieting
   d. All of the above
   e. None of the above

   If e. “That’s correct. There’s no cheating in compassionate, healthy living! “Cheating” on your diet isn’t cheating at all. Nobody is cheated out of anything, nobody is there to pass judgment, and nobody loses. Your mind will tell you that you’re cheating; that’s something minds do. What’s really going on is that you aren’t living consistently with your values, leaving you with the choice of what you want to do and be about.”

   If a, b, c or d. “That’s incorrect and the correct answer is e. There’s no cheating in compassionate, healthy living! “Cheating” on your diet isn’t cheating at all. Nobody is cheated out of anything, nobody is there to pass judgment, and nobody loses. Your mind will tell you that you’re cheating; that’s something minds do. What’s really going on is that you aren’t living consistently with your values, leaving you with the choice of what
you want to do and be about.”

5. According to the authors, if you follow the strategies and suggestions offered in this book things will always go well. True or False

If false. “That’s correct. From our perspective, if you act with willingness, if you invite the mischief makers of fear, anxiety, sadness, doubt, and judgment along on the journey and really do what matters to you…things won’t always go well. Life is unpredictable, and you can’t control what other people do. So what you’re left with is how you want to be as a person in each and every moment of your life.”

If True. “That’s incorrect. From our perspective, if you act with willingness, if you invite the mischief makers of fear, anxiety, sadness, doubt, and judgment along on the journey and really do what matters to you…things won’t always go well. Life is unpredictable, and you can’t control what other people do. So what you’re left with is how you want to be as a person in each and every moment of your life.

Chapter 7: Weight Loss – Know How

How much of this chapter have you read so far?
1. I did not read the chapter at all
2. I briefly skimmed through the chapter
3. I read part of the chapter
4. I read most of the chapter
5. I read the entire chapter

How much did you engage in the exercises and journaling activities for this chapter?
1  2  3  4  5  6  7  8  9  10
Not at all          Very much so

1. Why is there a section on weight loss strategies at the END of a book like this?
   a. We must change thoughts and feelings before we can lose weight
   b. We don’t think this information is helpful at all
   c. So you can use this information in the service of values-based, healthy living, not to change how you think and feel or to set a rigid diet plan
   d. All of the above

If c. “That’s correct. This information was saved until after addressing the “fix me” trap and other barriers that often get in the way of effectively using this type of information to make meaningful, effective life changes. This information was introduced in the hopes of supporting healthy behavior changes that are in the service of your values.”

If a, b or d. “That’s incorrect and the correct answer was c. This information was saved until after addressing the “fix me” trap and other barriers that often get in the way of effectively using this type of information to make meaningful, effective life changes.
This information was introduced in the hopes of supporting healthy behavior changes that are in the service of your values.”

2. Think of the food you eat as having these two characteristics:
   a. Pleasure and ascetics
   b. **Pleasure and nutrition**
   c. Nutrition and protein
   d. Protein and pleasure

   If b. “That’s correct. A key for successful, values-consistent dieting is finding foods that pack a nutritional punch while also providing some pleasure. Aim to get the majority of the food you eat from this high-pleasure, high-nutrition category.”
   
   If a, c or d. “That’s incorrect and the correct answer is b. A key for successful, values-consistent dieting is finding foods that pack a nutritional punch while also providing pleasure. Aim to get the majority of the food you eat from this high-pleasure, high-nutrition category.”

3. Counting calories is harmful because it throws you right back into the fix-me trap. True or False

   If false. “That’s correct. There is this risk, which is why this information was saved till the end of the book. However, counting calories can be done in the service of living your values, which we highly recommend for making meaningful health behavior changes.”
   
   If true. “That’s incorrect. There is this risk, which is why this information was saved till the end of the book. However, counting calories can be done in the service of living your values, which we highly recommend for making meaningful health behavior changes.”

4. Eating out will make it particularly difficult to lose weight. How many calories should you estimate a "normal" meal at a restaurant to typically have?
   a. 400
   b. 800
   c. 1,000
   d. **2,000**

   If d. “That’s correct. If you eat out and think you ordered an extremely healthy meal, assume it’s 1,000 calories. If you think you just got a “normal” meal, assume 2,000 calories. If you think you ate a pretty big and unhealthy meal, estimate 3,000 to 3,500 calories. If that sounds crazy, look up your favorite chain restaurant online and check the calorie content of a meal that includes a main dish, a shared appetizer, and, if you usually have one, a dessert.”
   
   If a, b or c. “That’s incorrect and the correct answer was d. If you eat out and
think you ordered an extremely healthy meal, assume it’s 1,000 calories. If you think you just got a “normal” meal, assume 2,000 calories. If you think you ate a pretty big and unhealthy meal, estimate 3,000 to 3,500 calories. If that sounds crazy, look up your favorite chain restaurant online and check the calorie content of a meal that includes a main dish, a shared appetizer, and, if you usually have one, a dessert.

5. A rough guideline for how many calories you should be consuming to lose 1-2 pounds per week, assuming you weigh between 200 and 300 pounds and are not very active is
   a. 900 calories per day
   b. 1,150 calories per day
   c. **1,500 calories per day**
   d. 2,000 calories per day

   If c. “That’s correct. If you weigh less than 200 pounds, aim for about 1,200 calories per day. If you weigh 200 to 300 pounds, aim for about 1,500 calories per day. If you weigh more than 300 pounds, aim for about 1,800 calories per day.”

   If a, b or d. “That’s incorrect and the correct answer was c. If you weigh less than 200 pounds, aim for about 1,200 calories per day. If you weigh 200 to 300 pounds, aim for about 1,500 calories per day. If you weigh more than 300 pounds, aim for about 1,800 calories per day.”

**Week 8: Re-Cap**

1. This past week offered quite a different perspective than the past 6 chapters. Much of this program is built around flexibility and finding more personally meaningful values in living the life you want - not making and sticking to rigid rules. How can you use what you have learned in this book when you are handed topics like chapter 7? How can you use what you have learned throughout this program when you are confronted with dieting options, healthy eating options, exercise options, etc.?

________________________________________________________________________

2. What tools did you use most throughout this past week?

________________________________________________________________________

3. What journal exercises do you feel you might come back to at a later date?

________________________________________________________________________

4. As a final journal activity, write a letter to yourself. Write a letter explaining what tools or perspectives you might harness in challenging times. Explain your options in handling the situation, how might you slow down and notice the moment? Do you offer yourself some self-compassion? From what you’ve learned throughout the past 8 weeks, what do you want to convey to the “you” reading this letter at a later time.
Appendix D

Guided Self-Help Coaching Instructions
Overview of general principles
The primary goal of the phone contact is to increase adherence to the self-help book (reading the book and completing exercises). A secondary goal is to support acquisitioning, strengthening and generalization of concepts, exercises and skills, within the context of what is covered in each chapter. The goal does NOT include the delivery of adjunctive ACT therapy through the phone. Guided self-help functions primarily by creating accountability and connecting personal values with adherence.

The general principles of guided self-help include:

1. **Legitimacy:** The phone coach must be seen as trustworthy, benevolent, and having the necessary expertise. That is, the coach must be seen as having the participant’s best interest at heart and have expertise in the intervention model.

2. **Social presence:** bringing the social context to this accountability and support is important.

3. **Expectations:** The coach should be specific about what is expected from participants. These expectations should be focused on reading chapters and completing exercises, not on any outcomes targeted by the book (i.e., being more accepting of unwanted thoughts).

4. **Reciprocity:** The relationship should be framed as including reciprocity, in which the participant can expect to receive definable benefits from the coach. This involves having the participant identify treatment related goals (e.g. reading chapters and practicing exercises) and identifying the coach role as supporting that role (giving time, attention and assistance with problems).

5. **Accountability:** Participants will be held accountable for completing the program (but not in terms of getting certain outcomes such as losing weight).

6. **Explain Accountability Early:** These accountability processes must be clarified at the beginning of treatment. Adequate justification must be provided. To ensure connection with values, participant agreement with these processes must be obtained prior to implementation.

7. **Monitoring:** The coach must monitor adherence through check in calls and quiz data. It should be made clear that the aim of monitoring is to provide feedback, why that feedback is helpful, that failure to meet goals provides opportunity for self-reflection and growth, and that there are no negative consequences.

8. **Address Non-Adherence:** When the participant is non-adherent, the coach should gently hold the participant accountable by asking the participant to describe why the adherence goal was not met, connecting the goal back to larger goals and values, and collaboratively problem-solving solutions.

9. **Reinforce Adherence:** Success in meeting goals should be verbally rewarded and encouraged.
10. **Goal-setting**: Try to set adherence goals linked to larger values and be sure to involve client in goal setting

11. **Motivation**: Foster intrinsic motivation to engage in the program. Highlighting how using the program is relevant and important, how it fits with values, how it can be helpful and be applied to challenges they are experiencing and enhancing a sense of personal challenge in completing program tasks.

12. **Choice**: Provide choices when possible. Avoid overt/covert pressure, including advice giving. This also encourages a piece in self-identification of different choices available.

13. **Boundaries**: Maintain a clear distinction between acting as a facilitator for self-help and taking on the more extensive role of a therapist.

14. **Problem-solve**: Collaboratively identify and address program use barriers.

15. **Track Time**: Time spent within each phone coaching session is to be tracked.

### Coaching Protocol for First Phone Call

- The goal of this brief “get to know you” session is to increase motivation for participating in the self-help program. By the end of the session we’d like to have our participants express **DARN-C (desire and reasons for, and ability and need to make changes in how they are approaching weight-related issues)**. Participants must feel fully understood to elicit change talk and of program participation.

- The engagement session is semi-structured and has several phases:
  - (1) eliciting participant **program goals**
  - (2) providing brief overview of the **approach and role** of phone coach
  - (3) identifying **potential barriers and problem solving**
  - (4) eliciting **commitment** to adhere to the program, elicit commitment to the process of weekly phone check-ins

- **1. Provide a brief introduction.**
  - **Coach introduction**: *Welcome to the My Body My Health Program, I’m _____, [provide explanation of expertise]. I will be working as your coach throughout your time in this program.*
  - **Set the agenda/purpose of first meeting**: *I was hoping we could get to know each other a little bit today and talk about what to expect from this program, what you would hope to get out of participating, as well as answering any questions you might have. How does that sound to you?*
  - **Cover confidentiality issues and supervision**: *It’s important for me to let you know that while the things we discuss here are confidential, there are a few cases in which I would have to break confidentiality (e.g., harm to self or others). It’s also important that you know that this program is a part of my dissertation, so I am being supervised throughout this project by my mentor, the principle investigator on this project. If I need to consult on a certain issue, it is possible that I may bring up a concern we talk about during a coaching session. While this program is intended to provide support, it is not*
intended to replace or provide general psychological support. If you are currently engaging in mental health services, continue those as you usually would. Together, you and I will check-in regarding your experiences in this program.

- Okay, now we can go ahead and talk about what brings you in to the program. I am excited you’re here!

2. Elicit goals for program.

- Identify desire and reasons for participation. What made you interested in this study? What are your goals?
- Consider conceptualizing the ability and need for making changes: It sounds like there are some things you would like to be different. You also notice that you’ve thought about making/made some changes before. Why again? Why now?
- What challenges/difficulties have you encountered with your weight and related concerns? What has come up for you regarding your weight?
- What are the costs of your current weight management approach? What I mean is, what do you think gets left out of your life because of the way you manage weight?

- Elicit hopes and identify fears for the My Body My Health program regarding weight issues. What would you like to get out of this program? If this program were to work exactly the way you hope, what would life be like two months from now? What might you be doing differently?

- Note: Many participants will report experiential avoidance, aversive control, and otherwise non-values-based motivations related to weight loss and looking/feeling better. The goal at this point is **not to target** or attempt changing these goals, but rather to try using whatever motivation participant currently has and rolling it into program engagement while also trying to elicit some appetitive goals and values.

- Eliciting goals/values: For example, if they focus on looking or feeling better, you might ask what else might be different if they looked/felt better and are there things they would do that they are not doing now. You might also just ask, “What else is important to you about addressing weight issues?” to explore other motivators.

- Acknowledge non-ACT goals: If someone says “I want to feel better and like the way I look” you might:
  - a) validate the goal by saying: *This is a common goal people have.*
  - b) orient focus to the book by saying: *The book you are about to start will explore how you relate to your weight and weight loss efforts, ultimately helping you find out what hasn’t been working*
and what might work better. Part of this might be clarifying your goals and what’s most important and effective to focus on as you keep doing this work.

- During the discussion look for opportunities to help the participant see how the book can provide support and consistencies between the treatment approach and participants’ wishes, especially in terms of appetite goals and personal values.

- **3. Provide overview of book’s approach, program components, and coach’s role.**
  - Discuss: *What do you already know about the program?*
  - Goals of the program (highlighting places that fit with what client said)
    - **Program is different:** This program may differ from previous unsuccessful weight loss attempts you may have tried. The book you’ll read takes a different approach.
    - **Living the life you want:** One key difference is that this program focuses more generally on helping you to live the life you want. This program is not about rules and following them.
    - **Meaningful patterns:** This includes building healthier patterns of living, but not in a forced “I have to do this” way, rather in a way that feels personally meaningful, engaging, and vital.
    - **Weight-loss... YOU already know how:** In building this program and in writing this book, it’s assumed that people are likely to already know what is needed to lose weight. However, barriers show up, make it hard, and get in the way... especially in the long term.
    - **Barriers get in the way:** Part of this program will involve finding new ways to approach psychological barriers that contribute to weight gain and make weight loss difficult... barriers that get in the way of living the life you want.
    - **Long-term change:** Another distinctive part of this program is the focus is on long-term change. Many diets, though options seem diverse, are created equal: they are time oriented. This program invites you to break the cycle of short-term weight loss followed by regain and feeling demoralized, which can be the most devastating.
    - **Emphasis on rich and meaningful life:** Although we think this is a better route to long-term weight loss, the goal is less on the number of pounds you lose and more on how rich and meaningful your life is. It’s by living a more personally meaningful life and connecting broad health behaviors to these values that you will also be successful at managing your weight.
    - Elicit: *What are your thoughts?*

- **Program structure and components**
  - Elicit: *What do you know so far in terms of what using the program...*
entails?

- **Provide:** This program will involve reading a self-help book called *The Diet Trap*. This book is based on Acceptance and Commitment Therapy, a heavily researched treatment that has been found to be helpful for individuals like yourself struggling with weight concerns, among other things.

- **Introduce perspective:** The book will introduce you to new strategies for approaching difficult thoughts and feelings as well as identifying what you want out of your life. This will include a heavy emphasis on exercises to try out, so you can test to see what works for you. Not physical exercises, but ones that involve your mind, your heart, your inner self.

- **Reading for content and practice, not speed:** There are 7 chapters in the book and I ask that you complete one chapter each week. This will help you to pace yourself in going through the book and applying what you learn. The goal isn’t just to finish the book as much as it is to consider and apply what you read to your life and the challenges you’ve struggled with regarding weight.

- **Dig deeper with your journal entries:** You will also be asked to keep a regular journal, reflecting on what is discussed and how to apply it more in your life. You can keep your journal within the book, although there is often not enough room to write everything you want. I do suggest completing your journaling in a separate journal or perhaps printing out the journal entries document I will send you over email after this meeting. Know that whatever you have in your journal is YOURS. I will not be asking for you to return any part of it to me.

- **Self-help structure:** This study is testing out the book in a self-help format. By that, I mean we are interested in whether a program can be successful with (1) minimal guidance and support from a therapist and (2) much of the work being done on your own (book, journaling, quizzes).

- **What are some advantages to this approach?**
  - **Flexibility:** This approach gives you significant flexibility while also giving your accountability. You can complete things on your own time ANYTIME throughout the week. You can do a little here, little there, and ultimately take in the material wherever, however you like.
  - **Reputability:** Sometimes it’s not clear how to choose self-help books like this. There are many books out there and it can be challenging to know the basis of a self-help book of or if the person who wrote it is a
“renowned” researcher or licensed professional in the field. The material you’ll read is based on many years of Acceptance and Commitment Therapy research from licensed psychologists and is written by highly esteemed clinicians and researchers at reputable clinics/hospitals. The method we use for checking-in is based on an evidence-supported model for delivering guided self-help.

- What are some disadvantages and possible challenges for this approach?
- Can add:

  - Prioritization: As it goes when committing to things, it can also be challenging to prioritize the program and complete weekly tasks, especially when life gets busy.

- **Phone calls:** The weekly phone contact we have might help address those issues from self-help.
  - Elicit: *What do you know about my role as your coach?*
  - Provide: *As your coach I will be supporting you in using the program.*
    - I will not be providing therapy, but will be available to help you use the book and apply it in your life. So, the book itself will actually give you the skills to address your weight concerns, not me. However, we can talk about the skills you read about and how to apply them and I can be here to answer questions you might have during our coaching sessions.
    - I will be checking in with you through regular, 5 to 10-minute phone calls to see how things are going in using the book.
    - For the study, we ask you to complete an online quiz after you read each chapter. I’ll be monitoring these quizzes. These quizzes will help me to track how far you’ve gotten in the book and how you are doing in terms of learning the content. These quizzes will also give you a chance to reflect on what you have learned, check your knowledge, and to further your understanding of the materials.

- **Expectations for future contact:** *We will schedule 5 to 10-minute phone calls each week during the 8-week period to check in on how things are going and see if you have any questions.*
  - Although we will wait for the phone session to check-in, you can always contact me by email or phone if you have any questions.
  - Accountability expectations: “When we talk, we’ll review any difficulties you’ve been having with the Diet Trap program, including how you have been doing reading the chapters, journaling, and practicing exercises. In a way, we’ve found this
to not only be helpful for problem solving issues, but in increasing motivation since you know someone will be checking in on your progress.

- Elicit: Does this make sense? What do you think of this role? How is it going to work for you?
- Highlight reciprocity: In other words, my role will be to give you support, attention and assistance in using the program, in exchange for your role of working on actively using the program.

- Expectations: To summarize, your participation in the Diet Trap program will include:
  - 1) Reading the full book over the 7-week period – one chapter a week
  - 2) Practicing exercises to further build your experience with the skills you learn
  - 3) Journaling regularly with prompts from the book to apply concepts to your life
  - 4) Completing chapter quizzes after finishing each chapter
  - 5) Completing weekly coaching calls with me
  - 6) We are confident this process will help ensure you have a positive experience with the program and get the most you can out of it.
  - 7) How does that sound to you?

- 4. Identify barriers to participating in program and problem solve.
  - Discuss: Beyond the concerns you talked about already (name them), what might keep you from participating in the My Body My Health program?
  - First probe for psychological (fears, doubts, guilt, etc.) and cultural concerns (stigma, therapist age/ race/ culture) (e.g., Some people have concerns about what it means that they are getting help for their weight or feel guilty about taking time for themselves instead of putting all their effort into taking care of their families. Some have doubts about whether this might help. It wouldn’t be unusual if you had some doubts like these. Do any of these apply to you?).
  - Talk about the practical concerns last. What might make it hard for you to participate, even if you wanted and intended to? (time, other responsibilities, etc.)
  - What are your thoughts about how to address these barriers? (Very briefly brainstorm with participant.)

- 5. Elicit commitment
  - Give a grand summary, summarizing the participant’s story, dilemma, and strengths, ambivalence about counseling, highlight “change talk” and perceived positives of the counseling program, barriers and solutions.
- Elicit commitment “How does this sound to you? Is this what you want to do?”
- Goal setting
  - We recommend you read through the book while doing exercises and journaling.
  - The program is setup so that you read one chapter a week.
  - What are your thoughts about starting with this goal to read the first chapter this week?
  - How might this goal fit with what we’ve discussed today? Why is it important to you?
  - I will be calling you in one week to check in on your progress. We can go ahead and make a schedule for the program now. When do you want to setup the phone calls? (add to Participant Tracking Database MBMH)
  - I will send these weekly meeting times to you in the next email I send.
- Instill hope. Affirm participation in this session and his/her strengths; recall session positives and express optimism. You’ve taken the first step towards addressing these issues...
- Leave the door open and be sure to instill a sense of the importance of communication. Life is somewhat unpredictable and it’s possible that something could happen at the last minute. If you’re unable meet as planned, just let me know and we can reschedule.

6. Logistics: I’ll explain all the materials for the program.
- Describe different aspects of the program (chapters, exercises, journal, quizzes, coaching calls) and email the participant the materials.
- Make sure participant knows how to access and complete chapter quizzes.
  - In order to complete the chapter activities, you will need to complete a quiz online. The link I send accesses all quizzes. I will send you this link each week and you can complete it when you’re done reading the chapter for the week.
- Discuss journaling.
  - Know that although we are not collecting journals at the end of the program, we do expect for people to use this component. We believe journaling to be important in eliciting personal change throughout the program. I will send an electronic version. Feel free to print the journal prompts out each week and complete. You can also keep your journal in your own journal if you like.
- Revisit phone coaching schedule.
  - Like I mentioned, we will plan to meet on the phone once a week. If you have any questions or concerns about the program, you can call my number and leave a voicemail. However, contacting me via email might work best. You can email me and provide some days/times you are available and then I can give you a call back at my earliest
Review time of first phone session. Explain as well that most phone sessions will be brief (approximately 5-10 minutes) to check in on how things are going with the book and to help with any issues that may have arisen. The next phone session will discuss the experience of Chapter 1 and prep for Chapter 2.

Check for any questions, offer encouragement, and thank participant for the time and opportunity to work together in the My Body My Health Study.

**Weekly Phone Prompting, Adherence, and Motivation Calls**

*(Approximately 10 minutes)*

*Be sure to track amount of time spent during the session*

The purpose of the follow up phone calls is to keep participants motivated to use the program and to help them troubleshoot any problems that may interfere with usage. This is an opportunity to help the participant clarify what about the Diet Trap is working well for them as well as address any problems. Calls should last approximately 5-10 minutes and use motivational interviewing principles to elicit commitment to the program.

Sessions will include coverage of topics including:

1. Whether they have been reading the book, journaling and completing exercises
2. Reinforcing successful applications
3. Increasing motivation to read and apply concepts
4. Troubleshooting problems related to adhering to the book (reading, etc.)
5. Addressing questions and issues related to understanding and applying the self-help book concepts and exercises
6. Don’t provide therapeutic advice beyond what is contained in the self-help book. This means that as a coach, you are not “digging too deep,” but discussing relevant material directly related to the book and their overall experience.

**Phone Session Outline**

- Send an email reminder with link for quiz 3-4 days prior to phone coaching appointment (Draft found in Assessment and Quizzes Folder).
- Prior to coaching session, check participant’s quiz data.
- Take down general notes of phone session on the participant’s calendar file (found in Participant Calendar Files).
- I’m going to check in with you for 5-10 minutes about how it has been going using The Diet Trap. How is it going?
- How was completing your goal for reading the book this week?
- If they read the book at all or otherwise engaged in the program:
o Have you been completing exercises and journaling?
o Give plenty of affirmations for having done any reading, exercises and/or journaling. What was most interesting and useful of what you learned/tried? Why was that helpful? **Eliciting and reinforcing change talk for engaging in book as well as reinforcing and promoting generalization of skills is important.**

  o Do you have any questions about the materials or how to apply them? Was anything confusing or unclear?
  o If they did poorly on the quiz in an important way, check in to see if they had any questions about the quiz feedback.
  o The goal for the next week will be to read chapter X. Any concerns about meeting that goal? **If so, troubleshoot possible solutions with them**

  o Schedule next coaching session.

- **If they have had trouble with adherence (to reading, exercises/journaling, completing quizzes)**
  o Have them articulate reason for wanting to meet that goal (i.e., to do the exercises 3 times, or to read the full chapter). **Why are you interested in doing this?**
  o Assess barriers. **What has been getting in the way? Anything else?**
  o Problem solve: What do they think they might do given this?
  o Don’t go around in circles or repeat things! Keep calls short and to the point.
  o The goal for the next week will be to read chapter X. Any concerns about meeting that goal? **If so, troubleshoot possible solutions with them.** This is especially important in keeping their progress in the program since they are already showing a lack of engagement.

  o Schedule next coaching session.
Implementing Guided Self-Help for the Two Conditions

Guided Self-Help-Email (GSH-E)

- **First Email**
  - After sending the “next steps” email with journaling documents, quiz links, and personal calendar, follow-up with participant if any questions arise.

- **Prompt and Reminder Email Schedule**
  - Send the participant the weekly email prompt from Email Drafts on the same day each week. This email provides instructions for the weekly tasks (chapter, journaling, and quiz), and a genuine, positive statement (e.g., It takes work to read and do these exercises, it really seems like you’re putting in effort.).
  - Record dates of all sent emails in the Participant Tracking Database MBMH.
    - Record prompts, reminders, and additional correspondence (e.g., response to participant questions) in the database.
  - Check the Qualtrics database for completion of weekly quiz 6 days after sending the weekly email prompt. If participant fails to complete a quiz on-time, as indicated by Qualtrics and the Personal Calendar, send reminder email to complete weekly tasks (e.g., reading, journaling, quiz) from Email Drafts.
    - This email includes a supportive statement such as, “I encourage you to stay on-track even though things come up that might make it challenging,” and a prompt to set a new due-date for the late tasks, such as “It is my intention to support you in making decisions that are important to you.” How does it sound to shoot for next (3 days away) to have this completed?”
  - If a participant does not respond to the reminder email within three days and has not completed the weekly chapter quiz, send a second similar email reminder from Email Drafts.
  - If the participant doesn’t respond to the second completion prompt, send no additional reminder emails for that chapter. Send the next weekly prompt starting with the next chapter scheduled.
    - It is important to remember that this GSH version is a less-intensive version. While it may feel “appropriate” to send more encouragement or check-in with greater detail, it is important to only give prompts and answer questions the participant asks. For example, do not ask a participant the following types of questions in emails (or in the case of phone contact):
      - NO: “What do you think is getting in the way?”
      - NO: “What happened differently this week?”
      - NO: “Are there any chapter topics you have questions about?”
• NO: “How can I help support you?”
• These types of questions are not appropriate for this condition because they demonstrate a higher level of support that requires more time to administer and monitor.

- If a GSH-E participant calls the research coordinator, any “support” given needs to follow this same model. Be kind and appreciative of program engagement, but simply remind person of tasks, encourage participation, and re-schedule quiz due-date. If it appears a participant is frustrated with the researcher’s inability to answer more “in-depth” questions or engage in greater conversation, here is an example response:
  - I would like to be able to answer more questions for you and check-in with you more. However, this program is testing a self-help type of program and it’s important that I let you engage in the book and complete the associated tasks on your own way. Your thoughts and experiences are very important to this study and to me. During the second survey (in X# weeks), I will ask you about your experience and the pros/cons of the program. I do hope that you will be able to share your experience.

- After final chapter completion or appropriate reminders, send email for second survey from Email Drafts.
  - Check the Qualtrics database for survey completion 48 hours after initial email. If the participant has not completed the survey, send a reminder from Email Drafts.
  - Check the Qualtrics database for survey completion 48 hours after reminder email. If the participant has not completed the survey, send a second reminder.
  - Continue this process for up to 5 reminder emails (last prompt email should be sent 12 days after initial email).
- Send appropriate email for final survey from Email Drafts.
  - Check the Qualtrics database for survey completion 48 hours after initial email. If the participant has not completed the survey, send a reminder from Email Drafts.
  - Follow the same reminder process as the second survey.

**Guided Self-Help-Phone (GSH-P)**

- **First Phone Coaching Appointment**
  - For participants randomized to Guided Self-Help-Phone (GSH-P), research coordinator will send appropriate email (see Email Drafts) and conduct first phone coaching appointment.
  - Use the Coaching Protocol for First Phone Call.
  - Explain to the participant that this first phone call will last approximately
15-20 minutes.

- **Basics of Phone Coaching**
  - Use the Participant Calendar that is participant-specific to keep specific information about coaching sessions. Record information from the phone session in this document. The file reads as: “MBMH _####,” where #### signifies the participant's ID, NOT participant's name.
  - Follow the general Coaching Protocol as instructed in Mohr, Cuijpers, and Lehman (2011) and in document (MBMH General Coaching Instructions).

- **Monitoring participants**
  - Once a week, email the link for the weekly quiz, encouraging participant complete reading, journalizing, and quiz.
  - Regularly check the quiz database to see if your participant has been completing chapters/quizzes regularly.

- **Weekly Coaching Phone Calls**
  - Weekly phone calls will last approximately 5-10 minutes.
  - Be sure to track amount of time spent during the coaching session.
  - Participants should have the chapter, journaling, and quiz completed prior to call.
  - Coaching sessions will include coverage of topics including:
    - Whether they have been reading the book, journaling and completing exercises
    - Reinforcing successful applications
    - Increasing motivation to read and apply concepts
    - Troubleshooting problems related to adhering to the book (not reading)
    - Addressing questions and issues related to understanding and applying the self-help book concepts and exercises
    - Don’t provide therapeutic advice beyond what is contained in the self-help book. This means that as a coach, you are not “digging too deep,” but discussing relevant material directly related to the book and their overall experience.

- **Missing Phone Calls or Not Completing Tasks**
  - If a participant misses a phone coaching call and does not call back or falls behind on completing quizzes, implement the following:
    - Call to check in with participant the same day as missed meeting
    - Send an email the same day as missed meeting/quiz completion
    - Call again 2 days later (3 days after the missed meeting)
    - Consult with PI if still no response
    - Document all action taken (e.g., email sent, phone message left, phone contact) in the Participant Tracking Database MBMH under item “extra contact” for the week. If necessary, leave more detailed information in the
participant’s Personal Calendar.

- Since these reminder/check-in class are occurring outside of scheduled time, they are designed to be very brief prompts for program engagement. Depending on level of participant engagement in the call, researcher may spend a few minutes enhancing motivation to complete the book and quiz and/or troubleshooting barriers.

- **Call content:**
  - Remind participant that he or she hasn’t completed the quiz and ask for him or her to do it at the earliest convenience.
  - Ask them when they might be able to complete it—it’s better if you get a clear commitment for when they will do the quiz/read the chapter.
  - Make sure they know how to complete the quiz if it’s their first one
  - Depending on how engaged/disengaged they are on the call, you might explore barriers to completing quiz or eliciting/reinforcing change talk to complete the quiz/chapter.

- **Coaching Session Outline (for weeks 2-5)**
  - Check participant’s quiz data prior to coaching session.
  - *I’m going to check in with you for 5-10 minutes about how the program. How is it going for you?*
  - *How is reading the book? How was completing your goal for reading the book this week?*
  - Choose A or B:
    - **A:** If participant read the book at all or otherwise engaged in the program, ask the following:
      - *Have you been completing exercises and journaling?*
      - Give plenty of affirmations for having done any reading, exercises and/or journaling. *What was most interesting and useful of what you learned/try? Why was that helpful?* Eliciting and reinforcing change talk for engaging in book as well as reinforcing and promoting generalization of skills is important.
      - *Do you have any questions about the materials or how to apply them? Was anything confusing or unclear?*
      - If participant did poorly on the quiz in an important way, check in to see if there are any questions about the quiz feedback.
      - *The goal for the next week will be to read chapter X. Any concerns about meeting that goal?* If so, troubleshoot possible solutions together.
• Schedule next coaching session.
  • B: If participant has had adherence issues (to reading, exercises/journaling, completing quizzes), ask the following:
    • Have participant articulate reason for wanting to meet the goal (i.e., to do the exercises 3 times, or to read the full chapter). Why are you interested in doing this?
    • Assess barriers. What has been getting in the way? Anything else?
    • Problem solve: What do you think you might do given this [challenge]?
    • Keep calls short and to the point.
    • The goal for the next week will be to read chapter X. What concerns do you have about meeting that goal? Troubleshoot possible solutions together. This is especially important in keeping participant progress in the program if showing lack of engagement.
  • Schedule next coaching session.

• Week 6 Coaching Session
  • Week 6 coaching includes same coaching session content as weeks 2-5 while also preparing participant for interacting with Chapter 6: Weight Loss Know How. This chapter offers a different perspective than previous chapters as it offers suggestions to change weight status (e.g., diet, exercise). Phone coach will discuss the nature of this chapter prior to the participant reading and completing the week’s assignments.
  • This week you will read the last chapter of our book – only two more weeks until you finish the program! What has been your take on the book so far? How is the book similar or different to your previous perspectives? It’s important that we check in before starting with this last week. There are different ideas and suggestions in this final chapter and I would encourage you to read this final chapter with the previous six chapters in the forefront of your mind. I encourage you to take these suggestions and apply what you have learned. What can be kind of cool about this chapter is how you respond to it. I won’t spoil the chapter for you though. We can check-in on it during our meeting next week.

• Week 7 Coaching Session
  • The 7th week coaching includes same coaching session content as weeks 2-5 while also discussing experience of the final book chapter. Phone coach will check-in on participant’s experience of the Weight Loss Know How chapter as it relates to the rest of the book.
  • How was this chapter in relation to the previous 6 chapters? What did you think about as you read this? Let’s say you hadn’t read the first 6 chapters, how might you have responded to this final chapter? Do you think you responded differently since you did read the first 6 chapters?
How so? This next week there are no required readings or journaling – just a brief quiz. What do you think this next week is for? This last week is a special week for you to reflect on what you have gathered throughout the last 7 weeks. How will you deal with “rules” you are given? How can you be flexible and attend to what matters in your life regardless of how “well” you follow these rules? What does it mean to you to empower your body? See what this week brings you! Feel free to peruse through the book again, go back and re-read or complete journal exercises again. You can treat this week however you like. Do you have any questions? We will meet on the phone next week for our final session. This final session may last about 15 minutes rather than our usual 5-10 minutes. Will our usual scheduled time still work for you?

- **Final Coaching Session**
  - The 8th week concludes the final coaching session. This final session is intended for the participant to debrief with phone coach. Phone coach and participant will discuss experiences using the book, how to continue practicing what was learned in the program, and any further questions/thoughts/concerns.
  - Congratulations on finishing the program! I hope that you have found the reading and activities helpful. Today will take about 15 minutes to review the last two months and talk about the future a bit. After we are done talking, there is a second survey (~30 minutes) to take online; I will send you the link in an email.
    - How were the last 8 weeks for you and what was it like to be a part of this program?
    - What was helpful for you in the program? What do you feel you’ve learned?
    - What things were less helpful or otherwise didn’t work well for you?
    - How can you continue to apply what you felt was useful from here on? Are there skills you had trouble with that you want to keep developing? ...areas you want to work on in applying these skills?
    - When challenges arise (because inevitably they will!), what can you do to help apply the skills you learned in the program? How will you set yourself for success?
    - What questions might you have for me?
  - Thank you for participating in this program! Since this is part of a dissertation research study, it is important for me to check-in after a longer period. I will send you a 3-month follow-up assessment over email. It will take about 20 minutes to complete and I would appreciate it if you were willing to complete this. Just to re-cap, I will email you a 2nd survey in just a moment. Then, in a few months, I will email the final survey. How does this all sound to you? (answer any questions) Great! Well, I can’t believe we are already done with the program! It has been a pleasure
being able to work with you in this program and I wish you the absolute best in continuing to focus on what matters in your life.

- **Post and Follow-up Surveys**
  - After final chapter completion or appropriate reminders, send email for second survey from Email Drafts.
    - Check the Qualtrics database for survey completion 48 hours after initial email. If the participant has not completed the survey, send a reminder from Email Drafts.
    - Check the Qualtrics database for survey completion 48 hours after reminder email. If the participant has not completed the survey, send a second reminder.
    - Continue this process for up to 5 reminder emails (last prompt email should be sent 12 days after initial email).
  - Send appropriate email for final survey from Email Drafts.
    - Check the Qualtrics database for survey completion 48 hours after initial email. If the participant has not completed the survey, send a reminder from Email Drafts.
    - Follow the same reminder process as the second survey.

**Addressing Concerns in Phone Coaching**

- **Addressing more specific issues**
  - If the participant is “too busy” to meet the goal:
    - Discuss reasons for wanting to use the program
    - Help problem solve how to fit the program in his/her schedule
    - Encourage participant to make a commitment to complete part of the reading (or journaling or exercise) sometime in the next couple of days. *Is there any other way that I might be helpful in assisting you with this program?* (e.g., *Is it alright if I follow-up with you by email in a few days to check-in on how the reading/activities go?*).
  - If participant is resistant to committing to an action plan, reiterate that the commitment is completely up to them and when and how much he/she uses the program (e.g., *I realize that you are busy and this program may seem like just another responsibility. I’m also here to serve as an encouraging support. Given your thoughts when we started this program, I am confident that when you have time and interest you will get back to it. I am here to support you, so please let me know how I can continue to provide that.*).
  - If participant is vague or does not provide explanation for poor program use, it is okay to probe: *I’m wondering if you aren’t finding the program useful or if you might be feeling discouraged. Discuss his/her experience and collaboratively troubleshoot.*
  - If the participant is feeling good, but just not participating:
    - *I realize you might be feeling good right now and I bet that feels good. I’m curious though, if you might be able to think of reasons*
why you started this program? The way you describe “feeling good” makes me think “feeling good and feeling bad” might be just a part of life. How do you think continuing this program now may actually help you during another time? ...maybe when something unexpected or stressful comes up or when you don’t feel so great?

- If they can’t articulate any reasons, suggest possible reasons why someone might want to continue reading.
  - Let’s think back to our initial phone meeting and kind of the beginning of this program. There was a reason you wanted to get involved. What was that? Now that you’ve been in the program for X weeks, you are feeling good. It sounds to me like you are learning, doing things that matter, and possibly the way you handle things is different. Maybe things are “easier” right now, maybe your perspective is shifting, maybe you have new skills, maybe you’re taking better care of yourself... Why stop here? What else do you think you could gain from continuing?
  - Continuing this program even though you’re feeling good right now might help you when you get into a place that doesn’t feel good, kind of like learning tools to use later. On the same note, it might even be a neat way to read this book with a perspective of “I could use these skills if I needed to” and recognizing your choice in this.
  - Just for a moment, I would like for you to imagine how you might handle a challenging situation that makes you feel bad. You don’t have to tell me, but just think of one. I want you to imagine what you would do, how you would handle it, what you would tell yourself, and maybe even how it all might impact other things or people in your life. Do some of these responses look like what you’ve usually done? Do you think there are other ways of responding that might be aligned with what matters to you? Might there still be some room to grow? If so, (and only you know!), I encourage you to keep working in this program.

- “I don’t understand ‘X, Y, or Z concept’ or exercise.”
  - Any researcher implementing this protocol is expected to be very familiar with both ACT and the content in The Diet Trap. Researchers should be prepared to answer basic questions about content, including clarifying concepts and how they apply to problems, and troubleshooting issues that commonly arise in ACT.
  - A couple of points for researchers when addressing issues:
    - Keep your content explanations brief; avoid getting into long-winded metaphors or therapeutic conversations. Your role is to be a coach providing brief support, not providing therapy as a therapist.
- Keep explanations confined to the content covered in the book. DO NOT introduce new metaphors or exercises outside the book in addressing issues.
- If you are not sure how to answer a question, you can always say, "that’s a good question and I’m having trouble thinking of how best to answer that. Let me get back to you in a day or two with a bit more of an explanation after I consult with my supervisor. Would it be okay if I emailed you or gave you a call in a couple days?"

**Client says: “This isn’t working.”**
- Some participants might report the program isn’t working for them. In these cases, our goals are to explore potential barriers to seeing program benefits (i.e., misinterpretation of exercises, goals for program), encouraging continuing to see if the program might be helpful to them (treating it like an experiment and just seeing what happens with full engagement), and also communicating the voluntary nature of participation.
- **Validate:** I’m sorry to hear that and I imagine that it’s disappointing for you.
  - Be empathetic to the frustrated participant.
- **Troubleshoot:** I wonder if there is anything different you might try in engaging with the book that might help. Are there particular things that aren’t working for you?
  - Keep in mind to identify issues this way and troubleshoot where possible. Discuss thoughts without engaging in therapy.
- **Encourage:** What are the downsides of continuing to engage in the program given these experiences? What are the potential benefits?
  - Provide a double-sided reflection to help elicit change talk for continuing to engage in the book and treat it like an “experiment” to see if it might be helpful for them.
- **Commitment:** Given that, what do you want to commit to this week (e.g., book, quiz)?
  - Instilling autonomy, see if you can roll a summary of the above into a commitment to read the book chapter this week.

**Adverse reaction**
- Examples of adverse reactions include distress related to reading the book (i.e., feeling blamed or personally attacked in some way by the book) or exercises (i.e., feeling overwhelmed or distressed from completing values exercises and recognizing areas needing attention). Although adverse reactions are not expected, as they have not been found in related ACT for obesity clinical trials, we cannot guarantee they would never occur. Our goals in this type of situation are to assess the adverse reaction, whether it meets criteria for stopping rules (i.e., removal from study), and, depending on...
severity, offer additional supports, such as treatment referrals. Researcher will contact the PI immediately in these instances for further consultation and in preparing any necessary report to the IRB.

- If there is not an adverse reaction to the program that would indicate a “stopping rule,” researcher may also state: Of course, since this is a research study, you always have the option to stop using the book. We’d encourage you to keep with it, but it’s your choice and we’re really interested in just hearing what people experience in this program (e.g., book, support, activities).

- **Managing Session Length – aim for 5-10 minutes**
  - In order to keep the time, use a reflection followed by directive question. Keep in mind that we still want to address time with a compassionate stance. Keeping coaching time to a minimum is an important variable in this study. Ultimately, this condition requires far less time than traditional face-to-face therapy. Although in the moment you might be inclined to extend the time and feel like you are helping, it is important to maintain the program focus: participants are autonomous.
  - Examples:
    - That sounds like a tough time. Where you able to use your ACT skills even during this tough time?
    - It sounds like you want to talk about x, y, and z, and although those are important pieces, I would like to make sure we also talk about ____, since that is also important to touch on.
    - We have about 3 minutes left – anything else we should talk about?
    - I’m noticing the clock and we’re already at about 10 minutes. I don’t want to take up too much time, as this is supposed to be about doing things on your own time. Is there anything else we need to touch base on?

- **Reducing intensity of calls**
  - After three weeks of phone coaching calls, if a participant is motivated and engaged OR is clearly not engaging in the phone calls at all (or maybe not even answering calls), assess the amount of phone coaching needed and offer them the option to engage with lower intensity phone sessions. Regardless of call issues, be sure to emphasize that the adjustment is completely their choice and for their benefit to support them in using the book as best as possible.
  - a) **High engagers:** It seems like you are doing well in engaging with the book. Given that, I was wondering if the structure of these phone calls is helpful for you or alternatively we could have briefer calls in which I very quickly check in on progress with the book and then answer any questions you may have on the latest chapter. Either way works well for us and we want to offer you the option just to be mindful of your time and whatever works best for you. We can also test out doing shorter calls and switch back to our original format if that doesn’t work as well for you.
• **b) Not returning calls:** It’s been a few weeks since we’ve talked on the phone regarding your use of the book. I wanted to check in to see if the structure of the calls and program is working for you and to trouble shoot possible options. One option is that we could bump down to just doing very brief phone calls to see how things are going and answer any questions you may have. In either case, we want to check in to see how things are going and if there is anything we can do to help in using the book, so if you’re willing, please give me a call back.

• **c) Consistently not using book:** I noticed that you’ve been having trouble engaging in the book for the past few weeks and I’m wondering if the structure of these phone calls is helpful for you or if there is anything we can change up to better support you. Sometimes when it’s difficult to do something, getting repeated reminders like these calls can end up feeling shaming or frustrating rather than supportive. I definitely want to make sure we are being a support for you and one option is we could change the calls so that they are just very brief check-ins each week to see how things are going. Would that work better for you?

**How To conduct brief phone calls**

- If the participant decides to just receive a brief phone call, use the following structure for calls:
  
  1) Ask whether participant read the next chapter of the book this week and completed the exercises/journaling.
  
  2) Reinforce completing any of these components and ask if there are any barriers they want help troubleshooting if they have not done these things.
  
  3) Ask if participant has any questions about the book.
Appendix E

Guided Self-Help Welcome Letters
Dear (participant’s name – for GSH-Email),

Welcome to the My Body My Health Study! We are thrilled to have you in this study and hope that you find the program helpful in your life.

As you may already know, there are a few components to the study. Two of those items are in this packet: the book and the printed journal entries. Both are yours to keep. The printed journal entries are identical to those presented throughout the book. We printed them for you as an option since there is little space to write the responses in the book. If you prefer to complete journal entries straight in your book, on a computer, or perhaps in your own journal, that is fine too! We will not be collecting your books or journals as a part of this study – it is your own space for your own thoughts, whatever they may be.

I encourage you to peruse the book before getting started! It’s written by three people who are top researchers and clinicians in the field of psychology and weight. Significant research and clinical practice lies within your hands when you read this book. At the same time, significant understanding of human nature does too. We will be reading one chapter per week. You might want to skip ahead at times, but we encourage you to stick to the scheduled chapter for that week. Sometimes it’s helpful to just let things to settle in our minds and give ourselves a little more time to process our own experiences.

The calendar on the next page will help you stay on track for completing the program in 8 weeks. You’ll see there are basically 3 tasks required each week: read the chapter of the week, complete journaling activities, and submit your online chapter quiz (very short!). I will also support your progress in the program by sending weekly email reminders as needed.

If you have any concerns or questions about the program during your participation, please email me at sarah.potts@aggiemail.usu.edu or call me at (435) 414-9848. I look forward to supporting you throughout the next 8 weeks!

Thank you for being a part of the My Body My Health Study!

Sincerely,
Sarah and the My Body My Health Team

*When I dare to be powerful, to use my strength in the service of my vision, then it becomes less important whether I am afraid.* — Audre Lorde

*Our one true home is in the present moment.* — Thich Nhat Hanh
Dear (participant’s name – for GSH-Phone),

Welcome to the My Body My Health Study! We are thrilled to have you in this study and hope that you find the program helpful in your life.

As you may already know, there are a few components to the study. Two of those items are in this packet: the book and the printed journal entries. Both are yours to keep. The printed journal entries are identical to those presented throughout the book. We printed them for you as an option since there is little space to write the responses in the book. If you prefer to complete journal entries straight in your book, on a computer, or perhaps in your own journal, that is fine too! We will not be collecting your books or journals as a part of this study – it is your own space for your own thoughts, whatever they may be.

I encourage you to peruse the book before getting started! It’s written by three people who are top researchers and clinicians in the field of psychology and weight. Significant research and clinical practice lies within your hands when you read this book. At the same time, significant understanding of human nature does too. We will be reading one chapter per week. You might want to skip ahead at times, but we encourage you to stick to the scheduled chapter for that week. As with many things, it can be helpful to let our minds settle and allow ourselves a little more time to process our own experiences.

The calendar on the next page will help you stay on track for completing the program in 8 weeks. Depending on when we schedule our weekly phone check-in, this calendar could shift a bit. I will email you a new one if/when we make changes. Please complete the reading, journaling, and online chapter quiz before we check-in each week. You’ll see there are 4 tasks required each week: chapter reading, journaling activities, online chapter quiz (very short!), and phone check-in. Journaling can require more time, so please choose what makes sense when you have particularly busy weeks. For example, it’s better to spend more time on 1 or 2 entries rather than touch every prompt on a surface level. We will talk more about this during our initial phone-coaching call. I will plan to support your progress and work in this program by sending weekly email reminders and providing weekly phone coaching appointments.

If you have any concerns or questions about the program during your participation, please email me at sarah.potts@aggiemail.usu.edu or call me at (435) 414-9848.

I look forward to supporting you throughout the next 8 weeks! Thank you for being a part of the My Body My Health Study!!

Sincerely,
Sarah and the My Body My Health Team

When I dare to be powerful, to use my strength in the service of my vision, then it becomes less important whether I am afraid. — Audre Lorde

Our on
Appendix F

Guided Self-Help Chapter Prompts
*All email prompts were personalized with a greeting, assessment ID, and salutation.

1\textsuperscript{st} Week Check-in (GSH-E)
Subject Line: Week 1 Check-in

\textbf{Hi NAME},

Welcome to Week 1! In this first week, you will read about the narrative we all have been “sold” – that losing weight is equal to being healthier and happier and the benefits of being gentle and accepting of your own experiences. Interestingly, the book mentions how debilitating “weight-shaming” can be, giving research findings to provide a stronger rationale. However, you have the opportunity with this week’s chapter to really let yourself explore your own history, experiences, and routines of treating yourself. Remember that your journal is yours – nobody will be reading it except you! I encourage you to let your thoughts be absolutely present in order to learn more about yourself here. Here is your quiz link: \url{https://usu.co1.qualtrics.com/SE/?SID=SV_9AILG7jhc7pDCoB&Study_ID=ADD}

This next week is all about self-compassion and learning a bit more about yourself and your experiences through some very real journaling. I encourage you to let yourself dive deep!

\textbf{Thank you for your participation!}

2\textsuperscript{nd} Week Check-in (GSH-E)
Subject Line: Week 2 Check-in

\textbf{Hi NAME},

I hope your second week is going well! Week two focuses on self-compassion and the benefits of being gentle and accepting of your own experiences. Interestingly, the book mentions how debilitating “weight-shaming” can be, giving research findings to provide a stronger rationale. However, you have the opportunity with this week’s chapter to really let yourself explore your own history, experiences, and routines of treating yourself. Remember that your journal is yours – nobody will be reading it except you! I encourage you to let your thoughts be absolutely present in order to learn more about yourself here. Here is your quiz link: \url{https://usu.co1.qualtrics.com/SE/?SID=SV_9AILG7jhc7pDCoB&Study_ID=ADD}

This next week (Chapter 3) focuses on thoughts, the power of thoughts, and our role. The authors discuss what we can do with our thoughts to impact the effect they can have on us. You’ll learn about getting “un-stuck,” a simple way to explain a mental experience we can all have!

\textbf{Thank you for your participation!}
3rd Week Check-in (GSH-E)
Subject Line: Week 3 Check-in

Hi NAME,
Chapter three of the study – it’s already been three weeks! This week (Chapter 3) focuses on thoughts, the power of thoughts, and our role. The authors discuss what we can do with our thoughts to impact the effect they can have on us. You’ll learn about getting “un-stuck,” a simple way to explain a mental experience we can all have!
Here is your quiz link: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD
The next week marks the half-way point of the program and provides some instruction on feeling what we feel, regardless of quality or opinions of the feelings. This involves willingness and present moment awareness – and provides examples of what our lives can look like when we choose the opposite responses, like avoidance.

Thank you for your participation!

4th Week Check-in (GSH-E)
Subject Line: Week 4 Check-in

Hi NAME,
This next week is chapter 4 in our program, which is all about choosing healthy living. Healthy living includes the way we treat our bodies (inside and out), the way we connect with those we love, and even the personal goals we have in our jobs or at school. In a way, our environments set us up to choose quick options and many times we are super busy, making these options even more attractive. As you know, convenience does not always equal long-term health. How can we make healthier choices while also living in a society offering so many quick and easy options, quick-fixes and a society that has opinions for what it looks like to be healthy? How can we live in our own bodies and engage with what is important to us while having a range of emotional experiences? How can we hear one thing our mind gives us (thoughts like we should give up, maybe we aren't good enough...) and still choose to do things we really want to? It's all about the willingness we choose to have.
Here is your quiz link: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD
Thank you for being a part of our research! I am so appreciative of your participation.
5th Week Check-in (GSH-E)
Subject Line: Week 5 Check-in

Hi NAME,

You are on chapter 5! This is all about identifying our values, then using those to motivate! Connecting your true values (things in life that MATTER to you) with what you DO can be pretty powerful. What’s really meaningful to you? What matters to you at a personal level? The journaling and reading this week go pretty deep in my opinion – complete what you want and save what you want for later. It’s always better to go deeper with fewer entries rather than touch each on a surface level.

Here is your quiz link: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD

Thank you!

6th Week Check-in (GSH-E)
Subject Line: Week 6 Check-in

Hi NAME,

Week 6! What do you want your life to actually look like? If things were different in 4, 8 weeks, what would that be? This chapter is all about where you are and where you want to be. How will you handle challenges? My guess is that you have learned a number of ways to hold yourself with compassion while trying new things, how to truly practice self-acceptance, and looking at your life as a combination of many experiences. What does (and what will) healthy compassionate living look like for you? This is all about you. All about your life.

Here is your quiz link: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD

This NEXT week is the last chapter in the book and the SECOND to last week of the program. Just a heads up – the last chapter is DIFFERENT than what the focus on the book has been. I encourage you to read it with a. If making lifestyle changes are connected to your larger values, consider how you might do that with a healthy compassionate stance (mindful flexibility + acceptance rather than strict + inflexible rules).

Have a great week,
7th Week Check-in (GSH-E)
Subject Line: Week 7 Check-in

Hi NAME,

Welcome to week 7!

Thanks for your continued work in this program! I know it takes time and attention... it can also feel pretty vulnerable at times. Here is a bit of what to expect in your final chapter:

There are different ideas and suggestions in this final chapter and I would encourage you to read this final chapter with the previous six chapters in the forefront of your mind. I encourage you to take these suggestions and apply what you have learned. What can be kind of cool about this chapter is how you respond to it. I won’t spoil the chapter for you though…
Here is your quiz link: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD

After this quiz there is still ONE final week check-in. That’s because we like for you to give yourself a week of trying on normal life with what you’ve learned. So, if you could read the final chapter and do the quiz, then give a little time before the final 8th check-in, that would be great!

Thank you and have a great weekend!

8th Week Check-in (GSH-E)
Subject Line: Week 8 Check-in

Hi NAME,

This is the final week of the study. There are no chapters or activities planned for this week. I encourage you to live your life how you usually would, while putting some of your newfound tools to use in ways that FIT your life. How can you incorporate what you’ve learned about in this book? Maybe you even feel like you’ve learned a lot about yourself… it’s not uncommon for folks to say, wow, I didn’t realize my weight/my body impacted THIS MUCH of my life.
Although there is no chapter to read, we will have a short check-in here: https://usu.co1.qualtrics.com/SE/?SID = SV_9AILG7jhc7pDCoB&Study_ID = ADD
At the end of the week I will send you a second survey, similar to the first one you took before starting the study.

Thank you for your time and energy in this study!!
CURRICULUM VITAE

SARAH A. POTTS, PH.D.

Boys Town Center for Behavioral Health,
13460 Walsh Drive Boys Town, Nebraska 68010
(w) 531-355-7925 (c) 816-383-1551
sarah.potts@boystown.org

### Education

<table>
<thead>
<tr>
<th>Year</th>
<th>Degree</th>
<th>Institution</th>
<th>Field</th>
<th>Thesis/Dissertation Title</th>
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<tbody>
<tr>
<td>2018</td>
<td>Ph.D.</td>
<td>Utah State University, Logan, Utah</td>
<td>Combined Clinical/Counseling Psychology (APA Accredited)</td>
<td>Putting weight in context: An ACT guided self-help program for weight self-stigma and health behavior change</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chair: Michael E. Levin, Ph.D.</td>
</tr>
<tr>
<td>2015</td>
<td>M.S.</td>
<td>Utah State University, Logan, Utah</td>
<td>Psychology</td>
<td>Relationship between mindfulness and positive mental and physical health among college students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chair: M. Scott DeBerard, Ph.D.</td>
</tr>
<tr>
<td>2010</td>
<td>B.A.</td>
<td>University of Missouri-Kansas City</td>
<td>Major: Psychology, Minor: Spanish</td>
<td>Graduated with Honors: Summa Cum Laude</td>
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### Clinical Experience

<table>
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<tr>
<th>Year</th>
<th>Position</th>
<th>Institution</th>
<th>Clinical Supervisors</th>
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<tbody>
<tr>
<td>2018-Present</td>
<td><strong>Post-Doctoral Fellow</strong></td>
<td>Boys Town Center for Behavioral Health</td>
<td>Thomas Reimers, Ph.D., Patrick Friman, Ph.D</td>
</tr>
<tr>
<td>2017-2018</td>
<td><strong>Predoctoral Psychology Intern (APA-Accredited)</strong></td>
<td>Boys Town Center for Behavioral Health, Nebraska Internship Consortium for Professional Psychology</td>
<td>Kim Haugen, Ph.D., Lindsey Hauser, Psy.D., Patrick Friman, Ph.D.</td>
</tr>
<tr>
<td>2015-2017</td>
<td><strong>Graduate Student Therapist</strong></td>
<td>Center for Persons with Disabilities, Biomedical Department, Utah State University</td>
<td>Clint Field, Ph.D.</td>
</tr>
</tbody>
</table>
2015-2016: **Graduate Student Therapist**  
Assessment Services-Utah State University Counseling Center and Psychological Services  
Supervisor: Justin Barker, Psy.D.

2015-2016: **Graduate Student Therapist**  
Utah State University Health and Wellness Center  
Supervisor and Director: James Davis, M.D., Clinical Supervisor: Scott DeBerard, Ph.D.

2014: **Psychology Extern Therapist**  
University of Utah Neuropsychiatric Institute  
Supervisor: Deanna Reilly, Ph.D.

2013-2015: **Graduate Assistant Therapist**  
Utah State University Counseling Center and Psychological Services  
Supervisors: LuAnn Helms, Ph.D., Justin Barker, Psy.D., Amy Kleiner, Ph.D., Chelsi Davis, Ph.D.

2012-2013: **Graduate Student Therapist**  
Utah State University Community Psychology Clinic  
Supervisors: Gretchen Peacock, Ph.D. and Susan Crowley, Ph.D.

**Teaching Experience**

2016-2017 **Introduction to Interviewing and Counseling (PSY 5200), Utah State University**  
Graduate Instructor (online course, four semesters)

2016 **Neuroscience (PSY 3460), Utah State University**  
Graduate Teaching Assistant (on-campus course)

2014-2016 **Strategies for Academic Success (PSY 1730), Utah State University**  
Graduate Instructor (Distance Education broadcasted course, two semesters)

2013-2014 **Strategies for Academic Success (PSY 1730), Utah State University**  
Graduate Instructor (On-campus course, two sections per semester)

2013 **Abnormal Psychology (PSY 3210), Utah State University**  
Graduate Instructor (on-campus course)

2012-2013 **Psychological Statistics (PSY 2800), Utah State University**  
Graduate Instructor (on-campus course, two semesters)
2011-2012 Psychological Statistics (PSY 2800), Utah State University
Graduate Teaching Assistant (all online and on-campus courses, 2 semesters)

**Grants**

2017 Graduate Research Creative Opportunities Grant, Utah State University
*Impacting Weight Self-Stigma and Health Behavior Change in Overweight Individuals: Acceptance and Commitment Therapy Guided Self-Help*

2017 Dissertation enhancement award, Utah State University

**Publication Activity**


**Under Review**


Potts, S. & DeBerard, M. S. (Under review). The relationship of trait mindfulness and positive mental and physical health among college students.
In Process


Levin, M., Ong, C., Smith, B., Potts, S., Bluett, E., Lee, E., Morrison, K., & Kraft, J. (In-process). A review of ACT process measures.

Current Research Experience

2016-2018  Dissertation project: *Putting weight in context: An ACT guided self-help program for weight self-stigma and health behavior change*
PI: Michael Levin, Ph.D.

2016- 2017:  Using the Matrix Application to Promote Well-Being
- Values reminder phone app using ecological momentary assessment (EMA) for clients currently in therapy
- Co-managed an RCT-version of the “Testing of an Adjunctive Matrix Application” below
PI: Michael Levin, Ph.D.

2016:  Pediatric Preoperative Program with Hospital Tailoring
- Organized collaborative research agreement between Shriner’s Children’s Hospital of Salt Lake City and Utah State University
- Web-based program to support patients/families in rural settings in preparing for psychological impacts of soft tissue and spine surgeries
PI: Michael Levin, Ph.D.; Site PI: Kristen Carroll, M.D.

2016:  Testing of an Adjunctive Matrix Application
- Values reminder phone app using ecological momentary assessment (EMA) for clients currently in therapy
- Organized and managed study
PI: Michael Levin, Ph.D.

Previous Research Experience

Aug. 2015-June 2016:  The Effectiveness of a Mind-Body Training to Foster Self-Care in Health Professionals, Utah State University
- Provided day-long mindfulness training with brief follow-up sessions to college students in healthcare field
- Developed and organized mobile app within program
PI: Myriam Rudaz, Ph.D.
Aug. 2012-Oct. 2014: Relationship Between Mindfulness and Positive Mental and Physical Health Among College Students, Utah State University
- Thesis project, defended August 2015
- Assessed presence of mindfulness practices, mindfulness ability, and mental and physical health correlates
PI: Scott DeBerard, Ph.D.

- Pilot study for dissertation project
- Guided self-help intervention to support overweight individuals in making meaningful health changes
- Organized and managed study
PI: Michael Levin, Ph.D.

- Provided group acceptance-based therapy targeting health behavior change in overweight participants
- Student’s dissertation project, Spencer Richard, Ph.D.
PI: Scott DeBerard, Ph.D.

- Developed and implemented survey assessing longitudinal risk factors for eating disorders in high school and college students
- Trained research assistants to deliver questionnaires
PI: David Stein, Ph.D.

- Data cleaning and analysis for the Duke Foundation assessment for Child Services in North and South Carolina
PI: Tamera Murdock, Ph.D.

Jan. 2010-Aug. 2011: University of Missouri-Kansas City, Research Assistant
- Emotion regulation using psychophysiological measures and emotion modulation of startle reflex.
- Student’s dissertation project, Jessica Hamilton, Ph.D.
PI: Diane Filion, Ph.D.

2010: Acculturation Experience of Vietnamese Boat Refugees: The Impact of the Boat Experience on Vietnamese Refugees and Their Fight for Survival
- Transcription of interviews with Vietnamese refugees
• Qualitative data coding of interviews
• Student’s dissertation project, Brian Licuanan, Ph.D.
  PI: Diane Filion, Ph.D.

**Presentations: Panel and Symposium**


**Potts, S.** (2017). My body my health: A workshop for weight-related programming. Utah State University Extension Conference, Park City, UT.

Lillis, J., Sqyures, E., R., & **Potts, S.** Symposium Discussant: Sandoz, E. Symposium Chair, **Potts, S.** (2016). ACT for Obesity and Weight-Related Stigma: Concept and Treatment. Association for Contextual Behavioral Therapy, WC-14, Seattle, WA.


**Poster Presentations**


**Outreach Activity**

| March 2017: | Workshops for implementing guided self-help and coaching for Utah Extension agents |
| June 2016: | Mindfulness workshops for parents with children with autism |
| March 2015: | Mindfulness training for therapeutic boarding school employees |
| 2014-2015: | Mental health awareness, workshops, and educational programming for the USU Counseling Center |
| January 2015: | Mindfulness and Yoga Workshop for USU Counseling and Psychological Services |
| June 2014-Present: | Therapeutic wilderness trips for youth, University of Utah Burn Center, Shriner’s Children’s Hospital |
| 2013-2014: | Mental health awareness, workshops, and educational programming for the USU Counseling Center and Academic Success Center |
| May 2012-Present: | Therapeutic wilderness trips with Holiday River Expeditions |

**Professional Activities**

Fall 2016: Guest Lecturer for undergraduate Behavioral Analysis course, Utah State University

Fall 2016: Guest Lecturer for graduate BCBA course, Utah State University

Spring 2016: Conference Submission Reviewer, Association for Contextual Behavioral Science

2015-2018: Ad Hoc Reviews: Behavior Therapy, Behavior Research and Therapy, Cognitive and Behavioral Practice

2014-2016: Graduate Student Board Member, Association for Contextual Behavioral Science, Rocky Mountain Chapter

August 2014-Present: American Psychological Association of Graduate Students (APAGS)

May 2013-Present: Wilderness Medical Associates, Wilderness First Responder

Aug. 2012-Present: Society for Behavioral Medicine (SBM)

Oct. 2011-Present: Association for Behavioral and Cognitive Therapies (ABCT)

Oct. 2011-Present: Association for Contextual Behavioral Science (ACBS)


**Professional Development**

Spring 2016: Allies Facilitator Training for Graduate Student Therapists Utah State University

Spring 2016: Innovations in Clinical Assessment and Treatment of Suicidal Patients, David Jones, Ph.D. Utah State University Counseling Center

Spring 2015: Neuropsychological Assessment, Justin Barker, Psy.D. Utah State University Counseling Center
Spring 2015: Mindfulness: Tailoring the Practice to the Person, Ronald Siegel, Ph.D.
Utah State University Counseling Center

Spring 2014: Understanding the Tx. Of Trauma- Trauma and the Brain: Bessel van der Kolk, Ph.D.
Utah State University Counseling Center

Spring 2014: Acceptance and Commitment Therapy Training: ACT Bootcamp Reno, VN

Spring 2014: Allies Facilitator Training, Nicole Vouvalis, M.S.
Utah State University Counseling Center

Spring 2014: Mindfulness-Based Stress Reduction Training Course, Valerie Bentley, Ph.D.
University of Utah

Fall 2013: Acceptance and Commitment Therapy: Advanced Workshop, Michael Twohig, Ph.D.
Utah State University Counseling Center

Fall 2012: Multicultural Training, Melanie Domenech-Rodriguez, Ph.D. and Michael Twohig, Ph.D.
Utah State University Counseling Center

Spring 2012: Scrupulosity: Understanding and Treating Religious Obsessive-Compulsive Disorder, John Dehlin, Ph.D.
Utah State University Counseling Center

Spring 2012: Allies Seminar: Allies Facilitator Training, Nicole Vouvalis, M.S.
Utah State University Counseling Center

Spring 2011: Seminar Training, Crisis Interventions/Suicide Risk Assessment, Amie Abels, Ph.D.