Disentangling the Relationships between Unhealthy-Perfectionism, Social Comparison Tendency, Body-Envy and Weight-Loss Dieting in College Women: A moderated mediation analysis

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Abstract

The study used the sociocultural theory to explain the relationship between upward social comparison, body envy, unhealthy perfectionism, and weight-loss dieting in college women. We hypothesized that body envy would mediate the relationship between upward social comparison and WLD such that women that engage more frequently in upward comparisons, will feel more often body envy and as a result would result in WLD. We also hypothesized that unhealthy perfectionism would moderate this relationship such that the mediation pathway would be stronger for women higher in unhealthy perfectionism. Finally, it was expected that these effects would occur over and above the self-reported body size (BMI). An online questionnaire was used with a convenience sample including 227 German college women who completed measures of: upward social comparison tendency, perfectionism, frequency of body envy and weight-loss dieting. A bootstrap analysis using PROCESS by Hayes 2013 was used in SPSS but did not support the moderated mediation model. However, further data exploration found that body envy mediates the relationship of UPACT and WLD as well as unhealthy perfectionism and WLD. The findings add to the current literature by explaining additional mechanisms by which upward comparisons and unhealthy perfectionism influence dieting in women.

Keywords: : sociocultural theory, body-envy, upward social comparison (UPACT), unhealthy perfectionism, weight-loss dieting (WLD).

Disentangling the Relationship between Unhealthy perfectionism, Upward Social Comparison tendency, Body Envy, and Weight-Loss Dieting in College Women: A moderated mediation analysis

According to research, weight-loss dieting (WLD) has been shown to be a risk factor for developing an eating disorder in women (Luz et al., 2018). In Germany, 2.4% of young women were found to suffer from an eating disorder (Morton, 2016). One risk factor for developing an eating pathology is a tendency to engage in social comparisons with various manifestations of women who represent a thin-ideal. (Spitzer et al., 1999). However, little research has examined the emotions that could mediate this relationship between upward social comparison tendency and WLD. According to contemporary social comparison theory, envy could be a powerful emotion that motivates engagement in WLD (Crusius et al., 2020). With this in mind, the first aim of the study is to examine whether the frequency of body-envy episodes mediates the relationship between Upward Social Comparison Tendency (USCT) and WLD, such that women will be more motivated to engage in WLD when experiencing body-envy as a result of frequent upward social comparisons to women with more attractive and thin bodies. We further want to examine whether unhealthy perfectionism, a personality variable linked with both upward social comparisons and envy, can strengthen the mediation pathway by strengthening the feelings of body envy as a result of upward comparisons.

Why do women feel constant pressure to fit into society's conceptualizations of how the "ideal" body looks like? Earlier research has confirmed the importance of sociocultural messages in western society's where the thin-ideal body type is considered attractive (Liss & Erchull, 2015). The theory that explains that the pathway by which the thin-ideal endorsement leads to eating disorder development is the Sociocultural Theory which suggests that cultural values influence individual thought and behavior (Thompson & Stice, 2001). Especially women in Western societies are made to believe that the way their body looks like is one of

the most important predictors of their worth and value in society. These women are exposed to a pervasive cultural aesthetic that rewards being thin which is portrayed very often on social media, on television and in magazines. Consequently, women try to come closer to society's thin-ideal by trying to be thin which will make them feel rewarded by society. Social comparison is thought to be the predominant medium through which the thin-ideal influences how women think feel and behave towards their body.

Humans have the innate drive to evaluate themselves by engaging in comparisons to others (Festinger, 1954). As Buunk and Gibbons (2000) describe, social comparison is "How we use others to make sense of ourselves and the world". According to social comparison theory, if objective means for evaluation are not available, people will use others assess and understand themselves (Buunk & Gibbons, 2000). In the body image context, women tend to engage in comparisons to women that are perceived better looking and thinner then them. As a consequence, women receive important information about themselves such as how far they are from the thin-ideal they are comparing themselves to. Unfortunately, these upward social comparisons tell them that, not conforming to this thin ideal will make them be seen as less attractive, less happy, and less successful. At the same time, these women compare themselves to perfected and airbrushed images, so this thin ideal is unachievable. However, it is sold as possible through unhealthy diets, weight-loss strategies, and exercise (Diel et al., 2021). Most research has focused on body dissatisfaction as a predictor for WLD (Thompson & Stice, 2001). However, we want to look whether envy as an emotion might also be a motivating factor for women to engage in WLD.

Envy is a classic upward social comparison emotion characterized by intense and negative feelings that results by a person realizing that somebody else possesses something that they want (Rentzsch & Gross, 2015). Envy is determined by the things that are most valued in society such as physical attractiveness. When people perceive that others have

certain advantages such as thin-body shape and that society values those advantages, they might experience envy because they value these advantages, and they are seen as important to them. Becoming aware of the discrepancy between themselves and the idealized other can create feeling that cause pain to the individual. As a result, women might search for way to reduce this negative feeling and the gap they have between themselves and the superior other (Lange et al., 2018).

As every other emotion, envy has action tendencies that allow the individual to cope with the situation (Pila et al., 2014). Generally, positive emotions signal that our situation is fine and there is no need to change something about the situation. On the other side, negative emotions, signal that something must be done to help the individual fix the problem they are coping with (Arnocky et al., 2016). Long-term consequences of envy can appear when for example women are repeatedly exposed to upward social comparison targets. A study by Arnocky et al. (2016) showed that women were more motivated to change their appearance (e.g., buying skin care products) after they have compared them themselves with other women and after they felt a discrepancy between themselves and the ideal other. They also found support for the role of envy in motivating women to take part in appearance-enhancing actions (e.g., purchasing diet pills) with the desire to lose weight. Their findings support that particularly upward social comparison generates negative feelings of envy and as a result motivates women to engage in weight loss dieting behaviors with a hope to reduce that discrepancy between themselves and their ideal (Arnocky et al., 2016). It is important to mention that the media also play a principal role as they promote this thin-ideal to the world and convey that it is possible for every woman to achieve these body standards. Therefore, knowing that anyone can be thin when they follow the correct diet or workout, women's motivation to diet increases (Diel et al., 2021). Consequently, it can be expected that the more

women engage in upward social comparisons, the more often they will experience feelings of body envy and thus the more they will engage in WLD.

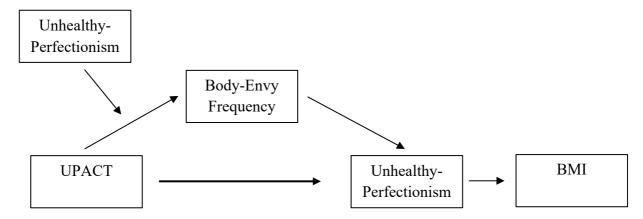
Although it is expected that envy will mediate the relationship between upward social comparison and WLD, it is also expected that this mediation pathway will be stronger for some women more than others. Research shows that not all women that are exposed to these thin-internalized ideals develop negative feelings about their bodies (Jin et al., 2018). Therefore, it is important to identify the women that are more susceptible to be affected by society's standards and to also understand whether these women have particular personality characteristics that make the pathway to WLD stronger. Previous research has suggested that women high in unhealthy perfectionism as a personality characteristic might be especially vulnerable to experience negative affect from exposure to body standards that reinforce thinideal (Stoeber et al., 2016). In general, perfectionism can be seen as adaptive (or healthy; enjoying the process of achieving high goals) or maladaptive (or unhealthy; trying to achieve unrealistic and exaggerated standards). In this paper, the focus is put on unhealthy perfectionism because previous research has found a strong link to eating pathologies in contrast to healthy perfectionism. Physical appearance is a well-known domain for perfectionistic people (Stoeber et al., 2016). Research shows that women high in physical appearance perfectionism have negative consequences for women's body image such as disordered eating symptoms, unhealthy weight controlling, low self-esteem and high social anxiety levels (McComb & Mills, 2022). In Western cultures where being thin-ideal is viewed as a highly valued goal, it can be anticipated that perfectionism might be associated with the thin-ideal internalization. Specifically, unhealthy perfectionists that have the tendency to be self-critical over their actions might be particularly affected by a pressure to be thin and might be especially more committed to it. This self-tendency of self-evaluation usually goes together with the belief that they will be negatively self-evaluated by people when they don't achieve

perfection (Hewitt & Flett, 1991). Therefore, it is expected that these women will not only negatively self-criticize themselves, but also feel pressure from their environment to meet unrealistic body standards. Although research has shown why perfectionists are prone to engage in WLD as well as why perfectionists experience body envy, it is not yet clear what the role perfectionism is when examining the role of body envy in the relationship of Upward Physical Appearance Comparison Tendencies (UPACT) and Weight Loss Dieting WLD.

To summarize, it is hypothesized that body envy will mediate the relationship between upward social comparison tendency, operationalized as upwards physical appearance comparison tendency (UPACT) and WLD. By the addition of a moderating variable, it is also hypothesized that this mediation pathway will be stronger for women high in unhealthy perfectionism trait (see Figure 1). These effects are expected to occur over and above the body size (BMI) of the women. Therefore, Body Mass Index (BMI) is a control variable. Finally, the focus is on college women since it has been shown that they are more likely to engage in upward social comparisons, WLD and disordered eating behaviors (Dalley et al., 2019).

Figure 1

Predicted Moderation Mediation Model



Note. The relationship between UPACT, Body-Envy, and WLD, with Unhealthy-Perfectionism as a moderator, while controlling for BMI.

Method

Participants

Originally, a total of 427 participants have been recruited for statistical analysis. The participants were required to identify as female, native German speakers studying at university with no history of an eating disorder. However, one hundred and eight participants got excluded due to missing one of the requirements or having incomplete questionnaires. A total of two hundred and twenty-nine students were left for statistical analysis. The age ranged from 18 to 46 years (M = 24.16, SD = 3.61). Body Mass Index (BM) ranged from 15.42 to 42.72 (M = 22.07, SD = 3.87). Participants were recruited by using convenience and snowball sampling.

Measures

Before we could begin distributing the research, a back translation process was done to ensure that all items were translated correctly. In the first place the items used were translated from English to German. Afterwards, by a second researcher they were back translated from German to English. Both researchers were German native speakers and had an English proficiency in level C1.

Weight loss dieting (WLD)

Participants were asked to describe their eating behaviors for the past 6 months by using the nine-item scale Dieting Intention Scale (DIS) developed by Stice (1998) (e.g., I eat diet foods in effort to control my weight - Ich esse Diät-Lebensmittel, in dem Bestreben mein Gewicht zu kontrollieren). This scale was used to operationalize WLD. The answer options ranged on a 5-point likert scale from "never" ("nie") to "always" ("immer"). The scales have shown to have an internal reliability of α = .94 and a temporal reliability after one month of α = .92 (Stice, 1998). For this scale the Cronbach's alpha was .88 and McDonalds was .91.

Body Mass Index (BMI)

The frequency of body envy was measured with a self-constructed measure including items such as (e.g., It often annoys me when I see women who are slimmer and more defined than me, Es nervt mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich). The answer options were given on a 5-point Likert scale (strongly disagree - stimme überhaupt nicht zu; to strongly agree - stimme voll und ganz zu). These items reflect envy components that are theoretically researched (Rentsch & Gross, 2015). The Cronbach's alpha for this scale was .82 and McDonalds Omega was .84.

Upward physical appearance comparison (UPACT)

The tendency to upwardly compare one's physical appearance was measured with the Upward Physical Appearance Compare Scale (UPACS) by O'Brien et al. (2009). This scale includes 10 items (e.g., I tend to compare myself to people I think look better than me. - Ich neige dazu, mich mit Leuten zu vergleichen, von denen ich denke, dass sie besser aussehen als ich.) which are measured on a 5-point Likert scale ranging from strongly disagree (stimme überhaupt nicht zu) to strongly agree (stimme voll und ganz zu). By O'Brien et al it has been previously shown that that the Cronbach's alpha is .93. For this study the Cronbach's alpha was .92 and McDonalds Omega was .91.

Healthy and unhealthy perfectionism

To measure perfectionism a self-translated version of the Short Almost Perfect Scale (SAPS) was used (Rice et al., 2014). The scale was also back translated. In total there were 8 items of which 4 contributed to Unhealthy Perfectionism (e.g., Doing my best never seems to be enough - Mein Bestes zu geben, scheint nie genug zu sein) and the other 4 to Healthy Perfectionism (e.g., I have high expectations of myself - Ich habe hohe Erwartungen an mich selbst). Answers were given on a 7-point Likert scale (strongly disagree - stimme überhaupt nicht zu; to strongly agree – stimme voll und ganz zu). For this scale Cronbach's alpha was .82 and McDonalds Omega was .89.

Frequency of Body Envy

The frequency of body envy was measured with a self-constructed measure including items such as (e.g., It often annoys me when I see women who are slimmer and more defined than me, Es nervt mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich). The answer options were given on a 5-point Likert scale (strongly disagree - stimme überhaupt nicht zu; to strongly agree - stimme voll und ganz zu). These items reflect envy components that are theoretically researched (Rentsch & Gross, 2015). The Cronbach's alpha for this scale was .82 and McDonalds Omega was .84.

Procedure

Before the study could begin, ethical approval was given by the faculty committee of ethics of Psychology at the University of Groningen. The study was designed as part of a Bachelor thesis project by Psychology Bachelor Students. Distribution of the study was done by sending QR codes to various social media channels (e.g., WhatsApp, Instagram, Facebook) as well as approaching students with a leaflet of the study together with the QR code in the University campus. All responses were recorded within 3 weeks. At the beginning of the study participants had to read the informed consent and had to indicate how they identify their gender (female, male, other), whether they are a native German speaker (yes, no) and whether they had a history of an eating disorder (yes, no). If all the requirements were met, then they could continue the questionnaire with the next questions regarding the UPACT scale as well as the Perfectionism, Envy and Dieting scale. To counterbalance any form of negative feelings the questionnaire could cause; the participants were directed to a sheet containing 10 steps to positive body image (10 Steps to Positive Body Image, 2017). These additional steps were given to the participants with a purpose of giving them a healthier viewpoint on the way they would perceive their bodies. Participants did not receive any form of compensation for

their participation. If any of the questions in the questionnaire where incomplete, the specific participant got excluded from the study.

Statistical Analysis

The moderation-mediation model was first tested by using model 7 with PROCESS by Hayes (2022) on SPSS (version 26). This process utilizes a Bootstrapping method, using 5000 bootstrap samples with 95% confidence intervals (CI) to assess statistical significance.

UPACT was included as the predictor variable, WLD as the outcome variable, body-envy as the mediator, unhealthy perfectionism as a moderator, BMI, and healthy perfectionism as a covariate according to the guidelines by Stoeber & Otto, 2006).

Results

Before starting the data analysis, the assumptions for bootstrapping were checked by using a scatterplot which showed that assumptions for linearity and homoscedasticity and multicollinearity were not violated. Since bootstrapping method is known to be robust to independence of errors, no further evaluation was done (Hayes, 2013). Heteroscedasticity was also controlled for using the Huber-White assumptions check (Hayes, & Cai, 2007). Furthermore, to check for outliers a case wise diagnostic ($> \pm 3$ SD) was used, and no outliers were found.

The Descriptive statistics and correlations are presented in Table 1.

Table 1Pearson Correlations, Means, and Standard Deviations of the Measured Variables

	1	2	3	4	5
1. WLD	-				
2. UPACT	.48**	-			
3. Body-Envy	.57**	.74**	-		
4. UP	.33**	.37**	.47**	-	
5. BMI	.24**	.07	.23**	.65	-

6. HP	.25**	.24**	.23**	.21**	.26
Mean	18.7	36.0	16.3	25.4	22.7
SD^7	7.6	7.9	6.2	5.8	3.9

Note. WLD: Weight-loss Dieting; UPACT: Upward Physical Appearance Comparison

Tendency; Body-Envy: Frequency of Body Envy; UP: Unhealthy-Perfectionism; BMI: Body

Mass Index; HP: Healthy-Perfectionism, SD: Standard Deviation

** *p* < .01.

Moderated Mediation Analysis

The moderated mediation analysis started by using model 7 by Hayes (2022). By looking at the interaction effect we concluded that our model was not significant (B = 0.0084, SE = 0.0054, CI [-0.0022, 0.0190], p = .1210). Unhealthy-perfectionism did not moderate the mediation pathway from UPACT through body-envy on WLD. Therefore, the hypothesis that unhealthy perfectionism will strengthen the frequency of body envy in individuals that frequently engage in UPACT and as a result lead to WLD is rejected. However, looking at the correlations we wanted to examine if both UPACT and unhealthy perfectionism may independently exert their influence on WLD through body envy. Thus, we conducted two separate mediation model 4 processes by Hayes (2022).

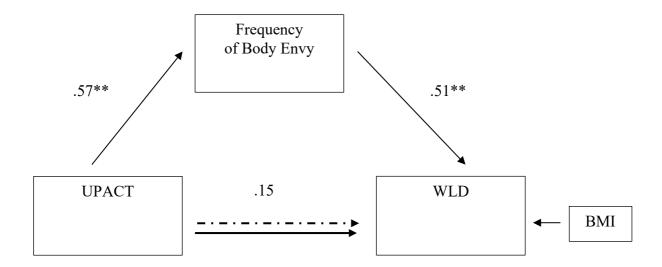
Mediation Analysis with UPACT as a predictor

We started by using Hayes (2022) simple mediation analysis to examine the indirect effect of UPACT on WLD through envy. For the overall model, an overall significant effect was found (F (2,26) = 159.2565, p < .001), with 58.5% of the variance explained by the predictor variables. Furthermore, significant effect was found for UPACT on envy (B= 0.5740, SE= 0.0338, 95% CI [0.5074, 0.6406], p < .001), for BMI on body envy B = 0.2953, SE = 0.693, 95% CI [0.1588, 0.4319], p < .001), for envy on WLD (B = 0.5080, SE = 0.1022, 95% CI [0.3066, 0.7095], p < .001), for BMI on WLD (B = 0.2631, SE = 0.1107, 95% CI

[0.449, 0.4813]. The indirect effect (IE = 0.2916) was also found significant, 95% CI [0.1670, 0.4332]. Figure 3 shows the mediation effect of envy on UPACT and WLD. All effects occurred while BMI was controlled for.

Figure 3

Mediation Models of the relationship of UPACT and WLD with envy as the mediating variable.



Note. Coefficients of interaction effects the variables have are shown.

UPACT: Upward Physical Appearance Comparison; WLD: Weight-Loss Dieting; BMI: Body Mass Index

The indirect effect is displayed by the dashed line

**p <.001

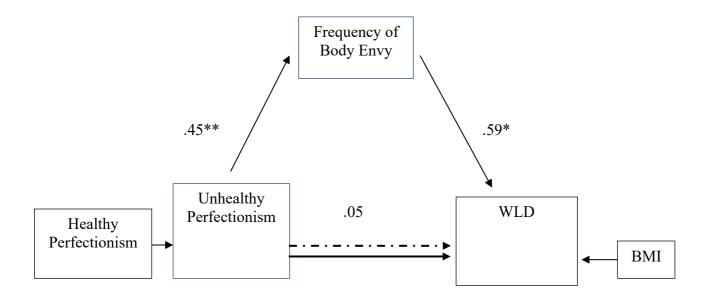
Mediation Analysis for Unhealthy Perfectionism as a predictor

Secondly, we used a mediation analysis to examine the indirect effect of Unhealthy Perfectionism on WLD through envy. An overall significant effect was found (F (2,25) = 27.8868, p < .001), with 27.1% of the variance explained by the predictor variables. Significant effects were also found for unhealthy perfectionism on envy (B = 0.4524, SE = 0.0680, 95% CI [0.3184, 0.5864], p < .001), for BMI on envy (B = 0.3460, SE = 0.0929, 95%

CI [0.1629, 0.5291], p < .001), for envy on WLD (B = 0.5906, SE = 0.0768, 95% CI [0.4393, 0.7420], p < .001). The indirect effect (IE = 0.2672) is also significant: 95% CI = [0.1733, 0.3696]. Figure 2 shows the mediation effect of envy on Unhealthy Perfectionism and WLD. All effects occurred while BMI and healthy perfectionism were controlled for.

Figure 2

Mediation Models of the relationship of Unhealthy Perfectionism and WLD with envy as the mediating variable.



Note. Coefficients of interaction effects the variables have are shown.

WLD: Weight-Loss Dieting; BMI: Body Mass Index

The indirect effect is displayed by the dashed line

**p <.001

Discussion

Building on the sociocultural theory (Thompson & Stice, 2001) and social comparison theory (Festinger, 1954; Buunk & Gibbons, 2000) we hypothesized that body envy would mediate the relationship between UPACT and WLD, in a sample of college women. We also hypothesized that women who scored higher on unhealthy perfectionism would moderate this

mediation pathway, by experiencing more body envy and upward social comparisons. It was also predicted that these results would occur over and above the influence of body size (BMI). No support was found for the moderated mediation model and therefore we tested the double mediation and found supporting evidence for both models. Our first hypothesis was that women that women that score high in unhealthy perfectionism, will also experience more frequent episodes of body envy and this will result in them engaging in WLD Our second hypothesis was that women who engage in UPACT will experience more frequent episodes of body envy and as a result they will engage in WLD.

The moderated mediation analysis was not significant showing that unhealthy perfectionism did not moderate the relationship between UPACT, body envy and WLD. One possible reason could be that the sample included in this study did not include a clinical sample. Specifically, if clinical perfectionists were included in the sample maybe the results would be different. For example, an eating disorder questionnaire could be added in the study as well as a longer version of the perfectionism scale to ensure that all dimensions of perfectionism are captured. The results of this study do not agree with previous research since research has supported those negative emotions such as envy that result from UPACT have a very strong motivational influence on appearance enhancement strategies such as WLD (Van de Ven et al., 2011). Previous research also supports the role of unhealthy perfectionism in promoting unhealthy dieting behaviors and consequently eating pathologies (Stoeber et al, 2016). Even though the correlations of the present study seem to point to the correct direction, the results did not support the moderated mediation. Therefore, further research should put focus on identifying a population that has clinical symptoms of unhealthy perfectionism in order to further understand whether this personality type could be a population at risk for engaging in unhealthy dieting behaviors.

The first mediation pathway that is significant suggests that body envy mediates the relationship between UPACT and WLD. This mediation pathway is in-line with previous research supporting envy is an emotion that motivates women to reduce the discrepancy they feel when they compare themselves to more thin and attractive others. Specifically, Arnocky et al. (2016) have previously supported the role of envy in motivating women to take part in appearance-enhancing actions such as dieting. They also found evidence that particularly upward social comparisons generate these negative feelings of envy and as a result motivates women to engage in WLD behaviors with hope to reduce the discrepancy between themselves and the ideal other. Additionally, more research has shown that envy can create unpleasant feelings and therefore motivate women to come closer to the person they envy by making changes to their physical appearance (Rentzsch & Gross, 2015). Overall, it can be suggested that body-envy is an emotion that results from the frequency of upward social comparison and motivates women to find ways to reduce the discrepancy between themselves and the ideal they are comparing themselves to. One way to reduce this discrepancy is to engage in compensatory behaviors such as dieting.

The role of the sociocultural theory plays an important role in the current findings. The media plays a big role on the way women view themselves. Unfortunately, we live in a world where these cultural ideals value thin body standards which reinforce unattainable bodies and physical attractiveness. Being constantly exposed to images of thin women which in many cases are altered and modified, can make women think that this is the standard and that it is healthy to look this way. Especially women in Western societies are told that there is a way to look like these ideals they portray in the media just by following specific diets and appropriate exercise (Diel et al., 2021). As a result, women try everything they can to engage in strategies to come closer to this unhealthy and unrealistic body ideal by engaging in WLD in order to come closer to the ideal presented by society and therefore feel more positive emotions.

Becoming aware of the discrepancy between themselves and the idealized other can create feeling that cause pain to the individual. As a result, women might search for way to reduce this negative feeling and the gap they have between themselves and the superior other. Reducing this gap with the significant other will happen either by improving ourselves (benign envy) or by bringing down the superior other (malicious envy). Future research could look at the differences between the two types of envy and identify whether malicious envy could maybe work as a buffer in the case of WLD.

The second mediation pathway that is significant suggests that envy mediates the relationship between unhealthy perfectionism and WLD. Women that score high in unhealthy perfectionism are judgmental towards themselves and usually feel like their performance and standards do not match to their standards, they feel disappointed towards their performance, are hardly satisfied with the outcomes they get, and experience more often body envy (Stoeber et al., 2017), Therefore, high scores in unhealthy perfectionism increases the chances that women will feel body envy and that leads to WLD to reduce the negative feeling they are experiencing. This finding is also supported by previous research which indicated that unhealthy perfectionism positively predicts dieting behaviors and well as eating pathologies as a result (Joachim et al., 2016). Additional research by Labunska and colleagues (2021) has demonstrated the positive correlation between envy and perfectionism, demonstrating how individuals high in perfectionism with desire for unattainable goals are also prone be to envious. Overall, it can be suggested that women high in unhealthy perfectionism also have the tendency to feel envious of other individuals and that motivates them to find ways to reduce this negative emotions through weight loss dieting behaviors. In other words, the findings show that because of their own self-criticism maladaptive traits, these women tend to engage in frequent episodes of body envy which results in compensatory behaviors (WLD).

The results of this study are consistent with precious research and demonstrate that results can occur over and above women's reported body size (BMI). This shows that the thin ideal is so extreme that it occurs to all different body sizes. This also demonstrates how important it is to identify the women that are more prone to engage in WLD since their actual body size does not make any predictions. Furthermore, this research also shows how both women that scored high in UPACT and unhealthy perfectionism experience the negative emotion of envy. This demonstrates the powerful influence the thin-ideal has on women.

The results of the present research possess some important practical implications as well as some interventions that could potentially help women that are in risk. First of all, the study showed how women that score high in upward social comparison tendencies are more prone to experiencing as body envy which as a result leads them to diet. Therefore, it is important to identify the women that score high in upward social comparison as well those that score high in unhealthy perfectionism since they are both susceptive to body envy, WLD and thus potentially eating pathologies (Schaumberg & Anderson, 2016). It is important to understand why this particular group of women actively searches for these upward comparisons since that leads them to experience more body envy and as a result engage in unhealthy behaviors to reduce the discrepancy. One of the interventions could be to put more focus on the positive feelings that self-compassion which can be described as treating oneself with warmth and kindness. Research has previously demonstrated how self-compassion is linked to body satisfaction as well as linked to the reduction of the negative emotion of bodyenvy (Homan & Tylka, 2015). Finally, women could benefit from media literacy interventions since it has been shown that they help women recognize biases and understand the reality behind the media they are exposed to (Rodgers et al., 2019).

It is important to acknowledge the limitations of this research. In order to provide causal associations between variables, experiments or longitudinal designs are needed. This

study used a cross-sectional design and thus causality cannot be reached. Therefore, future research could test the moderated mediation with the use of an experiment or a longitudinal design to be able to establish a form of causality. Additionally, the second limitation is that the present study focused on a sample of college women since it is known that they are more prone to be in risk of developing eating pathologies (Walker et al., 2015). However, this firstly cannot make the results generalizable and secondly it does not represent an actual clinical sample of women. This study did not include a clinical sample and that is one possible reason that the moderated mediation was not significant. Therefore, future research could test this moderated mediation in a clinical sample in order to make the results more reliable and representative. Another limitation is that the present study focused only on one ethnicity which does not make the results easy to generalize to different ethnicities. Consequently, future research could look at different ethnicities to see whether any differences would appear.

To summarize, it was found that body-envy mediated the relationship between UPACT and WLD. This shows that women that have a tendency to make upward social comparisons also have the tendency to experience more envy, and as a result engage in WLD to reduce the negative emotions they experience. Additionally, body-envy also mediated the relationship between unhealthy perfectionism and WLD. This shows that women that score high in unhealthy perfectionism also have the tendency to experience more envy and therefore also have the tendency to engage in WLD as a result. Furthermore, the results of the current study persisted over and above body size (BMI), which shows how dominant the thin ideal is in our society, that every woman, regardless of her body size, can feel the need to change her physical appearance to feel better.

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Appendix A

Upward social comparison tendency Ich vergleiche mich eher mit Anderen, die besser aussehen als ich, als mit denen, die es nicht tun. O stimme überhaupt nicht zu O stimme nicht zu O weder noch O stimme zu O stimme voll and ganz zu Ich neige dazu, meine eigene körperliche Attraktivität mit der von Models in Zeitschriften zu vergleichen. O stimme überhaupt nicht zu o stimme nicht zu • weder noch O stimme zu O 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.

O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O 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.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu
Ich neige dazu, mich mit Leuten zu vergleichen, von denen ich denke, dass sie besser
aussehen als ich

O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O 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.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu
Wenn ich gutaussehende Leute sehe, frage ich mich, wie ich im Vergleich wirke.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu

Auf Partys oder anderen Veranstaltungen vergleiche ich meine äußerliche Erscheinung mit
dem Äußeren von sehr attraktiven Leuten
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu
Ich ertappe mich dabei, wie ich mein Aussehen mit Leuten, die besser als ich aussehen,
vergleiche
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu
Ich vergleiche meinen Körper mit Leuten, die einen besseren Körper als ich haben

O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll and ganz zu
Envy
Es nervt mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich.
O stimme überhaupt nicht zu
stimme überhaupt nicht zustimme nicht zu
O stimme nicht zu

Ich neige dazu mich unwohl zu fühlen, wenn ich Frauen sehe, die schlanker und definierter
sind als ich.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll und ganz zu
Es stört mich oft, wenn ich Frauen sehe, die schlanker und definierter sind als ich.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll und ganz zu
Ich habe die Tendenz, Frauen zu beneiden, die schlanker und definierter sind als ich.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
stimme voll und ganz zu

Es frisst mich innerlich auf, Frauen zu sehen, die schlanker und definierter sind als ich.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll und ganz zu
Ich neige dazu, mich minderwertig gegenüber Frauen zu fühlen, die schlanker und
definierter sind als ich.
O stimme überhaupt nicht zu
O stimme nicht zu
O weder noch
O stimme zu
O stimme voll und ganz zu
Weight-loss dieting
rr eight-toss meting

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

O nie
O selten
O manchmal
O oft
○ immer
Ich überspringe/versäume Mahlzeiten, in einem Versuch mein Gewicht zu kontrollieren
O nie
○ selten
O manchmal
○ oft
○ immer
Ich esse Diät-Lebensmittel, in dem Bestreben mein Gewicht zu kontrollieren.
O nie
O selten
O manchmal
○ oft
○ immer
Ich zähle Kalorien, um einer Gewichtszunahme vorzubeugen

O nie
O selten
O manchmal
O oft
○ immer
Ich esse kalorienarme Lebensmittel, in dem Bestreben eine Gewichtszunahme zu
vermeiden.
O nie
○ selten
O manchmal
O oft
○ immer
Manchmal esse ich nur eine oder zwei Mahlzeiten pro Tag, um zu versuchen mein Gewicht
zu begrenzen
O nie
○ selten
O manchmal
O oft
O immer

Ich halte mich bei Mahlzeiten zurück, um einer Gewichtszunahme vorzubeugen
O nie
Oselten
Omanchmal
Ooft
Oimmer
Ich nehme mir kleine Portionen, in dem Bestreben mein Gewicht zu kontrollieren.
O nie
O selten
O manchmal
Ooft
O immer
Ich begrenze die Menge an Nahrung, die ich esse, in einem Versuch mein Gewicht zu
kontrollieren
O nie
O selten
O manchmal
Ooft
O 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.

Perfectionism

Ich habe hohe Erwartungen an mich selbst.

Stimme überhaupt nicht zu

stimme nicht zu

stimme eher nicht zu

weder noch

o stimme vollig zu

O stimme zu

Mein Bestes zu geben, scheint nie genug zu sein.

O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch
O stimme zu
O stimme vollig zu
Ich stelle sehr hohe Ansprüche an mich selbst.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch
O stimme zu
O stimme vollig zu
Ich bin oft enttäuscht, nachdem ich eine Aufgabe erledigt habe, weil ich weiß, dass ich es besser hätte machen können.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch

O stimme zu
O stimme vollig zu
Ich bin fast nie mit meiner Leistung zufrieden.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch
O stimme zu
O stimme vollig zu
Ich habe ein starkes Bedürfnis danach, ausgezeichnete Leistungen zu erbringen.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch
O stimme zu
O stimme vollig zu
Ich erwarte das Beste von mir selbst.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu

O weder noch
O stimme zu
O stimme vollig zu
Meine Leistung entspricht selten meinen Ansprüchen.
O stimme überhaupt nicht zu
O stimme nicht zu
O stimme eher nicht zu
O weder noch
O stimme zu
O stimme vollig zu