



2020

Think About It: Using Mindfulness as a Means to Treat Eating Disorders

Gabriella C. Breen

Follow this and additional works at: <https://scholarsarchive.byu.edu/intuition>



Part of the [Psychology Commons](#)

Recommended Citation

Breen, Gabriella C. (2020) "Think About It: Using Mindfulness as a Means to Treat Eating Disorders," *Intuition: The BYU Undergraduate Journal of Psychology*. Vol. 15 : Iss. 2 , Article 13.

Available at: <https://scholarsarchive.byu.edu/intuition/vol15/iss2/13>

This Article is brought to you for free and open access by the Journals at BYU ScholarsArchive. It has been accepted for inclusion in Intuition: The BYU Undergraduate Journal of Psychology by an authorized editor of BYU ScholarsArchive. For more information, please contact ellen_amatangelo@byu.edu.

Think About It: Using Mindfulness as a Means to Treat Eating Disorders

Gabriella C. Breen

Brigham Young University

Abstract

Eating disorders are complicated and prevalent issues among the general population; it is estimated that 30 million people are affected in the United States alone (Foundation for Research and Education in Eating Disorders, 2018). Because of the complex psychological nature of eating disorders, it is difficult to find a treatment that is broadly effective. Traditional therapies include cognitive behavioral therapy, dialectical behavioral therapy, and acceptance and commitment therapy. In recent years, mindfulness has emerged as a potentially effective way to treat eating disorders due to its ability to reduce maladaptive coping strategies, improve emotional regulation, and treat anorexia nervosa (Cowdrey & Park, 2012; Hernando et al., 2019; Kerin, Webb, & Zimmer-Gembeck, 2018). Unlike other therapies, mindfulness can be used as a preventative measure as well (Atkinson & Wade, 2016; Klassen-Bolding, 2018). Since the practice of mindfulness as a therapy is a fairly new development, further research on its long-term effects is warranted.

Keywords: mindfulness, eating disorders, therapy

Think About It: Using Mindfulness as a Means to Treat Eating Disorders

Much of everyday life revolves around food. For many people, food is heavily involved in spending time with friends, family gatherings, and a variety of celebrations. For those who suffer from an eating disorder, however, a dysfunctional relationship with food can make even the most basic of days difficult. Though many people are unaware of the prevalence of eating disorders, studies estimate about 30 million people (20 million women and 10 million men) in the United States suffer from an eating disorder (Foundation for Research and Education in Eating Disorders, 2018). Many of those affected do not seek help due to the stigma associated with eating disorders. When an individual decides to seek help, they can utilize many forms of therapy to regain control of their eating habits.

One of the most common types of therapies available is cognitive behavioral therapy (CBT). In the context of eating disorders, this therapy seeks to change the negative beliefs and attitudes that the client holds toward food. While other forms of therapy are available in eating disorder treatment, such as dialectical behavior therapy and acceptance and commitment therapy, CBT appears to be most efficacious in treating bulimia nervosa and binge-eating disorder (Linardon et al., 2017). In a meta-analysis of studies done on the efficacy of CBT, Linardon et al. (2017) found that the positive effects of CBT were maintained once treatment had ended. Thus, if a person suffering from an eating disorder were to seek therapy and wanted to prevent relapse, CBT may be an effective means of achieving recovery.

While CBT can be successful in treating eating disorders such as bulimia nervosa and binge-eating disorder, researchers and therapists are constantly looking for new ways to help clients improve (J. Clark, personal communication, October 23, 2019; Linardon et al., 2017). Mindfulness is another kind of therapeutic intervention that has recently come to light. Mindfulness is “awareness of one’s internal states and surroundings...[used] to help people avoid destructive or automatic habits and responses by learning to observe their thoughts, emotions, and other present-moment experiences without judging or reacting to them” (“Mindfulness,” 2018, para. 1). While mindfulness can be used to treat anxiety, stress, and depression (Querstret et al., 2018), researchers are also turning to it as a tool for eating disorder treatment and prevention. The purpose of CBT is to change negative attitudes that a person holds toward food. Mindfulness, however, teaches a person to recognize the negative thoughts or

emotions they hold toward food. As these thoughts come and go, mindfulness helps the person to choose to accept the thoughts and not judge them (Tsai et al., 2017).

There may be advantages to utilizing mindfulness in conjunction with or instead of CBT. Eating disorders are often associated with maladaptive coping strategies such as rumination (the repetitive focus on negative emotions, symptoms, and events) and experiential avoidance (avoiding thoughts, feelings, and other internal processes even though the effect may be harmful) (“Rumination,” 2018; Tyndall et al., 2019). In a study involving individuals with a history of anorexia nervosa, Cowdrey and Park (2012), found that increased levels of rumination and experiential avoidance were negatively correlated with mindfulness, leading them to conclude that an increase in mindfulness may lead to a decrease in these maladaptive coping strategies. In another case study, a female with a history of restricted eating was taught mindfulness strategies and implemented them over the course of 15 individual therapy sessions. After learning and applying mindfulness strategies to her eating, she saw an increase in her BMI and caloric intake (Albers, 2011). In terms of scope, CBT can effectively treat individuals with bulimia nervosa and binge-eating disorder but has had less success when treating anorexia nervosa (Linardon et al., 2017). Mindfulness, on the other hand, has shown positive results when used to treat individuals with bulimia nervosa, binge-eating disorder, and anorexia nervosa (Albers, 2011; Cowdrey & Park, 2012; Lavender et al., 2009; Woolhouse et al., 2012). Since mindfulness has been successful in treating individuals with these disorders, it may be a more effective means of treatment than CBT.

An additional benefit of practicing mindfulness in relation to eating habits is that it can be used as a preventative measure. Studies by Atkinson and Wade (2016) and Klassen-Bolding (2018) showed a decrease in eating-disorder symptoms when mindfulness was used as a preventative measure. While the short-term effects of mindfulness have been shown (Atkinson & Wade, 2016), its long-term validity is unknown. Although CBT is typically effective in treating a variety of eating disorders, therapeutic mindfulness may be even more beneficial

due to its ability to reduce maladaptive coping strategies, to improve emotion regulation, to treat anorexia nervosa, and to be used as a preventative measure.

Reducing Maladaptive Coping Strategies

According to the APA Dictionary of Psychology (American Psychological Association, 2018), coping strategies are the thought processes or actions used to confront stressful situations or experiences. Unlike defense mechanisms, which are unconscious reactions to stressors (American Psychological Association, 2018), coping strategies are consciously employed to deal with a problem (American Psychological Association, 2018). Some healthy coping strategies include writing in a journal, talking to supportive people, reading, participating in a hobby, or taking a walk (The Eating Disorder Foundation, n.d.). Maladaptive coping strategies, on the other hand, are negative cognitive processes that have been found to be associated with eating disorders (Hernando et al., 2019). Because mindfulness focuses on the nonjudgmental observance of negative thoughts and feelings, it can help reduce these harmful coping strategies.

Rumination

Rumination is one of several maladaptive coping strategies associated with eating disorders. Rumination is the repetitive, negative focus on thoughts, emotions, and events (“Rumination,” 2018). This coping strategy is common among those who suffer from eating disorders such as anorexia nervosa and bulimia nervosa (Hernando et al., 2019). Individuals who suffer from these disorders are often preoccupied with concerns about their weight, eating habits, and body shape, which allows their disorder to persist (Rawal, Park, & Williams, 2010). If they wish to recover from their disorder, this negative train of thought should be broken. If rumination is allowed to continue, recovery could be a near impossible task.

Although rumination can be a difficult habit to overcome, the practice of mindfulness can help. Findings from a study performed by Hernando et al. (2019) compared mindfulness, rumination, and effective coping levels between a healthy group of females and a group of females with various kinds of eating disorders. They found that the patients who were being treated for eating disorders had significantly lower mindfulness and effective coping levels in

comparison to the healthy control group (see Table 1). They also found that higher mindfulness levels were associated with the lower likelihood of an eating disorder diagnosis (Hernando et al., 2019). Thus, an increase in mindfulness may result in a reduction of rumination among eating-disorder patients. Furthermore, mindfulness could be increased through intervention therapies. As mindfulness increases and rumination decreases, the patient may be more likely to recover.

Experiential Avoidance

Another maladaptive coping strategy that is commonly found among individuals with eating disorders is experiential avoidance. In a study conducted by Hayes and Feldman (2004), experiential avoidance was one of the maladaptive coping strategies that contributed to the vast majority of eating disorders and other cognitive and mental disorders as well. Unlike rumination, which only involves negative thoughts, experiential avoidance involves all of an individual's unpleasant thoughts, feelings, and experiences and their attempts to avoid or change them (Fahrenkamp et al., 2019; Rawal et al., 2010). The individual in question recognizes that a certain situation (such as eating dinner) would be unpleasant, and therefore tries to avoid being present for that event (Fahrenkamp et al., 2019). This coping strategy can hinder the individual's ability to overcome his or her eating disorder because it involves avoiding the very experience that the individual needs to have a normal relationship with food.

Similar to rumination, experiential avoidance has been shown to have a negative relationship with mindfulness. While examining the correlation between experiential avoidance, rumination, and mindfulness, Cowdrey and Park (2012) found that experiential avoidance was positively correlated with eating disorder symptoms and negatively correlated with mindfulness. In eating disorders in which overeating is common, if an individual employs experiential avoidance in response to a food craving, they are more likely to participate in emotional eating and/or overeating (Fahrenkamp et al., 2019). In this instance, the individual uses food as a means to escape from the negative emotions that they are experiencing. Mindfulness-based therapy, however, can teach an individual how to deal with negative emotions in a healthy manner. Then, instead of turning to

food to mitigate those feelings, they may be able to turn to other healthy coping strategies.

Emotion Regulation Improvement

Emotion regulation is an individual's ability to regulate how they feel when confronted with certain situations ("Emotion Regulation," 2018). When an individual suffers from an eating disorder, the emotions they hold toward food can be very powerful and difficult to control. In eating disorders such as bulimia nervosa and binge-eating disorder, maladaptive emotion regulation typically results in overeating as a response to negative emotions (Kerin et al., 2018; Lattimore et al., 2017). This overeating, in turn, can lead to feelings of guilt that feed into a vicious cycle of negative emotions that is difficult to escape.

Maladaptive emotion regulation is not limited to bulimia nervosa or binge-eating disorder. It is a prominent psychological aspect of all eating disorders and often contributes to their development and persistence (Lattimore et al., 2017; Woolhouse et al., 2012). Improvement in emotion regulation, however, may improve eating habits and weight control as well (Kerin et al., 2018). This can result from implementing mindfulness as a therapeutic method either by itself or in conjunction with CBT (Kerin et al., 2018; Woolhouse et al., 2012). The focus on present-moment awareness through mindfulness is likely a contributing factor to emotion regulation. Instead of allowing an individual to instinctively act in a negative manner, mindfulness teaches them to take a step back and observe their emotions before taking action (Woolhouse et al., 2012). With this comes greater self-control and an increased likelihood of positive emotion regulation.

Ability to Treat Anorexia Nervosa

Anorexia nervosa is one of the most difficult eating disorders to treat. According to the National Eating Disorder Association (2018), individuals who suffer from anorexia nervosa struggle to maintain a normal body weight for their height and age and often perceive their bodies in a distorted manner. While mortality rates among individuals with eating disorders are high, the highest mortality rates are among those that suffer from anorexia nervosa (Arcelus et al., 2011). Studies also indicate that less than 50% of individuals who suffer from this eating disorder fully recover (Arcelus et al., 2011; Danielsen et al., 2016).

Unfortunately, psychiatric comorbidity (the presence of two psychiatric diseases occurring at once) is common among individuals who suffer from anorexia nervosa, meaning that they often struggle with other psychiatric illnesses, such as depression or anxiety, in conjunction with the eating disorder (Danielsen et al., 2016). Thus, it is essential to find a treatment that can not only treat these co-occurring disorders but also enables a larger percentage of individuals who suffer from anorexia nervosa to fully recover.

Due to the complex psychological nature of anorexia nervosa, it is difficult to find one treatment that works for the vast majority of individuals. Family-based therapy is generally recommended when treating adolescents, but researchers have yet to find a consistently successful treatment that works for adults (Brockmeyer et al., 2018; Danielsen et al., 2016). Some promising research has been performed in regard to using enhanced cognitive behavioral therapy to treat anorexia nervosa in adults, but more research should be conducted (Danielsen et al., 2016). Although a single therapy will not be effective for everyone, it may still be beneficial to find a therapy that could help the majority of individuals, regardless of their age.

While the research pertaining to the effects of mindfulness on anorexia nervosa is limited, results from studies that have been performed on the topic show promise. Psychiatric illnesses, such as depression and anxiety, often occur in comorbidity with anorexia nervosa (Danielsen et al., 2016). Anorexia nervosa is also associated with repetitive, ruminative thoughts (Cowdrey & Park, 2012). Mindfulness, however, has shown positive results when used to treat anxiety, stress, and depression (Querstret et al., 2018) and is inversely related to ruminative thoughts (Cowdrey & Park, 2012; Hernando et al., 2019). Thus, it may be concluded that if mindfulness were implemented as a therapeutic measure, it could result in the decrease of symptoms of anorexia.

Mindfulness as a Preventative Measure

While the necessity of treating eating disorders cannot be denied, it is better to prevent them from occurring in the first place. The ideal time to prevent an eating disorder from occurring is during, but not limited to, adolescence (Warschburger & Zitzmann, 2018). Prevention is ideal because treatment can prove difficult once a disorder develops (Warschburger & Zitzmann, 2018). If an

eating disorder develops, various forms of therapy are available, such as CBT, dialectical behavioral therapy, and acceptance and commitment therapy. These methods, however, are used to treat disorders and are not used as a means of prevention. Mindfulness, on the other hand, can function as both (Atkinson & Wade, 2016; Cowdrey & Park, 2012; Klassen-Bolding, 2018). This sets it apart from other therapies, such as CBT, because it can help individuals before a disorder develops.

As mentioned, an ideal time to implement eating-disorder prevention is during adolescence. This is because body dissatisfaction typically increases during puberty, and disordered eating is more likely to occur (Warschburger & Zitzmann, 2018). Therefore, it is crucial to develop the skills necessary to accept and not judge one's body during this time. Klassen-Bolding (2018) found this to be true in a mindfulness-based group intervention for preteen girls. In this group intervention, the girls met together on a weekly basis to learn about body perception, controlling strong emotions through mindful techniques, and healthy eating (Klassen-Bolding, 2018). At the end of the five-week period, participants reported that the mindfulness techniques they were taught helped them to gain greater control over their emotions and develop a better relationship with their bodies and with food (Klassen-Bolding, 2018). In a similar study, Monshat et al. (2013) found that adolescents in a mindfulness-based training program felt they had more control over their lives and emotions due to the techniques and practices they had learned. Indeed, it appears that the implementation of mindfulness-based interventions and trainings affect not only an individual's relationship with their body and food but can positively impact other aspects of their life.

Mindfulness-based interventions can also be effective in reducing eating disorder symptoms in those who have already developed body-image concerns. Atkinson and Wade (2016) observed that young adult women in mindfulness-based intervention groups showed significant improvements in areas such as weight and shape concern and eating-disorder symptoms in comparison to individuals who were placed in dissonance-based intervention groups. The dissonance-based group focused on taking counter-attitudinal stances against socially accepted body ideals in order to reduce weight and shape concerns. The mindfulness-based group, however, focused on nonjudgmental body image awareness and acceptance and discussing the internal experiences and body image concerns of those in the program. These interventions took place in one-hour sessions over a period of three weeks. While the effects were largely lost over a six-month follow-

up period, mindfulness is likely to provide more consistent benefits if practiced over a longer time period (Atkinson & Wade, 2016). If given the proper training and time to practice mindfulness, those who have body-image concerns or are at risk of developing an eating disorder may find that their concerns diminish over time. Training would likely be most efficacious if consistently practiced in a group setting where participants could support each other in their endeavors.

Conclusion

Eating disorders are complex psychological illnesses. While a number of therapies are available to treat eating disorders, they vary in efficacy. Some disorders, such as anorexia nervosa, do not respond well to many treatments (Brockmeyer et al., 2018; Danielsen et al., 2016), while others, such as bulimia nervosa and binge-eating disorder, respond to various therapies, including CBT (Linardon et al., 2017). The ability to treat and overcome an eating disorder is crucial to the well-being of the individual who is suffering, so their life is not restricted by their poor relationship with food.

While therapies such as CBT may work for many who seek help, the therapeutic use of mindfulness can be even more beneficial. Due to its focus on the nonjudgmental recognition of negative thoughts and emotions, it typically enables an individual to reevaluate their negative attitudes toward food in a way that promotes a healthy relationship with food (Klassen-Bolding, 2018; “Mindfulness,” 2018). The practice of mindfulness is also beneficial due to its ability to decrease maladaptive coping strategies such as rumination and emotional avoidance (Cowdrey & Park, 2012). Emotion regulation can also be improved as individuals practice mindfulness, which may result in improved weight control and eating habits (Kerin et al., 2018; Woolhouse et al., 2012). Unlike CBT, mindfulness has been shown to positively affect those who suffer from anorexia nervosa, which is an extremely complex and difficult disorder to treat (Brockmeyer et al., 2018; Cowdrey & Park, 2012; Danielsen et al., 2016; Linardon et al., 2017). Due to the benefits that mindfulness offers, it may be a viable treatment option for individuals who are affected by eating disorders.

Although the research involving the effect of mindfulness on eating disorders is limited, this type of therapy shows promise. Given that mindfulness therapy has been shown to have short-term efficacy (Atkinson & Wade, 2016), studies should be developed to examine its long-term effects. With further

development and research, this therapy could become a way that eating disorders are treated more effectively.

References

- Albers, S. (2011). Using mindful eating to treat food restriction: A case study. *Eating Disorders: The Journal of Treatment & Prevention*, 19(1), 97–107. <https://doi.org/10.1080/10640266.2011.533609>
- Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders: A meta-analysis of 36 studies. *Archives of General Psychiatry*, 68(7), 724-731. <https://doi.org/10.1001/archgenpsychiatry.2011.74>
- Atkinson, M. J., & Wade, T. D. (2016). Does mindfulness have potential in eating disorders prevention? A preliminary controlled trial with young adult women. *Early Intervention in Psychiatry*, 10(3), 234-245. <https://doi.org/10.1111/eip.12160>
- Brockmeyer, T., Friederich, H. C., & Schmidt, U. (2018). Advances in the treatment of anorexia nervosa: A review of established and emerging interventions. *Psychological Medicine*, 48(8), 1228-1256. <https://doi.org/10.1017/S0033291717002604>
- Coping Strategy. (2018). In APA dictionary of psychology online. Retrieved from <http://dictionary.apa.org/coping-strategy>
- Cowdrey, F. A., & Park, R. J. (2012). The role of experiential avoidance, rumination and mindfulness in eating disorders. *Eating Behaviors*, 13(2), 100-105. <https://doi.org/10.1016/j.eatbeh.2012.01.001>
- Danielsen, Y. S., Årdal Rekkedal, G., Frostad, S., & Kessler, U. (2016). Effectiveness of enhanced cognitive behavioral therapy (CBT-E) in the treatment of anorexia nervosa: A prospective multidisciplinary study. *BMC Psychiatry*, 16. <https://doi.org/10.1186/s12888-016-1056-6>
- Defense Mechanism. (2018). In APA dictionary of psychology online. Retrieved from <http://dictionary.apa.org/defense-mechanism>
- Emotion Regulation. (2018). In APA dictionary of psychology online. Retrieved from <http://dictionary.apa.org/emotion-regulation>
- Fahrenkamp, A. J., Darling, K. E., Ruzicka, E. B., & Sato, A. F. (2019). Food cravings and eating: The role of experiential avoidance. *International Journal of Environmental Research and Public Health*, 16(7) <https://doi.org/10.3390/ijerph16071181>
- Foundation for Research and Education in Eating Disorders. (2018, February 20). Eating disorder statistics. Retrieved from <https://www.freedeedingdisorders.org/patient-family-support/statistics/>
- Hayes, A.M., & Feldman, G. (2004). Clarifying the construct of mindfulness in the context of emotion regulation and the process of change in therapy. *Clinical*

- Psychology: Science and Practice*, 11(3), 255–262. <https://doi.org/10.1093/clipsy.bph080>
- Hernando, A., Pallás, R., Cebolla, A., García-Campayo, J., Hoogendoorn, C. J., & Roy, J. F. (2019). Mindfulness, rumination, and coping skills in young women with eating disorders: A comparative study with healthy controls. *PLoS ONE*, 14(3) <https://doi.org/10.1371/journal.pone.0213985>
- Kerin, J. L., Webb, H. J., & Zimmer-Gembeck, M. (2018). Resisting the temptation of food: Regulating overeating and associations with emotion regulation, mindfulness, and eating pathology. *Australian Journal of Psychology*, 70(2), 167-178. <https://doi.org/10.1111/ajpy.12169>
- Klassen-Bolding, S. (2018). A qualitative investigation of preteen girls' experiences in a mindfulness-based eating disorder prevention program. *Counseling Outcome Research and Evaluation*, 9(1), 42-54. <https://doi.org/10.1080/21501378.2018.1424533>
- Lattimore, P., Mead, B. R., Irwin, L., Grice, L., Carson, R., & Malinowski, P. (2017). 'I can't accept that feeling': Relationships between interoceptive awareness, mindfulness and eating disorder symptoms in females with, and at-risk of an eating disorder. *Psychiatry Research*, 247, 163-171. <https://doi.org/10.1016/j.psychres.2016.11.022>
- Lavender, J. M., Jardin, B. F., & Anderson, D. A. (2009). Bulimic symptoms in undergraduate men and women: Contributions of mindfulness and thought suppression. *Eating Behaviors*, 10(4), 228-231. <https://doi.org/10.1016/j.eatbeh.2009.07.002>
- Linardon, J., Wade, T. D., de la Piedad Garcia, X., & Brennan, L. (2017). The efficacy of cognitive-behavioral therapy for eating disorders: A systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology*, 85(11), 1080-1094.
- Mindfulness. (2018). In APA dictionary of psychology online. Retrieved from <http://dictionary.apa.org/mindfulness>
- Monshat, K., Khong, B., Hased, C., Vella-Brodrick, D., Norrish, J., Burns, J., & Herrman, H. (2013). 'A conscious control over life and my emotions': Mindfulness practice and healthy young people A qualitative study. *Journal of Adolescent Health*, 52(5), 572-577. <https://doi.org/10.1016/j.jadohealth.2012.09.008>
- National Eating Disorder Association. (2018, February 28). Anorexia Nervosa. In What Are Eating Disorders? Retrieved from <https://www.nationaleatingdisorders.org/learn/by-eating-disorder/anorexia>
- Querstret, D., Croypley, M., & Fife-Schaw, C. (2018). The effects of an online mindfulness intervention on perceived stress, depression and anxiety in a non-clinical sample: A randomised waitlist control trial. *Mindfulness*, 9(6), 1825-1836. <https://doi.org/10.1007/s12671-018-0925-0>
- Rawal, A., Park, R. J., & Williams, J. M. (2010). Rumination, experiential avoidance,

and dysfunctional thinking in eating disorders. *Behaviour Research and Therapy*, 48(9), 851-859. <https://doi.org/10.1016/j.brat.2010.05.009>

Rumination. (2018). In APA dictionary of psychology online. Retrieved from <http://dictionary.apa.org/rumination>

The Eating Disorder Foundation. (n.d.). Coping. In About Eating Disorders. Retrieved from: <https://www.eatingdisorderfoundation.org/learn-more/about-eating-disorders/coping/>

Tsai, A., Hughes, E. K., Fuller-Tyszkiewicz, M., Buck, K., & Krug, I. (2017). The differential effects of mindfulness and distraction on affect and body satisfaction following food consumption. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01696>

Tyndall, I., Waldeck, D., Pancani, L., Whelan, R., Roche, B., & Dawson, D. L. (2019). The acceptance and action questionnaire-II (AAQ-II) as a measure of experiential avoidance: Concerns over discriminant validity. *Journal of Contextual Behavioral Science*, 12, 278-284. <https://doi.org/10.1016/j.jcbs.2018.09.005>

Warschburger, P., & Zitzmann, J. (2018). The efficacy of a universal school-based prevention program for eating disorders among German adolescents: Results from a randomized-controlled trial. *Journal of Youth and Adolescence*, 47(6), 1317-1331. <https://doi.org/10.1007/s10964-018-0852-3>

Woolhouse, H., Knowles, A., & Crafti, N. (2012). Adding mindfulness to CBT programs for binge-eating: A mixed-methods evaluation. *Eating Disorders: The Journal of Treatment & Prevention*, 20(4), 321-339. <https://doi.org/10.1080/10640266.2012.691791>

Appendix

Table 1

Comparison of means and independent samples t-test in mindfulness, rumination and effective coping between patients and healthy women groups.

	ED		NO ED		t-test	Sig.	95% CI	
	M	SD	M	SD				
Mindfulness	33.42	6.17	37.36	4.68	-2.53	.015	-7.08	-0.80
Rumination	54.88	11.02	49.48	7.67	1.99	.052	-0.04	10.83
Effective coping	41.13	9.95	48.96	9.51	-2.82	.007	-13.42	-2.42

Note. Adapted from “Mindfulness, Rumination, and Coping Skills in Young Women with Eating Disorders: A Comparative Study with Healthy Controls” by Hernando et al., 2019. PLoS ONE, 14(3)

