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# Perfectionistic self-presentation, body satisfaction and body appreciation in young women: Direct and indirect associations

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## ABSTRACT

Perfectionism (desire to be perfect) predicts negative body image in young women directly, and indirectly, via body appreciation. However, perfectionism goes beyond internal trait components and includes external expressional components, known as perfectionistic self-presentation. Trait perfectionism literature highlights the “what”, i.e., internal beliefs about striving for flawlessness relate to negative body image. However, perfectionistic self-presentation focusses on the “how”, by examining observable behaviours used to promote flawlessness. It is therefore important to understand the role of body appreciation in the relationship between negative body image and perfectionistic self-presentation. We conducted a cross-sectional, survey-based study and recruited a non-clinical sample of young women (university students and non-students,  $N = 173$ ), to examine direct and indirect associations (via mediation analyses) between perfectionistic self-presentation, body satisfaction, and body appreciation. Perfectionistic self-presentation negatively predicted body satisfaction directly and indirectly, via body appreciation. Overall, these findings offer initial support for examining body appreciation, and its utility in understanding perfectionistic self-presentation and negative body image in young women.

## 1. Introduction

Perfectionistic self-presentation (desire to appear perfect) is increasing in the UK, as young women are experiencing increased pressure to meet global perfectionistic standards (Curran & Hill, 2019). Upward trends in social media use have bolstered this, increasing body image and eating concerns (Fioravanti, Bocci Benucci, Ceragioli, & Casale, 2022; Vandenbosch, Fardouly, & Tiggemann, 2022). In the present study, we examine the indirect association between perfectionistic self-presentation and body satisfaction, via body appreciation.

### 1.1. Negative body image

Young women often experience negative thoughts and feelings toward their body (i.e., negative body image; Grogan, 2021) and low body satisfaction due to ever-evolving cultural body standards (Jarman, Marques, McLean, Slater, & Paxton, 2021; McComb & Mills, 2021; Saunders, Nutter, Waugh, & Hayden, 2024; Volonté, 2019). This pursuit of body ideals can lead to weight control behaviours (i.e., dieting), and eating disorder onset (Yuan, Bouzari, Bains, Cohen, & Kakinami, 2024). To further understand the development of eating disorders, it is

important to investigate factors contributing to low body satisfaction in non-clinical samples of young women.

### 1.2. Perfectionism and negative body image

Perfectionism is a multidimensional personality trait, characterized by striving for flawlessness (Stoerber, 2017). Frost, Marten, Lahart, and Rosenblate (1990) introduced six dimensions of perfectionism (personal standards, concern over mistakes, doubts about actions, parental expectations, parental criticism, and organisation). Similarly, Hewitt and Flett (1990) introduced three dimensions (self-oriented, other-oriented, and socially prescribed). Factor analysis mapped these dimensions into perfectionistic strivings (organisation, personal standards, self-oriented and other-oriented, i.e., adaptive perfectionism, regarding setting high standards) and perfectionistic concerns (doubts about actions, parental expectations, parental criticism, concern over mistakes and socially prescribed, i.e., maladaptive perfectionism, regarding fear of negative evaluation; Smith, Saklofske, Yan, & Sherry, 2017). Haynos et al. (2018) suggest that perfectionistic concerns predict restrictive eating in young women. Research also suggests that perfectionistic strivings are associated with eating disorder symptoms, as failing to meet weight/eating

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standards can lead to negative self-evaluation, reinforcing the striving (Bills, Greene, Stackpole, & Egan, 2023; Stackpole, Greene, Bills, & Egan, 2023). This highlights the importance of investigating the role of perfectionism dimensions in disordered eating and in particular, precursory body image concerns.

The transactional model of social media and body concerns (Perloff, 2014) suggests perfectionistic young women use social media more often, resulting in upward social comparisons (evaluating oneself as inferior, in line with social comparison theory; Festinger, 1954), increases in body dissatisfaction and subsequently, disordered eating (Downey & Chang, 2007; McComb & Mills, 2022). However, the generalisability of previous work to the wider female population is limited by recruitment of university students (Henrich, Heine, & Norenzayan, 2010). Furthermore, although previous work examines the direct association between perfectionism and negative body image, the mechanisms underpinning this relationship remain unclear.

### 1.3. Body appreciation

Positive and negative body image are distinct constructs, rather than opposing ends of a continuum, meaning young women can experience positive and negative body image simultaneously (Tylka & Wood-Barcalow, 2015). A key facet of positive body image is body appreciation (i.e., appreciation toward the health and functionality of one's body; Tylka & Wood-Barcalow, 2015). Therefore, improving body appreciation, may help to reduce/neutralise negative body image. Research supports this, suggesting that increasing body appreciation can increase body satisfaction in non-clinical samples of young women and reduce eating disorder pathology (Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015; Messer, Tylka, Fuller-Tyszkiewicz, & Linardon, 2022).

Research highlights the link between perfectionism and negative body image, and the relevance of body appreciation in improving body image. Iannantuono and Tylka (2012) also report that perfectionism can predict body appreciation. However, few studies have investigated the mechanistic role of body appreciation in the relationship between perfectionism and negative body image. Liang et al. (2021) reported that body appreciation partially mediated the relationship between perfectionism and body-related shame and guilt; however, it is unclear whether this may be the case for body dissatisfaction, a related, but distinct construct. Dissatisfaction involves unhappiness with one's body, due to a perceived discrepancy between one's actual body and desired body. Whereas body-related shame is characterized by one feeling unworthy due to their body, and body-related guilt involves negative evaluations of one's body image behaviours (i.e., eating habits or exercise). Moreover, research suggests that shame/guilt may relate to specific eating disorder symptoms, i.e., binge eating (Bottera, Kambanis, & De Young, 2020), whereas body dissatisfaction is characteristic of eating disorders transdiagnostically (Fairburn, Cooper, & Shafran, 2003). It is therefore important to investigate body dissatisfaction, due to its increased relevance across eating pathology. Another limitation is that Liang et al. (2021) only examined trait perfectionism.

### 1.4. Perfectionistic self-presentation and negative body image

Trait perfectionism models provide a strong framework for adaptive/maladaptive dimensions, however, we need to consider aspects of perfectionism beyond strivings/concerns, to comprehensively understand the role of perfectionism in body image and disordered eating. Hewitt et al. (2003) propose an interpersonal, expressional component: perfectionistic self-presentation. Trait perfectionism is the desire to be perfect, whereas perfectionistic self-presentation is the desire to appear perfect and consists of three dimensions. Perfectionistic self-promotion involves overtly displaying one's perfection. Non-display of imperfection involves concealing imperfect behaviours. Non-disclosure of imperfection involves concealing imperfect disclosures (Hewitt, Flett, &

Mikail, 2017). Thus, the focus of perfectionistic self-presentation is to understand the observable behaviours/strategies used to promote perfection and conceal imperfection. This furthers the limited offerings of the trait perfectionism literature, which states that internal motivations toward flawlessness relate to negative body image outcomes i.e., the "what", without explaining the "how", as uniquely demonstrated by perfectionistic self-presentation. Moreover, the appearance-focussed nature of perfectionistic self-presentation is increasingly relevant to body image and disordered eating, as women with eating disorders are often preoccupied with self-presentation (Striegel-Moore, Silberstein, & Rodin, 1993).

McGee, Hewitt, Sherry, Parkin, and Flett (2005) reported that perfectionistic self-presentation was associated with disordered eating in female university students and this relationship was dependent upon body satisfaction. Therefore, body dissatisfaction may be an obstacle to the perfect image women are trying to promote, leading to increased striving to perfect one's body, via disordered eating behaviours (e.g., dieting, bingeing-purging; McGee et al., 2005). However, the recruitment of university students, once again, limits the generalisability of these findings to the wider female population (Henrich et al., 2010). Sherry et al. (2009) recruited a diverse sample of community members, reporting that non-display of imperfection was significantly correlated with negative body image, after controlling for trait perfectionism. This highlights that perfectionistic self-presentation may play a greater role than trait perfectionism, thus, research should examine the unique contribution of perfectionistic self-presentation. Furthermore, Sherry et al. (2009) recruited women and men, therefore, further evidence is needed to understand the role of perfectionistic self-presentation in the body image of women specifically. More recently, research suggests that perfectionistic self-presentation (in the context of social media use) negatively predicts body satisfaction in young women (Milson & Madigan, 2024). However, it remains unclear whether body appreciation may play a role in the relationship between perfectionistic self-presentation and body satisfaction.

### 1.5. The present study

This cross-sectional survey aimed to examine direct and indirect associations between perfectionistic self-presentation, body satisfaction and body appreciation, in young women. We expected that perfectionistic self-presentation would be a negative predictor of body satisfaction, body appreciation would be a positive predictor of body satisfaction, and perfectionistic self-presentation and body satisfaction would be indirectly associated, via body appreciation.

## 2. Method

### 2.1. Participants

Participants were 173 women from the United Kingdom, aged 18–25 years ( $M = 19.98$ ,  $SD = 1.69$ ). University students (119) and non-students (54) were recruited by opportunity sampling, via social media platforms (Facebook, Instagram and X) and York St John University's research participation scheme, whereby students could take part in the study for course credit. Participants with a formal diagnosis of an eating or body image disorder were excluded, as we were interested in recruiting non-clinical samples, to examine factors that may prevent young women developing clinical disorders. Regarding ethnicity, 94.2 % identified as White, 3.5 % identified as Asian, 1.7 % identified as mixed ethnic groups and 0.6 % identified as other. Regarding sexual orientation, 59.5 % identified as straight, 4.6 % identified as gay/lesbian, 27.7 % identified as bisexual, 3.5 % identified as pansexual, 2.3 % identified as asexual, 0.6 % identified as other and 1.2 % preferred not to say. A priori power analysis, using GPower, was conducted to determine the sample size required for the analysis. Using a previous meta correlation of 0.24 (Limburg, Watson, Hagger, & Egan, 2017), a power

of 0.80 (Abraham & Russell, 2008; Bakker, Hartgerink, Wicherts, & van der Maas, 2016) and an alpha of 0.05 (Miller & Ulrich, 2019), the power analysis estimated that a minimum sample of 131 participants would be required.

2.2. Measures

2.2.1. Perfectionistic self-presentation

We used the Perfectionistic Self-Presentation Scale (Hewitt et al., 2003) to measure the three dimensions of perfectionistic self-presentation. The perfectionistic self-promotion subscale assessed overtly presenting one’s perfection (e.g., “I try always to present a picture of perfection.”) The non-display of imperfection subscale assessed concealment of imperfections (e.g., “It doesn’t matter if there is a flaw in my looks.”) The non-disclosure of imperfection subscale assessed concealment of disclosures of imperfection (e.g., “I should always keep my problems to myself.”) This 27-item measure used a 7-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (7). This measure has been validated among university students, clinical and community samples, demonstrating high internal consistency ( $\alpha = 0.72\text{--}0.91$ ; Hewitt et al., 2003).

2.2.2. Body satisfaction

We used the Body Image States Scale (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002) to measure state body satisfaction. This measure assessed 6 domains of body satisfaction, including satisfaction with physical appearance, body size, body shape and weight, physical attractiveness, one’s perception of their appearance compared to their usual perceptions, and one’s perception of their appearance compared to the average person’s appearance. Participants were asked to respond based on their current feelings/perceptions (e.g., “right now I feel (extremely satisfied to extremely dissatisfied) with my body size and shape”). This 6-item measure used a 9-point, bipolar, Likert-type scale, ranging from extremely dissatisfied (1) to extremely satisfied (9) for three items, and extremely satisfied (1) to extremely dissatisfied (9), for the other three items. The reliability and validity of this scale has been supported (Cash et al., 2002).

2.2.3. Body appreciation

We used the Body Appreciation Scale-2 (Tylka & Wood-Barcalow, 2015) to measure body appreciation. This 10-item measure assessed an individuals’ acceptance of, favourable opinions toward, and respect for their bodies (e.g., “I feel that my body has at least some good qualities”). For each item, participants were required to indicate how often each statement is true for them, using a 5-point Likert-type scale, ranging from never (1) to always (5). The reliability and validity of this scale has been supported (Tylka & Wood-Barcalow, 2015).

2.3. Procedure

Ethical clearance for all procedures was approved by the relevant ethics committee. Informed consent was obtained for all participants and questionnaires were distributed on Qualtrics. Via recruitment adverts, participants were informed that we were looking for females aged 18–25 to take part in an online survey-based study, exploring predictors of body image in young women. Participants were asked to complete 3 online questionnaires, with an estimated time frame of 15–20 min. Participants were asked to not take part if they had current/historic experience of a body image/eating disorder. The measures were presented in a fixed order (Perfectionistic Self-Presentation Scale, Body Appreciation Scale-2, Body Image States Scale) and the average survey duration was 20.8 min.

2.4. Analytic strategy

We conducted preliminary analysis, including screening for outliers,

then calculated descriptive statistics and bivariate correlations. Regression and analysis of indirect association was used to examine direct and indirect relationships between perfectionistic self-presentation, body satisfaction and body appreciation.

3. Results

3.1. Preliminary analysis

The data was analysed using IBM SPSS Statistics 29. 244 participants responded to the survey. 70 participants had incomplete/missing data and were excluded from further analyses. We screened the data for univariate outliers (i.e., standardised scores that were greater than  $z = 3.29$ ). 1 outlier was detected, and this participant was removed from further analyses, leaving a final sample of 173. Next, we calculated Cronbach’s alphas, which showed acceptable alpha levels for all scales (see Table 1).

3.2. Descriptive statistics and correlations

Descriptive statistics and bivariate correlations are presented in Table 1. Overall, we found small-to-medium negative correlations between all three dimensions of perfectionistic self-presentation and body appreciation ( $p < .01$ ) and body satisfaction ( $p < .01$ ). We also found a large correlation between body appreciation and body satisfaction ( $p < .01$ ). In line with Cohen (1992), we regarded correlations with absolute values of 0.10, 0.30, and 0.50 as small, medium, and large.

3.3. Regression and analysis of indirect association

We conducted regression analyses to examine how perfectionistic self-presentation predicted body satisfaction (Model 1) and how body appreciation predicted body satisfaction (Model 2).

Normality was tested, via the Shapiro-Wilk Test. This assumption was met, as observed standardised and unstandardized residuals were normally distributed ( $p > .05$ ; Yang & Berdine, 2021). Scatterplots were used to assess linearity. The relationships between perfectionistic self-presentation and body satisfaction, and body appreciation and body satisfaction were linear, with no evidence of curved/u-shaped patterns. Moreover, none of the variables possessed high multicollinearity as all Tolerance scores were greater than 0.1 (Nakarmi, 2024).

Model 1 accounted for 22.5 % of the variance in body satisfaction ( $R^2 = 0.225, f(3,169) = 16.35, p < .001$ ). In Model 1, non-display of imperfection made a significant contribution to the regression model, as did non-disclosure of imperfection. Perfectionistic self-promotion did not significantly contribute to the model (see Table 2).

Model 2 accounted for 68.4 % of the variance in body satisfaction ( $R^2 = 0.684, f(1,171) = 369.88, p < .001$ ). In Model 2, body appreciation made a significant contribution to the regression model (see Table 2).

**Table 1**  
Bivariate correlations, means, standard deviations and Cronbach’s alphas.

Variable	1	2	3	4	5
Perfectionistic Self-Presentation					
1. SP					
2. NDisp	0.72**				
3. NDisc	0.68**	0.58**			
4. Body Satisfaction	-0.27**	-0.45**	-0.36**		
5. Body Appreciation	-0.29**	-0.49**	-0.37**	0.83**	
M	47.68	53.39	27.98	4.64	3.04
SD	11.12	10.15	7.52	1.53	0.88
Cronbach’s Alpha	0.89	0.90	0.80	0.83	0.94

Note.  $N = 173$ . SP = Perfectionistic Self-Promotion. NDisp = Non-Display of Imperfection. NDisc = Non-Disclosure of Imperfection.

\*\*  $p < .001$ .

**Table 2**  
Summary of regression analyses predicting body satisfaction.

	<i>b</i>	<i>SE</i>	$\beta$	<i>p</i>
Model 1 (Perfectionistic Self-Presentation)				
Perfectionistic Self-Promotion	0.023	0.015	0.171	0.124
Non-Display of Imperfection	-0.067	0.015	-0.447	< 0.001
Non-Disclosure of Imperfection	-0.043	0.019	-0.213	0.025
Model 2 (Body Appreciation)				
	1.434	0.075	0.827	< 0.001

Note. *N* = 173. *b* = Unstandardised Coefficient. *SE* = Standard Error.  $\beta$  = Standardised Coefficient. *P* = Significance Value.

To test indirect associations between each dimension of perfectionistic self-presentation and body satisfaction, via body appreciation, we examined the size and significance of each indirect effect using PROCESS Model 4 (Hayes, 2013), running a model with 5000 bootstraps. If the 95 % confidence interval does not contain zero, the test can be considered significant at the *p* < .05 level (Preacher & Hayes, 2008). For non-display of imperfection, results confirmed that the indirect effect was significant (indirect effect = -0.06, 95 % CI [-0.08, -0.04]; see Fig. 1). For non-disclosure of imperfection, results confirmed that the indirect effect was significant (indirect effect = -0.06, 95 % CI [-0.08, -0.04]; see Fig. 2). For perfectionistic self-promotion, results confirmed that the indirect effect was significant (indirect effect = -0.03, 95 % CI [-0.05, -0.02]; see Fig. 3).

Overall, these findings suggest that perfectionistic self-presentation is directly associated with body satisfaction in young women, and indirectly associated, via body appreciation.

#### 4. Discussion

Trait perfectionism predicts body-related shame/guilt in young women, and body appreciation may explain the mechanism for these relationships (Liang et al., 2021). However, less is known regarding body satisfaction, which may have greater clinical relevance due to the transdiagnostic nature of body satisfaction across eating disorders (Fairburn et al., 2003). Despite perfectionistic self-presentation demonstrating unique theoretical relevance to body satisfaction, compared with trait perfectionism (Sherry et al., 2009), the role of body appreciation remains unclear. To address these gaps in the literature, we examined direct and indirect associations between perfectionistic self-presentation, body satisfaction and body appreciation, in young women. We found that perfectionistic self-presentation negatively predicted body satisfaction, and body appreciation positively predicted body satisfaction. We also found an indirect association between

perfectionistic self-presentation and body satisfaction, via body appreciation.

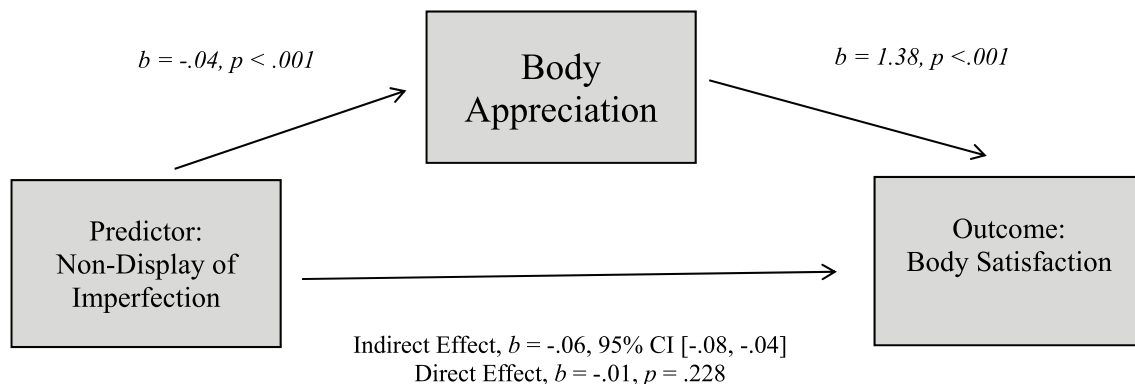
We expected that young women who present themselves as perfect will be less satisfied with their bodies. In line with theory (Perloff, 2014) and previous work (McGee et al., 2005; Milson & Madigan, 2024; Sherry et al., 2009), we found support for this. We also found that non-display of imperfection was an important unique predictor, aligning to previous work (e.g., Milson & Madigan, 2024; Sherry et al., 2009). This suggests that concealing imperfections may lead to young women being more dissatisfied with their bodies. Moreover, our findings expand on previous work examining trait perfectionism and highlight the importance of investigating behaviours used to conceal imperfection in relation to women’s body image.

We also expected that women who reported greater levels of body appreciation would also report greater satisfaction with their bodies. In line with previous work (Alleva et al., 2015), we found support for this. This suggests an increased focus on the health and functionality of the body, rather than appearance (i.e., body appreciation) may play an important role in improving body satisfaction in young women, however, directionality of this relationship is tentative, due to the cross-sectional design.

We further expected that there would be an indirect association between perfectionistic self-presentation and body satisfaction, via body appreciation. We found support for this, furthering previous work examining trait perfectionism (Liang et al., 2021). However, these effects may flow in the reverse direction, as Milson and Madigan (2024) found that women who are less satisfied with their bodies are more likely to promote perfection on Instagram. Therefore, conclusions on temporal precedence are tentative, due to the cross-sectional design.

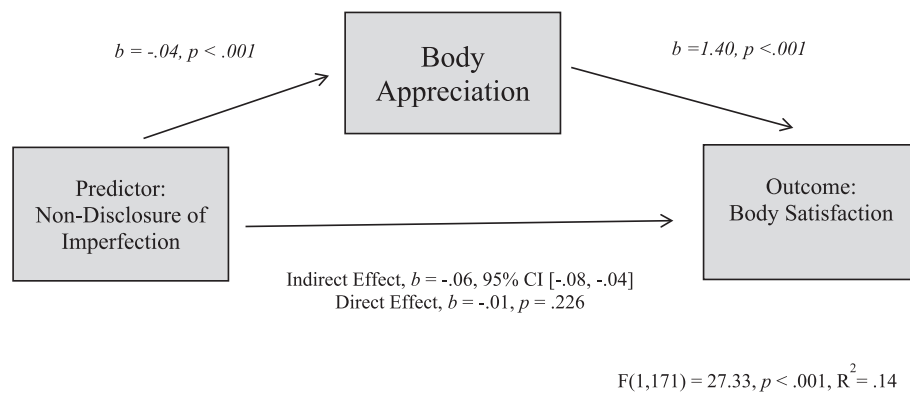
##### 4.1. Implications

Our findings suggest that perfectionistic self-presentation predicts body satisfaction in young women, indicating a useful target for intervention. Research suggests clients may show limited symptom improvement and greater relapse, if underlying perfectionism is not addressed (Dalle Grave, Sartirana, & Calugi, 2021; Fairburn, 2008; Shafran, Egan, & Wade, 2018). Moreover, treating transdiagnostic components of eating disorders, i.e., underlying perfectionism, may be more advantageous than diagnosis-specific components (Haynos et al., 2018; Wonderlich, Joiner Jr, Keel, Williamson, & Crosby, 2007). However, previous work focusses on trait perfectionism, therefore, present findings offer clinicians insight into the importance of addressing perfectionistic self-presentation. Moreover, these observable behaviours may be more easily addressed in shorter-term cognitive behavioural

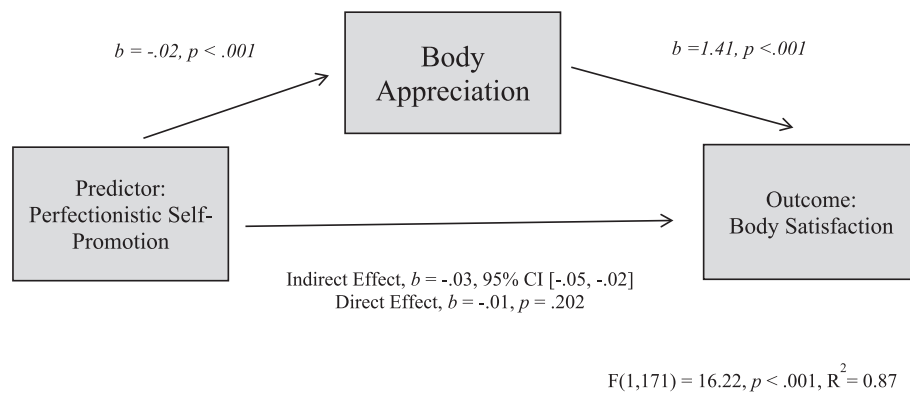


$$F(1,171) = 52.87, p < .001, R^2 = 0.24$$

**Fig. 1.** Indirect association between non-display of imperfection and body satisfaction, via body appreciation.



**Fig. 2.** Indirect association between non-disclosure of imperfection and body satisfaction, via body appreciation.



**Fig. 3.** Indirect association between perfectionistic self-promotion and body satisfaction, via body appreciation.

interventions offered within the National Health Service, compared with perfectionism traits, which may require more intensive intervention (Curran & Hill, 2019; Smith et al., 2023).

Our findings also suggest that body appreciation may play a mechanistic role in the relationship between perfectionistic self-presentation and body satisfaction and, thus, be another useful target for intervention. Research supports body appreciation interventions used to reduce the impact of media exposure on body dissatisfaction (Andrew, Tiggemann, & Clark, 2015) and suggests that improving body appreciation may be easier than directly reducing body dissatisfaction (Andrew, Tiggemann, & Clark, 2016). This may be because the improvement of body appreciation relies on the development/practice of new behaviours, such as engaging with activities that focus on the function of the body, as opposed to appearance, (e.g., yoga). This also draws a parallel with how perfectionistic self-presentation could be addressed, i.e., the modification of perfectionistic behaviours regarding body image/eating to behaviours that are aligned with body appreciation.

#### 4.2. Limitations and future research

We used a cross-sectional design. Although present findings provide initial support for an indirect association, longitudinal data is required to ensure temporal precedence and comprehensively test the mediating role of body appreciation (Baron & Kenny, 1986; Hayes, Linardon, Kim, & Mitchison, 2021; Jose, 2016; MacKinnon & Luecken, 2008).

We relied on self-report measures. The nature of perfectionistic self-presentation is to appear flawless (Hewitt et al., 2017), potentially limiting the obtention of accurate self-evaluations. Future research could use alternative measurement methods, such as controlled experiments.

We recruited women aged 18–25. Variance within this age range is likely (e.g., older women may experience higher levels of body

appreciation; Tiggemann & McCourt, 2013). Future research could examine narrower age ranges and control for potential age effects. Moreover, our study aimed to examine factors that may prevent young women developing clinical disorders, with research supporting an average age of onset for Anorexia Nervosa and Bulimia Nervosa, of 18 years (Volpe et al., 2016). However, Volpe et al. (2016) also report an early onset component of 16 years. Future research should seek to expand the lower age limit.

#### 5. Conclusion

Our study aimed to examine direct and indirect associations between perfectionistic self-presentation, body satisfaction and body appreciation, in young women. We found that perfectionistic self-presentation negatively predicted body satisfaction directly, and indirectly, via body appreciation. These findings offer initial support for examining body appreciation, and its utility in understanding perfectionistic self-presentation and negative body image in young women.

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#### Private link to share

<https://figshare.com/s/d7fb0e5911c3a4cca50d>

#### Pre-registration statement

The authors have not pre-registered this research.

## Research transparency statement

Data is available via the York St John University Data Repository.

## CRedit authorship contribution statement

**Rhea Milson:** Supervision, Methodology, Investigation, Formal analysis, Data curation, Conceptualization, Writing – review & editing, Writing – original draft. **Amy Ellis:** Methodology, Formal analysis, Conceptualization, Writing – review & editing. **Georgia Boumpaki:** Methodology, Formal analysis, Conceptualization, Writing – review & editing.

## Declaration of Generative AI and AI-assisted technologies in the writing process

The authors confirm that Generative AI was not used.

## Declaration of competing interest

The authors report there are no competing interests to declare. This research received no specific grant from any funding agency and the authors have no competing interests to declare.

## Data availability

I have shared the link to the data in the Title Page

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