

ATTITUDES AND PERCEPTIONS: THE RELATIONSHIP BETWEEN
SELF-OBJECTIFICATION, SELF-ESTEEM, AND SELF-PERCEPTIONS OF
FACIAL ATTRACTIVENESS

by
Rebecca McGarity

Submitted in partial fulfillment of the requirements for Major Honors in Psychology

Houghton College, Houghton, New York
May, 2015

Honors Committee

Cynthia Symons, Chair: Signature: _____

Paul Young: Signature: _____

John Van Wicklin: Signature: _____

Carlton Fisher: Signature: _____

Abstract

Self-objectification occurs when individuals internalize society's objectifying standards and evaluate themselves based on their physical appearance (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1997; McKinley & Hyde, 1996; Noll & Fredrickson, 1998).

Self-objectification, seen as an attitude one has of the self, should affect perceptions of the self, such as self-esteem and self-perceptions of facial attractiveness. The relationship between self-objectification, self-esteem, and self-perceptions of facial attractiveness was assessed in college undergraduates, using the Self-Objectification Questionnaire (SOQ; Fredrickson et al., 1997) and the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) as measures of self-objectification. Self-objectification was significantly correlated to self-perceptions of facial attractiveness in a negative direction, $r(20) = -.42, p = .03$ for the SOQ; $r(26) = -.36, p = .03$ for the OBCS. Negative correlations between self-objectification and self-esteem approached significance, $r(20) = -.43, p = .05$; $r(26) = -.32, p = .05$. Implications of these findings are discussed.

Keywords: self-objectification, self-esteem, facial attractiveness, attitudes, perceptions

Attitudes and Perceptions: The Relationship Between Self-Objectification, Self-Esteem, and Self-Perceptions of Facial Attractiveness.

A society focused on physical appearance affects the attitudes and perceptions of its people. In such a culture, a person may frequently be objectified and thought of as an object rather than as a person with feelings, ideas, and dreams. Objectification theory (Fredrickson & Roberts, 1997) posits that when people are objectified, particularly when women experience sexual objectification and their bodies are viewed as objects to be used, a common response is to internalize this view of themselves. Not all objectified people respond in this manner and certainly some respond to varying degrees, but Fredrickson and Roberts (1997) argue that women are socialized to internalize this perspective of themselves and see their own bodies as mere objects for others to look at, evaluate, and use. For the objectified person, others dictate how his or her body should look and the ways in which it will look best. Objectified people are preoccupied with their physical appearance because they evaluate themselves based on their appearance rather than on their abilities or accomplishments, or who they are as people (Fredrickson & Roberts, 1997). Research shows that such internalization of objectification leads to negative consequences such as increased risk of depression, disordered eating, sexual dysfunctions, and a lower quality of life (Fredrickson & Roberts, 1997; McKinley & Hyde, 1998).

One does not need to be dissatisfied with his or her body, however, in order to experience self-objectification. According to Noll and Fredrickson (1998), women may experience the negative effects of self-objectification whether they are satisfied with their bodies or not. Noll and Fredrickson assert that it is not one's level of satisfaction with

one's body that determines whether self-objectification occurs, but rather how dependent one's self-worth is on his or her appearance. Thus, because self-objectification involves seeing oneself as an object rather than a person, even a woman who sees herself as a beautiful object nonetheless engages in self-objectification.

Sexual objectification occurs whenever someone's body is viewed as being separate from the person (Bartky, 1990). Fredrickson and Roberts (1997) specify three main domains in which it is likely to occur, primarily through an *objectifying gaze*. First, sexual objectification occurs in interpersonal and social interactions. People objectify each other in everyday interactions, even when merely walking down the street. Second, objectification occurs in the social interactions portrayed in the media. In television shows, movies, and music videos we frequently see people being sexually objectified. Third, it occurs in the media in the form of a focus on particular body parts that visually separate persons from their bodies. This is especially true in the portrayal of women: Camera shots tend to focus on their bodies as opposed to their faces. For men, in contrast, camera shots tend to focus on their faces and with more attention to facial details. In this way the media emphasize women's bodies as separate from their persons, thereby objectifying them (Fredrickson & Roberts, 1997).

Objectified body consciousness theory (OBC; McKinley & Hyde, 1996) is closely related to objectification theory and was first introduced as pertaining only to women. The theory states that there are three components of self-objectification: body surveillance, internalization of cultural body standards, and beliefs about appearance control. If an individual exhibits these three acts or beliefs, then he or she is considered to self-objectify. The first component, body surveillance, is what happens when women

start to view themselves as others view them, constantly monitoring their body to be sure that it is approved of by others and the self. Consistent with some feminist theories (Bartky, 1990; de Beauvoir, 1952), the theory asserts that objectified women survey their own bodies as a third-party observer would, perceiving themselves as an object to be gazed at (Fredrickson & Roberts, 1997). Note that, however, a woman's physical attractiveness may define her social power and likelihood of economic success (Unger, 1979). Consequently, the act of surveying her own body to know how she will be judged is not only a consequence of being sexually objectified but also a strategy used to increase her likelihood of success in some domains (Silberstein, Striegel-Moore, & Rodin, 1987). A woman who evaluates her appearance before others get the chance to has the opportunity to change aspects of her appearance so that others will judge her more highly.

The second component of self-objectification according to OBC theory is that women internalize their culture's body standards (McKinley & Hyde, 1996). A part of self-objectification is that women come to believe that the cultural ideals and goals they hold are self-generated personal choices, rather than arising out of cultural pressures. They truly believe that they *need* to attain these cultural standards, and desire to match their appearance with those standards. Unfortunately, body standards characteristic of Western culture are practically impossible to attain, leaving many women feeling ashamed of their bodies (Fredrickson & Roberts, 1997; Rodin, Silberstein, & Striegel-Moore, 1984).

The last component of OBC theory is the assumption that women are responsible for their appearance and that they can control how they look if they exert enough effort,

referred to as *appearance control beliefs* in the literature (cf. Sinclair & Myers, 2004).

The belief that one is responsible for and can control one's appearance is a form of self-objectification because the belief leads one to evaluate oneself based on one's appearance. McKinley and Hyde (1996) note that the assumption that one is in control can lead to positive psychological outcomes, such as feeling in control or able to change something one is unhappy with. However, this assumption can also lead to negative behaviors such as disordered and restricted eating.

McKinley and Hyde (1998) measured these three components of self-objectification in the scale they created, the Objectified Body Consciousness Scale (OBCS). Using this scale and comparing it to other similar scales, they showed in their research that women who exhibit body surveillance, internalization of cultural body standards, and appearance control beliefs are likely to exhibit objectified body consciousness; that is, they are likely to objectify themselves (Choma et al., 2010; John & Ebbeck, 2008; Noser & Zeigler-Hill, 2013).

Research further shows that self-objectification can be of two types (Fredrickson et al., 1998): It can be either a personality trait, or a state that comes and goes. If one exhibits *trait self-objectification*, he or she tends to dispositionally self-objectify, doing so much of the time. A person who exhibits trait self-objectification characteristically self-objectifies, usually for a particular reason, such as excessive weight or a physical deformity of some kind. Women tend to exhibit trait self-objectification more than men (Fredrickson et al., 1998).

In contrast, in *state self-objectification*, objectification is situational. State self-objectification is characterized by an awareness of one's body that becomes salient in

certain situations (Fredrickson et al., 1998). State self-objectification is induced when people are in vulnerable or revealing situations that emphasize their awareness of observers and the appearance of their body. Situations that are likely to cause such awareness are often unstructured public situations in which both sexes are present (Gardner, 1980). State self-objectification may happen at any time, and affect individuals who do not characteristically self-objectify.

Effects of self-objectification

Self-objectification has many negative effects. For example, Sinclair and Myers (2004) found that those who score high in body surveillance and internalization of cultural body standards on the OBCS exhibit lower wellness scores, compared to those who do not self-objectify. They suggest that the more one experiences internalization of standards and subsequent shame for his or her body, with a need for constant surveillance, the less overall wellness that person reports. However, Sinclair and Myers also found a positive correlation between appearance control beliefs and wellness scores, suggesting the possibility that appearance control beliefs can also have positive effects on one's quality of life.

Fredrickson & Roberts (1997) reported four specific negative consequences of sexual objectification particular to women: shame, anxiety, loss of flow (Csikszentmihalyi, 1990), and lower awareness of internal bodily states. Their research suggests that women who experience sexual objectification often experience shame. Shame occurs when women believe they do not measure up to societal standards of beauty and, consequently evaluate themselves negatively. Anxiety is a second consequence of sexual objectification. It can take the form of either *appearance anxiety*,

in which one is anxious about one's looks and worries constantly if one meets a standard (potentially resulting in habitual monitoring of one's own body), or *safety anxiety*, in which one worries about when and where one will be judged by others.

Because of the constant social monitoring and surveillance of women's bodies, either by others or by the woman herself, Fredrickson and Roberts (1997) argued that women are more frequently interrupted in their daily activities. Research by Fredrickson et al. (1998) shows that this is the case; they found that state self-objectification affected women's performance on a math test more than it affected men's performance. Young (1990) argues that an inner self-consciousness symptomatic of self-objectification interrupts women's physical activities and comportment. Constant self-consciousness causes peak motivational states, which Csikszentmihalyi (1990) referred to as *flow*, to be interrupted. Flow is a state in which one is so focused on and wrapped up in an activity that he or she does not notice the passage of time; only the activity matters. Flow is accompanied by positive emotions and calm focus—a desirable experience. But in order for flow to take place, one must lose self-consciousness. Thus, self-objectification reduces flow because it leads to a state of constant self-awareness. If a woman is constantly interrupted by others calling attention to her body or by her own self-monitoring of her body, it follows that she will have fewer opportunities to experience flow. Consequently, women who self-objectify may experience a reduced quality of life because they are not able to experience flow as often as others (Fredrickson & Roberts, 1997).

The ironic fourth negative effect of sexual objectification is that for many women it causes less awareness of *internal* bodily states. Because women who self-objectify are

so focused on self-conscious *external* body monitoring, they are theoretically left with fewer perceptual resources that allow awareness of internal bodily states, such as physiological or sexual arousal or awareness of emotions (Fredrickson & Roberts, 1997). For example, women have a harder time learning to distinguish the beat of their hearts than men do (Harver, Katkin, & Block, 1993; Katkin, 1985; Katkin, Blascovich, & Goldband, 1981). Also, research shows that for women physiological arousal is often not predictive of subjective ratings of sexual arousal; rather, women rely on contextual cues to determine sexual arousal (Laan, Everaerd, van Bellen, & Hanewald, 1994). Further research has found that for a sample of married women affect and arousal were not correlated, but the variables were correlated for their husbands (Levenson, Carstensen, & Gottman, 1994). Women may spend so much focus on their outward appearance that they may not have sufficient energy to focus on their inward body experiences (Fredrickson & Roberts, 1997). Although these findings are not direct evidence that self-objectification is the cause, it seems like a reasonable hypothesis that the variables are related.

Objectification theory and objectified body consciousness theory focus on women and their experiences, because society targets women's bodies more for objectification than men's bodies (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). However, other researchers have asked if men also are objectified and led to self-objectify. Research suggests that the answer is yes, but it occurs to a lesser degree for men than for women (Fredrickson et al., 1998; Strelan & Hargreaves, 2005).

Fredrickson et al. (1998) conducted a study showing that both men and women experienced self-objectification, but women experienced the negative consequences much more than men did. Participants came into the experiment already having

completed a trait self-objectification questionnaire so that the experimenters could group the participants based on their trait self-objectification score (Fredrickson et al., 1998). Participants then tried on either a swimsuit or a sweater in the privacy of their own changing room. While wearing the clothing item, participants completed questionnaires on body shame, self-objectification, and emotions as well as completing a short math test.

Fredrickson et al. (1998) found that for both men and women, trying on the swimsuit produced a state of awareness of one's body. The researchers labeled this a state of self-objectification, inferring that the situation led participants to view their bodies as potential observers would. However, only for women did this state self-objectification from trying on the swimsuit lead to body shame. Men's reports of body shame were not dependent on the state self-objectification of trying on the swimsuit. Rather, the analysis showed that it was their level of trait self-objectification as measured by the questionnaire before the start of the experiment that predicted their reactions. Based on that analysis, only the men who exhibited trait self-objectification also experienced body shame, no matter which condition they were in. This is in contrast to the women, for whom the *state* self-objectification led to body shame.

Thus, in Fredrickson et al.'s (1998), state self-objectification did not affect men in the same way it did women. Emotionally, men and women also responded differently to trying on the swimsuit: Whereas men reported feeling bashful, shy, silly, and awkward, women reported feelings of disgust, distaste, revulsion, anger, and irritation. These emotional differences show the shame women felt in response to wearing a swimsuit—a much different response than the men's more lighthearted self-consciousness.

The results of the math test also showed a gender distinction: Women in the swimsuit condition performed worse on the math test than women in the sweater condition, whereas no clothing condition difference appeared for the men. Frederickson et al. (1998) inferred that higher body awareness for women in the swimsuit condition led to a disruption in attention, resulting in worse performance on the math test. The researchers interpreted this finding to mean that women who experience state self-objectification exhibit disruptions in attentional focus (Young, 1990). They argued that self-objectification thus results in decreased flow and diminished cognitive load. This study and others show that men are less likely to experience self-objectification and its negative consequences, such as body shame and interrupted attention than women (Fredrickson et al., 1998; Strelan & Hargreaves, 2005).

In summary, self-objectification is a phenomenon experienced by both men and women, but which appears to affect women more than men. Its negative consequences include feeling shame of one's body, anxiety about measuring up to internalized societal beauty standards, disrupting body surveillance and monitoring, less awareness of internal bodily states, less opportunity for flow and other peak motivational states, and a risk for disordered eating and depression (Fredrickson et al., 1998; Fredrickson & Roberts, 1997; Haines et al., 2008; McKinley & Hyde, 1996).

Reasons that objectification occurs

There are different theories as to why society objectifies women's bodies more than men's. The first theory is evolutionary: Evolutionary theories posit that women's physical attractiveness is evaluated because it is the means by which men select a mate who is fertile and reproductively mature (Buss, 1989; Singh, 1993). Theoretically,

society deems attractive those features that are evolutionarily associated with reproductive health. A second theory posits that women are objectified as a way to maintain patriarchy in society (Connell, 1987; Stoltenberg, 1989). In this view, the objectification of women is a means of rendering them inferior to men and making their power and worth dependent on men's evaluations of them.

Sexual objectification is directed more often towards women than men (Archer, Iritani, Kimes, & Barrios, 1983; Rudman & Verdi, 1993), but why do individuals *self-objectify*? Fredrickson and Roberts (1997) theorize that perhaps self-objectification occurs because of socialization. Socialization involves external pressures that press people to conform, to change themselves to fit societal norms. Perhaps, as Fredrickson and Roberts suggest, self-objectification works the same way: Perhaps women integrate society's beliefs and values into their sense of self to avoid fighting external pressures to behave, be or look a certain way. In this way, self-objectification may thus serve the function of reducing one's struggle with societal pressures.

A second explanation is related to this idea of societal pressures: Perhaps individuals self-objectify in order to gain power or opportunity (Fredrickson & Roberts, 1997). Physical beauty can be a means of power for women (Unger, 1979). It can provide or limit social and economic opportunities (Silberstein et al., 1987). It makes sense that women might be focused on their physical appearance to gain these advantages. According to this view, by evaluating themselves by the same standards society uses, women are able to conform to society's standards and increase their probability of success (Fredrickson & Roberts, 1997). With that said, although

self-objectification may be useful, any advantages resulting from it still do not decrease its potential for the damaging consequences described earlier.

Another possible explanation involves the theoretical mechanisms by which objectification becomes self-objectification: Some sociological theories about self-concept development are rooted in our interactions with others. For example, Cooley (1902/1990) defines one's self-concept as a social construction. According to his theory, one's perception of one's self develop out of an integration and reflection of the views that other people—especially significant others—have of that person. Cooley asserted that the way other people treat us becomes the basis of the self-concept; their reactions and feedback become the basis of our own self-conceptions.

Although Cooley (1902/1990) did not relate his theory to beliefs about one's body or one's *physical* self-concept, his theory provides a possible explanation for how self-objectification might occur. Because for Cooley the whole basis of self-concept development is rooted in the reactions of others, and the self-concept, especially when one is young, is essentially a reflection of others' views, his theory suggests a possible mechanism for the development of self-objectification: If one believes what other people say (through words or actions) about him or her, if one is treated as an object by people he or she knows, and if others tell one (implicitly or explicitly) that his or her body is merely for others to view or use, then one may also be more likely to incorporate these beliefs communicated by others into one's sense of self. Cooley's theory suggests that the mechanisms by which the self-concept develops will also eventually lead to internalization of self-objectifying beliefs that involve an integration of others' views of oneself into one's own self-concept. The result is a tendency to self-objectify.

Attitudes change perceptions

In the self-objectification literature, researchers have focused on the behaviors that seem to define it (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996).

However, an important assumption underlying my research is the idea that self-objectification can also be construed as an attitude.

Attitudes are the summary of how we feel towards a certain object, person, or idea (Fazio, 1995). They may be implicit or explicit, conscious and realized, or hidden and unknown (Greenwald & Banaji, 1995). Much research suggests that attitudes have the power to change our perceptions so that what we see fits with our attitudes (Fazio & Williams, 1986; Hastorf & Cantril, 1954; Lord, Ross, & Lepper, 1979).

In a now-famous study, Hastorf and Cantril (1954) examined differing perceptions of a football game played between Dartmouth College and Princeton University in the 1950s—a study that demonstrates the power of attitudes to guide perceptions. Hastorf and Cantril described the game as one of the roughest played between the two rivals with numerous fouls on both teams, a broken nose for Princeton's star, and a broken leg later for a Dartmouth player. Princeton came out as the champion, but afterwards players, fans, and coaches recalled the game differently. Princeton's school newspaper blamed the rough play on Dartmouth, claiming that Dartmouth had a dirty style of play with rough tactics that climaxed when a Dartmouth player deliberately kicked an opponent. The Dartmouth school newspaper, however, testified that once Princeton's star player got hurt, the Princeton team resorted to dirty play, attributing most of the rough plays to Princeton. The two schools saw and remembered the game differently; how could this be?

Hastorf and Cantril (1954) set out to find out why. They administered a questionnaire to both Dartmouth and Princeton undergraduate students a week after the game, asking their opinions of it. The researchers also presented a video clip of the game to a different set of participants from both schools who rated each infraction they saw on the video as either “flagrant” or “mild.” The results showed that even though the two schools had seen the same game, they did not perceive it the same way. The first set of Princeton students rated the game as “rough and dirty;” not one of them rated it as “clean and fair.” Many of the first set of Dartmouth participants rated the game as “rough and dirty” as well; however, over a tenth rated it as “clean and fair” and a third labeled it “rough and fair.” For those who watched the video clip and rated the infractions seen, Princeton participants saw Dartmouth make over two times as many infractions as the Princeton team, whereas Dartmouth participants saw the same number of infractions made by both teams. The participants watched the same video clip of the game, but their attitudes influenced what they saw, correlated with their alliance to their schools.

Hastorf and Cantril’s (1954) study provides evidence that attitudes can influence what we see, or, more importantly, what we pay attention to. They interpreted their results to mean that although each person saw the game differently, depending on his or her attitudes and alliances, each person’s perceived version of the game was just as real to him or her as that of other viewers. It was not the case that the fans of one school deliberately closed their eyes during certain times or pretended to have or have not seen infractions made by the opposing team. Rather, “out of all the occurrences going on in the environment, a person selects those that have some significance for him” (Hastorf & Cantril, 1954, p. 133). These choices usually happen without awareness, and are

influenced by our attitudes. The researchers concluded an attitude is not a predisposition to react to an outside stimulus in some way but rather a filter through which we see and experience the world.

Fazio, Roskos-Ewoldsen, and Powell (1994) showed a similar shift of perceptions to fit one's attitudes. They asked participants to referee a computerized tennis match by calling balls either in or out of play. Participants believed that the focus of the study was on the computer graphics and the correctness of their perceptions of the location of the tennis ball on the screen. Participants were also led to believe that another participant was playing the computer game and that they were calling this participant's plays in the computerized tennis match. The participants knew that they were merely recording where the ball landed—either in or out—and that their judgments did not have any effect on the where the ball actually landed. However, this other “participant” was actually a confederate of the experimenter, who behaved in a way that was either likeable or not likeable, depending on the condition.

Fazio, Roskos-Ewoldsen, and Powell (1994) found that the participants displayed a readiness to perceive the game in a way that matched their attitudinal bias, either for or against the confederate. If participants liked the confederate, then they saw more balls as being in, whereas if the participants disliked the confederate, they saw more balls as being out. Even though participants were given feedback at every trial (or round of play) as to whether their calls were correct, and they knew that an experimenter was later going to compare their calls with the correct computer calls, participants' bias still showed up in their calls. Moreover, the participants' attitudes about the confederate affected their perceptions in such a way that they believed their calls were accurate and unbiased.

Fazio et al.'s study provides compelling evidence that people change their perceptions to match their attitudes.

Lord, Ross, and Lepper (1979) showed how attitudes can lead to belief polarization even when participants are given the same evidence. The researchers divided participants into two groups based on which side of a controversial issue they already agreed with, resulting in two groups with opposing attitudes. The researchers then gave both of the groups the same inconclusive evidence about the issue. Lord et al. found that, after receiving exactly the *same* evidence, the difference between the two groups' opinions increased and became more polarized. Lord and colleagues concluded that this belief polarization occurred because the participants interpreted the evidence in a biased way, one that fit their previous opinions.

Lord et al. (1979) also found that when the participants' beliefs already aligned with evidence they were given, participants were less likely to continue searching for fallacies and flaws in the evidence, in contrast to their behavior when the evidence did not agree with prior beliefs. When they did not agree with the evidence provided, the participants were more likely to search for alternatives and flaws. Thus, the participants' responses to information were driven by their pre-existing attitudes.

Self-objectification as an attitude

The studies described above show that people make biased judgments in perception and information processing correlated with their preexisting attitudes. A basic prediction in my present study is that self-objectification may also function as an attitude. Self-objectification is essentially an internalized attitude about the self, rooted in the belief that one's worth is summed up in one's appearance. If self-objectification is an

attitude, it should function as attitudes did in the studies just described: An attitude of self-objectification should influence how people perceive themselves.

Rodeheaver and Stohs (1991) conceived of self-objectification as an attitude and demonstrated its influence on perceptions. The researchers asked older men and women to select a picture of themselves based on their judgment of the extent to which they thought the photo looked like a current picture of them. They found that older women were more likely than older men to favor a more youthful, subjective physical image of themselves rather than an accurate physical image.

Rodeheaver and Stohs (1971) posited that by choosing a more youthful image of themselves, these older women were employing an adaptive strategy to maintain positive self-concepts at a time in their lives when they no longer fit society's standards for external beauty. Rodeheaver and Stohs' findings suggest that the women's self-objectified attitudes influenced their perceptions of their own self-images. Their study is evidence that an attitude of self-objectification, like all attitudes, has the power to significantly influence one's self-perceptions. In particular, self-objectifying attitudes may influence other constructs related to self-image: self-esteem and judgments of one's own facial attractiveness.

Self-esteem

Self-esteem is one's evaluation of oneself, based on self-knowledge that one has gathered from others' words and actions (Cooley, 1902/1990; Baumeister, 1998). Baumeister shows in his research that self-esteem leads to many positive effects, such as high academic achievements, sociability, and increased persistence in problem solving and in life.

Baumeister distinguished between global self-esteem and domain-specific self-esteem. Domain-specific self-esteem is one's self-evaluation in a specific area of life, such as athletic ability, academic success, or physical attractiveness. Global self-esteem is one's overall, general sense of self-esteem, the sum of his or her domain specific self-evaluations. Researchers have usually focused on measures of global self-esteem, because global self-esteem is more strongly related to psychological well-being (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995).

Other research has examined the effects of global versus domain-specific self-esteem: Arens, Yeung, Nagengast, and Hasselhorn (2013) found that for a sample of young German students, their academic self-concept, a domain-specific attribute, was linked to their global self-esteem score. Likewise, Haugen, Säfvenbom, and Ommundsen (2011) found that increasing adolescents' physical activity benefited their global self-worth because it elevated adolescents' perceptions of their domain-specific physical self-esteem. Thus, research suggests that changes in physical self-esteem are directly associated with changes in global self-worth, and theorists have argued that the physical self is an important aspect of self-esteem (Lau, Cheung, Ransdell, 2008).

Self-objectification and self-esteem

Choma et al. (2010) studied possible mediators between self-objectification and self-esteem, including body shame, appearance anxiety, self-surveillance, and gender. They hypothesized that higher self-surveillance (a symptom of self-objectification, McKinley & Hyde, 1996) would predict lower self-esteem, and such was the case for both men and women. However, this correlation was not stronger for women than men, as they predicted. They found that women self-objectified more and experienced more of

its negative effects than men did, but found no gender difference on the correlation between self-surveillance and self-esteem.

Choma et al. (2010) theorized that the absence of a gender difference might indicate that objectification theory may indeed be applicable to men, a new development because the theory was originally based on women's experiences. Their study is important for two reasons: First, it showed that men do experience objectification (albeit to a lesser degree than women) and that they also internalize objectified views; second, the study showed a negative correlation between self-surveillance (an aspect of self-objectification) and self-esteem.

Noser and Zeigler-Hill (2013) also explored this connection, looking at appearance-contingent self-worth, appearance self-esteem, and objectified body consciousness in undergraduate college women. Appearance-contingent self-worth means much like it sounds: One's self-worth hinges on his or her appearance. Appearance self-esteem is similar to physical self-esteem or body image. The researchers found, as hypothesized, that appearance contingent self-worth is negatively correlated with appearance self-esteem and that this connection was due to body surveillance and body shame. Noser and Zeigler-Hill found that these women based their self-worth on physical appearance and consequently monitored their bodies more closely and experienced more shame, due to their belief that their physical appearance did not meet societal standards. According to Noser and Zeigler-Hill, these women were more preoccupied with their appearance than women who did not find their worth in their physical appearance. Their body surveillance and the experience of shame led to lower levels of appearance self-esteem.

Mercurio and Landry (2008) also studied the relationship between self-objectification, body shame, and self-esteem. The researchers hypothesized that self-objectification would be negatively correlated with self-esteem and that body shame would mediate this relationship. The researchers found that, indeed, self-objectification was negatively correlated with self-esteem, and that body shame mediated the relationship: It was positively correlated with self-objectification but negatively correlated with self-esteem. The researchers also suggested that self-objectification may influence general life satisfaction because experiences in a specific domain of self-esteem (such as physical appearance) may transfer to global self-evaluations and experiences.

Body image

All of the studies cited above show that self-objectification, an attitude about the self, leads to negative emotional reactions (e.g., shame) and negatively impacts self-esteem. To the extent that self-objectification functions as an attitude, it ought also to affect body image, that is, perceptions of one's own body.

Much of the research concerning the connection between self-esteem, self-objectification, and actual ratings of the physical self focuses on the perception of one's own body (Berscheid, Walster, & Bohrnstedt 1973; Lerner, Karabenick, & Stuart, 1973; Stowers & Durm, 1996). Body image is defined as one's perceptions of and attitudes toward one's own body, particularly its appearance (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002; Davidson & McCabe, 2005). Essentially, one's body image is a mental representation of the physical self (Chakraborty & De, 2013). This physical self-image is by its nature *perceived*, and is influenced by one's attitudes toward

the self (Cash & Pruzinsky, 1990). Thus, one's body image may be influenced by self-objectification.

Research supports this assertion: A more positive and satisfied view of one's body is related to fewer feelings of worthlessness and more frequent feelings of well-being and greater self-esteem (Cash, Winstead, & Janda, 1986; Lerner et al., 1973; Mintz & Betz, 1986; Weinberg, 1960). Cash and Pruzinsky (1990) claim that self-esteem is the most essential of all the personal attributes or attitudes that affect body image. If self-objectification negatively influences self-esteem (Choma et al., 2010; Mercurio & Landry, 2008), then it should also negatively affect body image (Cash & Pruzinsky, 1990; Cash, Winstead, & Janda, 1986).

Indeed, Noser and Zeigler-Hill (2013) showed that the association between appearance-contingent self-worth and appearance self-esteem was mediated by two components of objectified body consciousness—body shame and body surveillance. Because the women in this study based their self-worth on their appearance, this objectifying of themselves was related to their appearance self-esteem. Their self-objectification was connected to their perceptions of their bodies (Noser & Zeigler-Hill, 2013).

Self-perceived facial attractiveness

Body image is a physical self-perception that can be altered by an attitude such as self-objectification (Cash & Pruzinsky, 1990; Noser & Zeigler-Hill, 2013). Physical attractiveness is another important self-perception that should theoretically be affected by self-objectification.

Physical attractiveness is an important perception because it is the basis on which we often first judge others. A large body of literature supports this assertion:

Attractiveness affects first impressions (Miller, 1970), judgments of success and happiness (Dion, Berscheid, & Walster, 1972), judgments of intelligence and competence (Clifford & Walster, 1973; Hodge, 1995), actual opportunities (Madera & Hebl, 2002), and popularity (Perrin, 1921).

The above research shows how attractiveness may influence judgments of other personality characteristics. Others have found that other personality characteristics influence perceptions of attractiveness (Felson & Bohrnsteadt, 1979; Gross & Crofton, 1977). Gross and Crofton, in their 1977 study, found that pictured females were rated as more attractive when the information given about them beforehand was favorable. If this information presented beforehand was unfavorable, then the females were rated as more unattractive. Gross and Crofton (1977) showed that personality traits or how one's personality is viewed can influence the rating of that person's physical attractiveness. This same conclusion was reached in a study on middle school-aged children (Felson & Bohrnsteadt, 1979). The children rated one another on three dimensions—physical attractiveness, athletic ability, and academic ability. The two ability ratings influenced the children's ratings of attractiveness, but this relationship did not exist in the reverse order (Felson & Bohrnsteadt, 1979). Children's perceptions of a classmate's personality influenced their perceptions of the classmate's attractiveness. Perhaps attitudes of the self are able to influence self-perceptions of physical attractiveness.

Young, Ratner, and Fazio (2014) showed how voters' attitude towards a presidential candidate affected their mental representation of the candidate's face. The

researchers used a reverse correlation image classification method that obtained estimates of participants' visual mental images of a face. This was accomplished by having the participants complete numerous trials of forced-choice tests where they chose which altered picture looked more like a certain person. The chosen pictures were then compiled into one image. This compiled image represented the participant's mental image of the particular person. Young and colleagues asked voters about their political views and voting intentions for the 2012 US Presidential candidate Mitt Romney. The researchers found that compiled images for participants who supported Romney portrayed him as significantly more trustworthy compared to those who did not support Romney. Young and colleagues showed that subjective mental representations for a person's face were altered or biased by attitudes towards that person.

Self-objectification causes shame of one's body and is linked to lowered self-esteem (Choma et al., 2010; Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Mercurio & Landry, 2008). Self-objectification also affects the perception of body image (Noser & Zeigler-Hill, 2013). Therefore, just as voters' attitudes affected their perceptions of a face (Young et al., 2014), the attitude of self-objectification should theoretically affect one's self-perceptions of facial attractiveness.

The Present Study

The repeated and frequent sexual objectification of persons can lead them to internalize the objectifying gaze of the observer and begin to view themselves in this way (Fredrickson & Roberts, 1997). Self-objectification is an attitude about the self, teaching that self-worth depends on one's physical attractiveness (Noll & Fredrickson, 1998). Noser and Zeigler-Hill (2013) showed that self-worth that is dependent on physical

appearance is linked to lower self-esteem. This association is mediated by body surveillance and body shame—two behaviors characteristic of self-objectification. Self-objectification influences how individuals view their overall self-esteem. Felson and Bohrnsteadt (1979) showed that the attitudes held about a certain person affect that person's rated physical attractiveness. Self-objectification's lower evaluation of the self should affect how a person perceives his or her physical attractiveness.

The main purpose of my study was to examine the relationship between self-objectification, self-esteem, and self-perceptions of facial attractiveness. Specifically, I wanted to examine the possibility that self-objectification acts as a self-attitude that influences one's perceptions of the self, such as self-esteem and facial attractiveness. My study was a partial replication of Pittenger and Baskett's (1984) study. Participants rated their facial attractiveness two separate times—once from memory and again when looking at a photograph of themselves. These self-ratings were then compared to independent raters' evaluations of the photographs. The main measure of interest was the difference between the two ratings, a calculation of error by which to tell if participants overestimated or underestimated their facial attractiveness, compared to independent ratings. Participants also completed a self-esteem measure as done in Pittenger and Baskett's study. In addition, in my study, participants completed two measures of self-objectification, so that the relationship between self-objectification, self-esteem, and perceptions of facial attractiveness could also be assessed.

Contrary to Pittenger and Baskett's (1984) finding, I hypothesized that overall self-esteem and self-perceived facial attractiveness will be positively correlated (Berscheid et al., 1973; Davison & McCabe, 2005; Lerner et al., 1973). Pittenger and

Baskett found a strong correlation between physical self-esteem and self-perceived facial attractiveness but did not find a significant relationship between overall self-esteem and self-perceived facial attractiveness. However, Pope and Ward (1997) report that children with craniofacial anomalies, such as cleft palate, show a direct correlation between the two variables. They found that the children's negative attitudes toward their own facial appearance was correlated with low overall self-esteem. This is another example of this direct relationship between self-perceived facial attractiveness and self-esteem.

Davison and McCabe (2005) studied the relationship between body image and different psychological and social functioning variables in adult men and women. Two of the measures they gave participants were the Rosenberg Self-Esteem Scale to measure self-esteem and a scale the researchers created called the Physical Attractiveness scale. This latter scale measured participants' perceptions of their own attractiveness. Davison and McCabe found that higher self-esteem was associated with positive perceptions of attractiveness.

I further hypothesized that self-objectification would be negatively correlated with self-esteem, a prediction supported by several past studies. For example, Choma et al. (2010) found a link between body surveillance and body shame (two aspects of self-objectification) and lower self-esteem. Mercurio and Landry (2008) also found that self-objectification was negatively correlated with self-esteem, with body surveillance and body shame mediating the relationship. Generally, individuals who have low self-esteem are likely to also have body surveillance and body shame, and therefore, are likely to self-objectify (Choma et al., 2010; Mercurio & Landry, 2008).

I also hypothesized that self-objectification will be negatively correlated with self-perceived facial attractiveness. The internalization of cultural body standards—a symptom of self-objectification—causes one to feel shame (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Attitudes about a person affect perceptions towards that person (Fazio et al., 2014; Gross & Crofton, 1977), even affecting perceptions of faces (Young et al., 2014). The attitude of self-objectification, that is shame and a lower evaluation of the self (Choma et al., 2010; McKinley & Hyde, 1996; Mercurio & Landry, 2008), should cause decreased self-perceptions of facial attractiveness.

Finally, I hypothesized that there will be a gender difference in the degree to which men and women engage in self-objectification; I predicted that women would self-objectify to a greater extent than men. With that said, I did not expect a gender difference for self-esteem. This expectation is consistent with studies like that of Strelan and Hargreaves (2005), who found more self-objectification in women than in men, but did not find a difference in self-esteem levels between genders. Several other studies have also found similar patterns: John and Ebbeck (2008) found that women self-objectified more, with women experiencing more body shame and surveillance than men. Also, Choma et al. (2010) found that women experienced self-objectification and its negative experiences more often than men did. Based on those studies, I predicted that men and women should show significantly different scores for self-objectification, but not for self-esteem.

Method

Participants

Participants included 27 undergraduate psychology students at Houghton College (10 male; 17 female) who received class credit for participation. Participants ranged in age from 18 to 52 ($M = 21.3$, $SD = 6.3$). Participants were treated in accordance with the ethical standards of the American Psychological Association.

Written Materials

Participants completed three standard written measures as a part of the experiment: the Self-Objectification Questionnaire (Fredrickson et al., 1998), the Objectified Body Consciousness Scale (McKinley & Hyde, 1996), and Rosenberg's Self-Esteem Scale (Rosenberg, 1979). All questionnaires were administered to the participants individually and were completed after the attractiveness ratings in Phase I.

The Self-Objectification Questionnaire (SOQ; Fredrickson et al., 1998) was used to measure participants' degree of self-objectification. For this scale, participants ranked 10 attributes of their physical selves in order of their subjective importance to their physical self-concepts; the rankings go from "9," "having the greatest impact" to "0," "having the least impact." The ranked attributes on the scale include five appearance-based items (weight, sex appeal, physical attractiveness, firm/sculpted muscles, and body measurements in the chest, waist, and hips) and five competence-based items (physical coordination, health, strength, energy level, and physical fitness level). The measure is based on objectification theory (Fredrickson & Roberts, 1997) and the Body Esteem Scale (Franzoi & Shields, 1984). Often self-objectification is linked to body esteem and how satisfied an individual is with his or

her body. However, the SOQ differs from the Body Esteem scale in that it does not measure an individual's satisfaction with his or her body. It is not a satisfaction or dissatisfaction with one's body that leads to self-objectification and experiencing its negative consequences but, according to objectification theory, an excessive focus on one's appearance (Fredrickson & Roberts, 1997; Noll & Fredrickson, 1998). For this reason, the SOQ measures which aspect of the physical self has a greater influence on one's physical self-concept—appearance or competence. Scoring for this scale ranged from -25 to 25, with higher scores indicating a greater impact of appearance, which theoretically translates to greater trait self-objectification (Fredrickson & Roberts, 1997; Fredrickson et al., 1998). The questionnaire measures *trait* self-objectification as opposed to state self-objectification, which can appear in individuals when they are in a situation that accentuates others' viewing of their bodies (Fredrickson et al., 1998).

The SOQ has demonstrated construct validity. Scores from the questionnaire are positively correlated with scores from both the Appearance Anxiety Questionnaire (Dion, Dion, & Keelan, 1990) and the Body Image Assessment (Williamson, Davis, Bennett, Goreczny, & Gleaves, 1985). The former assesses one's anxiety or preoccupation with his or her physical appearance and how others will evaluate it whereas the latter assesses discrepancies between one's actual body and his or her ideal body (Noll, 1996). The SOQ shows a moderate correlation with body dissatisfaction, assessed through the Body Image Assessment; this supports objectification theory in that satisfaction with one's body does not determine self-objectification (Noll & Fredrickson, 1998).

Another measure of self-objectification, the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996), was used to measure the degree to which

participants act out self-objectification. This measure includes one 8-item scale for each of the three Objectified Body Consciousness (OBC) components: surveillance, body shame, and appearance control beliefs. All 24 items are presented as personal statements, such as “I rarely think about how I look,” “I would be ashamed for people to know what I really weigh,” and “I think a person’s weight is mostly determined by the genes they are born with.” The scales are rated on a 7-point scale from “1”, strongly disagree to “7”, strongly agree.

McKinley and Hyde (1996) demonstrate the validity of the OBC scale via correlations with body esteem. In their study, surveillance and body shame were both negatively correlated with body esteem, with moderate correlations. These findings are consistent with OBC theory: A more negative evaluation of one’s body and finding that one’s body does not fit cultural standards should produce feelings of shame and greater surveillance if one has internalized the objectifications of others (McKinley & Hyde, 1996). Appearance control beliefs (the assumption that physical appearance can be in the control of the person) were not significantly correlated with body esteem. However, these control beliefs had significant correlations to both surveillance and body shame, supporting the idea that the three components of OBC are interconnected and measure self-objectification.

Participants also completed the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1979), a measure that assesses an individual’s overall self-esteem by measuring positive and negative feelings about the self. Participants rated 10 statements about their self on a 4-point Likert scale. Responses ranged from “1”, “strongly agree” to “4”, “strongly disagree.” Of the 10 statements, half were positive (“I feel that I have a number of

positive qualities”) and half were negative (“I feel I do not have much to be proud of”). Negative statements were reverse scored. Total scores for this measure range from 0 to 30 with higher total scores indicating greater self-esteem. The RSES demonstrates high test-retest reliability and has shown to be significantly correlated to other measures of self-esteem, such as the Coopersmith Self-Esteem Inventory (Coopersmith, 1967), The RSES is also negatively correlated with scales measuring depression and anxiety (Rosenberg, 1979).

Procedure

In the first phase of my study, participants signed up for the experiment via the college subject pool. I met with each participant individually in the psychology lab. Using a Sony digital camera with 18.2 megapixels, one color photograph was taken of each participant’s face (showing the head only). For the picture, participants were asked to maintain a neutral facial expression and to remove any facial accessories (e.g., glasses, earrings, hats) to control for any differences in attractiveness based on facial expression or accessories. All of the photographs were taken with the same solid background and consistent lighting.

Participants were then asked two questions concerning their own photograph. On a 7-point scale (with “1” being “not very attractive” and “7” being “very attractive”) participants were asked to rate their facial attractiveness from memory (without seeing their photograph). Participants then completed the Tower of Hanoi problem with four and five pieces as a filler activity. Afterwards, participants again rated their facial attractiveness using the same 7-point scale but were presented with their photograph (“Looking at this photo taken a few moments ago, rate your facial attractiveness”).

Photographs were presented in full screen on a 13-inch MacBook with full brightness.

After completing the attractiveness ratings, participants completed two scales measuring self-objectification, the SOQ and the OBCS, and one measuring self-esteem, the RSES.

In the second phase of the experiment, the participants' photographs were presented to a separate group of independent raters. These independent raters were 18 other undergraduate students; they received extra credit for their participation. The photographs were presented to the independent raters via a PowerPoint presentation and presented full screen to the raters using a classroom projector. For each photograph, the independent raters were asked to rate facial attractiveness (on the same 7-point scale used before) and to rate their familiarity with each person pictured. Participants were asked to indicate if they knew the person pictured and whether the person pictured was their friend. If the rater indicated that he or she was a friend of the person in the rated picture, his or her rating was dropped from the data set.

Results

Six of the participants did not accurately complete the Self-Objectification Questionnaire (Fredrickson et al., 1998), and so their data for that measure were thrown out. Hence, all computations concerning the SOQ have a smaller sample size ($n = 21$). Even still, the SOQ and the OBCS were positively correlated, validating them both as measures of self-objectification, $r(20) = 0.533, p = .01$.

The relationship between self-objectification and self-esteem was obtained by computing two Pearson correlation coefficients. The Objectified Body Consciousness Scale (McKinley & Hyde, 1996) was correlated with self-esteem as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1979), $r(26) = -0.321, p = .05$. Additionally,

self-objectification as measured on the Self-Objectification Questionnaire was also negatively correlated to self-esteem, $r(20) = -0.428, p = .03$. Thus, as scores of self-objectification increase, self-esteem decreases. Neither of the correlations between self-esteem and self-objectification was particularly strong, however.

The range of facial attractiveness ratings from the independent others ranged from 2.27 to 4.82 on a 7-point scale, generally showing somewhat negative judgments made by the independent raters. The mean facial attractiveness rating for all 27 faces was 3.67 ($SD = 0.65$). This mean closely fits that of the replicated study ($M = 3.64$) (Pittenger & Baskett, 1984).

The main measure of interest in my study was the difference between participants' self-ratings of attractiveness and those made by the independent raters. This difference was the error of the scores. To compute the error, the mean independent rating for each participant is subtracted from the participant's self-rating. Because the participants performed two ratings, one using their memory of their own face, and one using the experimenter's photograph, each participant had two error ratings. Positive error scores signified an overestimation of facial attractiveness on the part of the participant, whereas negative error scores signified an underestimation of facial attractiveness.

Participants' mean error for the rating of their own facial attractiveness from memory was 0.99 ($SD = 0.95$); in contrast, their mean error for the rating of their own attractiveness with the photograph as a reference was -0.19 ($SD = 1.47$). This shows that participants overestimated their facial attractiveness for the memory rating, whereas they slightly underestimated their attractiveness when using the photograph as a reference.

Arguably, when presented with the photograph as a reference, participants' ratings were more realistic, if not a bit pessimistic. A paired samples t test showed the difference between the memory and photograph errors ($M = 1.19$ $SD = 1.02$) to be significant, $t(26) = 5.93$, $p < .001$, two-tailed. The overall mean error rating for both memory and photograph conditions was $+0.40$ ($SD = 1.37$), indicating the general tendency for participants to overestimate their facial attractiveness.

In order to ascertain the relationship between self-perceived facial attractiveness and self-objectification I computed various Pearson correlation coefficients. Because I used two measures of self-objectification, I conducted the correlations between self-perceived facial attractiveness and each self-objectification scale separately throughout my entire analysis in case they produced differing results. I first computed the correlations between the measures of self-objectification and participants' ratings of facial attractiveness for both the memory and photograph ratings. The Self-Objectification Questionnaire showed a significant correlation with the photograph ratings, $r(20) = -0.482$, $p = .03$. The SOQ did not show a significant correlation with the memory ratings. The Objectified Body Consciousness Scale did not show any significant correlations with either the memory or photograph ratings.

Following the pattern set up by Pittenger and Baskett (1984), I again analyzed the relationship between self-perceived facial attractiveness and self-objectification, but instead of simply using the participant's ratings, I used the error scores as a measure of facial attractiveness. The error scores are the difference between the participants' rating and the average independent other rating. This difference was calculated for both the memory and photograph ratings. Using the difference scores, I was able to compare how

participants perceived their own facial attractiveness compared to an objective rating of their attractiveness. Thus, I could see if participants overestimated or underestimated their facial attractiveness compared to the objective view of the independent others' rating. I analyzed the relation between participants' overestimations and underestimations of their facial attractiveness to their level of self-objectification. Supporting the first hypothesis, a negative relationship was found between both self-objectification measures and the photograph error scores, $r(26) = -0.364, p = .03$ for OBCS; $r(20) = -0.418, p = .03$ for SOQ. Self-objectification was also found to be negatively associated with the memory error scores, but these correlations were not significant, $r(26) = -0.246, p = .22$ for OBCS; $r(20) = -0.162, p = .48$ for SOQ.

I also assessed whether self-objectification was related to objective ratings of facial attractiveness. If the findings from Davis et al. (2001) are correct, then individuals who are more attractive are more prone to self-objectification. The relationship between the independent others' objective ratings and self-objectification measured with the OBCS approached significance, $r(26) = 0.366, p = .06$. The SOQ did not show a significant association with the objective ratings of facial attractiveness.

Finally, I analyzed any relationship between self-perception of facial attractiveness and self-esteem. As with the self-objectification correlations, I first looked at the connection between self-esteem and participants' ratings of facial attractiveness. Neither the memory ratings nor the photograph ratings were significantly correlated to self-esteem. However, the relationship between self-esteem and participants' photograph ratings did approach significance, showing a tendency for a positive relationship, $r(26) = 0.327, p = .10$. I then looked for any connections between

self-esteem and the error scores (the difference between the participants' ratings of facial attractiveness and the independent other's average rating). Neither the memory or photograph error scores were significantly correlated with self-esteem; however, the photograph error scores approached significance, $r(26) = 0.308, p = .12$. I also computed a Pearson correlation coefficient to test the relationship between self-esteem and objective appearance. No significant correlation was found. Table 1 summarizes the correlational data between the variables.

Table 1

Descriptive statistics and correlations for OBCS and SOQ

<i>Measure</i>	<i>M</i>	<i>(SD)</i>	<i>Correlations</i>	
			<i>OBCS</i>	<i>SOQ</i>
OBCS	97.48	(14.82)		
SOQ	3.95	(12.38)	.53**	
RSES	21	(3.61)	-.32	-.43
Memory Rating	4.67	(.77)	.004	-.18
Photograph Rating	3.48	(1.29)	-.23	-.48*
Memory Error	0.99	(.95)	-.25	-.16
Photograph Error	-0.19	(1.47)	-.36*	-.42*
Objective rating	3.67	(.64)	.37	.02

Note: $N = 27$ for OBCS measures; $N = 21$ for SOQ measures; * $p < .05$; ** $p < .02$

Men and women showed significantly different self-objectification scores as measured by the SOQ. Women showed significantly higher levels of self-objectification ($M = -3, SD = 12.11$) than men did ($M = 13.22, SD = 3.46$), $t(19) = 3.72, p < .001$, one-tailed. Self-objectification as measured by the OBCS showed a tendency toward this same gender difference: Women scored higher on the self-objectification scores ($M = 101.12, SD = 12.67$) than men did ($M = 91.3, SD = 16.12$), $t(25) = 1.69, p = .052$, one-tailed.

An unexpected finding with regard to gender was a difference on self-esteem. Men ($M = 23.1$, $SD = 3.62$) and women ($M = 19.76$, $SD = 2.98$) showed significantly different scores on the self-esteem measure, $t(25) = 2.49$, $p < .02$, two-tailed.

Discussion

The main purpose of this study was to assess the relationship of self-objectification to self-esteem and self-perceptions of facial attractiveness, specifically in how self-objectification affects these perceptions of the self.

Self-esteem and self-perceived facial attractiveness

The first hypothesis, based on the replicated study (Pittenger & Baskett, 1984), was that there would be a positive correlation between overall self-esteem and self-perceived facial attractiveness. Although Pittenger and Baskett (1984) did not find any significant association between perceived facial attractiveness and general self-esteem, they did find a significant correlation with the physical self-concept. But because in some studies domain specific self-concepts seem to contribute to overall self-esteem (Haugen et al., 2011; Lau et al., 2008; Yeung et al., 2013), it is likely that general self-esteem is indeed connected to self-perceptions of facial attractiveness. Pope and Ward (1997) found that in children with craniofacial anomalies, such as cleft palate, negative attitudes toward their face were correlated with lower overall self-esteem. This study and others support the hypothesis that how one perceives his or her facial attractiveness is related to his or her self-esteem (Berscheid et al., 1973; Davison & McCabe, 2005; Lerner et al., 1973;).

In my study, a significant correlation between self-perception of facial attractiveness and self-esteem was not found; however, the correlation approached

significance in a tendency towards a positive association, as was hypothesized. The lack of a significant finding suggests that there is not a relationship between self-esteem and self-perceived facial attractiveness. Perhaps Pittenger and Baskett's findings were correct, in that only a correlation between self-perceived facial attractiveness and the physical self-concept could be found. Perceived attractiveness affected a specific domain of the self but was not able to affect overall self-esteem. However, it could also be the case that in my study this relationship between self-perceived facial attractiveness and self-esteem did exist, but more power was needed in order for the correlation to be significant. More research with larger sample sizes is needed in order to explain the findings in the present study. No significant correlations were found between the independent others' ratings and self-esteem; this suggests that what may matter for self-esteem is not one's actual attractiveness but how one perceives his or her attractiveness.

Self-objectification and self-esteem

I measured self-objectification using two different scales—the Self-Objectification Questionnaire (Fredrickson et al., 1997) and the Objectified Body Consciousness Scale (McKinley & Hyde, 1996)—because they seemed to measure different aspects of self-objectification. The SOQ measures individuals' focus on physical appearance (Fredrickson et al., 1998) whereas the OBCS measures the extent to which individuals act out the symptoms of self-objectification (McKinley & Hyde, 1996). In my study, these two measures produced congruent results: For both measures, higher scores signified greater self-objectification, and they were positively correlated. This

finding between the two scores validates that they are indeed both measuring self-objectification.

As an attitude about the self, self-objectification should influence perceptions about the self. Self-esteem, an attitude itself, is one such self-perception. Self-objectification showed a significant negative relationship with self-esteem, as was hypothesized. One of the negative effects of self-objectification is the feeling of shame towards one's body (McKinley & Hyde, 1996). This shame can lead to a lowered self-esteem (Noser & Zeigler-Hill, 2013). This fits past research done by Noser and Zeigler-Hill (2013), who found that appearance-contingent self-worth was correlated with appearance self-esteem, with surveillance and body shame as mediating factors. This study and others show a correlation between self-objectification and lower self-esteem (Mercurio & Landry, 2008; Choma et al., 2010).

Self-objectification and self-perceptions of facial attractiveness

The self-perception of facial attractiveness theoretically should be affected by the attitude of self-objectification: Gross and Crofton (1979) showed that the attitudes one has about a person affect his or her perceptions of that person's attractiveness. Therefore, attitudes about the self should also affect self-perceptions of attractiveness. Because self-objectification leads to shame (McKinley & Hyde, 1998), a negative attitude about the self, self-objectification should be associated with more negative perceptions of facial attractiveness (Feslon & Bohrnsteadt, 1979). As such, I hypothesized that self-objectification would be negatively correlated with self-perceived facial attractiveness. To measure self-perceived facial attractiveness, I used the participants'

facial attractiveness ratings—from memory and from when looking at the photograph—and what Pittenger and Baskett (1984) call the error of the scores.

Pittenger and Baskett introduced the term *error* to describe the difference between the independent other ratings and the self-ratings produced by the participant him or herself. I computed the error as well, using the independent others' ratings as an objective measure of facial attractiveness just as Pittenger and Baskett (1984) did. Using other people's ratings of one's facial attractiveness as the objective ratings does not equal exact accuracy but is consistent with the idea of the self-concept being formed by feedback from others (Pittenger & Baskett, 1984; Cooley, 1902/1990).

I found a negative correlation between the photograph error scores and self-objectification (McKinley & Hyde, 1996). This means that participants who evidenced high self-objectification on both measures had photograph rating scores that were lower on average than the independent others' ratings of their attractiveness. Thus, participants who self-objectified were more likely to underestimate their facial attractiveness. This finding supports the second hypothesis.

What is interesting, however, is that the memory error scores were not significantly correlated with either measure of self-objectification. Self-objectification seems to only be connected to self-perceptions of facial attractiveness when someone is able to physically see his or her face during ratings. Participants' mental representation of their facial attractiveness does not seem to be related to their level of self-objectification.

Self-objectification and objective attractiveness

A positive correlation that approached significance was found between objective attractiveness as rated by the independent others and the OBCS. Participants who were rated as more attractive were more likely to self-objectify. Davis and colleagues (2001) found that the more attractive a woman was, the more likely she was to self-objectify. They reasoned that this was due to more attractive women being sexually gazed at more often compared to unattractive women, and this more frequent sexual gaze made them more prone to self-objectification (Davis et al., 2001). Indeed, some researchers have suggested that the main cause of self-objectification is being sexually objectified (Fredrickson & Roberts, 1997). Therefore, this is likely the reason for why objective attractiveness and OBCS were positively correlated in the current study.

Gender differences

I also hypothesized that a gender difference would exist for measures of self-objectification, and that women would score higher than men. Objectification theory and objectified body consciousness theory were first created with women and their experiences in mind (Fredrickson et al., 1997; McKinley & Hyde, 1998). At one time self-objectification was thought to occur only in women; however, subsequent studies have shown that men experience self-objectification also but that they experience it to a lesser degree and are less affected by its negative consequences (Choma et al., 2010; Fredrickson et al., 1998; Strelan & Hargreaves, 2005). Comparing men and women on the SOQ showed a significant difference with women scoring higher on self-objectification than men. The OBCS did not result in a significant difference;

however, it showed the same positive tendency. This gender difference is consistent with the literature (Choma et al., 2010; John & Ebbeck, 2008).

Finally, I hypothesized that there would be no gender difference on the self-esteem scores. The absence of a gender difference would be consistent with past research (Strelan & Hargreaves, 2005); however, my results showed a significant difference between men and women on the RSES, with women having significantly lower self-esteem scores than men. Choma and colleagues (2010) reported finding a similar gender difference on self-esteem. Although my results were not as I predicted, they are consistent with some past findings. This pattern should be investigated further in future studies.

Difference in error scores

In my study I found an unexpected significant difference between the memory and photograph error scores. The results show that participants overestimated their facial attractiveness more in the memory ratings, but tended to underestimate facial attractiveness in the photograph ratings, suggesting that they may have been more realistic. This difference may have occurred because in their memory ratings, participants presumably used their mental representation of their face, their memory of what they *normally* look like. However, when presented with a picture of themselves that had been taken only a few moments earlier, they could not deny what they actually looked like. It may be that people generally overestimate their facial attractiveness when working from their memories, and remember a better-looking face than that which they really have. Participants also could have been experiencing a form of response bias, knowing that the experimenter would have access to both the photograph and their rating of the

photograph. Pittenger and Baskett (1984) found a similar result to mine, in that participants moderated the rating they gave from memory when they saw the photograph by which they made their second ratings. However, Pittenger and Baskett's participants nonetheless still *overestimated* their facial attractiveness on the photograph rating, whereas participants in the current study on the average underestimated their facial attractiveness in the photograph rating.

One reason that participants rated their facial attractiveness higher in the memory ratings may have been because their mental representation of their face did not match the picture—not simply because they overestimate their facial attractiveness but because their mental representation of their face might include emotion. Golle, Mast, and Lobmaier (2014) found that perceptions of facial attractiveness are strongly influenced by the intensity of a smile expressed on that face. Expressed positive emotions are attractive on faces. Perhaps participants rated their photograph as less attractive than their mental representation because their mental representation is of their best face with their best smile. Research on self-perceptions of facial attractiveness that allows the participants to smile in their photograph or perhaps choose what type of face to make would be interesting to pursue. Perhaps this would yield less of a difference between memory ratings and photograph ratings.

The current study found self-objectification to be negatively correlated to both self-esteem and self-perceived facial attractiveness. This supports the idea that self-objectification is an attitude about the self that is capable of influencing and affecting self-perceptions such as self-esteem and facial attractiveness. Evidence was also found that individuals overestimate their facial attractiveness mentally, but have more realistic

perceptions when viewing an actual photograph of themselves. Future research should look to find what possible protective factors there are against self-objectification. One such idea might be that individuals from certain religious and faith backgrounds would be less susceptible to self-objectify because of the different self-worth messages they have received that are contrary to society's.

References

- Archer, D., Iritani, B., Kimes, D., & Barrios, M. (1983). Face-ism: Five studies of sex differences in facial prominence. *Journal of Personality and Social Psychology*, *45*, 725-735.
- Arens, A. K., Yeung, A. S., Nagengast, B., & Hasselhorn, M. (2013). Relationship between self-esteem and academic self-concept for German elementary and secondary school students. *Educational Psychology*, *33*, 443-464.
- Bartky, S. L. (1990). *Femininity and domination: Studies in the phenomenology of oppression*. New York: Routledge.
- Baumeister, R. F. (1998). The Self. In G. Lindzey, D. Gilbert, & S. T. Fiske, (Eds.), *The Handbook of Social Psychology* (pp. 680-740). New York, NY: Oxford University Press.
- Berscheid, E., Walster, E., & Bohrnstedt, G. (1973). The happy American body: A survey report. *Psychology Today*, *7*, 119-131.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, *12*, 149.
- Cash, T. F., Fleming, E. C., Alindogan, J., Steadman, L., & Whitehead, A. (2002). Beyond body image as a trait: the development and validation of the body image states scale. *Journal of Eating Disorders*, *10*, 103-113.
- Cash, T. F., & Pruzinsky, T. (1990). *Body image: development, deviance and change*. New York: Guilford Press.
- Cash, T. F., Winstead, B. A., & Janda, L. H. (1986). The great American shapeup. *Psychology Today*, *20*, 30-34, 36-37.

- Chakraborty, R., & De, S. (2014). Body image and its relation with the concept of physical self among adolescents and young adults. *Psychological Studies, 59*, 419-426.
- Choma, B. L., Visser, B. A., Pozzebon, J. A., Bogaert, A. F., Busseri, M. A., & Sadava, S. W. (2010). Self-objectification, self-esteem, and gender: Testing a moderated mediation model. *Sex Roles, 63*, 645-656.
- Clifford, M. M., & Walster, E. (1973). The effect of physical attractiveness on teacher expectations. *Sociology of Education, 46*, 248-258.
- Connell, R. W. (1989). *Gender and power*. Redwood City, CA: Stanford University Press.
- Cooley, C. H. (1902/1990). Human nature and the social order. In A.G. Halberstadt & S.L. Ellyson (Eds.), *Social psychology readings: A century of research* (pp. 61-67). New York, NY: McGrawHill.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: W. H. Freeman & Co.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York, NY: Harper and Row.
- Davis, C., Dionne, M., & Shuster, B. (2001). Physical and psychological correlates of appearance orientation. *Personality and Individual Differences, 30*, 21-30.
- Davison, T. E., & McCabe, M. P. (2005). Relationships between men's and women's body image and their psychological, social, and sexual functioning. *Sex Roles, 52*, 463-475.
- De Beauvoir, S. (1952). *The second sex*. (H.M. Parshley, Trans.). New York: Knopf.

- Dion, K. K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24, 285-290.
- Dion, K. L., Dion, K. K., & Keelan, J. P. (1990). Appearance anxiety as a dimension of social evaluative anxiety: Exploring the ugly duckling syndrome. *Contemporary Social Psychology*, 14, 220-224.
- Fazio, R. H., RoskosEwoldsen, D. R., & Powell, M. C. (1994). Attitudes, Perception, and Attention. In P. M. Niedenthal & S. Kitayama (Eds.), *The heart's eye: Emotional influences in perception and attention* (197-216). San Diego: Academic Press.
- Felson, R. B., & Bohrnstedt, G. W. (1979). "Are the good beautiful or the beautiful good?" The relationship between children's perceptions of ability and perceptions of physical attractiveness. *Social Psychology Quarterly*, 42, 386-392.
- Franzoi, S. L., & Shields, S. A. (1984). The body esteem scale: Multidimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173-178.
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173-206.
- Fredrickson, B. L., Roberts, T. A., Noll, S. M., Quinn, D. M., & Twenge, J. M. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology*, 75, 269-284.
- Gardner, C. B. (1980). Passing by: Street remarks, address rights, and the urban female. *Sociological Inquiry*, 50, 328-356.

- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 427.
- Gross, A. E., & Crofton, C. (1977). What is good is beautiful. *Sociometry*, *40*, 85-90.
- Haines, M. E., Erchull, M. J., Liss, M., Turner, D. L., Nelson, J.A ., Ramsey, L. R., & Hurt, M. M. (2008). Predictors and effects of self-objectification in lesbians. *Psychology of Women Quarterly*, *32*, 181-187.
- Harver, A., Katkin, E. S., & Bloch, E. (1993). Signal-detection outcomes on heartbeat and respiratory resistance detection tasks in male and female subjects. *Psychophysiology*, *30*, 223-230.
- Hastorf, A. H., & Cantril, H. (1954). They saw a game: A case study. *The Journal of Abnormal and Social Psychology*, *49*, 129-134.
- Haugen, T., Säfvenbom, R., & Ommundsen, Y. (2013). Physical activity and global self worth: The role of physical self-esteem indices and gender. *Mental Health and Physical Activity*, *4*, 49-56.
- John, D. H., & Ebbeck, V. (2008). Gender-differentiated associations among objectified body consciousness, self-conceptions and physical activity. *Sex Roles*, *59*, 623-632.
- Katkin, E. S. (1985). Blood, sweat, and tears: Individual differences in autonomic self-perception. *Psychophysiology*, *22*, 125-137.
- Katkin, E. S., Bloscovich, J., & Goldband, S. (1981). Empirical assessment of visceral self-perception: Individual and sex differences in the acquisition of heartbeat discrimination. *Journal of Personality and Social Psychology*, *40*, 1095-1101.

- Lau, P. W. C., Cheuny, M. W. L., & Ransdell, L. B. (2008). A structural equation model of the relationship between body perception and self-esteem: Global physical self-concept as the mediator. *Psychology of Sport and Exercise, 9*, 493-509.
- Lerner, R. M., Karabenick, S. A., & Stuart, J. L. (1973). Relations among physical attractiveness, body attitudes, and self-concept in male and female college students. *The Journal of Psychology, 85*, 119-129.
- Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1994). The influence of age and gender on affect, physiology and their interrelations: A study of long-term marriages. *Journal of Personality and Social Psychology, 67*, 56-68.
- Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology, 37*, 2098-2109.
- Madera, J. M., & Hebl, M. R. (2012). Discrimination against facially stigmatized applicants in interviews: An eye-tracking and face-to-face investigation. *Journal of Applied Psychology, 97*, 317-330.
- McKinley, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale: Development and Validation. *Psychology of Women Quarterly, 20*, 181-215.
- Miller, A. G. (1970). Role of physical attractiveness in impression formation. *Psychonomic Science, 19*, 241-243.
- Mintz, L. B., & Betz, N. E. (1986). Sex differences in the nature, realism, and correlates of body image. *Sex Roles, 15*, 185-195.
- Noll, S. M. (1996). The relationship between sexual objectification and disordered eating: Correlational and experimental tests of body shame as a mediator. *Dissertation*

Abstracts International: Section B: The Sciences and Engineering, 57, 5926.

- Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, 22, 623-636.
- Perrin, F. A. C. (1921). Physical attractiveness and repulsiveness. *Journal of Experimental Psychology*, 4, 203-217.
- Pittenger, J. B., & Baskett, L. M. (1984). Facial self-perception: Its relation to objective appearance and self-concept. *Bulletin of the Psychonomic Society*, 22, 167-170.
- Pope, A. W., & Ward, J. (1997). Self-perceived facial appearance and psychosocial adjustment in preadolescents with craniofacial anomalies. *Cleft Palate-Craniofacial Journal*, 34, 396-401.
- Rodeheaver, D., & Stohs, J. (1991). The adaptive misperception of age in older women: Sociocultural images and psychological mechanisms of control. *Educational Gerontology*, 17, 141-156.
- Rodin, J., Silberstein, L., & Striegel-Moore, R. (1984). Women and weight: A normative discontent. *Nebraska Symposium on Motivation*, 32, 267-307.
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60, 141-156.
- Rudman, W. J., & Verdi, P. (1993). Exploitation: Comparing sexual and violent imagery of females and males in advertising. *Women and Health*, 20, 1-14.

Silberstein, L. R., Striegel-Moore, R. H., & Rodin, J. (1987). In H. Block (Ed.) *The role of shame in symptom formation*. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.

Sinclair, S. L., & Myers, J. E. (2004). The relationship between objectified body consciousness and wellness in a group of college women. *Journal of College Counseling, 7*, 150-161.

Stoltenberg, J. (1989). *Refusing to be a man*. London: University College London Press.

Stowers, D. A., & Durm, M. W. (1996). Does self-concept depend on body image? A gender analysis. *Psychological Reports, 78*, 643-646.

Strelan, P., & Hargreaves, D. (2005). Reasons for exercise and body esteem: Men's responses to self-objectification. *Sex Roles, 53*, 495-503.

Unger, R. K. (1979). *Female and male: Psychological perspectives*. New York, NY: Harper and Row.

Weinberg, J. R. .A. (1960). A further investigation of body cathexis and the self. *Journal of Consulting Psychology, 24*, 277.

Williamson, D. A., Davis, C. J., Bennett, S. M., Goreczny, A. J., & Gleaves, D. H. (1985). Development of a simple procedure for assessing body image disturbance. *Behavioral Assessment, 11*, 433-446.

Young, I.M. (1990). *Throwing like a girl and other essays in feminist philosophy and social theory*. Bloomington, IN: Indiana University Press.

Young, A. I., Ratner, K. G., & Fazio, R. H. (2014). Political attitudes bias the mental representation of a presidential candidate's face. *Psychological Science, 25*, 503-510.