Upward Social Comparison Tendency, Self-compassion, Body-Envy and Dieting

Behavior in College Women: A Moderated Mediation Analysis

Nina Schoonbeek

S4006917

Department of Psychology, University of Groningen

PSB3E-BT15: Bachelor Thesis

Supervisor: dr. S. E. Dalley

Second evaluator: A. Kuschel (MSc)

In collaboration with: Layla Goralski, Luisa Schade, Liana Drakopoulou, and Olivia

Czeschka.

June 30, 2022

A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.

Abstract

In line with contemporary sociocultural theory, the current study examined the relationships between upward social comparison tendencies (USCT), self-compassion, body-envy and weight-loss dieting (WLD) in a sample of German college women, using a cross-sectional design. Hypotheses entailed that body-envy would mediate the relationship between USCT and WLD; frequent upward social comparisons would be associated with more WLD through more frequent episodes of body-envy. Additionally, expected was that self-compassion would function as a moderator in this regard; the mediation pathway would be weaker for women higher in self-compassion. Lastly, the effects were hypothesized to occur over and above self-reported body size. An online survey was administered in a convenience sample of 245 German college women who completed measures of USCT, self-compassion, frequency of body-envy and WLD, as well as measures of height and weight. A bootstrapping analysis using PROCESS-macro (Hayes, 2013) for SPSS was used to test the predictions, and has supported the expected moderated mediation model. The current study adds to previous research because it identified an additional mechanism by which upward social comparisons influence dieting behavior in college women. Additionally, it identified a potential protective factor, self-compassion, meaning that self-compassion -based interventions could be used to reduce the impact of upward social comparisons.

Keywords; sociocultural theory, upward social comparison tendency (USCT), self-compassion, body-envy, weight-loss dieting (WLD)

Upward Social Comparison Tendency, Self-compassion, Body-envy and Dieting

Behavior in College Women: A Moderated Mediation Analysis

In the year 2016, approximately 2.4% of young women in Germany were suffering from an eating disorder (Morton, 2016). Research has shown that weight-loss dieting (WLD) is a strong predictor for eating pathology in women (Schaumberg & Anderson, 2016). One important factor thought to motivate WLD is a woman's tendency to compare herself with thinner and more attractive others (upward social comparison tendency, or USCT; O'Brien et al., 2009). However, not much is known about the psychological mechanism underpinning the impact of such social comparisons on WLD (Arnocky et al., 2016).With this in mind, the first aim of this study is to examine whether the frequency of envy about another's thinner and more attractive body (from now on referred to as body-envy), might play a mediating role between USCT and WLD. In support of this reasoning, envy is an emotion theoretically and empirically linked to upward comparisons (Crusius et al., 2020). The second aim of this study is to examine whether self-compassion, a construct theoretically linked to reducing the impact of upward body comparisons (Homan & Tylka, 2015), can moderate this mediation relationship by weakening the feeling of body-envy after having compared oneself upwards.

The most empirically supported explanation for why women engage in WLD is the sociocultural paradigm, which focuses on how cultural values influence individual values and behavior (Ata et al., 2015; Thompson & Stice, 2001). In sociocultural theory, such a cultural value with a lot of influence is the thin-ideal (Thompson & Stice, 2001). Women in Western society live in world in which their bodies are consistently evaluated by others. They are given the idea that their bodies are a primary source of their value and worth (Liss & Erchull, 2015). Therefore, women have the wish to strive for this thinness-ideal; they want to be thin, to present their worth. For these women, being thin feels rewarding. This powerful thin-ideal

is thought to predominantly exert its impact through a process of social comparison (Yang, 2013).

According to Buunk and Gibbons (2000), social comparison is "how we use others, to make sense of ourselves and our world." In the context of body image, women have a tendency to compare themselves upwards to better looking women, in order to get important information which with they can make sense of their selves; how far is their distance from the thin-ideal? How can they minimize this distance and become thin then? Because of the increased use of social media, women learned that this thinness is valued and rewarded (Thompson & Stice, 2001). In order to also be valued and feel rewarded, women start comparing themselves with these thin-ideals. They detect a discrepancy between themselves and the thin-ideal, and become aware of strategies to achieve this thinness. Unfortunately, these thin-ideals are out of reach for most women (Thompson & Stice, 2001). Therefore, most research has focused on body dissatisfaction as a consequence of upward social comparisons and motivator for WLD. However, according to contemporary social comparison theory, the emotion of envy might also play a role in this regard (Ata et al., 2015; Smith et al., 1999; Crusius et al., 2020).

Envy is the very unpleasant emotion that elicits after one has compared oneself to a perceived higher standard (Crusius et al., 2020; Smith et al., 1999). One becomes aware of a discrepancy between oneself and the higher standard, and, therefore, feels a sense of inferiority towards that higher standard – importantly, the standard has got to be valued or seen as important by the comparer (Smith et al., 1999). Additionally, envy many times leads to "ill will", or an hostile edge, because upward social comparisons often reflect an unreachable desire. This sense of inferiority and ill will together feel very painful, annoying and frustrating. Envy therefore motivates individuals to reduce the pain it entails; they want to eliminate the gap with the other person, in order to reduce the pain this gap entails (Crusius et

al., 2020). Thus, when the upward social comparison of individuals highlights their inferiority on a desired attribute, envy will be the resulting motivational emotion (Smith et al., 1999).

In the context of women's body image, this would mean that the upward social comparisons of women with better looking women can elicit the very unpleasant feeling of body-envy, because a woman becomes aware of the discrepancy between her own body and the body of the better looking woman (Dalley et al., 2019a). The woman will feel a sense of inferiority (Smith et al., 1999) regarding her thinness, which feels annoying, painful and frustrating. The frequent episodes of body-envy can be linked to the increased use of social media (Ata et al., 2015); here the pictures of women are often airbrushed and perfected, reflecting an unrealistic body standard (Thompson & Stice, 2001). The use of social media increases the perception that such thinness is valued (Ata et al., 2015; Thompson & Stice, 2001; Yang, 2013). When using social media, women get confronted with these perfect and unattainable bodies time after time, increasing their perceived discrepancy even more. The more they get confronted with these gaps between their own bodies and the bodies of the better looking women, the more frequent episodes of body-envy they will experience (Smith et al., 1999). Keeping this in mind, the expectation is that USCT will be associated with body-envy. Specifically, the more a woman engages in upward social comparisons, the more frequent will their experiences of body-envy be.

According to contemporary social comparison theory, envy motivates behavior directed at reducing the discrepancy with the upward social comparison target (Ata et al., 2015; Smith et al., 1999), because feeling envious feels painful but also frustrating. In the context of women's body image domain, this would mean that the frequent episodes of body-envy that are experienced after upward social comparisons, motivates women to reduce this negative feeling. They want to minimize the "gap" between themselves and the other (Lange, Blatz & Crusius, 2018). One possible way in which women can reduce this discrepancy, and

thus their feelings of body-envy, is by weight-loss dieting. Research by Arnocky and colleagues (2016) previously confirmed the fact that the feeling of body-envy can motivate various compensatory behaviors to reduce this negative feeling. For example, they indicated that body-envy is significantly associated with appearance enhancement strategies such as the willingness to use plastic surgery or the willingness to use a diet pill. With this in mind, body-envy might play an important role in the decision to start dieting after having compared oneself to a better looking woman, because this strategy leads to reduction in body size and thus moves them closer to the thin-ideal. Therefore, the expectation is that the frequency of body-envy mediates the relationship between USCT and WLD; it is hypothesized that the more a woman engages in upward social comparisons, the more frequency of body-envy she will experience, and, in turn, the higher her motivation for WLD will be.

Although the expectation is that body-envy will mediate the relationship between USCT and WLD, an additional expectation is that this mediation pathway will be weaker for women higher in self-compassion. Individuals high in self-compassion are mindful, kind, and nurturing toward themselves during situations that threaten their adequacy, while recognizing that not being perfect is part of "being human (Homan & Tylka, 2015)." It can further be described as an attitude of kindness and understanding toward one's personal disappointments and struggles. Self-compassion consists of three components (Homan & Tylka, 2015); *mindfulness*, *self-kindness* and *common humanity*. By mindfulness is meant being open to personal distress while also taking a non-judgmental attitude towards perceived inadequacies and failures. Self-kindness holds treating oneself with understanding, patience, and forgiveness, even when confronted with perceived disappointments or inadequacies. Common humanity entails the recognition that nobody is perfect, everybody makes mistakes, and experiences failure. As a result of being self-compassionate, people do not feel so isolated by perceived struggle or failure (Homan & Tylka, 2015). Thus, if a woman can take a non-

judgmental attitude towards perceived inadequacies (mindfulness), can treat herself with understanding and forgiveness (self-kindness), and can remind herself that all people are imperfect and experience failure, she will not feel so inferior and annoyed and thereby would be able to reduce the impact the upward social comparison had (Homan & Tylka, 2015). Other studies have confirmed the positive effects of self-compassion, for example, indicating that self-compassionate people report lower rates of psychological distress, such as anxiety, depression, and stress (MacBeth & Gumley, 2012). Therefore, researchers suggests that self-compassion might function as a buffer against negative self-feelings when having a negative experience (Leary et al., 2007). Much research has already studied whether self-compassion could function as a moderator. For example, research by Homan and Tylka (2015) shows that self-compassion moderated the relationship between body-comparison and body appreciation. Research by Liss and Erchull (2015) found similar effects, indicating that high levels of self-compassion were related to lower levels of body-shame after having compared oneself to social beauty standards. Studies like these clearly show that self-compassion can be a buffer against negative self-feelings, like body shame and body dissatisfaction. Although less is known about self-compassion being a moderator between USCT and body-envy, the expectation is that this might also be the case. In other words, the expectation is that self-compassion, and thus being mindful, kind to oneself and reminding oneself of common humanity (Homan & Tylka, 2015), reduces the frequency of body-envy after college women have compared themselves to better looking women. Hence, the prediction holds that the more self-compassionate a women is, the less frequency of body-envy she will experience after having compared herself to a better looking women. Consequently, the expectation is that women will be less motivated to engage in dieting behaviors.

To summarize, the aim of this study is to examine whether the frequency of body-envy will mediate the relationship between upward social comparison tendency and weight-loss

dieting. Additionally, the prediction is that this mediation model will be weaker for those women higher in self-compassion (see Figure 1). These hypotheses are tested in a population of college women (in Germany), since disordered eating is prevalent among this population (Walker et al., 2015). Lastly, the expectation is that the predicted moderated mediation model will occur over and above self-reported body size, since research has indicated that many women experience WLD, body dissatisfaction, and disordered eating regardless of being in a normal range of body size (Dalley et al., 2019a).

Figure 1:

Predicted Moderated Mediation Model; Controlling for Body Mass Index (BMI)
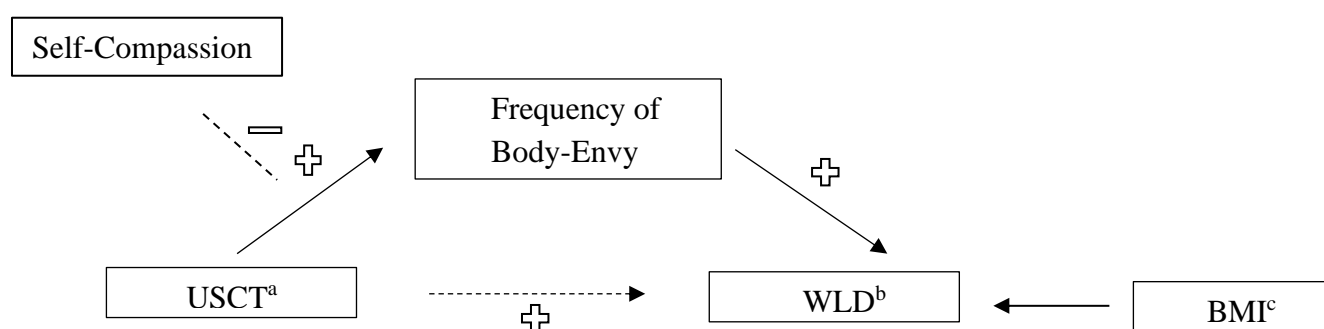
Note. The expected associations and their directions between USCT, self-compassion, frequency of body-envy and WLD, while controlling for BMI.

[a] USCT = upward social Comparison tendency, [b] WLD = weight-loss dieting, [c] BMI = body mass index.

Method

Participants

Participants were required to be female, native German speakers, studying at a university and without any history of an eating disorder. They were recruited using convenience and snowball sampling. Four hundred and twenty-seven female students

originally volunteered to participate. However, 182 students had to be excluded since the requirements were not met. Participants with missing data and participants that were identified as outliers using the casewise diagnostics method (Wiggins, 2000), were also excluded from the dataset. A total of 245 female students remained for statistical analysis. Ages ranged from 18 to 46 years ($M = 24.11$, $SD = 3.549$), with a Body Mass Index (BMI) ranging from 15.42 to 42.72 ($M = 22.67$, $SD = 3.72$).

Measures

Upward Social Comparison Tendency

To measure the upward social comparison tendency, the Upward Physical Appearance Comparison Scale (UPACS), developed by O'Brien and colleagues (2009), was used. The scale contained 10 items (e.g. "I find myself thinking about whether my own appearance compares well with models and movie stars"/"Ich ertappe mich dabei, wie ich darüber nachdenke, ob mein eigenes Aussehen mit dem von Models und Filmstars vergleichbar ist"), with a 5-point Likert scale running from 1 (*I don't agree at all/stimme überhaupt nicht zu*) to 5 (*I totally agree/stimme voll und ganz zu*). Higher scores reflect a higher tendency to compare oneself upwards. O'Brien and colleagues (2009) report an internal reliability of $\alpha = 0.94$. Current research indicates an Cronbach's alpha of $\alpha = 0.908$ and an omega of $\Omega = 0.907$.

Self-Compassion

The scale used to measure self-compassion is the German version of the Self-Compassion Scale (SCS-D; Hupfeld, & Ruffieux, 2011), originally developed by Neff (2003). The 12 item subscale consists of a 5-point Likert scale ranging from 1 (*almost never/sehr selten*) to 5 (*almost always/sehr oft*) and contains items such as: "When I'm going through a very hard time, I give myself the caring and tenderness I need"/"Wenn ich eine sehr schwere

Zeit durchmache, schenke ich mir selbst die Zuwendung und Einfühlsamkeit, die ich brauche." Higher scores reflect greater use of self-compassion. Hupfeld and Ruffieux (2011) report a Cronbach's alpha of $\alpha = 0.91$. The current research shows an internal reliability and an omega of $\alpha = 0.864$ and $\Omega = 0.861$.

Frequency of Body-Envy

A self-constructed 5 item scale was used to measure the frequency of body-envy. The subscale utilizes a 5-point Likert scale ranging from 1 (*I don't agree at all/stimme überhaupt nicht zu*) to 5 (*I totally agree/stimme voll und ganz zu*) and includes items such as: "It often annoys me when I see women who are slimmer and more toned than me"/"Es nervt mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich." These items reflected components of envy as proposed in recent theoretical and empirical research (Rentsch & Gross, 2015). Higher scores reflect a higher frequency of body-envy. In the current sample the Cronbach's alpha and omega were both 0.916.

Weight-loss Dieting

To measure weight-loss dieting, the Dieting Intention Scale (Stice, 1998) was used. The subscale contained 9 items (e.g. "I sometimes avoid eating in an attempt to control my weight"/"Manchmal vermeide ich es zu essen, in einem Versuch mein Gewicht zu kontrollieren"), including a 5-point Likert scale ranging from 1 (*never/nie*) to 5 (*always/oft*). Higher scores reflect greater dieting intentions. Stice (1998) reported an internal reliability of $\alpha = 0.94$. In the current study the Cronbach's alpha was $\alpha = 0.910$ and the omega was $\Omega = 0.906$.

Body size

Body size was measured in terms of body mass index (BMI). The BMI of each participant was calculated from self-reported weight and height. Bowman & DeLucia (1992) previously indicated that self-reported values can differ from the actual values. However, they found a variation of only 1% to 3.5% between actual- and self-reported weight and height.

Procedure

Ethical approval was obtained from the Faculty ethics committee. To ensure the accuracy of the questionnaire, questions that were translated into German were back translated to its original language (English). This way it was ensured that both translations have the same meaning, consequently avoiding confusion in participants. A pilot study, using 6 participants, was first carried out to make sure the questionnaire was understandable for participants. These participants were not included in the actual statistical analysis. After performing the pilot study, a link and QR code of the online survey was distributed through social media (e.g. Whatsapp and Facebook). The researches also approached female participants in the library of the University of Groningen, even as in cafeterias of different faculties. After providing their informed consent, participants were asked to complete the online survey containing demographic information (e.g. age, height, weight, language), and measures of upward social comparison tendency, experienced frequency of body-envy, use of self-compassion and weight-loss dieting intentions. Participants that not met the requirements for taking part in the study were directed to the end of the survey, which offered a "10 steps to a positive body image" – guide (NEDA, n.d.). Following the completion of the questionnaire, participants were offered an opportunity to leave a comment, and were also provided the "10 steps to a positive body image" – guide. There was no compensation for participants that took

part in the study. Completed questionnaires were excluded from the statistical analysis if there were any missing items. See appendix A for the complete German survey.

Statistical Analysis

The hypothesized moderated-mediation model was examined using the PROCESS-macro for SPSS (27th version), which contains a bootstrap method for model testing. This approach is robust to the possible influences that non-normal data might have (Wright, London & Field, 2011). Prior to the actual analysis, descriptive and correlational statistics of the measures, as well as the assumptions for using the bootstrapping method, were checked. A "piecemeal approach" was then used to assess whether moderated mediation occurred (Muller, Judd & Yzerbyt, 2005). Following this approach, the predicted indirect effect and moderation pathway were first analyzed independently using model 4 (Hayes, 2013) and model 1 (Hayes, 2013) respectively. Subsequently, the overall results of the moderated mediation were interpreted using model 7, which estimates all parameters simultaneously (Hayes, 2013). This analysis offered a moderated-mediation index, which is the slope of the line reflecting the association between the moderator effect and the indirect effect (Dalley et al., 2019b), as well as estimates of the mediation effect on specific levels of the moderator (-1 *SD*, *Mean*, +1 *SD*). The analysis utilized 5000 bootstrap re-samples, and significance was based on 95% confidence intervals. The models tested, included USCT as the predictor variable, self-compassion as a moderator, body-envy as a mediator, and WLD as the criterion variable. As a covariate, BMI was included.

Results

Data Screening

Prior to the data-analysis, assumptions for using the bootstrapping method were checked. Despite a small deviation in the scatterplot (see appendix B: figure B1), the

assumptions for linearity and homoscedasticity seem to be reasonably satisfied; almost all points are randomly distributed, and no serious violations were shown. There was controlled for heteroscedasticity in the statistical analysis by including the Huber-White assumption check (Hayes & Cai, 2007), which employs a heteroscedasticity- consistent standard error. This way, possible violations of heteroscedasticity cannot affect the results of the analysis. The assumption for independence of errors is fulfilled (see appendix B: Table B1), because the Durbin- Watson statistic is beneath 2.0, which indicates independence of errors (Schreiber-Gregory et al., 2018). The bootstrapping method is a flexible procedure; it is robust to possible influences that non-normal data might have (Hayes, 2013). Therefore, there was no need to test for normality. Outliers that were identified using the casewise diagnostics method (Wiggins, 2000) were removed from the dataset because they can negatively affect the results and therefore lead to a distorted view (Wiggins, 2000).

Descriptive statistics and bivariate correlations of the measured variables are presented in Table 1.

Table 1

Descriptive Statistics and Bivariate Correlations of the Measured Variables

Variable	M	SD	1.	2.	3.	4.	5.	6.
1.USCT[a]	35.988	7.866	-					
2.BE[b]	16.433	6.314	0.740**	-				
3.WLD[c]	18.857	7.652	0.475**	0.593**	-			
4.SC[d]	36.200	8.156	-0.375**	-0.479**	-0.316**	-		
5.BMI[e]	22.670	3.715	0.081	0.216**	0.286**	-0.162*	-	
6.Age	24.11	3.549	-0.141*	-0.018	0.029	-0.017	0.295**	-

Note. N = 245. Table with the descriptive statistics and bivariate correlations of the measured variables.

[a] USCT = upward social comparison tendency, [b] BE = frequency of body-envy, [c] WLD = weight-loss dieting, [d] SC = self-compassion, [e] BMI = body mass index.

p < 0.05. **p* < 0.01.

Mediation

Following the piecemeal approach (Muller, Judd & Yzerbyt, 2005), and using model 4 (Hayes, 2013), the focus was first on the mediation part of the hypothesized moderated mediation model, examining the indirect effect of USCT on WLD through the frequency of body-envy while controlling for BMI. An overall significant model was found ($F(3,241) =$

71,2088, $p < 0.01$), with 38,26% of the variance in WLD explained by USCT and frequency of body-envy. While there was no significant direct effect for USCT on WLD, there was a significant effect for USCT on frequency of frequency of body-envy ($\beta = 0.5840$, $SE = 0.0314$, 95% CI (0.5223, 0.6458), $p < 0.01$), for BMI on frequency of body-envy ($\beta = 0.2674$, $SE = 0.0707$, 95% CI (0.1280, 0.4067), for frequency of body-envy on WLD ($\beta = 0.5734$, $SE = 0.0926$, 95% CI (0.3839, 0.7629), $p < 0.01$), and also for BMI on WLD ($\beta = 0.3587$, $SE = 0.1073$, 95% CI (0.1473, 0.5701), $p < 0.01$). Furthermore, the indirect effect for USCT on WLD through the frequency of body-envy was significant ($\beta = 0.3349$, $SE = 0.0595$, 95% CI (0.221, 0.4533). Consistent with the prediction, body-envy mediated the relationship between USCT and WLD. See Figure 2 for the mediation pathway.

Figure 2

Mediation Pathway
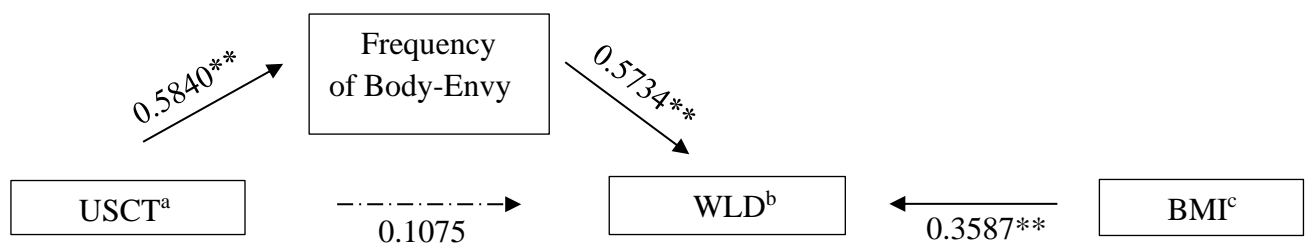
Note. $N = 245$. The relationship between USCT and WLD, mediated by body-envy. BMI was a control variable.

[a] USCT = upward social comparison tendency, [b] WLD = weight-loss dieting, [c] BMI = body mass index.

**$p < 0.01$.

Moderation

Second, the focus was on the moderating part of the hypothesized moderated mediation model (using model 1; Hayes, 2013), examining the predicted moderating influence of self-compassion on the relationship between UCST and the frequency of body-envy while controlling for BMI. The overall model was significant ($F(4, 240) = 125.0907$, $p < 0.01$), with 61,93% of the variance explained. While there was no significant effect for self-compassion on frequency of body-envy, there was a significant effect for USCT on frequency of body-envy ($\beta = 0.8225$, $SE = 0.1318$, 95% CI (0.5629 1.0821), $p < 0.01$) and for BMI on frequency of body-envy ($\beta = 0.2278$, $SE = 0.0713$, 95% CI (0.0874, 0.3682), $p < 0.01$). A significant interaction effect for USCT and self-compassion was found ($\beta = -0.0083$, $SE = 0.0034$, 95% CI (-0.0149, -0.0016), $p < 0.05$). To be more specific, the relationship between UCST and body-envy decreased in magnitude from low (-1SD; $\beta = 0.5907$, $SE = 0.0451$, 95% CI (0.5018, 0.6795), $p < 0.01$) to moderate (mean; $\beta = 0.5232$, $SE = 0.0309$, 95% CI (0.4624, 0.5841), $p < 0.01$) to high (+1SD; $\beta = 0.4558$, $SE = 0.0374$, 95% CI (0.3822, 0.5295), $p < 0.01$) with increasing levels of self-compassion (see Figure 3). The results indicate that self-compassion significantly functions as a moderator, which is in line with the predictions.

Figure 3

Interaction between Upward Social Comparison Tendency and Self-Compassion
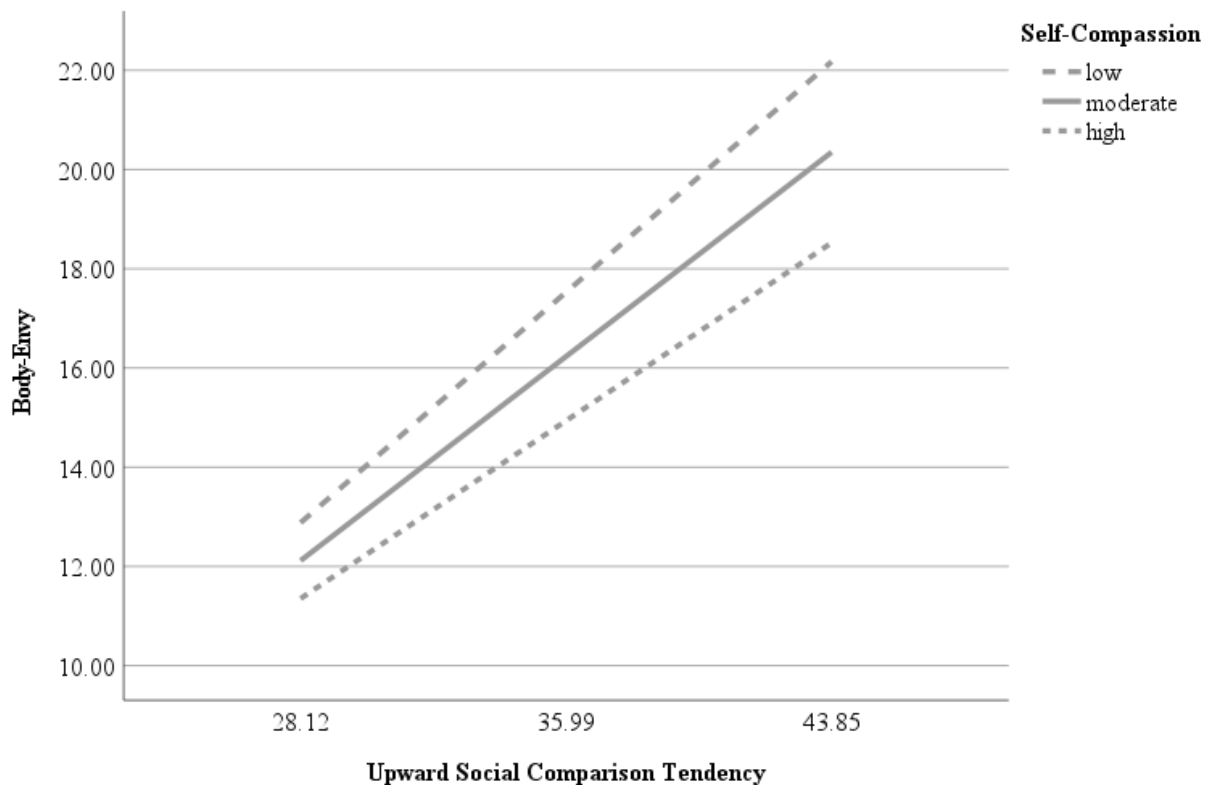
Note. $N = 245$. The interaction between the frequency of body-envy and low, moderate and high levels of self-compassion and their relationship with upward social comparison tendency. BMI was a control variable.

Moderated Mediation

The overall results of the moderated mediation are interpreted using model 7, which estimates all parameters simultaneously (Hayes, 2013). The moderated mediation index (Hayes, 2015), which concerns the slope of the line representing the association between the indirect effect and the moderator variable (self-compassion), was significant ($\beta = $ -0.0047, *SE* $= 0.0023$, 95% CI (-0.0094, -0.0003). Therefore, consistent with the prediction, the frequency of body-envy mediated the relationship between USCT and WLD across different levels of

self-compassion; the conditional indirect effect of UCST on WLD, through the frequency of body-envy, was significant at high (+1SD; $\beta = 0.2614$, $SE = 0.0495$, 95% CI (0.1696, 0.3603), moderate (mean; $\beta = 0.3000$, $SE = 0.0551$, 95% CI (0.1956, 0.4106) and low (-1SD; $\beta = 0.3387$, $SE = 0.0658$, 95% CI (0.2145, 0.4723) levels of self-compassion.

Discussion

Building on social comparison theory (Buunk & Gibbons, 2000) and sociocultural theory (Ata et al., 2015; Thompson & Stice, 2001), the expectation of this study was that the frequency of body-envy would mediate the relationship between USCT and WLD, in a sample of German college women. Furthermore, a second expectation was that self-compassion would moderate this mediation pathway; women higher in self-compassion would experience less body-envy after upward social comparisons. Ultimately, it was predicted that the moderated mediation model would occur over and above any type of body size (BMI). Results from the current study correspond with these hypotheses.

The significant mediation pathway is consistent with research; Arnocky and colleagues (2016) previously indicated that body-envy mediates the relationship between upward social comparisons and several appearance enhancement strategies, such as dieting behaviors. Moreover, it is also consistent with theory indicating that frequent upward social comparisons can motivate dieting behaviors (O'Brien et al., 2009; Arigo et al., 2014), because of a very painful experience of body-envy that arises when women become aware of the discrepancy between their own bodies and the body of the better looking women, as a result of these upward social comparisons (Smith et al., 1999). Keeping this in mind, and more generally, the results of the current study are also in line with contemporary sociocultural theory on women's body image disturbance (Ata et al., 2015; Thompson & Stice, 2001). The significant mediation pathway found in the current study builds on this previous research because it suggests that the feeling of body-envy has a motivational impact, resulting from

upward social comparison tendencies: it motivates women to reduce the discrepancy they experience between themselves and the better looking women. They can do that by starting to diet. Furthermore, the current study adds to previous research because it identified an additional mechanism (body-envy) by which upward social comparisons influence dieting behavior in women. Body-envy can thus be seen as an important psychological mechanism that underpins the impact of social comparisons on WLD.

An important trigger for experiencing envy is a perceived discrepancy between what one has, and what one desires (Smith et al., 1999), which becomes salient after upward social comparisons (Smith et al., 1999; Arnocky et al., 2016). According to sociocultural theory (Ata et al., 2015) and research by O'Brien and colleagues (2009), young women often engage in upward social comparisons. Sociocultural theory explains that social media plays a big role in these comparisons (Ata et al., 2015). The frequent use of social media, but also peer- and parental influences, make the thin-ideal more saliant. It becomes pervasive due to increasing use of social media (Liss & Erchull, 2015; Yang, 2013). In order to make sense of oneself regarding this thin-ideal, women start to compare themselves to better looking women (Buunk & Gibbons, 2000). As indicated, these upward social comparisons can elicit the negative feeling of body-envy, because women become aware of a discrepancy between their own body and the body that is in line with the thin-ideal, which feels very painful (Smith et al., 1999).

O'Brien and colleagues (2009) state that experiencing envy motivates to reduce the painful feeling and discrepancy that is experienced after upward social comparisons, with two different strategies; self-enhancement or self-improvement (O'Brien et al., 2009). Self-enhancement would mean to use downward social comparisons; comparing oneself with a woman who is perceived as worse off, in order to feel better about oneself. In contrast, when a woman is comparing herself to a higher standard, she will become motivated to achieve that

same standard, known as upward social comparisons (O'Brien et al., 2009). These two strategies, which can be used to reduce the feeling of body-envy, might be explained through two different types of envy that an individual can experience. In their dual approach to envy, Lange and Crusius (2020) state that envy can appear in two different forms; malicious envy and benign envy. Malicious envy involves the wish for others to lose their good aspects, whereas benign envy entails to pursue the qualities of superior others. Therefore, malicious envy is associated with hostile thoughts, feelings and behaviors, whereas benign envy is associated with desire and motivation to improve (Crusius et al., 2020). Putting this into the body image domain, one could suggest that young women experience benign envy because they want to improve themselves in order to reduce the gap between themselves and the better looking women. As the current study indicates, this could be achieved by weight-loss dieting. Since the current study did not focus on a distinction between these two kinds of envy, it would be interesting for future research to make this distinction, in order to gain a more complete understanding of the working process of (body)envy.

The foregoing may give a rationale for young women to engage in WLD; this way they can reduce their feelings of inferiority, and thus body-envy, that elicited after upward social comparisons, thereby coming closer to the desired body standard. However, and unfortunately, this thin-ideal is unachievable for most young women (Thompson & Stice, 2001). Therefore, WLD is an unhealthy strategy to achieve this desired standard, because women are trying to achieve something they probably will never reach. This unhealthy cycle, or unhealthy mediation pathway, could be the beginning of the development of eating pathology (Schaumberg & Anderson, 2016).

However, this mediation pathway between USCT, body-envy and WLD, seems to be weaker for women who are higher in self-compassion. Women who are non-judgmental towards their own perceived inadequacies (mindfulness; Homan & Tylka, 2015), are treating

themselves with understanding and forgiveness (self-kindness; Homan & Tylka, 2015), and can recognize that nobody is perfect (common humanity; Homan & Tylka, 2015), experience less body-envy after having compared themselves to better looking women. In other words, if women are able to accept the flaws of their body in a non-judgmental manner, can recognize that one's body does not have to be perfect to be valuable, and can keep in mind that no person's body is really perfect, they can protect themselves from the negative impact that upward social comparisons can have. Therefore, the construct self-compassion can be interpreted as a buffer in this context. These findings are in line with previous research, which indicated that high levels of self-compassion were related to lower levels body shame after having compared oneself to beauty standards (Liss & Erchull, 2015). Homan and Tylka (2015) found similar effects, indicating that body comparison was more weakly related to body dissatisfaction when self-compassion was high among women. Therefore, in line with the research by Leary and colleagues (2007), one could suggest that self-compassion functions as a buffer against negative self-feelings, such as body-envy, thereby reducing the impact that upward social comparisons might have. The current study assumed that the three components of self-compassion, mindfulness, self-kindness and common humanity (Homan & Tylka, 2015), together reduce the impact of upward social comparisons and thereby together reduce the feeling of body-envy. No attention was given to these components separately. Interesting for future research would be to utilize the longer version of the self-compassion scale (Neff, 2003), which will allow an assessment of the efficacy of each component independently. This way, more insight will be gained into which components individually or together have greater impact on reducing the feeling of body-envy. A particular intervention could then focus on this relevant component, which would have implications for clinical practice.

The results of the current study indicate that this moderated mediation pathway occurred over and above self-reported body size (BMI). This means that the thin-ideal is so strong, and so pervasive, that it affects all women of all sizes, and additionally, that a lot of women experience upward social comparison tendencies, episodes of body-envy, and WLD regardless of having a body size in the normal range. It can be suggested that body-envy is a strong emotional feeling that underpins the impact of upward social comparisons on WLD.

The limitations of this research should be acknowledged. Firstly, the study included a cross-sectional design; therefore, the results of the study should be interpreted carefully because such designs might produce biased estimates of moderation and mediation (Cole & Maxwell, 2003). Furthermore, results of cross-sectional designs are often interpreted as causal relationships, even though this cannot be established with cross-sectional designs (Cole & Maxwell, 2003). However, despite this limitation, the current study succeeded in providing more insight into the interactions between the key variables of this model. A suggestion for future research would be to test this moderated mediation model in an experiment or longitudinal design, in order to make conclusions about causality. For example, since upward social comparisons, feelings of body-envy and unhealthy eating behaviors are prevalent among young college women and seem to peak in this age range (Stice, Marti & Rhode, 2013), a potential suggestion for future research would be to examine whether the strength of the moderated mediation pathway indicated in this study follows a similar pattern from pre-through post-adolescence. A second limitation is that the study was carried out in a sample of young college women, because this population seems to be at risk for eating pathology (Walker et al., 2015). It is important to keep in mind that this sample might differ from the real clinical population. If statements about the clinical population are desired, future research should focus on testing this model in a clinical sample to ensure the representativeness of the results. Also worth noting, is that most research in the body image domain has focused on

body dissatisfaction as a potential mediator and motivator for unhealthy eating behaviors or even eating pathology. Limited research has studied whether body-envy might play a role in these relationships. Although the current study indicated that the emotion body-envy plays an important role, no knowledge is available about which variable has the strongest impact. Does body-envy add anything above body-dissatisfaction? This would be an interesting question for future research to examine. A fourth limitation concerns the linearity and homoscedasticity assumption; a small deviation in the scatterplot is visible, since not all points are randomly distributed. Although this is not a serious violation, the results of this study should be interpreted carefully. Lastly, the current study did not focus on differences in ethnicity. Future research could focus on differences in ethnicity, to gain insight into whether differences in results in ethnicity exist.

Despite some limitation, this research supports findings which have important practical implications. Since the current study indicated that upward social comparison tendencies can elicit a painful but motivating emotion of body-envy, which in turn can motivate (unhealthy) dieting behaviors, women with a high tendency to compare themselves upwards should be the targets for intervention. These women are at risk for engaging in (unhealthy) dieting behaviors and therefore for developing eating pathology (Schaumberg & Anderson, 2016). An intervention that tries to reduce the impact of these upward comparisons, and thereby reduces the feeling of body-envy, could be of much help here. As the current study indicates, in line with previous research (Homan & Tylka, 2015; Liss & Erchull, 2015), teaching women to be more self-compassionate could be the focus of such an intervention. An example of a well working intervention is the Compassion Focused Therapy (CFT), originally developed by Gilbert (2009). The goal of CFT is to help self-critical individuals to understand the origins, functions and consequences of their self-critical behavior, and to learn them to recognize the importance of relating to themselves from a more

self-compassionate view. Additionally, they are taught to be open to compassion from others. This way, the harmful cycle is sought to break down (Gilbert, 2009). Applying this to the women's body image domain, learning to recognize the importance of relating to oneself, and thus one's own body, in a more self-compassionate view, would be very valuable for young college women. This way the harmful cycle of constant comparing, feeling very bad (envious) afterwards, and starting unhealthy dieting (in order to achieve a body standard one will probably never reach; Thompson & Stice, 2001), can hopefully be broken down.

To summarize, the frequency of body-envy was found to mediate the relationship between upward social comparison tendency and weight-loss dieting. This indicates that young women who are high in upward social comparison tendency try to reduce this negative emotional feeling by engaging in weight-loss dieting. Furthermore, women who were higher in self-compassion were less likely to engage in such dieting behaviors when experiencing body-envy. Lastly, it turns out that body-envy specifically underpins the results, over and above any type of body size (BMI). For women higher in upward social comparison tendency and lower in self-compassion, self-compassion based interventions should be employed. This way self-compassion can protect young women from the great impact of upward social comparisons.

References

Arigo, D., Schumacher, L., & Martin, L. M. (2014). Upward appearance comparison and the development of eating pathology in college women. *International Journal of Eating Disorders*, *47*(5), 467–470. https://doi.org/10.1002/eat.22240

Arnocky, S., Perilloux, C., Cloud, J. M., Bird, B. M., & Thomas, K. (2016). Envy Mediates the Link Between Social Comparison and Appearance Enhancement in Women. *Evolutionary Psychological Science, 2*, 71-83. https://doi.org/10.1007/s40806-015-0037-1

Ata, R. N., Schaefer, L. M., & Thompson, J. K. (2015). *Sociocultural Theories of Eating Disorders.* In L. Smolak & M. P. Levine (Eds.) The Wiley Handbook of Eating Disorders, chapter 21.

Bowman, R. L., & DeLucia, J. L. (1992). Accuracy of self-reported weight: a meta-analysis. *Behavior Therapy*, *23*(4), 637–655. https://doi.org/10.1016/S0005-7894(05)80226-6

Buunk, B. P., & Gibbons, F. X. (2000). Toward an enlightenment in social comparison theory: Moving beyond classic and Renaissance approaches. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 487–499). Kluwer Academic Publishers. https://doi.org/10.1007/978-1-4615-4237-7_22

Cole, D. A., & Maxwell, S. E. (2003). Testing Mediational Models With Longitudinal Data: Questions and Tips in the Use of Structural Equation Modeling. *Journal of Abnormal Psychology, 112*(4), 558–577. https://doi.org/10.1037/0021-843X.112.4.558

Crusius, J., Gonzalez, M. F., Cohen-Charash, Y., & Lange, J. (2020). Envy: an adversarial review and comparison of two competing views. *Emotion Review*, *12*(1), 3–21. https://doi.org/10.1177/1754073919873131

Dalley, S. E., Bron, G. G., Hagl, I. F. A., Heseding, F., Hoppe, S., & Wit, L. (2019b). Bulimic symptoms in a sample of college women: disentangling the roles of body size, body shame and negative urgency. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *25*(5), 1357–1364. https://doi.org/10.1007/s40519-019-00771-z

Dalley, S. E., Vidal, J., Buunk, A. P., Schmitt, S., Haugwitz, A.-C., Kinds, N. A., & Vlasma, A. (2019a). Disentangling relations between the desirability of the thin-ideal, body checking, and worry on college women's weight-loss dieting: a self-regulation perspective. *Eating Behaviors*, *34*.

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment*, *15*(3), 199–208. https://doi.org/10.1192/apt.bp.107.005264

Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in ols regression: an introduction and software implementation. *Behavior Research Methods*, *39*(4), 709–722. https://doi.org/10.3758/BF03192961

Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach*. New York: Guilford Press.

Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach*. New York: Guilford Press.

Hayes, A.F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, *50*(1), 1-22. https://doi.org/10.1080/00273171.2014.962683

Homan, K. J., & Tylka, T. L. (2015). Self-compassion moderates body comparison and appearance self-worth's inverse relationships with body appreciation. *Body Image*, *15*, 1–7. https://doi.org/10.1016/j.bodyim.2015.04.007

Hupfeld, J. & Ruffieux, N. (2011). Validierung einer deutschen Version der Self-Compassion Scale (SCS-D). *Zeitschrift für Klinische Psychologie und Psychotherapie, 40*(2), 115–123.

Lange, J., Blatz, L., & Crusius, J. (2018). Dispositional Envy: A Conceptual Review. *The SAGE Handbook of Personality and Individual Differences: Applications of Personality and Individual Differences*, *3,* 424-440. https://doi.org/10.4135/9781526451248.n18

Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: the implications of treating oneself kindly. *Journal of Personality and Social Psychology*, *92*(5), 887–904.

Liss, M., & Erchull, M. J. (2015). Not hating what you see: self-compassion may protect against negative mental health variables connected to self-objectification in college women. *Body Image*, *14*, 5–12. https://doi.org/10.1016/j.bodyim.2015.02.006

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*, 545–552. https://doi.org/10.1016/j.cpr.2012.06.003

Morton, N. (ed.). (2016). *Eating Disorders : Prevalence, Risk Factors and Treatment Options*. New York: Nova Biomedical.

Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, *89*(6), 852–63.

Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223-250.

O'Brien, K. S., Caputi, P., Minto, R., Peoples, G., Hooper, C., Kell, S., & Sawley, E. (2009). Upward and downward physical appearance comparisons: Development of scales and examination of predictive qualities. *Body Image*, *6*, 201-206. https://doi.org/10.1016/j.bodyim.2009.03.003

Pila, E., Stamiris, A., Castonguay, A., & Sabiston, C. M. (2014). Body-Related Envy: A Social Comparison Perspective in Sport and Exercise. *Journal of Sport and Exercise Psychology, 36*, 93-106. https://doi.org/10.1123/jsep.2013-0100

Rentzsch, K., & Gross, J, J. (2015). Who turns green with Envy? Conceptual and empirical perspectives on dispositional envy. *European Journal of Personality, 29,* 530-547. https://doi.org/10.1002/per.2012

Schaumberg, K., & Anderson, D. (2016). Dietary restraint and weight loss as risk factors for eating pathology. *Eating Behaviors, 23,* 97–103. https://doi.org/10.1016/j.eatbeh.2016.08.009

Schreiber-Gregory, D., & Jackson, H.M. (2018). Logistic and Linear Regression Assumptions: Violation Recognition and Control. Retrieved June 9, 2022, from https://www.lexjansen.com/wuss/2018/130_Final_Paper_PDF.pdf

Smith, R. H., Parrot Gerrod, W., Diener, W. F., Hoyle, R. H., & Kim, S. H. (1999). Dispositional envy. *Personality and Social Psychology Bulletin*, *25*(8), 1007–1020. https://doi.org/10.1177/01461672992511008

10 Steps to Positive Body Image. (n.d.). NEDA: Feeding Hope. Retrieved June 3, 2022, from https://www.nationaleatingdisorders.org/learn/general-information/ten-steps

Stice, E. (1998). Relations of restraint and negative affect to bulimic pathology: a longitudinal test of three competing models. *International Journal of Eating Disorders*, *23*(3), 243–260. https://doi.org/10.1002/(SICI)1098-108X(199804)23:3<243::AID-EAT2>3.0.CO;2-J

Stice, E., Marti, C. N., & Rohde, P. (2013). Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women. *Journal of Abnormal Psychology, 122*(2), 445–457. https://doi.org/10.1037/a0030679

Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science*, *10*(5), 181–183.

Walker, M., Thornton, L., De Choudhury, M., Teevan, J., Bulik, C. M., Levinson, C. A., & Zerwas, S. (2015). Facebook use and disordered eating in college-aged women. *Journal of Adolescent Health*, *57*(2), 157–163. https://doi.org/10.1016/j.jadohealth.2015.04.026

Wiggins, B. C. (2000). Detecting and dealing with outliers in univariate and multivariate contexts. Paper presented at the Annual Meeting of the Mid-South Educational 129 Research Association KY, 1-35.

Wright, D. B., London, K., & Field, A. P. (2011). Using bootstrap estimation and the plug-in principle for clinical psychology data. *Journal of Experimental Psychopathology*, *2*(2), 252–270. https://doi.org/10.5127/jep.013611

Yang, M. (2013). *Self-esteem, body image and appearance management behaviors among korean and caucasian-american women : associations to attitudes toward social comparison and model's ethnicity in advertisements*. Ohio State University.

Appendix A

Upward social comparison tendency

Ich vergleiche mich eher mit Anderen, die besser aussehen als ich, als mit denen, die es nicht tun.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Ich neige dazu, meine eigene körperliche Attraktivität mit der von Models in Zeitschriften zu vergleichen.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Ich ertappe mich dabei, wie ich darüber nachdenke, ob mein eigenes Aussehen mit dem von Models und Filmstars vergleichbar ist.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Am Strand oder bei Sportaktivitäten (z.B., Sport, Fitnessstudio etc...) frage ich mich, ob mein Körper so attraktiv ist wie die der Leute, die ich dort mit sehr attraktiven Körpern sehe.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Ich neige dazu, mich mit Leuten zu vergleichen, von denen ich denke, dass sie besser aussehen als ich

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Wenn ich eine Person mit einem tollen Körper sehe, neige ich dazu, mich zu fragen, wie ich mit ihr mithalten soll.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Wenn ich gutaussehende Leute sehe, frage ich mich, wie ich im Vergleich wirke.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Auf Partys oder anderen Veranstaltungen vergleiche ich meine äußerliche Erscheinung mit dem Äußeren von sehr attraktiven Leuten

◯ stimme überhaupt nicht zu

◯ stimme nicht zu

◯ weder noch

◯ stimme zu

◯ stimme voll and ganz zu

Ich ertappe mich dabei, wie ich mein Aussehen mit Leuten, die besser als ich aussehen, vergleiche

◯ stimme überhaupt nicht zu

◯ stimme nicht zu

◯ weder noch

◯ stimme zu

◯ stimme voll and ganz zu

Ich vergleiche meinen Körper mit Leuten, die einen besseren Körper als ich haben

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll and ganz zu

Envy

Es nervt mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Ich neige dazu mich unwohl zu fühlen, wenn ich Frauen sehe, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Es stört mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Ich habe die Tendenz, Frauen zu beneiden, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Es frisst mich innerlich auf, Frauen zu sehen, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Ich neige dazu, mich minderwertig gegenüber Frauen zu fühlen, die schlanker und definierter sind als ich.

○ stimme überhaupt nicht zu

○ stimme nicht zu

○ weder noch

○ stimme zu

○ stimme voll und ganz zu

Self-compassion

Wenn ich mich auf irgendeine Art unzulänglich fühle, versuche ich mich daran zu erinnern, dass die meisten Leute solche Gefühle der Unzulänglichkeit haben.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn ich mich niedergeschlagen fühle, neige ich dazu nur noch auf das zu achten, was nicht in Ordnung ist.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn mir etwas für mich Wichtiges misslingt, glaube ich oft, dass nur ich allein versage.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn mich etwas aufregt, versuche ich meine Gefühle im Gleichgewicht zu halten

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn ich eine sehr schwere Zeit durchmache, schenke ich mir selbst die Zuwendung und Einfühlsamkeit, die ich brauche.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Ich missbillige und verurteile meine eigenen Fehler und Schwächen.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Ich versuche, meine Fehler als Teil der menschlichen Natur zu sehen.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn es mir schlecht geht, neige ich dazu zu glauben, dass die meisten anderen Menschen wahrscheinlich glücklicher sind als ich.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn etwas Unangenehmes passiert, versuche ich einen ausgewogenen Überblick über die Situation zu Erlangen

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Ich bin intolerant und unduldsam gegenüber denjenigen Seiten meiner Persönlichkeit, die ich nicht mag.

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Ich versuche verständnisvoll und geduldig gegenüber jenen Zügen meiner Persönlichkeit zu sein, die ich nicht mag

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Wenn ich bei etwas versage, was mir wichtig ist, werde ich von Gefühlen der Unzulänglichkeit aufgezehrt

○ sehr selten

○ selten

○ gelegentlich

○ oft

○ sehr oft

Weight-loss dieting

Manchmal vermeide ich es zu essen, in einem Versuch mein Gewicht zu kontrollieren

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich überspringe/versäume Mahlzeiten, in einem Versuch mein Gewicht zu kontrollieren

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich esse Diät-Lebensmittel, in dem Bestreben mein Gewicht zu kontrollieren.

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich zähle Kalorien, um einer Gewichtszunahme vorzubeugen

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich esse kalorienarme Lebensmittel, in dem Bestreben eine Gewichtszunahme zu vermeiden.

○ nie

○ selten

○ manchmal

○ oft

○ immer

Manchmal esse ich nur eine oder zwei Mahlzeiten pro Tag, um zu versuchen mein Gewicht zu begrenzen

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich halte mich bei Mahlzeiten zurück, um einer Gewichtszunahme vorzubeugen

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich nehme mir kleine Portionen, in dem Bestreben mein Gewicht zu kontrollieren.

○ nie

○ selten

○ manchmal

○ oft

○ immer

Ich begrenze die Menge an Nahrung, die ich esse, in einem Versuch mein Gewicht zu kontrollieren

◯ nie

◯ selten

◯ manchmal

◯ oft

◯ immer

---

10 steps to a positive body image

---

1) Schätzen Sie, was ihr Körper alles tun kann. Jeden Tag bringt ihr Körper Sie ihren Träumen näher. Feiern Sie all die tollen Dinge, die ihr Körper für sie tut – laufen, tanzen, atmen, lachen, träumen, etc.

2) Erstellen Sie eine Top-10 Liste der Dinge, die Sie über sich selbst mögen – Dinge, die nicht darauf bezogen sind, wie viel Sie wiegen oder wie Sie aussehen. Lesen Sie diese Liste oft. Ergänzen Sie die Liste, wenn ihnen mehr Dinge einfallen, die Sie über sich mögen.

3) Erinnern Sie sich daran, dass wahre Schönheit nicht nur aus dem Äußeren besteht. Wenn Sie sich mit sich selbst und dem, was Sie sind, wohlfühlen, tragen Sie sich mit einem Gefühl von Selbstbewusstsein, Selbstakzeptanz und Offenheit, das Sie schön macht, unabhängig davon, ob Sie körperlich wie ein Supermodel aussehen.

4) Betrachten Sie sich als ganze Person. Wenn Sie sich im Spiegel oder in Gedanken sehen, konzentrieren Sie sich nicht auf bestimmte Körperteile. sehen Sie sich so, wie Sie von anderen gesehen werden wollen - als ganze Person.

5) Umgeben Sie sich mit positiven Menschen. Es ist einfacher, sich mit sich selbst und seinem Körper wohl zu fühlen, wenn Sie sich mit anderen umgeben, die Sie unterstützen und die erkennen, wie wichtig es ist, sich selbst so zu mögen, wie Sie von Natur aus sind.

6) Schalten Sie die Stimmen in Ihrem Kopf ab, die Ihnen sagen, dass Ihr Körper nicht in Ordnung ist oder dass Sie ein schlechter Mensch sind. Sie können diese negativen Gedanken mit positiven überwältigen. Wenn Sie das nächste Mal anfangen, sich selbst zu kritisieren, bauen Sie sich mit ein paar schnellen bestätigungen wieder auf, die für Sie funktionieren.

7) Tragen Sie Kleidung, die bequem ist und in der Sie sich wohlfühlen. Arbeiten Sie mit Ihrem Körper, nicht gegen ihn.

8) Werden Sie zu einem kritischen Betrachter von sozialen und medialen Botschaften. Achten Sie auf Bilder, Slogans oder Einstellungen, die Ihnen ein schlechtes Gefühl in Bezug auf sich selbst oder Ihren Körper geben. Protestieren Sie gegen diese Botschaften: Schreiben Sie einen Brief an den Werbetreibenden oder antworten Sie auf das Bild oder die Botschaft.

9) Tun Sie etwas Schönes für sich - etwas, das Ihrem Körper zeigt, dass Sie ihn zu schätzen wissen. Nehmen Sie ein Schaumbad, nehmen Sie sich Zeit für ein Nickerchen, suchen Sie sich einen ruhigen Platz im Freien, um zu entspannen.

10) Nutzen Sie die Zeit und Energie, die Sie vielleicht damit verbracht haben, sich über Essen, Kalorien und Ihr Gewicht Gedanken zu machen, um etwas zu tun, um anderen zu helfen. Manchmal kann das Eingehen auf andere Menschen dazu beitragen, dass Sie sich selbst besser fühlen und eine positive Veränderung in unserer Welt bewirken.

Appendix B

Figure B1

Standardized Predicted Values vs. Standardized Residual
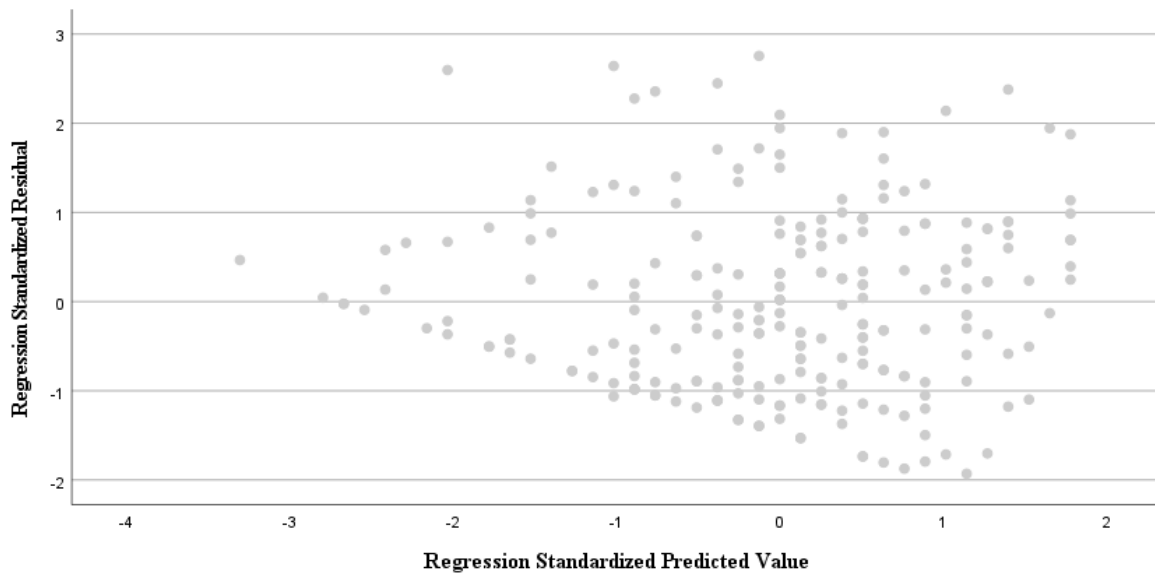
Note. $N = 245$. Scatterplot for testing the linearity and homoscedasticity assumption.

Table B1

Durbin-Watson Test

Model[1,2]	R	R^2	Durbin-Watson
1	0.619	0.383	1.935

Note. $N = 245$. Output of the Durbin- Watson test using regression analysis, to test for the assumption of independence of residuals.

[1] Predictors: Upward social comparison tendency, self-compassion, body-envy and body mass index.

[2] Dependent variable: Weight-loss dieting.