Examining Facets of Self-Compassion in Relation to Emotional and Disordered Eating Behaviors in a Treatment-Seeking Sample of Adults with Overweight/Obesity

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Abstract

Research has focused on examining self-compassion broadly as opposed to examining unique relationships exist between negative and positive components of self-compassion and disordered and emotional eating, especially among adults with overweight/obesity. The current study is a secondary analysis of baseline data from treatment-seeking adults (n = 64; 96.8% female) with overweight/obesity. Correlational analyses revealed that higher emotional eating-depression was associated with lower common humanity, higher over-identification, and higher self-isolation. Greater disordered eating was associated with lower common humanity, higher self-judgment, higher over-identification, and lower self-kindness. No significant bivariate relations were observed between self-compassion facets and binge eating severity and emotional eating-anxiety/anger and -boredom. Regression analyses indicated that self-judgment, over-identification, and self-kindness, together, were significantly related to disordered eating. Common humanity, over-identification, and self-isolation, together, were significantly related to emotional eating-depression. Targeting specific facets of self-compassion might be favorable in treating a range of problematic eating behaviors in people with overweight/obesity.

Introduction

Eating Pathology in Adults with Overweight/Obesity

Disordered and emotional eating are characterized as maladaptive eating behaviors that can negatively impact weight loss efforts and are associated with negative psychological and physiological health outcomes. In the context of weight status, adults with overweight/obesity report significantly higher frequency and prevalence of objective bingeing episodes (Dingemans et al., 2019) and global disordered eating behaviors (Neumark-Sztainer et al., 2006) in comparison to adults without overweight/obesity. Emotional eating is defined as the desire to eat in response to negative (e.g., depression, stress, frustration) (Konttinen et al., 2010) and positive (e.g., celebration, happiness) emotions (Bonger et al., 2013) in the absence of physiological hunger (Arnow et al., 1995), and is also common among adults with overweight/obesity. A preponderance (57%) of adults with overweight self-report frequent emotional eating behaviors (Péneau et al., 2013). Self-reported emotional eating is associated with similar negative psychological and physiological outcomes to that observed with disordered eating, such as an increase in body mass index (BMI) (Laitinen et al., 2002), binge eating behaviors, (Ricca et al., 2009), and impaired weight loss efforts (Braden et al., 2016). Research examining mechanisms of disordered and emotional eating among adults with overweight/obesity may help guide the development of novel, effective behavioral interventions for this population.

Theoretical models of disordered and emotional eating identify impairment in affect regulation as a potential psychological mechanism of these maladaptive eating behaviors. Across these models, disordered and emotional eating behaviors are thought to be engaged to bypass or avoid the negative emotional experience altogether. For example, affect regulation models (Lavender et al., 2016; Fischer et al., 2013) suggest that binge eating serves as a coping mechanism for negative affect and provide short-term emotional relief. Other research suggests that binge eating serves to escape and avoid negative affect derived from perfectionistic standards and aversive self-awareness (Blackburn et al., 2006). Additionally, individuals with anorexia nervosa are theorized to utilize restrictive eating behaviors to divert attention from negative emotions (Haynos et al., 2018). Affect regulation models have also been applied to emotional eating, as Evers and colleagues (2009) suggest that maladaptive emotion regulation strategies, such as suppression, may drive eating in absence of physiological hunger.

Because affect plays an important role in developing and maintaining disordered and emotional eating, it is not surprising that improving affect regulation is a key treatment goal in eating pathology, including disordered and emotional eating, eating disorders, and weight-loss efforts (Braden et al., 2021; Wonderlich et al., 2015). For example, one study of women with overweight/obesity showed that dialectical behavioral therapy (DBT) training was related to significant decreases in binging and purging behaviors compared to wait-list condition group (Telch, Agras, & Linehan, 2001). Another common treatment for maladaptive eating behaviors via affect regulation is mindfulness-based interventions (MBIs). A recent systematic review found that across nine randomized control trials, participants in the MBI groups showed a significant reduction in emotional eating, external eating, binge eating, and weight and shape concerns (Yu et al., 2020). Findings also suggest that increasing mindful awareness of internal experiences and automatic patterns could be effective in improving disordered and emotional eating via emotion regulation. Self-compassion interventions, which is an extension of traditional mindfulness interventions, have also been identified as potentially effective treatments for eating pathology (Neff, 2003). Self-compassion interventions are designed to foster a sense of self-compassion and have been used in diverse samples to treat a range of psychological conditions, including eating disorders (Ferrari et al., 2019).

Self-compassion And Affect Regulation
Self-compassion is a self-regulation strategy that counters self-judgment, self-stigmatization, and negative self-directed emotions such as guilt, anger, and shame (Allen et al., 2010). Self-compassion includes both positive and negative components. Three interrelated positive components of self-compassion include self-kindness, common humanity, and mindfulness (Strauss et al., 2016). Briefly, self-kindness includes the ability to demonstrate understanding and kindness to oneself during times of perceived failure; common humanity includes recognizing that suffering and personal inadequacy are part of the shared human experience; and mindfulness includes an enhanced state of, and attention to, current reality (Neff, 2003). Negative components of self-compassion include over-identification, self-isolation, and self-judgment. Over-identification includes connecting thoughts and emotions to one’s identity; self-isolation includes the absence of having common humanity and the ability to understand the shared human experience of suffering/detachment from suffering; and self-judgment includes when one denies the reality that being imperfect and experiencing difficult life events are inevitable (Neff, 2003). Self-compassion has been evidenced as a key characteristic in adaptive emotional regulation (Terry & Leary, 2011; Neff et al., 2009).

**Self-compassion And Eating Pathology**

Broadly, research has shown a link between unidimensional self-compassion and eating pathology. For example, higher self-compassion is associated with less disordered eating (Ferreira et al., 2013, Webb & Forman, 2013) and fewer eating and weight concerns (Fresnics et al., 2019; Kelly et al., 2014) in clinical and non-clinical populations. In a sample of undergraduate students, global self-compassion was both cross-sectionally and longitudinally related to lower eating disorder symptoms after controlling for mindfulness (Fresnics et al., 2019). While research overall is limited, self-compassion has also been examined in relation to eating pathology and weight-loss efforts in individuals with overweight/obesity.

For example, Gouveia and colleagues (2019) examined the efficacy of an intervention that included psychoeducation, mindfulness, valued-based action, and self-compassion in individuals with overweight/obesity. Results showed that self-compassion mediated the effect of the intervention on binge eating frequency. Additionally, ecological momentary assessment data showed that while self-compassion did not predict weight loss, self-compassion was positively correlated with intentions and self-efficacy to continue dieting behavior (Thogersen-Ntoumani et al., 2020). Additionally, another study with individuals with overweight and obesity found that self-compassion mediated the relationship between weight self-stigma and global health, such that more positive health outcomes were directly predicted by less self-stigma and more self-compassion (Hilbert et al., 2015). Finally, an intervention study aimed at targeting emotional eating via self-compassion and mindfulness skills found self-compassion was a direct mechanism in mitigating deleterious weight and eating-related outcomes post-treatment such that greater self-compassion and mindfulness acted as mechanisms of the reduction in emotional eating from baseline to post-treatment (Palmeira et al., 2019).

Regardless of weight status, meta-analytic results support a negative association between self-reported disordered eating and self-compassion, showing a medium to large effect size (effect size 0.58, medium effect; Turk & Waller, 2020). More specifically, results indicated that self-compassion-related interventions, relative to control, were significantly associated with lower eating pathology. However, while psychometric evidence suggests that facets of self-compassion are related, yet distinct from global self-compassion (Neff, 2020), limited research exists on the relations between self-compassion facets and health outcomes (Neff et al., 2019). Relatedly, a key limitation presented by Turk and Waller (2020) was that the self-protective role of self-compassion on eating pathology may be overestimated given that global scores were used across studies. Also of note, a previous meta-analysis that examined self-compassion facets indicated that associations between psychopathology and negative self-compassion facets were stronger than associations with positive indicators; thus, negative subscales (e.g., self-judgment, isolation, and over-identification) may be more closely related to psychopathology than positive (Muris et al., 2016). Limited data exist on self-compassion as a multidimensional construct, and research is needed to understand the spectrum of self-compassion in relation to health behaviors. For example, a facet approach to examining self-compassion may be useful in better understanding which facets are more closely associated with eating pathology (Turk et al., 2020).

**The Present Study**

While evidence suggests global self-compassion and eating pathology are negatively related (Turks & Waller, 2020; Ferreira et al., 2013, Webb & Forman, 2013), little is known about how unique positive and negative components of self-compassion are associated with disordered eating and emotional eating. Furthermore, limited research has examined relationships between self-compassion facets and eating pathology in adults with overweight/obesity. Identifying unique relationships between self-compassion components and eating pathology may help explain how positive facets of self-compassion are potentially related to disordered eating, especially given it has been previously suggested that psychopathology is more closely related to negative facets of self-compassion (Muris et al., 2017). Additionally, examining relationships between self-compassion facets and eating pathology may help tailor intervention techniques for adults with...
overweight/obesity with eating pathology. The current study was an exploratory, secondary analysis designed to address these gaps in the literature by investigating associations between self-compassion facets (i.e., self-kindness, common humanity, mindfulness, over-identification, self-isolation, and self-judgment) and disordered and emotional eating in a sample of treatment-seeking adults with overweight/obesity.

**Methods**

**Participants and Procedure**

The present study is a secondary analysis (Braden et al., 2022) utilizing a treatment-seeking sample of adults with overweight/obesity who identified as emotional eaters. In total, 63 adults attended an orientation session for a pilot treatment program that targeted both emotion regulation skills and traditional behavioral weight loss. At baseline, participants completed a battery of self-report questionnaires. For the present study, we analyzed participants' baseline data (i.e., before enrollment in the pilot treatment program). On average, participants were primarily women (96.8%), 49.2 years of age (SD = 10.9), Caucasian non-Hispanic (95.2%), graduate degree holders (39.7%), earning an annual income of $75,000 or more (28.6%), employed full-time (47.6%), and married (44.4%). See Braden and colleagues (2022) for more information about participant characteristics.

**Measures**

**Demographics**

Participants self-reported sex, age, race/ethnicity, highest level of education obtained, annual household income, current employment status, and relationship status.

**Binge Eating Scale**

The Binge Eating Scale (BES), a self-report measure assessing behavioral, emotional, and cognitive components of binge eating behavior, includes 16-items comprised of three to four statements that reflect a specific component of binge eating (e.g., loss of control of eating; Gormally et al., 1982). Such statements range in severity, and participants are tasked with selecting the statement that best reflects their current binge eating behavior. Items are summed to calculate a total score representing overall binge eating severity. Existing psychometric research supports the utility of the BES across non-clinical and clinical binge eating presentations (Duarte et al., 2015; Mason & Lewis, 2015). Higher scores were indicative of greater binge eating severity. In the present study, internal consistency reliability was adequate for the overall score of binge eating severity (Cronbach's alpha = .78).

**Eating Disorder Examination-Questionnaire**

The Eating Disorder Examination-Questionnaire (EDE-Q), a self-report measure assessing disordered eating attitudes, cognitions, and behaviors, includes 28-items in which participants report the frequency of disordered eating over the past four weeks (Fairburn & Beglin, 1994). More specifically, the EDE-Q captures dietary restraint and eating, weight, and shape concerns. From these, the EDE-Q also calculates a total score, denoted as global disordered eating. Items are averaged to calculate subscale scores, and for the calculation of the global disordered eating score, the sum of the dietary restraint and eating, weight, and shape subscales are averaged. To date, the EDE-Q demonstrates strong internal consistency and both convergent (Lavender et al., 2010) and discriminant (Grilo et al., 2015) validity. Higher scores were indicative of greater disordered eating. In the present study, the global score of disordered eating was used. In the present study, internal consistency reliability was adequate for the global score of disordered eating (Cronbach's alpha = .90).

**Emotional Eating Scale-Revised**

The Emotional Eating Scale-Revised (EES-R), a self-report measure assessing negative emotional eating in response to depression, anger/anxiety, and boredom, includes 25-items that participants respond to on a 5-point Likert scale (1 = No desire to eat; 5 = An overwhelming desire to eat) (Koball et al., 2012). For example, participants completed items probing the urge to eat in response to sadness (e.g., depression subscale), irritation (e.g., anger/anxiety subscale), and disinterest (e.g., boredom). Items are averaged to calculate subscale scores. Previous research has demonstrated sound psychometric properties of the EES-R (Koball et al., 2012). Higher scores were indicative of greater eating in response to depression, anger/anxiety, and boredom. In the present study, internal consistency reliability was adequate for the eating in response to depression, anger/anxiety, and boredom subscales (Cronbach's alphas = .86, .79, and .82, respectively).

**Self-Compassion Scale-Short Form**
The Self-Compassion Scale-Short Form (SCS-SF), a self-report measure assessing six components of self-compassion including self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification, includes 12 items that participants respond to on a 5-point Likert scale (1 = Almost never; 5 = Almost always) (Raes et al., 2011). Negative subscales were reverse-coded. Items were then averaged to calculate subscale scores. Higher scores on both positive (e.g., mindfulness, common humanity, and self-kindness) and negative subscales (i.e., isolation, over-identification, and self-judgment) indicate higher self-compassion (e.g., higher scores on self-judgment signify less self-judgment). Previous research has demonstrated sound psychometric properties of the SCS-SF (Raes et al., 2011). In the present study, internal consistency reliability was adequate for the self-kindness, common humanity, mindfulness, self-judgment, and over-identification subscales (Cronbach's alphas = .65, .78, .63, .75, and .65, respectively). Internal consistency reliability for the self-isolation subscale was poor (Cronbach's alpha = .40).

Analytic Plan

Descriptive statistics and bivariate correlations were calculated for primary study variables (Table 1). First, missingness, assumptions of multiple regression (e.g., homoscedasticity, linearity, and normality), and collinearity diagnostics were examined. Then, bivariate correlations were examined between key study variables (e.g., self-compassion facets and eating pathology). Next, two multiple regressions were probed between self-compassion facets and eating pathology, focusing on significant relationships that were identified with bivariate correlations. Specifically two models were examined. The first model examined common humanity, self-judgment, over-identification, and self-kindness as independent variables and disordered eating as the dependent variable. The second model examined common humanity, over-identification, and self-isolation as independent variables and emotional eating-depression as the dependent variable. Because of the poor internal consistency reliability of the self-isolation subscale, it was removed from the second model and a third multiple regression (model 3) analysis was calculated, including common humanity and over-identification as the independent variables and emotional eating-depression as the dependent variable.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>Cronbach's Alpha</th>
<th>Mean (SD)</th>
<th>Self-Isolation</th>
<th>Over-Identification</th>
<th>Self-Judgement</th>
<th>Self-Kindness</th>
<th>Common Humanity</th>
<th>Mindfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>BES</td>
<td>63</td>
<td>.78</td>
<td>23.3(6.7)</td>
<td>.025</td>
<td>-.079</td>
<td>-.125</td>
<td>-.184</td>
<td>-.145</td>
<td>-.061</td>
</tr>
<tr>
<td>EES-AA</td>
<td>63</td>
<td>.79</td>
<td>25.4(6.3)</td>
<td>-.189</td>
<td>-.085</td>
<td>-.033</td>
<td>-.128</td>
<td>-.184</td>
<td>-.208</td>
</tr>
<tr>
<td>EES-D</td>
<td>63</td>
<td>.86</td>
<td>32.8(6.8)</td>
<td>-.341**</td>
<td>-.302*</td>
<td>-.247</td>
<td>-.181</td>
<td>-.331**</td>
<td>-.242</td>
</tr>
<tr>
<td>EES-B</td>
<td>63</td>
<td>.82</td>
<td>25.5(5.7)</td>
<td>.112</td>
<td>-.073</td>
<td>.063</td>
<td>.083</td>
<td>.023</td>
<td>-.110</td>
</tr>
<tr>
<td>EDEQ-Global</td>
<td>63</td>
<td>.65</td>
<td>3.24 (.95)</td>
<td>-.228</td>
<td>-.395**</td>
<td>-.323**</td>
<td>-.316*</td>
<td>-.302*</td>
<td>-.120</td>
</tr>
<tr>
<td>Self-Kindness</td>
<td>63</td>
<td>.65</td>
<td>4.65(1.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Humanity</td>
<td>63</td>
<td>.78</td>
<td>4.86(2.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mindfulness</td>
<td>63</td>
<td>.63</td>
<td>5.41(1.7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Judgement</td>
<td>63</td>
<td>.75</td>
<td>4.82(1.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Isolation</td>
<td>63</td>
<td>.40</td>
<td>4.33(1.67)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over-Identification</td>
<td>63</td>
<td>.65</td>
<td>4.37(1.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: **p < .01, *p < .05. BES = Binge Eating Scale; EES-AA = Emotional Eating Scale Anxiety/Anger; EES-D = Emotional Eating Scale-Depressed; EES-B = Emotional Eating Scale-Bored; EDEQ-Global = Eating Disorder Examination Questionnaire-Global Score. Negative subscales self-compassion scores were reverse coded (i.e., greater scores on negative subscales of self-compassion yield greater self-compassion). Greater scores on positive subscales of self-compassion yield greater self-compassion.

Results

Preliminary Results
Descriptive statistics and bivariate correlations are presented in Tables 1 and 2. Missingness was low (0.02%) and thus analyses utilized list-wise deletion. Assumptions of multiple regression were confirmed, and collinearity diagnostics revealed tolerance and variance inflation factors within acceptable ranges.

### Table 2

**Standard Multiple Linear Regression of Self-Compassion Subscales on Global Disordered Eating (EDEQ-Global) Reported by a Treatment Seeking Sample with Overweight/Obesity**

<table>
<thead>
<tr>
<th>EDEQ</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.53</td>
<td>.392</td>
<td>11.54</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Over-Identification</td>
<td>-.131</td>
<td>.078</td>
<td>-.263</td>
<td>-1.678</td>
<td>.099</td>
</tr>
<tr>
<td>Self-Judgement</td>
<td>-.038</td>
<td>.085</td>
<td>-.074</td>
<td>-.452</td>
<td>.653</td>
</tr>
<tr>
<td>Self-Kindness</td>
<td>-.075</td>
<td>.098</td>
<td>-.124</td>
<td>-.767</td>
<td>.446</td>
</tr>
<tr>
<td>Common Humanity</td>
<td>-.036</td>
<td>.073</td>
<td>-.074</td>
<td>-.485</td>
<td>.629</td>
</tr>
</tbody>
</table>

### Bivariate Relations Between Self-compassion Facets And Eating Behaviors

Greater emotional eating while depressed was significantly related to less common humanity, greater over-identification, and greater self-isolation (See Table 1). Higher reports of global disordered eating were significantly related to less common humanity, greater self-judgment, greater over-identification, and less self-kindness. No significant bivariate relations were observed between self-compassion facets and binge eating severity, emotional eating-anger/anxiety, and emotional eating-boredom (ps > .05).

Bivariate correlations were also conducted on each self-isolation item and emotional eating-depression due to SCS-isolation’s poor internal consistency (Cronbach’s alpha = .40) (Item 1: *When I am feeling down, I tend to feel like most other people are probably happier than I am.* Item 2: *When I fail at something that’s important to me, I tend to feel alone in my failure*). A significant relationship was observed between Item 2 and emotional eating-depression (r = .351, p < .01). No significant bivariate relationship was observed between Item 1 and emotional eating-depression (p > .05).

### Multiple Linear Regressions

#### Disordered Eating

Results showed that common humanity, self-judgment, over-identification, and self-kindness were significantly associated with disordered eating (F(4, 58) = 3.38, p = .02), explaining 19% of the variance in disordered eating. No specific facet contributed significant unique variance in disordered eating (ps > .05; see Table 3).
Table 3
Standard Multivariate Linear Regressions of Self-Compassion Subscales on Emotional Eating while Depressed (EES-D) Reported by a Treatment Seeking Sample with Overweight/Obesity

<table>
<thead>
<tr>
<th>EES-D</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>41.618</td>
<td>2.64</td>
<td>15.765</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Common Humanity</td>
<td>-.812</td>
<td>.478</td>
<td>-.235</td>
<td>-1.698</td>
<td>.095</td>
</tr>
<tr>
<td>Over-Identification</td>
<td>-.124</td>
<td>.579</td>
<td>-.035</td>
<td>-1.315</td>
<td>.831</td>
</tr>
<tr>
<td>Self-Isolation</td>
<td>-1.001</td>
<td>.597</td>
<td>-.246</td>
<td>-1.677</td>
<td>.099</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EES-D*</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>39.575</td>
<td>2.377</td>
<td>16.648</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Common Humanity</td>
<td>-.824</td>
<td>.485</td>
<td>-.238</td>
<td>-1.669</td>
<td>.095</td>
</tr>
<tr>
<td>Over-Identification</td>
<td>-.636</td>
<td>.499</td>
<td>-.179</td>
<td>-1.275</td>
<td>.207</td>
</tr>
</tbody>
</table>

Notes: *=self-isolation subscale removed. Negative self-compassion scores were reverse coded (i.e., greater scores on negative subscales of self-compassion yield lower self-compassion). Greater scores on positive subscales of self-compassion yield greater self-compassion.

Emotional Eating-Depression

Results showed that common humanity, over-identification, and self-isolation were significantly associated with emotional eating-depression ($F(4, 58) = 4.10, p = .01$), explaining 17% of the variance in emotional eating-depression. No specific facet contributed significant unique variance in emotional eating-depression ($p$s > .05; see Table 3).

Emotional Eating-Depression: Self-Isolation Subscale Removed

Results showed that common humanity and over-identification were significantly associated with emotional eating-depression ($F(3, 60) = 4.60, p = .014$), explaining 17% of the variance in emotional eating-depression. No specific facet contributed significant unique variance in emotional eating-depression ($p$s < .05; see Table 4).

Discussion

In the current study, significant bivariate relations were observed between emotional eating-depression and common humanity, over-identification, and self-isolation. Significant bivariate relationships were also observed between disordered eating and common humanity, self-judgment, self-kindness, and over-identification. Regression analyses concluded that, together, common humanity, self-judgment, over-identification, and self-kindness were significantly related to disordered eating but no one facet was uniquely related to disordered eating. Additionally, common humanity, over-identification, and self-isolation, together, were significantly related to emotional eating-depression and no one facet was uniquely related to this emotional eating type. The final regression model, without the isolation subscale and considering common humanity and over-identification together, was still significantly related to emotional eating-depression.

To our knowledge, the present study is the first to examine specific positive and negative facets of self-compassion in relation to disordered and emotional eating types. Specifically, this study aimed to examine the relations between self-compassion facets and disordered and emotional eating in a treatment-seeking sample of adults with overweight/obesity. Because self-compassion is a multidimensional construct (Neff et al., 2009), the present study provides a finer level of detail on the nature of relationships between facets of self-compassion and eating pathology in adults with overweight/obesity. Common humanity, operationalized as recognizing both suffering and personal inadequacy as a part of a shared human experience, was a significant correlate of both emotional eating-depression and disordered eating such that higher levels of common humanity were related to lower levels of emotional eating-depression and disordered eating. While limited research is available examining facets of self-compassion such as common humanity in relation to eating pathology in adults with overweight/obesity, findings add to the protective role of common humanity in relation to health outcomes. For example, common humanity moderated the relation between perceived weight status and appearance comparisons in a sample of adolescents such that higher levels of common humanity weakened the relationship between weight status and appearance comparisons (Rodgers et al., 2017). Common humanity has also been found to be associated with other positive psychological outcomes. In a sample of men living with HIV, common humanity weakened the relationship between HIV stigma and negative affect (Skinta et al., 2019). In the context of eating pathology, one’s understanding of suffering as a universal experience (i.e., common humanity) may be associated with less emotional and disordered eating given the potential role that common humanity may play in supporting coping with painful and difficult emotions (e.g.,
negative emotions; Terry & Leary, 2019). Specifically, common humanity may equip people with tools to cope with negative emotional experiences which may diminish the need to cope with eating. With future research validating the temporal order of these variables, treatment designs supporting self-compassion skills such as common humanity may prove useful in the treatment of global disordered eating and emotional eating types (i.e., emotional eating-depression) in adults with overweight/obesity.

In addition to common humanity, over-identification was another facet of self-compassion significantly related to eating pathology. Specifically, over-identification was significantly correlated with emotional eating-depression and global disordered eating such that greater over-identification was related to higher eating pathology. This finding is consistent with the literature suggesting over-identification as a risk factor for deleterious health outcomes. For example, compared to the subsample of persons with no depressive symptoms, those with any depressive symptoms endorsed higher over-identification (Korner et al., 2015). Meaning, if one is experiencing greater cognitive fusion (i.e., over-identifying with their negative thoughts and/or emotions), they may experience greater depression. Furthermore, it is possible that those who endorse over-identifying with their negative emotions (e.g., depression) may eat in response to the overwhelming nature of cognitively fusing to those emotions. In addition, people may experience general eating, shape, and weight concerns (e.g., dietary restraint) in response to cognitively fusing with their negative thoughts and feelings. Support for this can be found with research suggesting that greater mindfulness (i.e., cognitively de-fusing) is associated with less severe eating pathology (Adams et al., 2012; Sala et al., 2020). Altogether, over-identification may be a risk factor to developing eating pathology, specifically general eating, shape, and weight concerns (e.g., global disordered eating) and emotional eating-depression, which is consistent with previous findings on the relation between general psychopathology and disordered and emotional eating while depressed (Braden et al., 2018).

While results are exploratory in nature, it is evident that parsing out positive and negative components of self-compassion might aid in understanding unique relationships with disordered and emotional eating behaviors among adults with overweight/obesity. Specifically, different positive facets of self-compassion (i.e, common humanity) are associated with lower emotional eating-depression and disordered eating. Negative facets (i.e., over-identification and self-isolation) are potential correlates of higher emotional eating-depression and disordered eating.

**Limitations/future Directions**

The present study is not without limitations and future research directions. Firstly, our study was derived from a cross-sectional design that relied on questionnaires that are subject to response bias. Furthermore, temporal order cannot be determined between constructs of interest. Future research exploring these relationships over time and with experimental designs may help address these limitations of response bias and temporal order. Secondly, poor internal consistency of the self-isolation subscale of the SCS (Chronbach's alpha = .40) limited our ability to observe a statistically robust relationship between self-isolation and emotional eating in response to depression. While a significant bivariate relationship was expressed between item 1 (When I am feeling down, I tend to feel like most other people are probably happier than I am) and emotional eating in response to depression, item 2 was not significant. Furthermore, regressions that included self-isolation should be examined with caution.

While exploratory in nature, these findings support that self-compassion should be further examined as a multidimensional construct in relation to disordered and emotional eating behaviors in adults with overweight/obesity. Future research should utilize the SCS-Full-Form to measure facets of self-compassion in relation to disordered and emotional eating types across diverse populations. Additionally, other factors that might potentially buffer or affect the relationship between self-compassion and disordered and emotional eating should be measured, such as emotional regulation. Clinicians should also consider utilizing specific facets of self-compassion (e.g. common humanity, self-kindness) when treating maladaptive eating behaviors such as disordered eating and emotional eating in response to depression in adults with overweight/obesity. Additionally, the construct of common humanity should be further explored in relation to destigmatizing emotional eaters’ experiences, especially among those seeking treatment.

**Conclusion**

Nevertheless, the current study makes a notable contribution to the literature by examining specific positive (common humanity, mindfulness, self-kindness) and negative (self-isolation, over-identification, self-judgment) facets of self-compassion in relation to emotional eating types and disordered eating behaviors in adults with overweight and obesity. Overall, utilizing a facet approach in treating eating pathology (global disordered eating and emotional eating while depressed ) in adults with overweight and obesity may be useful.

**References**


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**Declarations**
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