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Incorporating physical appearance into one's sense of self: Self-concept clarity, thin-ideal internalization, and appearance-self integration

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ABSTRACT

We tested the hypothesis that individuals who lack a clear sense of their own identity incorporate their physical appearance into their sense of self. Study 1 (162 female students; 262 female community members) found that individuals low in self-concept clarity were more likely to consider their physical appearance an important part of their personal identity. Study 2 (278 female community members) and Study 3 (289 female community members) showed that the connection between low self-concept clarity and the tendency to define one's identity in terms of one's appearance was explained by thin-ideal internalization. Results are discussed in the context of the potential negative consequences, such as body dissatisfaction, that can come from defining one's self in terms of one's appearance.

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Self-concept clarity; physical appearance; personal identity; thin-ideal internalization

Body dissatisfaction refers to negative thoughts and feelings that one has about one's body (Grogan, 2016) and is a prominent concern for adolescents and young adults: Almost 50% of adolescent girls describe themselves as being *extremely concerned* or *very concerned* about their body image (Carlisle et al., 2020), and almost 50% of adult women report that they are either *Dissatisfied* or *Very Dissatisfied* with their weight (Fallon et al., 2014). Importantly, body dissatisfaction is associated with a range of negative psychological outcomes (including low self-esteem and depression; Paxton et al., 2006) and is one of the most robust modifiable risk factors for the development of clinical eating disorders (Jacobi et al., 2010). Given the prevalence and consequences of body dissatisfaction, researchers have long sought to understand the factors that contribute to its development so that those factors could be targeted in intervention and prevention efforts.

Sociocultural models (such as the Tripartite Influence Model) have highlighted the importance of internalization of societal standards of attractiveness in the development of body dissatisfaction (e.g., Keery et al., 2004; Rodgers et al., 2015; Shroff & Thompson, 2006). Internalization refers to the extent to which one takes on these societal standards as personally meaningful beliefs and goals (as opposed to simply being aware of the societal standards or endorsing those standards; Thompson et al., 1999; Vartanian & Hayward, 2020). There is substantial evidence from cross-sectional, longitudinal, and

experimental research indicating that internalization plays an important role in body dissatisfaction (Thompson & Stice, 2001). For example, thin-ideal internalization has been shown to prospectively predict body dissatisfaction in adolescents (e.g., Rodgers et al., 2015) and interventions designed to reduce thin-ideal internalization have been found to improve body image (e.g., Stice et al., 2001). Furthermore, internalization has been shown to moderate the effects of exposure to thin models in the media, such that individuals who are high in internalization experience greater body dissatisfaction after exposure to thin-ideal media images than do individuals low in internalization (Dittmar & Howard, 2004).

Although research has highlighted the relevance of sociocultural factors to the development of body dissatisfaction, these models do not address the question of why some people are more susceptible to these sociocultural factors than are others. We have proposed a model (the Identity Disruption Model; Vartanian & Hayward, 2018; Vartanian et al., 2018) that considers identity processes as a risk factor for vulnerability to sociocultural pressures and body dissatisfaction. In particular, the Identity Disruption Model of body dissatisfaction (Vartanian & Hayward, 2018; Vartanian et al., 2018) was developed to explain the connection between negative early life experiences (e.g., child abuse) and disordered eating later in life (see Figure 1). According to this model, negative early life experiences disrupt normal identity development, resulting in a lack of clear sense of self. Early adversity might be related to identity disruption because the cognitive and emotional reactions to adversity are difficult to integrate into a coherent self-narrative, because experiences of abuse serve to invalidate the individual's sense of self, or because individuals are deprived of experiences (such as positive interactions with caregivers) that contribute to identity development (e.g., Carlson et al., 1997).

Individuals who lack a clear and coherent sense of self are thought to seek out external sources of self-definition (Campbell, 1990). In Western cultures, appearance norms are a salient example of an external source that can be used for self-definition. Thus, individuals who lack a clear sense of their own personal identity would be more susceptible to these sociocultural factors and, therefore, would be at greater risk for developing body dissatisfaction. Specifically, individuals who are low in self-concept clarity should be more likely to internalize societal standards of attractiveness and, consequently, be more likely to experience body dissatisfaction. A number of studies have indeed demonstrated that self-concept clarity is negatively associated with internalization of the sociocultural standards of attractiveness, and that internalization mediates the link between self-concept clarity and body dissatisfaction (Vartanian, 2009; Vartanian & Dey, 2013; Vartanian et al., 2016, 2018). Furthermore, Vartanian and Hayward (2020) demonstrated that self-concept clarity was specifically associated with *internalization* of the sociocultural standards (i.e., taking them on as personally meaningful beliefs and goals to strive for) as opposed to simple awareness (e.g., understanding what constitutes beauty in a particular culture) or endorsement (e.g., agreeing with the cultural norms) of those standards.

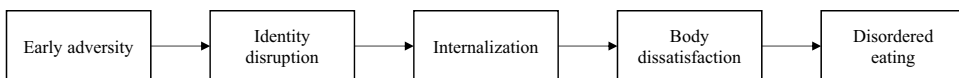


Figure 1. Identity Disruption Model of Body Dissatisfaction and Disordered Eating.

One of the key assumptions made in the Identity Disruption Model is that people low in self-concept clarity use their physical appearance as a core component of their personal identity; that is, that they define themselves in terms of their physical appearance. Indeed, the title of an early paper on the connection between self-concept clarity and body dissatisfaction was “When the body defines the self” (Vartanian, 2009). The reasoning has been that, by internalizing societal standards of attractiveness, one’s physical appearance and attractiveness become part of how one defines oneself. To this point, however, the assumption that physical appearance has become part of the self-definition for individuals low in self-concept clarity is mere conjecture. The aim of the present research is to test this aspect of the theory.

Although there is no direct evidence that certain individuals define themselves in terms of their physical appearance, other research does provide some suggestive evidence. For example, one of the diagnostic indicators of clinical eating disorders is an excessive influence of weight and shape on self-evaluation (APA, 2013). Weight-based self-evaluation refers to the tendency for some individuals to base their self-worth on their appearance, weight, or shape. This construct is not just relevant to clinical eating disorders, but is also apparent in non-clinical samples of individuals high in body-image concern (McFarlane et al., 2001; Trottier et al., 2013). Thus, there is evidence in the literature of a link between evaluations of the body and evaluations of the self. Another related construct is the concept of contingencies of self-worth, which refers to people basing their self-worth on their standing in particular domains, such as academic competence or moral virtue (e.g., Crocker & Wolfe, 2001). This construct has also been extended to appearance (Crocker et al., 2003) and body-weight contingencies of self-worth (Clabaugh et al., 2008). Furthermore, Vartanian (2009) found that, for women, self-concept clarity was negatively correlated with body-weight contingent self-worth. That is, having an unclear sense of self is associated with having a self-worth that is contingent on body weight. Thus, there is some evidence of a connection between physical appearance and the sense of self. However, this research focuses on the *impact* of appearance/weight on one’s sense of self (that is, how evaluations of one’s appearance are related to one’s evaluation of the self), rather than on the *importance* that one places on appearance/weight as a defining feature of the self. Thus, in order to test this key assumption of the Identity Disruption Model, more direct evidence of the incorporation of physical appearance into one’s personal identity is needed.

To address this gap in the literature, we developed two measures to more directly assess the integration of physical appearance into one’s personal identity. The first measure assessed the *importance* of physical appearance to individuals’ sense of self. This measure consisted of four items drawn from the Self-Objectification Questionnaire (Fredrickson et al., 1998): physical attractiveness, weight, [body] measurements, and sex appeal. In its original form, the Self-Objectification Questionnaire asks participants to rank 10 items with respect to the impact they have on the person’s physical self-concept. These items reflect either appearance (e.g., physical attractiveness, sex appeal, weight) or competence (e.g., physical coordination, strength, physical fitness), and self-objectification is said to be present when the appearance-based items are ranked higher than the competence-based items. Rather than assessing self-objectification, we simply asked participants to indicate how important the physical-appearance items were to their personal identity (i.e., who they are as a person).

The second measure assessed the *overlap* between individuals' physical appearance and their sense of self. This measure was based on Aron's (Aron et al., 1992) Inclusion of Other in the Self (IOS) Scale. The IOS was originally designed as a pictorial measure of interconnectedness or interpersonal closeness in which participants are asked to consider the extent to which the "self" overlaps with a significant "other". The measure consists of a set of seven pairs of circles, with the degree of overlap between the circles in each pair increasing linearly, beginning with two circles that have no overlap at all and ending with two circles that are almost completely overlapping. This simple measure has been shown to predict various other measures of closeness in relationships and thus appears to capture a meaningful and valid representation of closeness (Aron et al., 1992). The IOS has also been extended to other domains, such as the overlap between the self and one's racial ingroup (Tropp & Wright, 2001), the natural environment (Schultz et al., 2004), and even consumer goods (Trump & Brucks, 2012). Of particular relevance to the current context, Goldenberg and Shackelford (2005) used a version of the IOS to measure the integration of the physical body with the sense of self. Our measure included a slight variation on Goldenberg and Shackelford's version to emphasize the focus on the extent to which individuals' physical *appearance/attractiveness* (rather than the physical body in a more general sense) overlaps with their personal identity.

The Present Research

According to the Identity Disruption Model of body dissatisfaction, individuals who lack a clear sense of their own identity turn to societal appearance norms as a source of self-definition. Although previous research has shown that low self-concept clarity is associated with thin-ideal internalization and, in turn, body dissatisfaction, there is no direct evidence that individuals low in self-concept clarity "define" themselves in terms of their appearance. The aim of the present research is to test this aspect of the theory (see, Figure 2).

In Study 1, two separate samples completed a measure of self-concept clarity, along with the two measures assessing appearance-self integration. We predicted that individuals low in self-concept clarity would show a greater degree of appearance-self integration than would individuals high in self-concept clarity. Studies 2 and 3 tested an assumption of the Identity Disruption Model that there would be an indirect path from

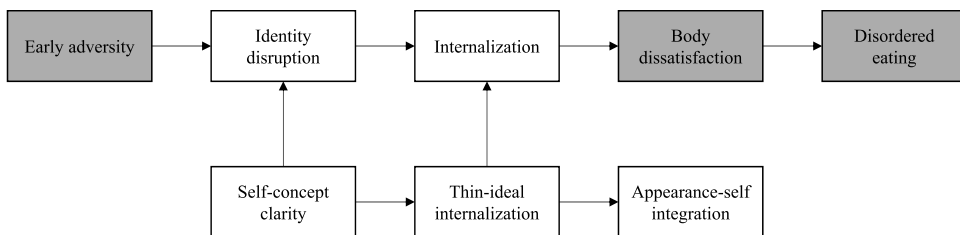


Figure 2. Components of the Identity Disruption Model Tested in these Studies.

Note: Shaded boxes are aspects of the Identity Disruption Model that are not addressed in the current research.

self-concept clarity to appearance-self integration via thin-ideal internalization. That is, we theorize that individuals who lack a clear sense of self turn to social standards of attractiveness as a potential source of self-definition. By internalizing these societal ideals, they then come to define their own identity in terms of their physical appearance/attractiveness.

Study 1

Method

Participants

Two separate samples were included in this study: an undergraduate student sample and a community sample. For the student sample, participants were 162 female undergraduate students enrolled in an introductory psychology course at a large public university in Australia. They signed up as part of a larger study on body image and participated in exchange for partial course credit. The sample size was determined based on the power calculations for the larger study, but was sufficient to detect a small-to-medium correlation with 80% power. Their mean age was 19.40 years ($SD = 3.98$, range = 18–54)¹ and their mean body mass index (BMI; kg/m^2) was 21.76 ($SD = 3.43$). In terms of ethnicity, 28.4% identified as White/Caucasian, 58.0% identified as Asian, and 13.6% identified with other ethnicities. For the community sample, participants were 262 women aged between 18–30 who were recruited through Prolific Academic. A larger sample was recruited to ensure that some of the smaller effects observed in the student sample were not due to lower power. Their mean age was 24.73 years ($SD = 3.60$) and their mean BMI was 23.79 ($SD = 6.41$). In terms of ethnicity, 82.0% identified as White/Caucasian, 9.2% identified as Asian, and 8.7% identified with other ethnicities. This study was approved by the UNSW Human Research Ethics Advisory Panel C, Psychology (File 2755, 2826).

Measures

Self-concept clarity. The Self-Concept Clarity Scale (Campbell et al., 1996) assesses the extent to which individuals have a well-defined, coherent, and stable sense of self. The scale consists of 12 items (e.g., “In general, I have a clear sense of who I am and what I am”). For the student sample, items were rated on a 5-point scale (1 = *Strongly disagree*, 5 = *Strongly agree*); for the community sample, the scale was increased to 7 points to allow for greater variability in scores. Some items were reverse-coded and higher mean scores indicate higher self-concept clarity (student sample $\alpha = .89$; community sample $\alpha = .89$). For ease of presentation, in both samples, participants were classified as being relatively high in self-concept clarity if they scored at or above the mid-point of the scale, and were classified as being relatively low in self-concept clarity if they scored below the mid-point of the scale.

Appearance-self integration. The integration of appearance and the self was assessed with two measures:

Importance of appearance to self. Participants were asked to indicate the extent to which they considered their physical appearance to be an important component of their personal identity. This measure consisted of four appearance-based items drawn from the Self-Objectification Questionnaire (Fredrickson et al., 1998): physical attractiveness,

weight, measurements, and sex appeal. So that we could determine whether the associations with self-concept clarity were specific to appearance-related aspects of the self, four additional items were included to reflect nonappearance aspects of identity (creativity, intelligence, sociability, morality). Participants were asked, "How important is each of the following to your personal identity (who you are as a person)?" For both the student and community samples, each item was rated on a 5-point scale from 1 (*Not at all important*) to 5 (*Extremely important*). The four physical appearance items were averaged to form an overall index of importance (student sample $\alpha = .79$; community sample $\alpha = .85$). The four nonappearance items showed low internal consistency (student sample $\alpha = .40$; community sample $\alpha = .51$) and thus these items were considered individually.

Overlap between appearance and self. Participants completed a modified version of the Inclusion of Other in the Self Scale (Aron et al., 1992). In the present study, we modified the scale to assess the extent to which participants' physical appearance overlaps with their personal identity. The specific instructions were as follows:

Please take a moment to think about the things that make up your personal identity. There are many different features that make up a person's sense of "self", how they define their personal identity. For the next question, we would like you to think about how much your physical appearance or attractiveness defines who you are as a person. Below are pairs of circles. For each pair, one circle represents your identity ("who you are") and the other represents your physical appearance/attractiveness ("what you look like"). Please select the pair of circles that best describes how closely linked your physical appearance/attractiveness is with your identity as a whole.

Participants were then shown seven pairs of circles that increased linearly in their degree of overlap, from completely separate to almost completely overlapping. Higher scores on this measure indicate a greater overlap between self and physical appearance.

Procedure

The student sample completed the measures in the laboratory as part of a larger experimental study on body image. They completed the measures in the following order: the overlap measure, the importance measure, and the Self-Concept Clarity Scale. (In that study, participants were randomly assigned to view either images of thin models or images of normal weight models, but this manipulation had no impact on any of the outcome variables and is not discussed further.) The community sample completed the measures online. They first completed the Self-Concept Clarity Scale, and then completed the two appearance-self integration measures in random order.

Results

Student Sample

Initial inspection of the data indicated that there were no missing data on any of the variables, the data were normally distributed, and there were no outliers. The two measures of appearance-self integration were significantly correlated ($r = .33, p < .001$). Table 1 shows the correlations between self-concept clarity and each of the other variables. Lower self-concept clarity was associated with placing greater importance on

Table 1. Descriptive Statistics and Between-Group Comparisons for the Main Variables in Study 1.

Variable	Bivariate correlation with self-concept clarity	Low SCC	High SCC	<i>t</i>	<i>p</i> -value	Cohen's <i>d</i>
		<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			
Student sample						
SCC	–	2.17 (0.48)	3.63 (0.47)	19.26	< .001	3.05
Overlap	–.05	4.01 (1.30)	3.90 (1.26)	0.54	.589	–0.09
Importance						
Appearance	–.27***	3.05 (0.71)	2.70 (0.82)	2.93	.004	–0.46
Creativity	.06	3.56 (1.00)	3.76 (1.04)	1.24	.216	0.20
Intelligence	–.07	4.34 (0.79)	4.28 (0.70)	0.49	.622	–0.08
Morality	–.01	4.38 (0.87)	4.45 (0.79)	0.50	.617	0.08
Sociability	.01	3.92 (0.96)	4.07 (0.85)	1.02	.309	0.17
Community sample						
SCC	–	3.20 (0.55)	4.90 (0.66)	22.58	< .001	2.81
Overlap	–.08	3.64 (1.40)	3.51 (1.22)	0.79	.433	–0.10
Importance						
Appearance	–.24***	2.93 (0.91)	2.68 (0.82)	2.39	.017	–0.30
Creativity	–.03	3.21 (1.04)	3.24 (1.01)	0.20	.841	0.03
Intelligence	.02	3.89 (0.88)	3.99 (0.75)	1.00	.311	0.12
Morality	.05	4.10 (0.82)	4.25 (0.79)	1.51	.132	0.19
Sociability	.03	3.41 (0.98)	3.54 (0.99)	1.08	.283	0.13

Note: SCC = Self-concept clarity. For the student sample, the Self-Concept Clarity Scale used a 5-point rating scale (with a mid-point of 3); for the community sample, we used a 7-point rating scale (with a mid-point of 4).

one's appearance as a component of one's identity. As an additional analysis to provide an indication of how much participants endorsed each of the measures, we also used independent samples *t*-tests to compare participants relatively low (i.e., below the mid-point of the scale; $n = 91$) and relatively high (i.e., at or above the mid-point of the scale; $n = 71$) in self-concept clarity on each of the variables. The two groups differed in terms of their scores on the Importance measure, but not on the Overlap measure, nor on any of the nonappearance-importance measures (see, Table 1).

Community Sample

Preliminary inspection of the data revealed that there were no missing data on any of the variables, the data were normally distributed, and there were no outliers. The pattern of results for the community sample was very similar to that for the student sample.² The two measures of appearance-self integration were significantly correlated ($r = .40$, $p < .001$). As with the student sample, self-concept clarity was only significantly (and negatively) correlated with the importance of appearance measure. Comparing participants relatively low ($n = 145$) and relatively high ($n = 117$) in self-concept clarity, the two groups differed in their scores on the Importance measure, but not on the Overlap measure, nor on any of the nonappearance-importance measures (see, Table 1).

Discussion

Consistent with the Identity Disruption Model, individuals low in self-concept clarity do seem to take on their physical appearance as part of their personal identity to a greater extent than do individuals high in self-concept clarity. This difference was observed for

the Importance measure, but not for the Overlap measure. Although the Overlap measure was not related to self-concept clarity, scores on that measure did correlate with scores on the Importance measure, providing some evidence of the validity of these measures. There was no difference between individuals high and low in self-concept clarity with respect to the importance of any of the nonappearance items, presumably because these are aspects that relate to internal attributes as opposed to being drawn from external sources. The aim of the next study was to examine whether appearance-self integration is associated with thin-ideal internalization and, in particular, whether there is an indirect path from self-concept clarity to appearance-self integration via internalization.

Study 2

Method

Participants

Participants were 278 women aged 18–30 who resided in the United States and who were recruited through Amazon's Mechanical Turk. Sample size was determined using the Monte Carlo method provided by Schoemann et al. (2017). Using the correlations obtained in Study 1 and an assumed small-to-medium correlation between the mediator and the outcomes, we estimated that a minimum sample of 250 participants would be sufficient to detect the indirect effects. We oversampled to account for attrition and data loss. Of the 286 eligible participants who signed up for the study, 7 participants were excluded because they failed the attention-check question (a question directing participants to select a specific response option), resulting in a final sample of 279 participants. Their mean age was 26.02 years ($SD = 2.96$) and their mean BMI was 23.81 ($SD = 6.94$). The majority of the sample identified as White/Caucasian (67.7%). This study was approved by the UNSW Human Research Ethics Advisory Panel C, Psychology (File 2755).

Materials and Procedure

Participants signed up for a study on "personality and health" and the entire study took place online. Participants completed the Self-Concept Clarity Scale (7-point-scale version; $\alpha = .94$) and Importance and Overlap measures described above. The measures were completed in random order. To test the predicted indirect path, participants also completed the Internalization: Thin/Low Body Fat subscale of the SATAQ-4 (Schaefer et al., 2015) as a measure of thin-ideal internalization. This measure consists of five items (e.g., "I want my body to look very thin"), each of which is rated on a 5-point scale (1 = *Definitely disagree*, 5 = *Definitely agree*). Higher mean scores reflect a greater degree of internalization ($\alpha = .97$).

Results and Discussion

Preliminary inspection of the data indicated that there were no missing data on any of the variables, the data were normally distributed, and there were no univariate or multivariate outliers. Table 2 displays the correlations among the variables included in this study. Self-

Table 2. Mean (SD) and Bivariate Correlations among Variables (Study 2).

	Mean (SD)	SCC	Internalization	Importance
SCC	4.30 (1.37)	–		
Internalization	3.44 (0.94)	–.34***	–	
Importance	3.20 (0.99)	–.24***	.51***	–
Overlap	4.35 (1.54)	–.12	.25***	.36***

Note: SCC = Self-concept clarity. *** $p < .001$.

concept clarity was negatively correlated with thin-ideal internalization and Importance, but not with Overlap. Thin-ideal internalization was positively correlated with both Importance and Overlap. Finally, Importance and Overlap were positively correlated.

Next, separate mediation analyses were conducted using the PROCESS macro (Hayes, 2013; Model 4) to determine whether there were indirect paths from self-concept clarity to appearance-self integration via thin-ideal internalization. For Importance, the indirect path was significant, completely standardized indirect effect = $-.16$, $SE = .03$, 95% CI = $-.23, -.10$. The indirect path was also significant for Overlap, completely standardized indirect effect = $-.08$, $SD = .02$, 95% CI = $-.13, -.03$, but the magnitude of the indirect effect was smaller than it was for Importance. See, [Figure 3](#).

Study 3

The aim of Study 3 was to replicate the findings of Study 2, while also providing temporal separation between the measures. Participants completed the Self-Concept Clarity Scale at an initial session. A week later, they completed the measure of internalization. Finally, a week after the second session, participants completed the two measures of appearance-self integration. Although this three-week period would not be sufficient to establish any longitudinal associations (i.e., changes in one variable being associated with changes in another variable over time), the distinct timepoints do establish a temporal sequencing of the variables, allowing for a clearer test of mediation.

Method

Participants

Female participants aged 18–30 were recruited through Prolific Academic. Using the same power calculations as in Study 2, we estimated that a minimum sample of 250 participants would be sufficient to detect the indirect effects. We oversampled to account for attrition across the three time points. There were 406 participants who completed the first survey; 330 participants completed the first and second surveys; and 290 participants completed all three surveys. One participant failed an attention check item, leaving a final sample of 289 participants. The mean age of the final sample was 24.17 years ($SD = 3.53$) and the mean BMI was 24.57 ($SD = 7.27$). The majority of the sample identified as White/Caucasian (58.2%). This study was approved by the UNSW Human Research Ethics Advisory Panel C, Psychology (File 3578), and was preregistered at AsPredicted.com (<https://aspredicted.org/u4yy9.pdf>).

Materials and Procedure

Participants signed up for a study on “Identity and views of the self” and the entire study took place online. Participants completed the Self-Concept Clarity Scale (7-point-scale version; $\alpha = .88$) and demographic questions at baseline; the Internalization: Thin/Low Body Fat subscale of the SATAQ-4 ($\alpha = .86$) one week later; and the Importance measure ($\alpha = .84$) and Overlap measure (in random order) a week after that.

Results and Discussion

Preliminary inspection of the data indicated that there were no missing data on any of the variables and the data were normally distributed. There was one univariate outlier (on the Internalization measure), but removing that participant from the analyses had no impact on the results, and thus the analyses were run on the full sample. There were no multivariate outliers. [Table 3](#) displays the correlations among the variables included in this study. Self-concept clarity was negatively correlated with thin-ideal internalization and Importance, but not with Overlap. Thin-ideal internalization was positively correlated with both Importance and Overlap. Finally, Importance and Overlap were positively correlated.

Next, separate mediation analyses were conducted using the PROCESS macro (Hayes, 2013; Model 4) to determine whether there were indirect paths from self-concept clarity to appearance-self integration via thin-ideal internalization. For Importance, the indirect path was significant, completely standardized indirect effect = $-.18$, $SE = .04$, 95% CI = $-.25, -.10$. As in Study 2, the indirect path was also significant for Overlap, completely standardized indirect effect = $-.10$, $SD = .03$, 95% CI = $-.15, -.05$, but again the magnitude of the indirect effect was smaller than it was for Importance. By separating the assessment of the key variables in time, these findings provide even stronger support for the hypothesis that internalization leads individuals to incorporate their physical appearance into their self-definitions. See, [Figure 4](#).

General Discussion

The Identity Disruption Model posits that individuals with low self-concept clarity look to external sources for self-definition, which can lead them to internalize societal standards of attractiveness and, consequently, define their personal identity (at least in part) in terms of their appearance. The present studies provide the first direct evidence for this perspective.

Table 3. Mean (SD) and Bivariate Correlations among Variables (Study 3).

	Mean (SD)	SCC	Internalization	Importance
SCC	3.94 (1.07)	–		
Internalization	3.71 (0.66)	–.31***	–	
Importance	2.85 (0.87)	–.22***	.59***	–
Overlap	3.59 (1.33)	–.01	.29***	.44***

Note: SCC = Self-concept clarity. *** $p < .001$.

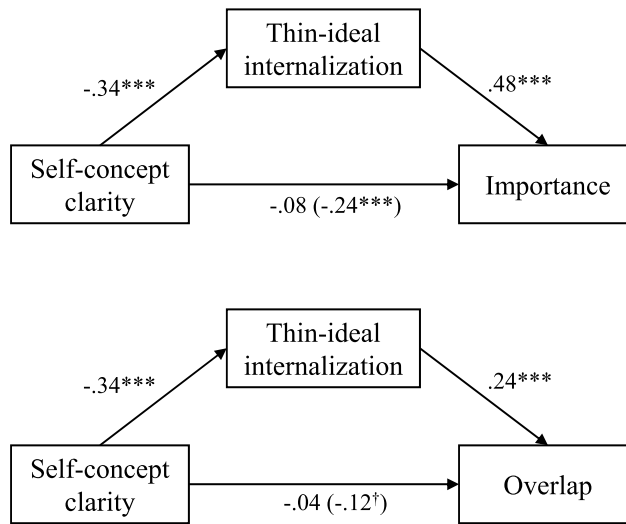


Figure 3. Indirect Paths between Self-Concept Clarity and Appearance-Self Integration via Thin-Ideal Internalization (Study 2).

Note: All numbers represent standardized beta coefficients. Numbers in parentheses represent the unmediated (total) effects. $^{\dagger}p < .10$, $***p < .001$.

Of the two measures that we used to assess appearance-self integration, the measure of Importance showed the strongest associations. In Study 1, individuals low in self-concept clarity were more likely to report that their physical appearance was an important part of how they defined their personal identities, and this was true for both the student sample and the community sample. It is important to note that, in both samples, there was only modest agreement for the importance of appearance to one's identity. Even for individuals low in self-concept clarity, the mean scores in both samples was close to the mid-point of the scale ("moderately important"). Thus, even though individuals low in self-concept clarity are relatively more likely to endorse this aspect of their identity, physical appearance is not the most important aspect of their identity. Indeed, mean ratings of the importance of the nonappearance aspects were higher than the appearance aspects in both samples.

Note that the group differences in importance ratings did not emerge for the nonappearance-related items (i.e., creativity, morality, intelligence, sociability). This finding is consistent with the theoretical perspective suggesting that individuals low in self-concept clarity are particularly prone to look to *external sources* of self-definition (Campbell, 1990). The nonappearance items used in the present study can all be considered *internal* attributes, and thus we might not expect to see any differences as a function of self-concept clarity. It would be interesting in future research to determine whether the importance of other external sources of self-definition (e.g., social roles) are differentially endorsed by individuals high and low in self-concept clarity.

The second measure of appearance-self integration – the Overlap measure – failed to show an association with self-concept clarity. Although this measure was significantly correlated with the Importance measure, it does not appear to be directly associated with

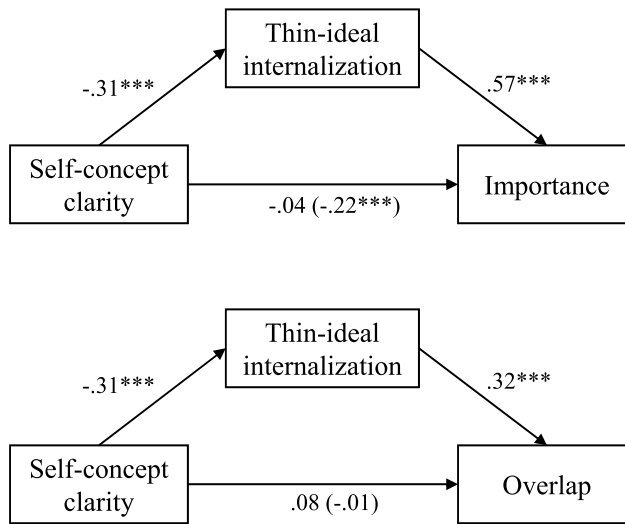


Figure 4. Indirect Paths between Self-Concept Clarity and Appearance-Self Integration via Thin-Ideal Internalization (Study 3).

Note: All numbers represent standardized beta coefficients. Numbers in parentheses represent the unmediated (total) effects. *** $p < .001$.

self-concept clarity. One reason why we might not have found an association is that the relationship between self-concept clarity and appearance/self-overlap is more nuanced and variable across individuals. For example, in their work on body-self integration, Goldenberg and Shackelford (2005) found that the relationship between self-esteem and body-self integration (also assessed using a version of the IOS) depended on participants' level of body-esteem. Similarly, it may be that participants' level of appearance satisfaction determines the extent of the association between self-concept clarity and appearance/self-overlap, and that failing to account for that body satisfaction clouded the association. For example, individuals who are reasonably satisfied with their appearance might be more likely to integrate their appearance into their sense of self than are individuals who are dissatisfied with their appearance. (It is not immediately clear, however, why this would be the case for the Overlap measure but not for the Importance measure.)

Building on these initial findings, Study 2 tested the hypothesis derived from the Identity Disruption Model that self-concept clarity was associated with appearance-self integration via thin-ideal internalization. Results showed that the indirect path was significant for both measures of appearance-self integration, but was weaker for the Overlap measure than for the Importance measure. Because the Study 2 data were cross-sectional, Study 3 provided temporal separation by having participants complete measures over three timepoints, each separated by a week. The pattern of results was virtually identical to those obtained in Study 2. These findings support the theoretical suggestion that the process of internalizing societal standards of attractiveness leads individuals who lack a clear sense of self to make their appearance an important feature of their sense of self.

Incorporating aspects of one's physical self into one's personal identity is not inherently problematic, and could even be seen as contributing to a holistic sense of self (Goldenberg & Shackelford, 2005). However, taking on one's physical appearance and attractiveness as part one's identity can be associated with negative outcomes, especially given how unrealistic the cultural standards of attractiveness are for most women. In Western cultures, the ideal body for women is a thin and toned body. These ideals are ubiquitous in traditional media, such as magazines, television, and movies (Byrd-Bredbenner & Murray, 2003), as well as in newer forms of media, such as social media (e.g., Tiggemann & Zaccardo, 2018). It has been well-established that comparing one's appearance to these idealized bodies increases body dissatisfaction (Grabe et al., 2008). If one's physical appearance is also connected to one's sense of self more generally, then failing to measure up to these cultural standards of ideal bodies can have broader implications for one's self-evaluations.

Limitations and Future Directions

There are some limitations to the present studies that are worth considering. First, the two measures of appearance-self integration used in this research were developed specifically for these studies. It was necessary to develop new measures because there were no existing measures of these constructs. Although the measures were based on established measures (i.e., the Self-Objectification Questionnaire for the Importance measure, and the IOS for the Overlap measure), and the correlation between the two measures was significant in all studies, it will be important for future research to further establish the reliability and validity of these measures.

Second, the data in Studies 1 and 2 were cross-sectional and, although Study 3 provided temporal separation among the variables, the interval was not sufficient to test how changes in self-concept clarity over time leads to changes in internalization and appearance-self integration. Longitudinal studies are needed to fully test the developmental trajectories proposed by the Identity Disruption Model. In particular, longitudinal studies with adolescent samples would be important, given that identity and body-image concerns both tend to emerge in adolescence (Kroger et al., 2010; Schutz et al., 2002). It would also be useful for experimental research to attempt to establish causal associations among the variables, for example, by increasing self-concept clarity and determining whether that reduces the importance that participants place on their appearance for their sense of self.

Finally, exploring these questions in more diverse samples would be an important direction for future research. A consistent pattern of results was found across studies, despite the samples all being recruit from different sources (an undergraduate class, MTurk, and Prolific), and despite the student sample in Study 1 consisting mostly of participants who identified as Asian (in contrast to the other three samples, which consisted mostly of individuals who identified as White/Caucasian). However, there could be differences across demographic characteristics in terms of the extent to which individuals take on their appearance as part of their identity. For example, research has shown that African American women are less likely to internalize societal standards of attractiveness (e.g., Jefferson & Stake, 2009), and it might follow, therefore, that they would also be less likely to take on their appearance as part of their identity. Furthermore,

although the Identity Disruption Model applies to women and men (Vartanian et al., 2018), the specific cultural ideals and appearance concerns differ for women and men. Thus, the specific aspects of appearance that come to define the self might also differ for men and women.

Conclusion

We developed two measures of appearance-self integration to allow us to test a key assumption of the Identity Disruption Model: that individuals low in self-concept clarity will define their sense of self (at least in part) in terms of their appearance. Consistent with the predictions of the Identity Disruption Model, we found that individuals who are relatively low in self-concept clarity were more likely to consider their physical appearance to be part of their personal identity. Furthermore, it appears that thin-ideal internalization might be the mechanism through which self-concept clarity is associated with appearance-self integration. Defining oneself in terms of one's appearance can have negative consequences. Therefore, it is worth helping individuals find more adaptive ways to define their personal identities.

Notes

1. 98% of participants in the student sample were < 30 years of age. In order to maintain consistency across studies, all subsequent studies restricted recruitment to participants aged 18–30.
2. To determine whether the pattern of associations between self-concept clarity and the appearance-self variables differed by sample, we conducted a series of regression analyses that included sample as a moderator. There were no significant interactions involving sample for any of the variables, indicating that the pattern was stable across groups.

Disclosure statement

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