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Connections between Internalization of Appearance Ideals and Presence of a Young Female Model on Body Dissatisfaction and Heterosexual Female Evaluations of Prospective Mates

by

Laura K. Morgan, M.A.

A dissertation

submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy at the Department of Psychology

Idaho State University

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RE: regarding study number IRB-FY2019-214: Connections between Internalization of Appearance Ideals and Presence of a Young Female Model on Body Dissatisfaction and Heterosexual Female Evaluations of Prospective Mates

Dear Ms. Morgan:

Thank you for your responses from a previous expedited review of the new study listed above. This is to confirm that I have approved your application.

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You may conduct your study as described in your application effective immediately. The study is subject to renewal on or before April 19, 2020, unless closed before that date.

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Sincerely,

Ralph Baergen, Ph.D., MPH, CIP
Human Subjects Chair

Dedication

I dedicate this dissertation to all of my advisors, friends, and family that supported me throughout this journey. I could not have accomplished this feat alone. To you, I am forever grateful for all of your guidance, encouragement through the long nights, and never wavering faith in my ability and persistence.

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Connections between Internalization of Appearance Ideals and Presence of a Young Female Model on Body Dissatisfaction and Heterosexual Female Evaluations of Prospective Mates

Dissertation Abstract – Idaho State University (2019)

When females internalize sociocultural ideals of thinness and beauty found in Western society, they are likely to compare their bodies to unrealistic physical standards propagated by visual media. If appearance-focused, upward comparisons occur, females may evaluate themselves as not measuring up to strict ideals of beauty to prompt heightened body dissatisfaction. Dittmar and Howard (2004) demonstrated that exposure to advertisements featuring idealized female bodies elevated body dissatisfaction, particularly among females that internalized unrealistic and highly unobtainable ideals as synonymous to their own personal standard of attractiveness. To replicate and extend Dittmar and Howard's (2004) findings, all participants were heterosexual females (n = 180; age 18 – 30, M = 26.17) categorized as either high or low internalizers and exposed to visual advertisements containing either a neutral product, a thin-idealized female model wearing a swimsuit, or identical swimsuits with no female present. After viewing stimuli, participants completed three body image measures to determine whether the manipulation elicited heightened body dissatisfaction. Following, participants rated images of males varying in attractiveness to determine whether mate preferences (evaluations of attractiveness and interest in a sexual encounter) were similarly influenced. It was expected that high internalizing participants exposed to images of thin-idealized females would express the greatest body dissatisfaction following the manipulation; this prediction was partially supported. No main effect of image type resulted; however, a significant main effect of internalization indicated that high internalizers experienced greater body dissatisfaction across all body image measures compared to low internalizers. Implications included support that internalization of appearance

ideals appears to increase vulnerability to experience body dissatisfaction which in turn may also influence the mate preferences of heterosexual females.

Keywords: internalization, female, body image, body dissatisfaction, thin-ideal, appearance, sociocultural ideals, attractiveness.

CHAPTER I: INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Socialization begins at a young age through the various experiences individuals have within their social circles and other influential institutions throughout life. This process serves to teach individuals what the ideologies and norms of a particular culture are from a young age to result in an extensive (and involuntary) awareness of guidelines encompassing what behaviors, beliefs, and actions an individual can express that will be accepted and/or condoned by society. This creates certain expectations for behavior and violations of these guidelines may predispose individuals to be evaluated negatively by the greater society. Gender roles serve as a powerful example of how cultural associations such as traditional conceptions of masculinity and femininity instruct young people how their gender restricts what is acceptable and expected of them (Fredrickson & Roberts, 1997). This demarcation of acceptable roles for males and females to occupy in society results in a power struggle where females are, more often than not, designated roles that are perceived to be subservient, inferior, or supportive compared to roles typically held by males.

The sociocultural context of the industrialized world is rampant with explicit guidelines that overtly designate which status positions are available to and acceptable for females to hold while covertly limiting the upward mobility and ultimate rank in society females can and should aspire to achieve (i.e., advertisements on the surface level function to sell goods and services; yet, a deeper examination reveals a promotion of the oppressive ideals of the dominant culture) (Dittmar & Howard, 2004). The societal structure of the Western world dictates that females are expected to be employed in occupational roles that revolve around traditionally feminine gender roles typically associated with caretaking positions (e.g., elementary teacher, nurse, secretary, etc.). Even within many areas of female-dominated occupations, males are more likely to be

employed in or promoted to higher status positions such as administration or leadership roles compared to females. This occupational segregation functions to keep females in less valued and lower paid positions while also limiting the opportunities females have to be involved in social or political discussions for change that could benefit females (Roos & Stevens, 2018). Culturally condoned and institutionalized oppressive gender practices function to prevent females from climbing the corporate ladder through convoluted schemes that operate to maintain a culture in which females simply cannot aspire to the same echelon as their male counterparts (e.g., female preoccupation with attaining idealized, unrealistically thin body expectations orients their attention away from potentially more impactful and/or meaningful achievements) (Grogan, 2017). More so for females than males, evaluations of social and personal factors are often associated with and limited by physical attractiveness as beauty is deemed as a cardinal factor of female identity (Clarke, 2018). This disparity is reinforced through covert practices directed at females that serve to exploit the deep-seated, cultural associations between a female's appearance and her societal worth (e.g., restrictions in the societal roles females are preferred and/or *permitted* to hold, in concurrence with limitations on social mobility corresponding to their level of perceived physical attractiveness by outside observers).

Theoretical Application

Traditional gender roles edify whether certain actions and/or behaviors will be perceived as acceptable at an individual and institutional level within a particular societal structure (Eastwick et al., 2006). One consequence of these enduring traditional gender roles can be gender oppression, the degree of which can vary depending on the specific culture in question. Oppressive practices are condoned through continued support of culturally accepted gender norms that serve to maintain the power disparity between males and females. There are few institutions where females are equally represented in positions of power, particularly in large

corporations (Chisholm-Burns, Spivey, Hagemann, & Josephson, 2017). The formation of gender roles may be viewed colloquially as associated with one's biological sex, yet the assignment of certain behaviors and roles as feminine or masculine is realistically rather arbitrary and has more of a basis in the differential socialization of males and females rather than limitations imposed by biology (Eastwick et al., 2006; Fredrickson & Roberts, 1997). The inseparable associations regarding a female's worth as a function of her physical appearance necessitates an understanding of how the female experience is impacted by living in a patriarchal society that values females predominantly for the usefulness of their bodies and subsequently devalues their other attributes (Dittmar, 2007; Hesse-Biber, Leavy, Quinn, & Zoino, 2006; Fredrickson & Roberts, 1997).

Western culture is highly influenced by patriarchal ideals that place females in subordinate positions in society through the restriction of opportunities to achieve power and status through means that consistently favor males throughout social, political, and economic realms (Eastwick et al., 2006). The immense, socialized concentration on and concern with the physical shape of the female body places immense pressure on females of all ages to conform to cultural ideals of thinness in order to be granted opportunities that will allow her advancement in society (Hesse-Biber et al., 2006). Even as Western culture is the particular cultural milieu of interest here, it is important to note that specific appearance ideals are abundant throughout human society making their presence not exclusive to the Western world. Many theoretical perspectives have been developed to understand the influence of appearance ideals and can be applied in many different societal and cultural settings to more fully understand how such ideals can affect the human experience, specifically in regard to females. With this in mind, concepts from Social Comparison theory, Evolutionary theory, and Objectification theory can be useful

frameworks to further understand the social reality that females are faced with by living in Western society.

Social Comparison theory (Festinger, 1954) indicates that individuals have a strong urge to compare themselves to others in order to evaluate their own abilities and status. These comparisons can occur through either downward or upward social comparisons which typically take place in relation to individuals perceived as similar to the observer. Downward comparisons take place when individuals are comparing themselves with others that are deemed to be of lesser ability or are in a less favorable position than the observer which can create positive effects such as boosted self-esteem; upward comparisons take place when individuals compare themselves with others determined to be of greater ability or in a more favorable status position and tend to result in more negative consequences such as decreased self-esteem (Myers & Crowther, 2009). Physical appearance is constructed as a central aspect of the female experience and the use of social comparisons to evaluate female physical appearance in relation to other females tends to occur in an upward manner.

As a consequence of the more frequent use of upward social comparisons, females are more likely to experience negative effects such as lowered self-esteem, heightened body dissatisfaction, and increased body monitoring when basing the status of their own appearance in relation to females perceived to be in a more beneficial position (Hesse-Biber et al., 2006; Myers & Crowther, 2009). Even as individuals are generally more likely to seek information in the environment that affirms and supports positive conceptions of the self, in situations involving evaluations of physical attractiveness , females are most likely to compare themselves in this upward fashion as a function of the physical ideals that are valued in Western culture (Myers & Crowther, 2009). Looking through the lens of Evolutionary theory would suggest that this process is rooted in the intrasexual competition that occurs between females to attain high quality

mates and further supported by the notion that female attractiveness is the primary asset of mate value that is assessed when males are seeking a romantic mate (Buss & Schmitt, 1993; Eastwick et al., 2006; Li et al., 2002; Miner & Shackelford, 2010). As Evolutionary theory is intricately related to mate selection and physical attractiveness, this particular theory will be explained in more depth after a through explanation of the principles guiding evaluations of physical attraction have been described in the relevant subsection below.

Females that adhere to and internalize cultural ideals of thinness and beauty are likely to spend a substantially greater portion of their time, energy, and finances on the aspiration to achieve such ideals (Dittmar, 2007; Hesse-Biber et al, 2006). Practices of marketing and the media serve to promulgate this drive by providing perceived tangible solutions of how to go about molding one's body into the idealized physical form (i.e., through means of product purchase) (Dittmar, 2007). The abundance of advertisement exposure creates an environment where it is almost impossible to escape the visual presentation of culturally-based ideals for the body (Dittmar, 2007; Hesse-Biber et al., 2006). Females that are prone to internalize societal ideals of thinness are more likely to habitually experience specific thoughts and practice behaviors associated with taking an outsider's perspective of the body which is a key principle associated with Objectification theory (Fredrickson & Roberts, 1997).

Females are socialized from a young age to understand that they are constantly being observed and appraised based on the state of their physical being which can lead females to adopt an outsider's perspective regarding her body (Hesse-Biber et al., 2006; Fredrickson & Roberts, 1997; Myers & Crowther, 2006). With this in mind, females learn that their body is viewed as an ornament of their worth and value in society such that more favorable bodies receive greater societal rewards than less favorable bodies (Trekels & Eggermont, 2017b). When this outsider's view is internalized, females are prone to exercise habitual body monitoring which

encourages a consistent and constant scrutiny of any physical discrepancies between the actual self and the socially prescribed idealized self (Fredrickson & Roberts, 1997). Additionally, a steady presentation by the media of the highly specific female body type representing the epitome of the thinness ideal is often construed in particular poses or angles that operate to place the focus of the observer on more sexualizing aspects of the female body.

When introducing Objectification theory as a novel framework to understand the experiences of girls and women living within a culture influenced by patriarchal principles, Fredrickson and Roberts (1997) first coined the term sexual objectification as the tendency to evaluate and view a body in terms of its usefulness rather than as a conscious entity. Objectification of the female body often results in a sexualized view of girls and women which places a disproportionate amount of emphasis on a female's physical appearance and sexual usefulness over her other characteristics. Desirable feminine characteristics are more closely tied to physical appearance than typical masculine characteristics, making attractiveness and appearance a fundamental facet of female identity. Fredrickson and Roberts (1997) describe this distinctive view of the female body and its potential to impact the psychological outcomes of girls and women by way of their lived experience to be "uniquely female" (p. 175). Since attractiveness is an important feature of mate choice, this restricting view of females not only limits their ability to improve their position in society, but also affects their potential to obtain a mate of a desirable mate value when evaluations are often restricted by the basis of nothing more than their physical appearance.

In sum, these theories provide a platform upon which a more comprehensive view of the female experience can be understood. The pressure from society to look a certain way combined with the perceptions of character and ability that go hand in hand with judgments of appearance create an environment where females are likely to be influenced by the bombardment of thinness

ideals propagated by the media. In order to recognize how socialized ideals of thinness influence the obligation to fashion one's self as highly attractive (particularly for females), a review of the appearance standards that affect judgments of attractiveness must be discussed.

Physical Attractiveness

Various assumptions of character and social standing are associated with individuals that are deemed to be good looking, which establishes physical attractiveness as a highly desirable trait for an individual to possess. An attractive appearance is placed on a proverbial pedestal, creating an intense preoccupation with physical beauty throughout many societies; the Western world is not an exception to this phenomenon. Within the first few moments of encountering someone, some essential pieces of information are effortlessly derived from the face including that individual's gender, age, ethnicity, and whether that person is known by the observer (Clarke, 2018; Perrett, 2012). Attractiveness is another vital physical attribute that is appraised quickly and seemingly automatically, even when exposure to a face lasts for only 100ms (Olsen & Marschuetz, 2005; Willis & Todorov, 2006). First impressions guide assumptions regarding the traits people are presumed to possess such as trustworthiness, likeability, warmth, intelligence, femininity, and/or masculinity (Hu et al., 2018; Kleisner, Chvátalová, & Flegr, 2014; Todorov, Olivola, Dotsch, & Mende-Siedlecki, 2015). Biased evaluations based on appearance can impact how opportunities are provided to people as many initial judgments about character are based on whether an individual's physical features are culturally idealized as attractive to both individual observers and to the larger society. These judgments are prone to be spontaneous and erroneously based almost entirely on appearance which creates the opportunity for inaccuracies to arise regarding a person's true statue, ability, or character (Grogan, 2017; Todorov et al., 2015). Inaccurate social or personal inferences based on an individual's looks may be made during these snap judgments, creating biased conclusions that may lead to life

altering outcomes when concerning substantial matters such as promotion or hiring decisions, mate choices, educational advancement, social stature, and/or sentencing decisions within the criminal justice system (Todorov et al., 2015). Incorrect inferences can impact both males and females, however; the potential consequences are often more costly for females since physical attractiveness is far more influential regarding the connection between a female's societal value and her self-worth than is typical for males (Grogan, 2017).

People tend to demonstrate a favorable bias towards attractive persons due to the perception that physical beauty is linked to positive qualities; this coupling of good looks with favorable traits is called the attractiveness halo effect (Lorenzo, Biesanz, & Human, 2010). Attractive individuals are often treated better as a consequence of their good looks which may in turn encourage them to develop the traits they are already assumed to possess, presumably as a result of internalizing this positively biased view of the self. Another interpretation of this phenomenon suggests that favorable social and individual characteristics may couple with genetic quality such that attractive individuals are more likely to possess other positive traits that tend to occur with greater physical prowess (Brand, Bonatsos, D'Orazio, & DeShong, 2011). Due to the benefits prescribed to females based on the degree of physical attractiveness they possess, females are typically more accurate at assessing their own level of physical attractiveness than males (Grogan, 2017). Highly attractive females prefer and expect to attract more appealing partners compared to less attractive females (Buss & Shackelford, 2008; Little, Burt, Penton-Voak, & Perrett, 2001). Further support for this effect is seen in females that elect to undergo invasive procedures aimed at enhancing their physical attractiveness (i.e., cosmetic surgery). Post-recovery, these females demonstrate a heightened preference for highly desirable qualities in a mate as a result of increasing the fundamental basis of their appeal as a mate: their physical appearance (Atari, Chegeni, & Fathi, 2017).

Much of the knowledge regarding universal notions of beauty originates from research examining the role physical attractiveness plays in relation to mate preferences (Shackelford, Schmitt, & Buss, 2005; Thornhill & Gangestad, 1999). Mate preferences are constrained by mate value: an individual's ability to find, attain, and retain a mate based on their own prospective appeal as a mate (Fisher, Cox, Bennett, & Gavric, 2008). While there are multiple factors that influence mate preferences, physical attractiveness is one of the primary determinants of suitability as a mate due to its connection to health, reproductive capacity, and fertility (Buss & Schmitt, 1993; Nedelec & Beaver, 2014; Thornhill & Gangestad, 1999; Peters, Rhodes, & Simmons, 2007). Due to the physical restrictions imposed on a female's ability to procreate as she ages, indications of female mate value are most detectable through the observable, physical characteristics of facial attractiveness and body shape (Buss & Schmitt, 1993; Miner & Shackelford, 2010). The attractiveness halo effect suggests that physically attractive others are perceived to possess higher levels of positive, favorable traits (e.g., intelligence, sociability, competence, sense of humor, etc.) which functions to make them highly appealing as a romantic mate (Brand et al., 2011; Lorenzo et al., 2010). Males and females both utilize cues of attractiveness in their decision making, however; these physical cues are prioritized to a greater extent by males as the physical body is a more direct indicator of a female's ability to successfully bear healthy offspring (Buss & Schmitt, 1993; Li, Bailey, Kenrick, & Linsenmeier, 2002).

Evolutionary Theory

An evolutionary perspective suggests that mate preferences are influenced by the drive to produce healthy offspring that will reach sexual maturity and further propagate one's genes (Buss & Schmitt, 1993). While males are physically capable of producing healthy children throughout most of their lifespan, females experience a greater number of physical restrictions

regarding their chances of successfully conceiving healthy babies as they advance in age (Buss & Schmitt, 1993). Fertility is defined as one's current likelihood to reproduce which, for females, peaks shortly after they gain the ability to conceive upon reaching sexual maturity; reproductive value is defined for females by the ability to successfully conceive throughout her life as she ages (Buss & Schmitt, 1993). In this sense, fertility is more closely associated with the perception of youth while reproductive value is denoted more by age as it directly impacts both a female's current and future remaining potential contribution to the gene pool. Males are presumed to have developed a preference for indications of the health and fertility of a prospective partner which can be visibly detected by physical markers associated with both age and attractiveness. Cues signifying female fecundity can be inferred through body shape, specifically waist-to-hip ratio (WHR). A WHR of .7, meaning that the waist measures at 70% of the width of the hips, is deemed to reliably be the most attractive female body shape. Females with a WHR of .7 visually exemplify optimal fat distribution along with a hip distance more conducive to successfully bearing offspring, both of which contribute to the development of the highly coveted hour-glass figure (Buss & Schmitt, 1993). Research supports the notion that females with a .7 WHR possess higher reproductive capacity along with a reduced risk of experiencing health issues, thus providing support for the reliability of this physical marker regarding appraisal of female mate appeal (Karremans, Frankenhuis, & Arons, 2010; Nedelec & Beaver, 2014; Singh, 2004).

Females with a WHR of .7 are consistently viewed as possessing the most attractive body shape when presented among an array of images differing in WHR, regardless of a female's weight and despite the anticipated time duration of an encounter (i.e., one-night stand or lasting partnership) (Li et al., 2002; Miner & Shackelford; Singh, 2004). Females tend to express a preference for males with a mesomorphic body composition, however; preferences for

masculinity and body shape vary across the phases of a female's menstrual cycle (Little, Jones, & Burriss, 2007). When discerning mate appeal, males are more likely to predictably and consistently utilize physical shape while female preferences tend to fluctuate over time. While the body as an entire entity is used when appraising physical attractiveness, research examining the body and the face independently denote that each possess unique indicators that contribute to evaluations of the overall attractiveness of an individual (Confer, Perilloux, & Buss, 2010).

Preferences for attractiveness throughout most modern societies indicate that facial features that adhere to sexual dimorphism, are configured in a symmetrical manner, and appear average looking consistently convey higher levels of physical attractiveness (Shackelford, Schmitt, & Buss, 2005; Jones, DeBruine, & Little, 2007). Bilaterally symmetrical facial features indicate genetic health and resistance to disruptions during prenatal development as some genetic disorders can prompt facial features to develop in an asymmetric manner during or after prenatal development (e.g., Down syndrome) (Nedelec & Beaver, 2014). People tend to prefer average looking faces as they convey both familiarity and normality to the observer (Shackelford & Larsen, 1999). Studies that blend together multiple individual faces to produce a single composite image of a face have demonstrated that these composite faces are evaluated to be more attractive than any of the distinct faces used in creating the composite (Jones et al., 2007). Blending together individual faces into a composite face results in a smoothing of the skin that minimizes or eliminates abnormalities such as blemishes and/or tone discoloration that are used to infer health status thus making the composite face appear more highly attractive through a subtle manipulation of the appearance of facial features (Grammer & Thornhill, 1994). Average-looking facial features have attractive, sexually dimorphic characteristics (e.g., square jaw line and heavy brow for men; full lips and large eyes for women) that correspond to prototypical representations of how human faces are expected to appear as designated by sex identity. Due to

the salience of health status when determining mate choice, faces that are symmetrical, average, and sexually dimorphic are considered to be the most highly attractive to both sexes (Nedelec & Beaver, 2014; Peters et al., 2007). Consistent findings in this field indicate that the face is generally accepted as the best proxy of overall physical attractiveness (Peters et al., 2007). While attractiveness is of vital importance for mate choice, the strength of preference for this physical marker is influenced by how long a mate encounter is intended to last (Miner & Shackelford, 2010).

Mate preferences are influenced by whether the expected duration of a romantic encounter is either long-term or short-term which determines how specific mate qualities are classified as either necessities or luxuries (Miner & Shackelford, 2010). Yet, regardless of the anticipated length of a partnership, a sufficient level of necessary traits (e.g., fertility, health, and attractiveness) must be met before traits deemed to be luxuries (e.g., creativity, sense of humor, kindness, etc.) may even be considered during mate appeal evaluations (Li et al., 2002). Physical attractiveness (especially facial attractiveness) is consistently allocated as a necessity due to the wealth of information it conveys regarding markers of individual mate value including fertility and health (Li et al., 2002). When seeking a short-term rendezvous, both sexes prioritize physical attractiveness in a sexual partner, presumably to increase the genetic prowess of any offspring that may result from a sexual encounter (Miner & Shackelford, 2010). When a long-term romantic partner is sought, mate preferences shift to reflect a prioritization of qualities that are more beneficial in regards to sustaining a partnership over time (e.g., kindness, intelligence) (Li et al., 2002). In simpler terms, it may be relatively easy to engage with an individual that does not possess desirable social or personal characteristics during a singular or short-term encounter, however; when seeking a long-term partnership, individuals are much choosier regarding the

possession of traits that will support, benefit, and enhance a sustained partnership (i.e., kindness, conscientiousness, intelligence, etc.).

Among both males and females, individuals that are of greater physical attractiveness tend to be more successful when seeking short-term sexual partners, presumably due to the favorable traits, genetic quality, and high mate value signaled by their appearance, which allows for a higher frequency of potential and successful mating opportunities (Fisher et al., 2008; Rammsayer & Troche, 2013). In a study examining how bodily and/or facial attractiveness influenced short-term or long-term mating interest, Confer et al. (2010) had male and female participants evaluating a prospective mate choose a view of only the face or only the body to assist with their decision making. Regarding short-term mating interest, males were significantly more likely to select a view of the body rather than the face; females did not significantly differ on view preference of either male face or male body in terms of potential mating duration. This finding suggests that males valued bodily attractiveness as more important than facial attractiveness when evaluating prospective female mates for a short-term sexual encounter (Confer et al., 2010). Interestingly, females that view themselves as highly attractive (especially to the opposite sex) may have a tendency to overestimate other's sexual interest in them. These females tend to be more inclined toward pursuing and/or accepting short-term mating, particularly among females that perceive her body as highly physically attractive and tend to practice body accentuating behavior more frequently (e.g., wearing flattering and/or revealing clothing) (Fisher et al., 2016; Perilloux, Cloud, & Buss, 2013; Rammsayer & Troche, 2013). The occurrence and frequency of short-term mating opportunities an individual experiences may also function to confirm that one possesses a high level of attractiveness, resulting in a self-esteem boost (Perilloux et al., 2013). These findings suggest that females are consciously aware that body attractiveness is valued more highly by males seeking short-term sexual partners, which in

turn encourages females to infer that short-term mating opportunities are available to an elevated degree to highly attractive bodies (Perilloux et al., 2013). This implies that in situations where females do not evaluate their body as attractive (i.e., from internalizing physical ideals, practicing body monitoring, and/or experiencing negative body judgments), they should be more inclined to evaluate their opportunities for short-term mating as limited since their perception of their current physical appearance is more negative. The association between appearance and femininity is intricately tied to how females are perceived in society and serves to inform females on not only how they should look, but also how their actions may be perceived by the greater society to either reap rewards or create restrictions based on the presentation of their physical features.

According to a sociocultural perspective, females are disproportionately provided fewer opportunities to increase their initial status and resources in Western cultures compared to males (Li et al., 2002). When viewed from a market-exchange perspective, this social context creates an environment where, in order to increase their initial level of status and resources, females must engage in an exchange of the characteristics desired by the opposite sex (i.e., physical attractiveness) in order to attain higher levels of social status and resources that are often established through partnerships with socially powerful males. This disparity results in females prioritizing qualities in a partner indicative of resource acquisition and social status since long-term relationships are more readily maintained with sustainable access to resources that are typically more difficult for females to easily attain (e.g., parental investment, income, social status, etc.) (Li et al., 2002). Since males are afforded more status and power from birth than females, males tend to prioritize socially-favored markers in a female partner (i.e., physical attractiveness) in order to reflect their level of social status in society. When considered from this sociocultural perspective, the value allocated to female beauty by societal standards appoints it as

a symbol of status and power which, in turn, reinforces male preferences for a physically attractive partner for both short-term and long-term partnerships (Eastwick et al., 2006; Li et al., 2002). After attaining a sufficient level of sex-specific necessities, qualities such as kindness, intelligence, emotional stability, and a pleasing disposition are reallocated to also be necessities in a long-term relationship by both sexes due to the advantages they confer for the survival of offspring and the partnership itself (Fisher et al., 2008; Li et al., 2002). Overall, physical attractiveness is considered to be the most highly prioritized quality in a prospective mate, irrespective of the anticipated time duration of a romantic or sexual encounter. The salience of attractiveness in both an evolutionary and sociocultural context appoints it as a crucial feature of the environment that people are motivated to inherently pay attention to whenever they encounter it.

Sex is considered as an evolutionary drive that is as essential to survival as the need for food and water (Fisher at el., 2008). A substantial amount of cognitive resources are dedicated to direct motivated awareness toward stimuli linked with evolutionary drives, including appraisals of the physical attentiveness of potential mates in the environment (Fisher et al., 2008). The abundance of information provided by the face (specifically mate appraisal that is considerably influenced by attractiveness) serves to make the face a highly salient feature of the environment that effortlessly necessitates the allocation of motivated attention in comparison to less relevant stimuli (Maner, Gailliot, & DeWall, 2007). The mere presence of an attractive face in an environment diminishes how quickly people can disengage their attention from an attractive target to direct it toward other stimuli or relevant tasks (Maner et al., 2007). People allocate a substantial amount of cognitive resources to processing physical attractiveness in a quick and automated manner which functions to essentially capture the attention of an observer (Johnston & Oliver-Rodriguez, 1997; Jung, Ruthruff, Tybur, Gaspelin, & Miller, 2012). Research utilizing

neurophysiological measures of brain activity indicates that brain areas typically associated with reward are activated in males viewing images of females with an optimal WHR, supporting the notion that attention directed toward physical attractiveness is not only motivated by evolutionary pertinence but is also inherently rewarding to look at which further reinforces this phenomenon (Platek & Singh, 2010; Werheid, Schacht, & Sommer, 2007).

Numerous methodologies of measuring motivated attention reveal that the mere presence of physically attractive stimuli (typically attractive faces) reliably causes participants to demonstrate difficulty shifting their attention away from attractive stimuli toward a relevant task, especially when attractive *female* faces are used (Maner et al., 2007; Johnston & Oliver-Rodriguez, 1997; Jung et al., 2012). Methodology exploring attentional disengagement during a dot-probe task revealed that females who were insecure regarding the status of their current romantic partnership and sexually promiscuous males experience pronounced delays in attentional disengagement when viewing an attractive female face (Maner et al., 2007). This suggests that insecure females and promiscuous males were both highly motivated to maintain attentional engagement with attractive female faces in terms of evaluation of either intrasexual competition or a prospective mating opportunity, respectively. In another study, females also displayed an attentional bias toward thin, female bodies compared to larger female bodies during a modified dot-probe task; this effect persisted even when the display time for stimuli was as brief as 150ms, suggesting that this bias toward cultural notions of physical attractiveness appears to be automatic (Glauert, Rhodes, Fink, & Grammer, 2017).

While males and females are both susceptible to this capturing effect, the reasoning behind each differs. Males are more prone to experience an attentional capture effect when exposed to attractive female faces as a consequence of the salient cues the face exhibits regarding appeal as a prospective female mate (Maner et al., 2007; van Hooff, Crawford, & van

Vugt, 2011). Intrasexual competition between females revolves around attractiveness, effectively motivating females to pay attention to other attractive females as they are likely to be perceived as a threat to an individual's chances at successful mating opportunities (Buss & Schmitt, 1993). The motivated and sustained attention that attractive faces garner also makes them more memorable than less attractive faces, perhaps due in part to activation in brain systems associated with reward when viewing attractive faces (Marzi & Viggiano, 2010). Broadly speaking, this line of research suggests that attractiveness is an environmental feature that demands the attention of onlookers without their conscious awareness or choice (Maner et al., 2007; Morgan & Kisley, 2014; van Hooff et al., 2011). Taken further, this suggests that people cannot help but pay attention to environmental stimuli, such as visual media advertisements, that use both attractive faces and bodies to sell products, especially female models, since the brain is wired to exhibit attentional biases toward highly attractive stimuli as a function of their reward value, sociocultural relevance, and evolutionary salience.

Media Influence

Visual advertisements are created to successfully sell goods and services which are reliably more effective when highly attractive models are used (Dittmar & Howard, 2004). Marketing schemes function by creating feelings of anxiety or inadequacy that revolve around individuals not possessing culturally valued attributes or qualities (Hesse-Biber et al., 2006). These persistent feelings of falling short regarding cultural values can be temporarily alleviated through the purchase of specific goods or services associated with achieving the ideals put forth by a given society or culture (Dittmar, 2007; Hesse-Biber et al., 2006). Yet, almost as soon as these feelings are subdued through purchase, new products and goods are released and marketed as the latest and greatest way for people to demonstrate to others that they are living in accord

with social values, creating a never ending cycle of purchasing behavior motivated by lessening feelings of anxiety associated with social inadequacy.

Dittmar (2007) describes consumer culture as presenting two ideologies that encompass the epitome of living a highly desirable and rewarding lifestyle: the material "good life" and the "body perfect." The ability to express personal values that coincide with identity is fundamental in Western culture and is typically achieved through the selective purchase of material goods that symbolize living the "good life" to the self, others, and the greater society. Physical attractiveness goes hand in hand with idealized conceptions of culture and the advertisement industry consistently exploits this perception by indicating that anyone can attain the "body perfect" ideal if people only purchase specified products associated with living the "good life." While the purchase of advertised products is not necessarily inherently harmful, the desire to aspire to a particular lifestyle and body composition can turn into a never-ending pursuit to achieve ideals that are out of reach for the majority of individuals when pursued using healthy means. The idealization of attractiveness in Western culture is persistent and can impact the daily choices people make in an effort to live up to an unattainable physical standard of beauty. While not all practices condoned by a culture are necessarily unhealthy, the "body perfect" ideal is largely unrealistic to achieve for the majority of people which can cause negative impacts on well-being and self-esteem when pursued, particularly for females (Bozsik, Whisenhunt, Hudson, Bennett, & Lundgren, 2018; Grogan, 2017).

The influence of media in the beauty industry serves to promote how standards for physical beauty are associated with specific values and ideals of a culture, particularly in relation to body types. The physical representation of the "body perfect" ideal for females is most often associated with possessing a thin frame and normatively attractive features (Hesse-Biber et al., 2006). Additionally, the most frequently represented bodies are usually of Caucasian females

with little regard to or representation of marginalized body types including those of higher weights, disabled bodies, non-gender conforming bodies, or ethnicities and/or races that are not white (Cohen, Irwin, Newton-John, & Slater, 2019). The limited nature of which body types people are typically exposed to through advertisements and the media supports the notion that the idealized female body is so highly coveted that females must seek to transform their own bodies to attain the ideals set forth by Western culture if they are to succeed socially, economically, and personally (Hesse-Biber et al., 2006). The inescapable presence of the media begins to influence how females view their own bodies at an early age through the experience of the mass exposure individuals have to visual media marketing, especially in reference to standards of the beauty industry (Trekels & Eggermont, 2017b). Adolescents are particularly apt to be influenced by societal ideals as they are more impressionable and less secure in their identity than adults.

The need to belong (Baumeister & Leary, 1995) is a strong psychological urge which can make adolescence a confusing and overwhelming time in life. Oftentimes, adolescents shy away from the influence of their parents in order to independently explore and formulate their own identity. Adolescents entering puberty are prone to be influenced to a greater extent by sources outside their home environment as they age, especially the thoughts and opinions of their peers and the media (Grabe, Ward, & Hyde, 2008; Grogan, 2017; Trekels & Eggermont, 2017a). In an attempt to fit in with societal norms and practices, adolescents beginning to explore their individual identities may turn to their peers for guidance on what behaviors are deemed not just to be acceptable, but will place them into a favorable or "popular" category ripe with social benefits and rewards (Dittmar, 2007; Trekels & Eggermont, 2017b).

Potentially as a consequence of the high frequency of advertisements and constant media coverage of celebrities, peers are prone to be influenced by the cultural ideals they are

bombarded with throughout the day (Trekels & Eggermont, 2017a). The pervasiveness of advertisements is difficult to avoid with some estimates indicating that people may view as many as 3,000 ads per day (Dittmar, 2007). The norms established by the dominant culture serve as examples of what characteristics (physical and otherwise) are valued in society which may steer many young people to look toward the media for role models (Grabe et al., 2008; Grogan, 2017). When popular media or celebrities endorse particular behaviors or products, young people may get caught up by the desire to appear up to date with the latest trends and choose to participate in behaviors falsely advertised as health-related (Dittmar, 2007). Such behaviors can be deceptive regarding whether they actually have any reliable basis in fact or science and ultimately may be harmful when practiced (e.g., diet pills; fad diets that guarantee quick results by condoning the consumption of a single food group which, in actuality, deprives the body of necessary nutrients, vitamins, and/or calories).

Successful marketing schemes in Western culture create the need to purchase a given product and one of the most prevalent ways to advertise goods and services for sale is by using the human body (Dittmar & Howard, 2004; Hesse-Biber et al., 2006). The mass media is not shy when it comes to using both male and female bodies to craft effective advertisements, regardless of whether the advertised product actually pertains to the body (Monro & Huon, 2005). Advertisements are tailored to appeal to mass audiences and the use of highly attractive models is the default go-to for a vast majority of marketing strategies (Dittmar & Howard, 2004). Perceptions of personal choice are fabricated illusions created through marketing experiences so immersive that people are largely unaware that they are ultimately being duped by schemes of consumerism rather than exercising personal choice reflective of their individuality through their selective purchase of goods and services (Dittmar, 2007).

An investigation into whether the psychological phenomenon of body dissatisfaction begins due to media influence or due to personal perception can turn into a chicken versus egg discussion; yet, evidence suggests that regardless of origin, the media is an influential purveyor of practices that encourage body dissatisfaction in order to sell products aimed at alleviating feelings of anxiety or inadequacy associated with adhering to social norms and ideals regarding the body (Dittmar & Howard, 2004; Grabe et al., 2006; Grogan, 2017). Studies examining whether individual body dissatisfaction changes after females view advertisements utilizing female models depicting the thin-ideal demonstrate significant increases in body dissatisfaction; females that chronically internalize socially-constructed beauty ideals and/or express existing body dissatisfaction prior to the manipulation tend to demonstrate stronger body dissatisfaction compared to females that do not internalize body ideals (Ashikali & Dittmar, 2012; Aubrey, 2006; Dittmar & Howard, 2004). The consequences of experiencing body dissatisfaction are widespread and can greatly alter how females interpret their value and the psychological and/or physical price they are willing to pay to attempt to achieve the ideal female body (Grabe et al., 2006; Hesse-Biber et al., 2006; Tiggeman & Polivy, 2010).

Preoccupation with the Thin-Ideal

The thin-idealized female body typically displayed in the media has not always been the specific body type identified as the most highly desirable, but the preoccupation displayed by Western culture with thin, female bodies has been the prototypical aspiration for at least the past 50 years (Hesse-Biber et al., 2006; Grogan, 2017; Sypeck et al., 2003). Larger bodies were historically viewed as representative of wealth and an abundance of food availability during times when natural resources were scarcer, but social, economic, and political changes spurred by the industrial revolution altered how society viewed the representation of wealth and status associated with the physical body (Grogan, 2017; Hesse-Biber et al., 2006). Important cultural

figures and celebrities are one of the primary sources that represent the ideals and norms for beauty within a culture (Dittmar, 2007; Pounders, 2018; Sypeck, Gray, & Ahrens, 2003). In particular, individuals such as supermodels and national beauty pageant competitors represent the notion that possessing idealized beauty is not only placed on a pedestal in Western culture, but also demonstrate the physical standard females living within this social milieu should strive to achieve (Hesse-Biber et al., 2006; Pounders, 2018). Within more recent years, the representation of bodies other than the typical thin, white, young female have become more prevalent, however; the struggle for equal representation is still progressing slowly for bodies that do not fit into the hallmark association with beauty that has been established as the epitome of attractiveness for a number of decades (Afful & Ricciardelli, 2015; Bombak, Meadows, & Billette, 2019).

The abundance of exposure to visual media can impact how people learn to view bodies and what is expected from certain bodies (Gangi & Koterba, 2017). The ideal physical shape of bodies designated by social standards and perpetuated by popular media sources shows a slender, yet muscular male body and an unrealistically thin, yet (within recent decades) toned female body (Grogan, 2017; Hesse-Biber et al., 2006; Simpson & Mazzeo, 2017; Tiggeman & Zaccardo, 2018). Male bodies are typically shown in terms of their functionality, such as demonstrating what the disciplined body is physically capable of, whereas the female body is often limited to a focus on individual body parts, such as the legs, buttocks, chest, or lips (Grogan, 2017). The highly accessible nature of advertisements reflecting these ideals establishes how bodies ought to look while similarly implying how they should not look. Socialization establishes what is acceptable within a particular cultural milieu and the need people experience to fit in with the norms of society generates a deep-seated desire to adhere to the values

prescribed by the dominant culture for fear of being judged negatively or ostracized (Fredrickson & Roberts, 1997).

Historically, the female body has been more frequently represented in the media, so much so that a higher prevalence of eating disorders occurring in females compared to males resulted in many investigations before the 1980's focusing almost exclusively on the female body (Grogan, 2017; Hesse-Biber et al., 2006). Within recent decades, a shift has taken place toward the male body receiving more representation in popular media than ever before, yet still considerably less than female bodies (Grogan, 2017). Advertisements using the male body typically focus on the body as a whole which serves to show men as individuals that possess agency and control over their lives; in contrast, are advertisements that dissect the female body for the use of her parts, signaling that women are objects to be viewed primarily for their usefulness to the observer rather than as individual agents capable of feeling and thought (Fredrickson & Roberts, 1997; Grogan, 2017, Hesse-Biber et al., 2006). While the potential for exposure to the idealized male body to negatively affect males should not be overlooked, the impact of appearance-related pressures on female's lived experience consistently encompasses a broader range of negative outcomes (Grogan, 2017; Schaefer et al., 2015).

Preoccupation with physical appearance places an immense pressure on females in particular to conform to the socially-prescribed ideal (Dittmar & Howard, 2004; Hesse-Biber et al., 2006). When ideals are internalized by females, their personal standard of attractiveness becomes synonymous with the societal standard of female beauty (Schaefer et al., 2015; Strahan et al., 2008). Adopting such a limiting and mostly unachievable definition of beauty and femininity is bound to result in a consistent preoccupation and rumination concerning the existence of any discrepancies between the ideal self and the actual self (Fredrickson & Roberts, 1997). Body image as a broad concept comprises both the positive and negative thoughts,

feelings, or perceptions associated with one's physical body that are shaped by socially endorsed standards and individual lived experiences (Fredrickson & Roberts, 1997). Body dissatisfaction can result when perceptions of one's own body are dominated by negative thoughts, which may increase the prevalence of harmful physical behaviors, such as disordered eating practices, and contribute to psychological health issues as well (Grabe et al., 2008). Feelings of body shame are experienced when negative evaluations of the body are combined with potential social exposure, resulting in a heightened awareness of physical shortcomings in comparison to prescribed ideals (Fredrickson & Roberts, 1997).

Body image is intimately connected to physical attractiveness because idealized bodies have been historically and reliably portrayed as both slender and highly attractive (Grogan, 2017). Aspirations to achieve an idealized version of one's physical self may result in a chronic fixation on the existence of self-discrepancies, especially as the thin-ideal is so pervasive throughout visual media that it is difficult to avoid (Dittmar & Howard, 2004). Since the 1950's, media representations of the female body have consistently been portrayed as thinner than the body size of average females and the epitome of thinness has also been steadily decreasing in size over time (Bozsik, Whisenhunt, Hudson, Bennett, & Lundgren, 2018). Additionally, the conceptualization of the idealized female body has shifted over the last few decades to also include an element of toned muscularity; it is no longer enough for females to merely possess a thin frame, they must also adhere to increasingly strict standards of muscle tone along with shapeliness when seeking to achieve an idealized body (Bozsik et al., 2018; Simpson & Mazzeo, 2017; Tiggeman & Zaccardo, 2018). The rewards and benefits associated with having a pleasing physical appearance creates a powerful incentive for females to enhance their appearance following the belief that possessing highly coveted looks will stimulate interpersonal success

while simultaneously increasing her chances for social and economic mobility (Clarke, 2018; Vargas, 2015).

The immense preoccupation with the thin-ideal has spurred a social movement directed at increasing both body acceptance and body positivity for bodies of all shapes and sizes in more recent years (Cohen et al., 2019). Companies that cater specifically and/or exclusively to "plus-size" consumers do exist in the marketing realm, and they have been increasing their presence in the media over recent years, fueled partly by this movement dedicated towards bringing more visibility and acceptance to traditionally non-idealized bodies. Advertising campaigns directed at increasing the visibility of more average-sized female bodies in the visual sphere of the media are becoming more abundant with the goal of normalizing bodies that are not typically displayed in the media or used in advertisements (e.g., Dove's 2004 Campaign for Real Beauty) (Pounders, 2018). In addition to this is the implementation of policies and regulations in multiple countries concerning the acceptable body size of traditionally slender female models with a shift toward a focus on the health of those individuals (Pounders, 2018).

Social media is highly influential regarding how people interact with the social sphere and how people are prone to interpret the various messages put forth by the dominant culture. Certain social media platforms such as Instagram have become proponents of the body positive movement through the actions and messages disseminated through posts by popular influencers (Afful & Ricciardelli, 2015; Bombak et al., 2019). However, the body positive movement can be a two-edged sword when a closer look is taken at the inherent messages presented by individuals that potentially have a considerable sway over how people interpret this increased focus on body acceptance. On the surface level, the intention of many body positive movements taking place through social media platforms, such as fitspiration, imply a focus on body acceptance and health, yet; content analyses demonstrate that posts associated with specific tags (e.g.,

#fitspiration) may actually encourage unhealthy practices due to a sustained preoccupation with appearance and appearance comparison, glorification of beauty and sexual suggestiveness, fat stigmatization, objectifying phrases, and food guilt and restrictive eating messages rather than encouraging individual health through sustainable practices (Afful & Ricciardelli, 2015; Alberga, Withnell, & von Ranson, 2018; Boepple & Thompson, 2015; Bombak, Meadows, & Billette, 2019; Cohen et al., 2019).

It is no secret that more physically attractive females receive better social, economical, educational, and relational benefits than less attractive females (Fredrickson & Roberts, 1997; Gupta, Etcoff, & Jaeger, 2016; Monro & Huon, 2005). The cosmetic industry takes advantage of this necessity to be beautiful by selling products intended to enhance one's appearance (Grogan, 2017). Females who take advantage of these abundant goods and services have at their disposal a seemingly infinite amount of products that smooth the skin while minimizing the appearance of blemishes to simulate a youthful, feminine appearance. Some females may even elect to undergo invasive cosmetic surgeries that artificially enhance particular body parts (e.g., breast augmentation, liposuction, collagen lip injections, etc.) to accomplish the task of improving their attractiveness. Body dissatisfaction and body shame are predictors of positive attitudes towards and the consideration to have cosmetic surgery (Vaughan-Turnbull & Lewis, 2015). Internalizing these standards results in people comparing themselves to a physical ideal they cannot live up to through the practice of body monitoring which can further contribute to chronic body dissatisfaction (Dittmar, 2007). While discrepancies between the actual self and the ideal self are perceived by both males and females, the distance between actual and ideal body shape is typically not as drastic for male bodies compared to female bodies, especially considering that the expectation for even thinner female bodies has increased over time (Bozsik et al., 2018). This socialized necessity to be the most attractive person in a room suggests it greatly benefits

females to be cognizant of their attractiveness in comparison to other females (Fredrickson & Roberts, 1997; Myers & Crowther, 2009).

Knowledge of one's status in reference to others is imperative information to be aware of as it allows one to anticipate how they will be perceived and subsequently treated by others (Clarke, 2018; Grogan, 2017). Features that are culturally perceived as physically attractive can influence many social trajectories; so much so that body shape is consistently associated with desirable personality traits, overall social appeal, and even perceptions of morality (Afful & Ricciardelli, 2015; Grogan, 2017; Hesse-Biber et al., 2006). Grogan (2017) describes a cultural shift taking place in the twenty-first century towards idealizing slenderness and demonizing excess weight which encouraged robust societal perceptions that overweight individuals possess a lack of willpower, low self-control, and even low morality. Highly sought after, idealized body forms which are challenging to obtain and maintain, such as a flat stomach, are often viewed as markers of personal success, control, and order in Western culture (Grogan, 2017; Hu, Parde, Hill, Mahmood, & O'Toole, 2018). However, the physical restrictions and mental exertion people endure to obtain and/or maintain such bodies can yield negative outcomes for physical and psychological health when obtained through unhealthy practices such as restrictive eating which can promote low self-esteem, depression, body monitoring, low self-confidence, anxiety, etc. (Fredrickson & Roberts, 1997; Gangi & Koterba, 2017; Grabe et al., 2008). Bodies that are deemed by society to be too far removed from dominant norms are likely to be ostracized, unless people identify with a subculture that has nuanced norms of idealized body composition (e.g., bodybuilder culture) (Grogan, 2017). Yet, even females that identify with deviant subcultures cannot completely escape the limitations imposed regarding whether their individual beliefs, actions, and behaviors will be condoned or penalized by society.

The body type typically portrayed by advertisements is restricted to slender bodies only, discouraging the notion that human bodies realistically vary widely in both size and shape. This discrepancy between idealized bodies shown in advertising and the average person's body encourages people to compare themselves to unrealistic and stylized bodies, which may result in normalized feelings of discontent concerning their own body status (Dittmar & Howard, 2004; Gangi & Koterba, 2017; Myers & Crowther, 2009). This discontent creates a need for consumers to alter his or her physical shape in pursuit of achieving an idealized body, typically through the purchase of goods and services (Clarke, 2018; Dittmar & Howard, 2004). Advertisements for products that promote dieting or weight-loss imply that individual body composition is relatively easy to change thus creating a mindset that obtaining the idealized body is an actuality for all people, if they only want it enough by consistently participating in specified behaviors (Dittmar & Howard, 2004). This unspoken message asserts that the use of specified products will allow an individual to transform their body, yet; for the average person, the idealized body type is physically unattainable using healthy means. This creates a perpetual cycle of purchasing products that do nothing more than sell false hope to create revenue (Dittmar & Howard, 2004). This paradoxical ploy works to get people to purchase more and more products that are advertised as a key component of achieving the unreachable physical standard idealized by the specific sociocultural environment one resides in.

As sexual maturation begins, the physical changes adolescents and young adults undergo contribute to the psychological development of their own individual identity (Gangi & Koterba, 2017; Grogan, 2017). As their physical bodies develop in ways outside of their control, young people may view themselves as moving further away from the capability to possess an idealized body. The inherent value placed on possessing an attractive physical appearance may drive young people to participate in unhealthy, non-sustainable practices (e.g., disordered eating,

excessive exercise, extreme dieting, etc.) in the pursuit of achieving cultural ideals (Fredrickson & Roberts, 1997; Ward, 2005). This is particularly true for young females entering puberty as their bodies distribute fat deposits in a configuration that might not follow the ideal form of a shapely, hourglass figure (Myers & Crowther, 2009). This can incite malicious teasing from peers which may be damaging to their self-esteem and push girls to initiate restrictive eating practices in an attempt to alter the physical development of their maturing body (Fredrickson & Roberts, 1997). In addition to the intense preoccupation concerning idealized physical shape, females are also limited by gendered restrictions concerning their societal value. The nature of being of the female gender generates a limited window of opportunity to improve their initial status that is possible, almost exclusively, by how physically attractive a female can make herself to be (Gangi & Koterba, 2017). "..Beauty is one of the primary currencies by which women gain and ultimately lose social status in Western culture" (Clarke, 2018 p. 104).

Appearance-based Comparisons

As a female's value in society is so intimately tied to her appearance, females, more so than males, tend to more frequently make appearance-based comparisons with other females as a way to estimate their own level of physical attractiveness (Gangi & Koterba, 2017; Myers & Crowther, 2009). Females that are sexually active have a greater tendency to make appearance-based comparisons since they are in direct competition with other females for opportunities to access desirable mates (Gangi & Koterba, 2017). Social comparisons can be a useful tool to anticipate how one will be perceived and subsequently treated, and appearance-based comparisons tend to occur in an upward direction, meaning that females are more likely to compare themselves to more attractive others or ideals rather than less attractive others (Gangi & Koterba, 2017; Myers & Crowther, 2009; Tiggeman & McGill, 2004). The frequency of upward comparisons can negatively impact body image for females of all ages, particularly if they have a

tendency to self-monitor their physical attributes for flaws and consistently find that they do not measure up to the idealized body type portrayed by sources of cultural standards such as the media, fashion models, or celebrities (Myers & Crowther, 2009; Strahan, et al., 2008). Western culture creates an environment where females frequently encounter opportunities to make appearance-based comparisons with other females and when combined with the tendency to self-monitor for flaws, this chain of events can result in heightened feelings of body dissatisfaction (Myers & Crowther, 2009). An effect of chronically evaluating appearance is negative body image which can also extend to perceptions of opportunities for casual sex which may subsequently impact evaluations of and preferences for the physical attractiveness of potential mates (Fisher, Hahn, DeBruine, & Jones, 2016; Perilloux, Cloud, & Buss, 2013). In order to more accurately understand how images of women in the media influence female body image and subsequent mate choice, this research sought to examine how multiple facets of body image were affected when participants were exposed to visual advertising that utilized thinness ideals displayed by female models compared to advertisements displaying products associated with body ideals without the presence of a female model or neutral products typically not associated with the body.

Current Study

The internalization of physical ideals creates an environment where females cannot seem to escape insistent judgments of their appearance that extend to assumptions about their character (Fredrickson & Roberts, 1997; Grogan, 2017). The urge to fit in with the ideals of a society to reap the benefits attractive females receive not only increases the chances that females will participate in harmful practices such as restrictive eating or excessive dieting, but also leaves them with a lesser amount of cognitive resources available to orient toward other tasks or achievements (Glauert et al., 2017; Maner et al., 2007; Harper & Tiggemann, 2008). The

prevalence of media advertisements using attractive female models that perpetuate the thin ideal promotes an environment where females are predisposed to routinely compare themselves to unrealistic representations. This can encourage negative evaluations of the self that incur lasting damage to self-esteem and impact females in both their professional and personal lives (Ashikali & Dittmar, 2012; Aubrey, 2006; Dittmar & Howard, 2004; Grogan, 2017; Harper & Tiggemann, 2008; Vargas, 2015). The culmination of these factors suggests that females may modify personal behaviors or preferences for potential romantic partners in order to adhere to ideals of beauty and femininity, especially when currently experiencing decreased evaluations of their own attractiveness. Females that perceive themselves as highly attractive tend to prefer more attractive partners since appearance is considered one of the primary and most salient indicators of female mate value (Buss & Shackelford, 2006; Fisher et al., 2008). This insinuates that negative evaluations of the physical self are likely to influence how females perceive their own appearance. Physical attractiveness plays a role in the formation of mate preferences and decreases of this self-evaluation may prompt lowered beliefs regarding one's ability to successfully attain a desirable mate, particularly in terms of short-term mating opportunities (Little et al., 2001). The relationship between body dissatisfaction, internalization of sociocultural ideals, and the mate preferences of heterosexual females was explored here.

The current study's methodology was based partly on Dittmar and Howard's (2004) study examining the subsequent body-focused anxiety (i.e., a specific conceptualization of body dissatisfaction) experienced by females following exposure to perfume advertisements either including a female model with an idealized body, a female model of average body size, or the same advertisement without the presence of a female model. Their study also explored the interaction of female profession and the perceived effectiveness of advertisement type, but the portion focused on body-anxiety was the primary basis for crafting the methodology of the

current study. Prior to viewing the advertisements, Dittmar and Howard (2004) had 150 female participants first complete a measure of internalization of cultural ideals (Sociocultural Attitudes towards Appearance Questionnaire: SATAQ; Heinberg, 1995) to categorize them as either high or low internalizers using a median split. Each condition presented two advertisements for two separate perfume products in conjunction with either (1) a thin-idealized model, (2) an average-sized model, or (3) no model. After viewing the advertisements, participants completed a short 8-item version of the state portion of the Physical Appearance State and Trait Anxiety scale (PASTAS; Reed, Thompson, Brannick, & Sacco, 1991) to measure their body-focused anxiety. A main effect of image type resulted with body-focused anxiety highest following exposure to the thin-idealized model (M = 3.06), followed by no model (M = 2.67), and lowest for the average model (M = 2.22; η^2 = .21).

For the current study, the focus was to examine how viewing a thin-idealized female model impacted instances of body dissatisfaction among female participants so the condition displaying an average-sized female model was not used. Instead, the comparison conditions consisted of a thin-idealized product only condition (swimsuit only condition) and a neutral product condition (backpack condition) to examine whether exposure to only a swimsuit could encourage a similar decrease in body image to that expected in the female model condition. The neutral product condition served as a sort of control condition that maintained the cover story of research examining marketing effectiveness. The current study had three conditions: swimwear advertised with the use of a thin-ideal female model, swimwear advertisements of the same swimsuit product only with no model present, and a neutral product condition in order to examine whether body dissatisfaction in female participants resulted from exposure to either (1) a female model perpetuating the thin ideal, (2) a product typically associated with the thin-ideal without the presence of a female model, or (3) a neutral, non-clothing product not typically

associated with the thin-ideal (a backpack) from the same clothing retailer advertised in the other two conditions.

Further analyses by Dittmar and Howard (2004) revealed that the effect of image type on body-focused anxiety was moderated by the degree to which participants internalized cultural ideals; high internalizing females experienced significantly greater body-focused anxiety compared to low internalizers ($M_{\text{High}} = 3.06$, $M_{\text{Low}} = 2.25$; $\eta^2 = .26$). An additional goal of Dittmar and Howard's (2004) study was to examine if profession impacted the severity of body-focused anxiety. Results indicated that a significant interaction was found only among high internalizing women employed in a non-appearance oriented profession (secondary school teachers) when compared to high internalizing fashion advertising employees ($\eta^2_{\text{Teachers}} = .55$; $\eta^2_{\text{Fashion}} = .16$). These results are useful for constructing the current methodology and indicated that it was imperative to utilize a measure of internalization in the current study to reveal these effects as well as to record participant profession for use as a potential covariate in analyses conducted after investigation of the primary hypotheses.

The instructions of the body-focused anxiety measure (PASTAS) used by Dittmar and Howard (2004) had participants indicate on a 5-point scale ranging from 1 (*not at all*) to 5 (*exceptionally so*) the extent to which "Right now, I feel *anxious*, *tense*, or *nervous* about" different weight-related body parts (e.g., my thighs, my buttocks, my stomach, etc.). The wording of this measure makes it highly face valid, making it easy for respondents to ascertain the construct of interest. Even though the questionnaire items were embedded among similarly worded filler items, this causes concern for the validity of the effects found here. An extension of the current study sought to alleviate the potential impact of demand characteristics by administering a well-validated measure of social desirability (Social Desirability Scale-17: SDS-17; Stöber, 2001) at the beginning of the procedure, prior to the manipulation and all body-

related measures. Should the variables of interest be significantly associated with scores on the SDS-17, social desirability would be controlled for in analyses. A cover story describing the purpose of the research as examining the effectiveness of marketing campaigns was used to help mask the true purpose of the study along with embedding filler items concerned with effective marketing and consumer opinion throughout the procedure.

For comparison to the results of Dittmar and Howard (2004), the same measures of internalization (SATAQ) and body-focused anxiety (PASTAS) were used here, however; some additional measures of body image to which responses may be more participant driven (i.e., fill in the blank rather than selecting a response option from those provided) were also selected to establish a more comprehensive understanding of how exposure to idealized images impacted various facets of body image. These measures included the Body Appreciation scale-2 (BAS-2; Tylka & Wood-Barcalow, 2005), the Objectified Body Consciousness scale (OBC; McKinley & Hyde, 1996), the Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998), and a modified version of the Twenty Statements Test (TST; as described in Fredrickson, Roberts, Noll, Quinn, & Twedge, 1998). The BAS-2 measured the concept of body appreciation. The OBC measured the contribution of three specific components (body surveillance, body shame, and appearance control beliefs) to negative body evaluation. The SOQ measured trait self-objectification and the TST measured state self-objectification. A full description of these measures and the order in which they were administered are described in detail below in the Materials section.

The relationship between physical attractiveness and body dissatisfaction indicated that exposure to idealized images of female bodies in conjunction with internalization of cultural ideals can prompt females to negatively evaluate their own body which can extend to perceptions of their self-rated attractiveness (Myers & Crowther, 2009). Appearance is a central component

of female identity, so much so that experiences prompting negative perceptions of one's attractiveness may modify the expression of mate preferences in accordance with lowered perceptions of their appearance resulting from exposure to advertisements displaying a thin-idealized female model (Little et al., 2001). The success of (specifically short-term) mating is one facet of mate preference that seems to be associated with self-perceived attractiveness; more attractive individuals have better access to and success regarding favorable, short-term mating opportunities (Fisher et al., 2016; Perilloux et al., 2013; Rammsayer & Troche, 2013). Access to mating opportunities tend to be limited by an individual's own attractiveness such that people tend to be attracted to and successfully pair with potential mates that are of a similar attractiveness level to themselves, essentially establishing a lower limit of an acceptable level of physical attractiveness for a prospective mate (Little et al., 2001). This implies that when individuals are driven to evaluate their physical appearance as lower than their typical baseline evaluation, their interest in prospective mates may also change such that their attractiveness standard may be lowered to parallel this perceived decrease in attractiveness. This may result in increased romantic and/or sexual acceptance of prospects that would usually be outside of the lower limit and may also manifest in higher attractiveness evaluations of a prospective mate in comparison to objective judgments of attractiveness. The variety of potential outcomes discussed above was an exploratory element of the current study, as the existence of a relationship between mate preferences and body dissatisfaction is not entirely clear from previous research. This exploratory goal sought to clarify if instances of experiencing body dissatisfaction among high internalizing females would alter the mating preferences of those females. For the purpose of this study, mate preferences were operationalized as perceptions of the appeal of a prospective male mate (facial attractiveness, sexual attractiveness, and interest in both a short-term and long-term sexual encounter).

For the purpose of examining the influence of body dissatisfaction on physical attraction and mate preferences, after completion of viewing advertisements associated with each condition, participants indicated their romantic interest in 18 target images of prospective opposite-sex mates. Responses to each image included rating the physical attractiveness, sexual attractiveness, and participant interest in both a short-term and long-term sexual encounter with the target. Additional filler items (e.g., "How effective do you think this person would be as a campaign model," "What is the likelihood you would purchase a product if this individual appeared in an advertisement," etc.) were also used to support the cover story. High internalizing participants in the female model condition were expected to demonstrate a different pattern of mate preferences compared to both the swimsuit only and the neutral product conditions due to a decreased perception of self-rated attractiveness as a result of experiencing increased body dissatisfaction.

The current study examined how female body image was impacted by exposure to either (1) images of thin-idealized, conventionally attractive female models advertising bikini-style swimwear (female model condition), (2) images of the same bikini-style swimwear displayed on a white background with no model present (swimsuit only condition), or (3) images of a neutral non-clothing product with no model present (backpack condition). Further, the impact of exposure to one of these image sets was explored to identify any influence it had on female evaluation of potential male targets varying in physical attractiveness in terms of evaluations of facial and sexual attractiveness, and interest in a sexual encounter with the target (mate preferences). The following hypotheses were formulated based on a review of the literature and findings of previous studies.

(1) A main effect of image type was predicted. Participants in the female model condition would demonstrate significantly higher body dissatisfaction compared to participants in any other image type condition.

(2) A main effect of internalization was predicted. High internalizers would demonstrate significantly greater body dissatisfaction compared to low internalizers.

(3) An interaction effect of image type and internalization was predicted. Degree of internalization was expected to moderate body dissatisfaction such that high internalizing participants in the female model condition would demonstrate the significantly highest body dissatisfaction compared to all other combinations of image type and internalization.

The following exploratory hypothesis presumed that a relationship existed between the variables of interest and sought to determine if a significant relationship could be garnered from the current study design.

(4) Significant relationships between image condition, internalization, and the mate preference variables (physical/sexual attractiveness ratings of targets and participant interest in both a short-term and long-term sexual encounter with targets) were expected, however; since this hypothesis was exploratory, the specific direction of the effects were not predicted.

Power Analysis

For the current study, effect sizes from Dittmar and Howard's (2004) study were used to determine appropriate sample size. In Dittmar and Howard's (2004) study, a significant main effect of image type demonstrated an effect size of $\eta^2 = .21$ regarding the comparison of images containing (1) a thin female model, (2) an average-sized female model, or (3) no model. Additionally, a significant main effect of internalization demonstrated an effect size of $\eta^2 = .26$

such that high internalizers reported significantly greater body-focused anxiety compared to low internalizers. The two-way interaction of image type and internalization demonstrated an effect size of $\eta^2 = .09$.

Using G*Power version 3.1, sample sizes for a 3 x 2 ANOVA were calculated using α = .05, power = .80, number of groups = 6, and the effect size for the interaction effect ($\eta^2 = .09$, converted to an f value of 0.3145). Power analysis indicated that a minimum total sample size of 104 was recommended for sufficient power to demonstrate the predicted interaction effect. To account for anticipation of potential missing data, inattention, outliers, and participant attrition, a minimum sample size of 150 was collected for the current study. This sample size supported a fully powered replication of Dittmar and Howard's (2004) procedures. After the primary analyses were conducted, potential covariates were explored by examining the correlation table between all variables. If significant correlations were found between the variables of interest and other recorded variables (specifically looking at social desirability and age), further analyses controlling for covariates (ANCOVA) were conducted.

A power analysis testing for adequate sample size if ANCOVA was required using the indicated sample size of 150, α = .05, number of groups = 6, and effect size = 0.31 determined that up to 10 covariates could be controlled for while maintaining power at .92 with the current sample size of 150. To analyze internalization as a continuous variable, a power analysis for multiple regression was conducted with α = .05, power = .80, number of predictors = 6, effect size $f^2 = 0.09$ and indicated a minimum sample size of 149. While the current sample size of 150 would maintain power at .80 for the planned exploratory multiple regression analysis with internalization as a continuous variable, it was possible that the final *n* after controlling for missing data, inattention, outliers, and attrition may not reach 150. Another power analysis examined how sample size would change for the multiple regression analysis if power was

reduced to .70 to indicate that a sample size of 123 would be sufficient to maintain this value. While it would be ideal to maintain power at .80 across all analyses, as is typical in psychological research, some tradeoff of power and sample size may be needed for study feasibility. Thus, the target sample size for this study was 150. This number of participants was more than sufficient (even after data quality control) for the main analysis (3 x 2 ANOVA) and exploratory hypotheses testing in the current study. Additionally, this sample size was sufficient for ANCOVA analyses (if necessary), and also for exploratory multiple regression analysis (although this may result in a slight reduction of power to .70).

CHAPTER II: METHODOLOGY

Participants

The participants for this study were selected from an online crowdsourcing marketplace hosted by Amazon called Mechanical Turk (MTurk). Additionally, the study utilized Turk Prime, a separate interface for collecting data that integrates with MTurk and allows for more streamlined participant recruitment including setting inclusion/exclusion criteria. As this study was examining whether the presence of a female model impacted female body image and heterosexual mate preferences, inclusion criteria was identifying as a single, heterosexual female. Additional inclusion criteria included being a current U.S. citizen, speaking English as a first language, and being between the ages of 18 and 30. The age of eligible participants was restricted to this range since media figures function as a more significant source of body image role models for younger females compared to middle-age and older females (Grogan, 2017).

Data was collected from 476 participants. Some participants indicated they might have inferred the true purpose of the study (n = 12) so their data was removed from subsequent analyses. Participants that indicated they either did or might have recognized any of the males pictured in the target images (n = 17) were removed from analyses examining their mate preferences as this only presented a potential confound for their mate preference ratings, but would not have altered their responses to the body image portion since they evaluated the male targets as their final task during the procedure. Out of the remaining 464 responses from individuals who did not infer the true purpose of the study, 180 were deemed to be valid data points for use in the current analyses in accordance with the required number of correct responses to attention checks (80%) and the eligibility requirements of respondents indicating they were female, heterosexual, single (not in a romantic relationship), age 18 – 30, a US citizen, and spoke English as their first language. These 180 participants self-identified as European

American (white) non-Hispanic (67.2%), African-American (black) (9.4%), Hispanic/Latino (11.7%), Asian American or Pacific Islander (7.8%), Native American (1.1%), more than one race or ethnicity (1.1%), not listed (1.7%). The age of participants ranged from 18-30 (M = 26.17, SD = 2.97). The individual annual income of participants ranged from less than $10,000 to more than $150,000 with the highest percentage (20.6%) indicating they earned $30,000 - $39,999 annually.

Respondents indicated whether they were currently pursuing a higher education degree with 2.2% seeking an Associate's degree, 17.2% seeking a Bachelor's degree, 3.9% seeking a Master's degree, 1.1% seeking a Doctoral degree, and 75.6% not currently seeking a degree. Years of education ranged from 12 years to 18 years with 37.8% indicated they had acquired the equivalent of a Bachelor's degree with 16 years of completed education. Participants selected their current occupational field from 16 options including Agriculture, Food, and Natural Resources (1.1%), Architecture and Construction (0%), Arts, Audio/Video Technology, and Communications (8.3%), Business Management and Administration (5%), Education and Training (13.9%), Finance (11.7%), Government and Public Administration (2.8%), Health Sciences (6.7%), Hospitality and Tourism (7.2%), Human Services (8.3%), Information Technology (8.9%), Law, Public Safety, Corrections and Security (1.7%), Manufacturing (2.2%), Marketing, Sales, and Service (15%), Science, Technology, Engineering, and Mathematics (5%), or Transportation, Distribution, and Logistics (1.1%). Participants indicated whether they had been previously sexually active (yes: 85%; no: 15%) and were currently sexually active (yes: 41.1%; no: 43.9%) with 15% preferring not to answer. Current use of birth control indicated that 40.6% were currently taking some form of hormonal birth control while 59.4% were not. When asked about the start date of their most recent menstrual cycle 69 out of 180 (38.3%) reported being 100% sure of the accuracy of their response. Estimates of whether

participants were currently cycling indicated that 27.1% were not, 67.7% were currently cycling, and 5.2% either did not respond or did not provide enough information to establish a reliable estimate.

Materials

To measure body image, multiple measures were used to achieve a more accurate understanding of how females perceive their body in regard to sociocultural expectations that can influence perceptions of physical appearance. Body image was measured using three scales to create a more complete picture of the various components of body image (see Measures below) that may be impacted including body appreciation (BAS-2), body consciousness (OBC), and body-focused state anxiety (PASTAS). The Self-Objectification Questionnaire (SOQ) was used as a baseline comparison of the degree of trait self-objectification of participants prior to the experimental manipulation to examine if the distribution of this participant characteristic was roughly equivalent following random assignment to condition. Internalization of cultural ideals was assessed by the Sociocultural Attitudes towards Appearance Questionnaire (SATAQ) to categorize participants as either high or low internalizers. A modified version of the Twenty Statements Test (TST) was used as a manipulation check after participants completed viewing the stimuli associated with each condition.

The images used in the current study consisted of 9 images of Victoria's Secret models advertising bikini-style swimsuits (female model condition), 9 images of the same swimsuit imposed on a white background (swimsuit only condition), and 9 images of Victoria's Secret brand backpacks to serve as a neutral product (backpack condition) to support the cover story of product market appeal. See Appendix J for example images. The images were collected from the Victoria's Secret website during the spring 2016 swimsuit campaign. All female model stimuli were full-color images and showed a frontal view of the body from the top of the head to just

above the knees and consisted of female models wearing bikini-style swimsuits of various color schemes. Facial expression of the models could be described as neutral or slightly sultry in accordance with typical swimsuit advertisements created by Victoria's Secret. With the results of the original Fredrickson and Roberts (1998) study in mind, swimsuit advertisement stimuli was selected as a bikini-style swimsuit is one of the most potentially body-revealing pieces of clothing a female may permissibly wear in public. Advertisements for this product commonly feature thin-idealized, female bodies which made it an appropriate stimulus for use in the current study in order to examine how viewing images of this kind may impact perceptions of female body image (Strahan, et al., 2008). Victoria's Secret is one of the most well-known and successful female-oriented lingerie/swimsuit retailers in Western culture; many of the models they employ are identified as some of the most successful female supermodels in the world and are commonly touted as some of the most (conventionally) beautiful women in the Western world. With this in mind, the stimuli selected for this study would not be appropriate for non-Western cultures due to their associations with specific appearance ideals present in Western culture.

Measures

Participants were required to respond correctly to a captcha (to verify that they are not a bot) and complete an eligibly check before they could proceed to the measures of the study. In addition to all measures, attention checks were embedded among the survey items throughout the experiment for quality control to ensure that participants were maintaining a sufficient level of attention to the wording of measures throughout the procedure. Questions that required participants to select a specific response were included as attention checks approximately every 20 questions.

Social Desirability Scale-17 (SDS-17; Stöber, 2001). This revised 16-item scale measured the extent to which people described themselves as possessing socially desirable attributes. Respondents were instructed to mark each statement as being "*true*" or "*false*" of them. Scores were calculated by allocating one point for each true response on items 2, 3, 4, 7, 8, 9, 11, 12, 13, and 15; items 1, 5, 6, 10, 14, and 16 received one point for each false response. Scores ranged from 0-16 (M = 8.72, SD = 3.87) with higher scores indicating more socially desirable responding. Example items included "In traffic, I am always polite and considerate of others," "I take out my bad moods on others now and again," and "I always eat a healthy diet." This measure was used to determine whether participants tended to present themselves in socially desirable ways (α = .71). See Appendix A.

Sociocultural Attitudes towards Appearance Questionnaire (SATAQ; Heinberg, 1995). Only the 8-item internalization subscale was used in the current study. This scale measured the degree of internalization of sociocultural standards of appearance-focused body image ideals. Items were scored on a 5-point Likert scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). To calculate the scale score, item 4 was reverse keyed and all items for the scale were summed. Scores ranged from 8-40 (M = 25.53, SD = 7.55) with higher scores indicating greater acceptance and internalization of sociocultural appearance ideals. Internal consistency for this measure was good (α = .89). Example items from the internalization subscale included "I believe that clothes look better on thin models" and "Photographs of thin women make me wish that I were thin." This measure was selected to examine the degree to which participants endorsed social appearance ideals of body image through the internalization of cultural standards. Replicating the same procedure as Dittmar and Howard (2004), a median split of responses was used to categorize participants as either high ($\geq$ 27) or low internalizers ($\leq$ 26). See Appendix B.

Self-Objectification Questionnaire (SOQ; Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). This scale measured trait self-objectification by having respondents rank a set of 10 attributes in order of importance to one's physical self-concept. Five attributes were competence based (physical coordination, health, strength, energy level (i.e., stamina), and physical fitness level) while five were appearance-based (weight, sex appeal, physical attractiveness, firm/sculpted muscles, and measurements e.g., chest, waist, hips). Scores were calculated by summing the competence and appearance items separately to then determine a difference score. Responses ranged from -25 to 25 (M = -1.17, SD = 13.75) with positive scores indicating a greater focus on physical appearance which was interpreted as higher trait self-objectification (α = .74). This scale was selected to establish a participant-driven baseline of trait self-objectification prior to the experimental manipulation. See Appendix C.

Twenty Statements Test (TST; Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). This respondent-driven measure examined participant state self-objectification. Typically, respondents complete 20 "I am" statements describing their identity to themselves and responses are categorized into six types of responses: body shape and size, other physical appearance, physical competence, traits or abilities, states or emotions, and uncodable/illegible. Statements classified as referring to the physical body or other physical appearance indicated higher state self-objectification. This measure was selected for use in the current study as a manipulation check after participants finished viewing the stimuli associated with their assigned condition. A greater number of responses falling into the physical body and appearance categories were expected from participants in the female model condition. This test was modified for the current study and only required participants to complete 10 "I am" statements to keep the entirety of the study within a manageable completion time. See Appendix D.

The Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2005). This 10-item revised version of the original 13-item scale (Avalos, Tylka, & Wood-Barcalow, 2005) measured how individuals viewed their body in terms of acceptance, holding favorable opinions towards, and respect for the body. Scores for each item were indicated on a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*). Example items included "I am attentive to my body's needs," "I appreciate the different and unique characteristics of my body," and "I am comfortable in my body." Total score for the measure was determined by calculating the average score across all items. Scores ranged from 12-50 with higher scores indicating greater body appreciation (M = 35.16, SD = 9.37, α = .96). This measure was selected to examine differential aspects of body image including body appreciation. See Appendix E.

Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996). This 24-item scale measured three components regarding behaviors and attitudes that contribute to negative body experience. Items were scored on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) or the item could be designated as n/a if the respondent felt the item did not apply to them; items marked as n/a were counted as missing. Responses to items 1-4, 7, 8, 13, 15, 17, 18, 20-22, and 24 were reverse scored. Scores for the three subscales (body surveillance; items 1-8; body shame: items 9-16; appearance control beliefs: items 17-24) were calculated separately by summing responses to each subscale (after appropriate items were reverse-scored) and divided by the number of non-missing items. Subscale scores could not be calculated if more than 25% of the items were marked as n/a or had no response. Higher scores on the body surveillance and body shame subscales represented greater body anxiety associated with negatively appraising their appearance; higher scores on the appearance control beliefs subscale represented increased beliefs that one can exert control over their weight and appearance with enough effort (body surveillance: range 8-56, M = 34.14, SD = 10.07, α = .87; body shame:

range 8-56, *M* = 31.66, *SD* = 10.84, α = .86; appearance control beliefs: range 9-56, *M* = 36.51, *SD* = 9.12, α = .86). Example items included "I rarely compare how I look with how other people look," "I feel ashamed of myself when I haven't made the best effort to look my best," and "I think a person can look pretty much how they want to if they are willing to work at it." This measure was originally validated using a group of young women (*M* = 18.41, *SD* = .72) and middle-aged women (*M* = 46.32, *SD* = .4.13) and demonstrated that each subscale was internally consistent: body surveillance: α = .79 and .76; body shame: α = .84 and .70; appearance control beliefs: α = .68 and .76 for young women and middle-aged women, respectively. This measure was selected for use in the current study to examine the extent to which participants had internalized behaviors and attitudes consistent with beliefs that contribute to principles of body dissatisfaction. See Appendix F.

Physical Appearance State and Trait Scale (PASTAS; Reed, Thompson, Brannick, & Sacco, 1991). The state portion of this scale measured the immediate anxiety indicative of state self-objectification associated with various weight-related body parts. Responses were recorded on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*exceptionally so*) and measured the extent to which "Right now, I feel *anxious, tense,* or *nervous* about" different weight-related body parts (e.g., my thighs, my buttocks, my stomach, etc.). Higher scores indicated greater state self-objectification (range 1 - 5, *M* = 2.19, *SD* = 0.99, α = .93). This scale was selected for use here as a measure of state self-objectification and for comparison purposes to the results of Dittmar and Howard (2004). See Appendix G.

Prospective Mate Target Images. Each target prospective mate image portrayed a black and white, frontal view of a male face with a neutral expression. All images were evaluated previously by two separate groups of participants ($n_{\text{female only}}$ = 257) to establish normed ratings of physical attractiveness on a 7-point scale with values of 1 (*very unattractive*), 4 (*neither*

attractive nor unattractive), 7 (*very attractive*). This resulted in the categorization of 20 images into three levels of attractiveness defined as high, moderate, or low attractive stimuli. The images used in the current study consisted of 6 highly attractive, 6 moderately attractive, and 6 low attractive images to total 18 images. See Appendix H for example images.

Mate Preferences. Participants responded to four questions to examine their mate preferences in regard to each male target image. Facial and sexual attractiveness were assessed with the same 7-point scale ranging from 1 (*very unattractive*), 4 (*neither attractive nor unattractive*), 7 (*very attractive*) so that ratings of facial attractiveness would be comparable to the previously acquired, normed ratings. Interest in both a short-term and long-term sexual encounter with the target was rated on a 5-point scale ranging from 1 (*no interest*), 3 (*moderate interest*), to 5 (*very high interest*). Additional filler items referring to marketing topics (e.g., "would you purchase a product if this model was present in an advertisement", "do you think the individual pictured here would sell many products", etc.) were included to support the cover story but were not analyzed. See Appendix I.

For quality control, participants also completed two open-response behavioral imprint items to identify whether any bots had completed the study since questions of this nature are far more difficult for bots to populate logical responses to. Each of these items required a fill-in-the-blank response and included the items "how did you make your decisions about the male models?" and "in your own words, briefly describe what you believe this study is about?" These two additional attention checks occurred at the end of data collection.

Procedure

After approval from the dissertation committee and the Human Subjects Committee at Idaho State University, data collection began. Once participants elected to sign up for the study on MTurk, the experimental procedure was executed through the use of Qualtrics, a research

software service used to collect survey data for a variety of professions. Participants read and electronically indicated their consent to participate in data collection for the current study. Upon completion of the consent form, participants were required to respond correctly to a captcha before proceeding to the eligibly check and completing the study items. Upon appropriate responding to the captcha and verifying their eligibility (e.g., sex is female, indicate a heterosexual orientation, within the 18-30 age range, relationship status of single, first language is English, and current US citizen), participants proceeded to the measures of interest. The SDS-17 was the first scale administered to participants followed by the SATAQ to measure their degree of internalization of cultural ideals. The SOQ measure was administered prior to viewing condition specific stimuli images to determine if systematic differences existed on initial trait self-objectification.

Participants were provided with a (fictional) overview of the purpose of the study to set up the cover story prior to viewing condition-specific images. The cover story indicated that the study was examining marketing advertisements of clothing retailers aimed at young women. Random assignment to condition determined which set of images (female model/ swimsuit only/ backpack) participants viewed. Each image was responded to in line with advertising questions drawn from Dittmar and Howard (2004) including "how would you describe your reaction to this advertisement (brand)?" and "what is the likelihood that you would purchase this product?" to support the cover story. After all images had been viewed and responded to, a modified 10-item version of the TST was administered as a manipulation check. The three body image questionnaires were then completed in the order of BAS-2, OBC, and PASTAS. Following a brief cover story description on the topic of whether "sex sells" in advertisements, the respondent indicated their perceptions concerning the effectiveness of males either (fictionally) employed or seeking to be employed in the advertisement industry; the 18 target images of prospective mates

were displayed in a randomized order. Participants rated each target on their facial attractiveness, sexual attractiveness, and interest the participant had in both a short-term and long-term sexual encounter with the target. After rating the 18 male images, participants indicated whether they recognized any of the males pictured ("did you recognize any of the men?"), if so, all images were displayed so they could indicate which targets they recognized.

Demographics were collected on age, sex, race and ethnicity, education level, profession, weight, height, individual income, sexual orientation, hormonal contraception use (and what type, when applicable), start date of their last menstrual cycle, relationship status, relationship duration (if currently involved in a committed relationship), and whether the participant was previously and/or currently sexually active. Participants also responded to a few open-ended questions regarding their perception of advertisements and opinion of marketing strategies (e.g., "how did you make your decisions about the male models"; "do you agree or disagree with the concept that sex sells in marketing and advertising"). In accordance with Dittmar and Howard's (2004) study, the last item asked participants what they believed the specific purpose of the study was examining so that participants that correctly guessed the topic of research could be excluded from analysis. Participants were then thanked for their time, debriefed as to the true purpose of the study, and informed that they would receive payment for their responses after a quality and eligibility check on the provided data had been completed. The duration of survey completion ranged from 9.98 min to 66.63 min (M = 27.11, SD = 11.43). As the going rate for MTurk workers is indicated as ~$1.50 per hour (Mason & Suri, 2011), participants were compensated $1.50 for their contribution to the current study.

CHAPTER III: RESULTS

Data Analysis

Statistical procedures were performed with the use of the Statistical Packages for the Social Sciences (SPSS) software. Descriptive statistics were performed on the demographic data collected to describe the sample of participants. Inferential statistics were conducted on the variables of interest in line with the proposed predictions. The independent variable for this study was image condition (3: female model/ swimsuit only/ backpack) along with the participant variable of internalization of sociocultural body standards (2: high/low) to form six groups total. The dependent variables for the primary hypotheses were body image as measured by the (1) BAS-2, (2) OBC, and the (3) PASTAS (hypotheses 1-3). The dependent variables for the exploratory hypothesis (4) were mate preferences as measured by responses to 18 images of prospective male mates for items of (1) facial attractiveness ratings, (2) sexual attractiveness ratings, and participant interest in both (3) a short-term and (4) long-term sexual encounter with the target. While internalization was analyzed as a categorical variable to replicate the procedure used by Dittmar and Howard (2004), this variable was also analyzed as a continuous variable using multiple regression to further examine how this variable may impact the dependent variables of interest by increasing response variance through maintaining the integrity of responses using the original scale.

Before any analyses took place, the data were cleaned, underwent quality control, and checked for adherence to the assumptions for ANOVA. For quality control, participants were required to respond correctly to a captcha after providing consent to participate but prior to completing any questionnaires to eliminate the potential for any bots to complete the study in lieu of human participants. Additionally, attention checks were included approximately every 20 questions; 4 out of the 5 (80%) attention checks had to be responded to correctly for the data to

meet the required level of quality for inclusion in the final dataset. For the two open-response questions ("how did you make your decisions about the male models?" and "in your own words, briefly describe what you believe this study is about?"), responses to how decisions were made about the targets were only evaluated for logical sentence structure as a quality control measure, specific responses of how participants came to determine their ratings may be examined in detail at a later date for a future set of analyses. Participant responses indicative of inferring the true purpose of the study prior to completion were removed from analysis (n = 12) since their responses would likely be more indicative of desirable responding bias rather than influenced from the elements of the study. Potential outliers for survey measures were identified as responses occurring more than two standard deviations outside mean responses.

Primary hypotheses were conducted using a two-way ANOVA with image type (3) x internalization (2) as independent variables for each of the dependent variables. Analyses were conducted to investigate the main effect of image type (hypothesis 1), main effect of internalization (hypothesis 2), and the interaction between image type and internalization (hypothesis 3) resulting in a statistical analysis for each body image measure: (1) BAS-2, (2) OBC, and (3) PASTAS. ANOVAs were conducted for each averaged rating of mate preference (exploratory hypothesis 4): (1) facial attractiveness, (2) sexual attractiveness, (3) interest in a short-term sexual encounter with the target, and (4) interest in a long-term sexual encounter for each level of target attractiveness (low/moderate/high).

Following the primary analyses, potential covariates were identified by looking for significant correlations between potential covariates (e.g., demographics) and the dependent variables. Scores on the SDS-17 were specifically examined as a potential covariate in the current study to ensure that results are due to the experimental manipulation and not due to

demand characteristics. Age and occupation were also specifically examined as potential covariates to replicate the procedure of Dittmar and Howard (2004).

Prior to performing inferential analyses, data were examined as to whether they adhered to the assumptions of a two-way ANOVA. All dependent variables were measured on a continuous scale, the independent variables consisted of two categorical variables with two or more groups, and all data were collected as individual responses to ensure the independence of observations. Scale scores were converted to z-scores to identify outliers defined as scores occurring more than two standard deviations above or below the mean response for each scale which resulted in the removal of three scores for the PASTAS scale (participants 122, 186, and 191). Normality was examined for each variable using the Shapiro-Wilk for each experimental condition after the removal of outliers. The results confirmed that all dependent variables were approximately normally distributed: BAS-2 (p = .83), OBC: body surveillance (p = .73), OBC: body shame (p = .59), OBC: appearance control beliefs (p = .08), PASTAS (p = .27). Homogeneity of variance was examined using Levene's test of equality of error variances for each dependent variable and confirmed that all the dependent variables were approximately equal in terms of their error variance: BAS-2 (p = .41), OBC: body surveillance (p = .68), OBC: body shame (p = .18), OBC: appearance control beliefs (p = .97), PASTAS (p = .07). With these assumptions met, inferential analyses were conducted to determine whether the collected data supported the hypotheses stated above.

Body Image

The first inferential analysis conducted was a two-way ANOVA to test the hypothesized predictions for body image examining the main effect of image type (3: female model/ swimsuit only/ backpack), main effect of internalization (2: low internalizers/ high internalizers), and the interaction effect between these variables (3 x 2) for all the dependent variables (BAS-2, OBC,

and PASTAS). Responses to the OBC were broken down into 3 subscales (body surveillance, body shame, and appearance control beliefs) which resulted in five 3 x 2 ANOVAs total to test the independent variables of image type (3) and internalization (2) for the dependent variables of BAS-2, OBC, and PASTAS. A one-way ANOVA examining difference scores for the SOQ corresponding to each image condition indicated that participants did not significantly differ on their initial level of trait self-objectification prior to the experimental manipulation, $F(2, 177) = 0.98$, $p = .38$).

The results did not support a significant main effect of image type for any of the dependent variables (BAS-2: $p = .61$; OBC – body surveillance: $p = .79$, OBC – body shame: $p = .17$; OBC – appearance control beliefs: $p = .12$; PASTAS: $p = .28$). The interaction effect of image type x internalization was also non-significant for all the dependent variables (BAS-2: $p = .10$; OBC – body surveillance: $p = .55$, OBC – body shame: $p = .18$; OBC – appearance control beliefs: $p = .72$; PASTAS: $p = .24$). A significant main effect of internalization was found for all dependent variables (BAS-2: $F(1, 158) = 29.06$, $p < .001$, $\eta^2 = .16$, OBC body surveillance subscale: $F(1, 164) = 34.16$, $p < .001$, $\eta^2 = .17$, OBC body shame subscale: $F(1, 164) = 66.23$, $p < .001$, $\eta^2 = .29$, OBC appearance control beliefs subscale: $F(1, 169) = 5.66$, $p = .02$, $\eta^2 = .03$, and PASTAS: $F(1, 165) = 50.45$, $p < .001$, $\eta^2 = .23$). These results supported the predicted effect of internalization on female body image (hypothesis 2) by consistently demonstrating that high internalizers of sociocultural standards of body image experienced significantly greater body image disturbances compared to low internalizers when examined through a number of scales measuring distinct aspects of body image. However, these results did not support the predicted effects of a main effect of image type (hypothesis 1) or an interaction effect of image type x internalization (hypothesis 3) on female body image. The statistical results of these analyses along with the mean and standard deviation for each scale are listed in Table 1 and 2,

respectively. Table 3 displays the frequencies by each condition. Average ratings for each body image measure broken down by condition are displayed in Figures 1-5.

Table 1.
Summary of 3x2 ANOVAs for each body image measure.

Image Type	*F*	*p*	partial η^2
BAS-2	0.50	.61	.006
OBC - body surveillance	0.24	.79	.003
OBC - body shame	1.81	.17	.02
OBC - appearance control beliefs	2.17	.12	.03
PASTAS	1.29	.28	.02
Internalization	*F*	*p*	partial η^2
BAS-2	29.06	.000*	.16
OBC - body surveillance	34.16	.000*	.17
OBC - body shame	66.23	.000*	.29
OBC - appearance control beliefs	5.66	.02*	.03
PASTAS	50.45	.000*	.23
Image Type x Internalization	*F*	*p*	partial η^2
BAS-2	2.33	.10	.03
OBC - body surveillance	0.61	.55	.007
OBC - body shame	1.71	.18	.02
OBC - appearance control beliefs	0.33	.72	.004
PASTAS	1.45	.24	.02

Note. *Significant at the *p*<.05 level

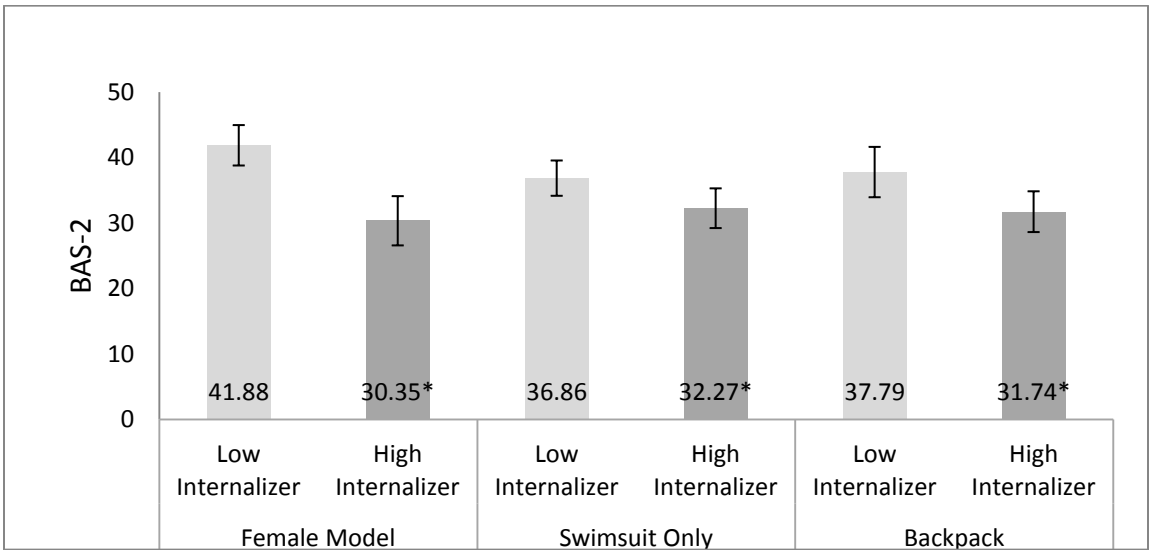
Table 2.
Body image measure descriptive statistics for each condition.

	BAS-2		
Image Type	Internalization	*M* (*SD*)	95% CI
Female Model	Low Internalizer	41.88 (7.88)	[44.97, 38.79]
	High Internalizer	30.35 (9.79)	[34.11, 26.58]
Swimsuit Only	Low Internalizer	36.86 (8.25)	[39.56, 34.16]
	High Internalizer	32.27 (7.26)	[35.31, 29.24]
Backpack	Low Internalizer	37.79 (9.61)	[41.64, 33.95]
	High Internalizer	31.74 (8.85)	[34.86, 28.63]
	OBC: body surveillance		
Image Type	Internalization	*M* (*SD*)	95% CI
Female Model	Low Internalizer	29.30 (9.70)	[32.95, 25.64]
	High Internalizer	38.82 (8.00)	[41.78, 35.86]
Swimsuit Only	Low Internalizer	30.51 (8.88)	[33.38, 27.65]
	High Internalizer	36.72 (9.08)	[40.28, 33.16]
Backpack	Low Internalizer	30.09 (11.22)	[34.67, 25.50]
	High Internalizer	39.57 (8.97)	[42.78, 36.36]
	OBC: body shame		
Image Type	Internalization	*M* (*SD*)	95% CI
Female Model	Low Internalizer	22.17 (8.04)	[25.38, 18.95]
	High Internalizer	37.00 (7.33)	[39.67, 34.33]

Swimsuit Only	Low Internalizer	28.31 (10.31)	[31.54, 25.07]
	High Internalizer	36.64 (9.15)	[40.46, 32.81]
Backpack	Low Internalizer	26.58 (11.06)	[31.01, 22.16]
	High Internalizer	38.53 (8.55)	[41.49, 35.57]
	OBC: appearance control beliefs		
Image Type	Internalization	*M* (*SD*)	95% CI
Female Model	Low Internalizer	36.59 (9.60)	[40.21, 32.97]
	High Internalizer	34.00 (8.53)	[37.11, 30.89]
Swimsuit Only	Low Internalizer	37.95 (8.46)	[40.57, 35.33]
	High Internalizer	33.08 (8.50)	[36.48, 29.68]
Backpack	Low Internalizer	39.74 (8.87)	[43.36, 36.11]
	High Internalizer	37.28 (10.10)	[40.78, 33.78]
	PASTAS		
Image Type	Internalization	*M* (*SD*)	95% CI
Female Model	Low Internalizer	1.47 (0.61)	[1.70, 1.24]
	High Internalizer	2.73 (0.89)	[3.04, 2.41]
Swimsuit Only	Low Internalizer	1.81 (0.90)	[2.09, 1.53]
	High Internalizer	2.51 (0.92)	[2.91, 2.12]
Backpack	Low Internalizer	1.90 (1.00)	[2.30, 1.50]
	High Internalizer	2.81 (0.83)	[3.11, 2.52]

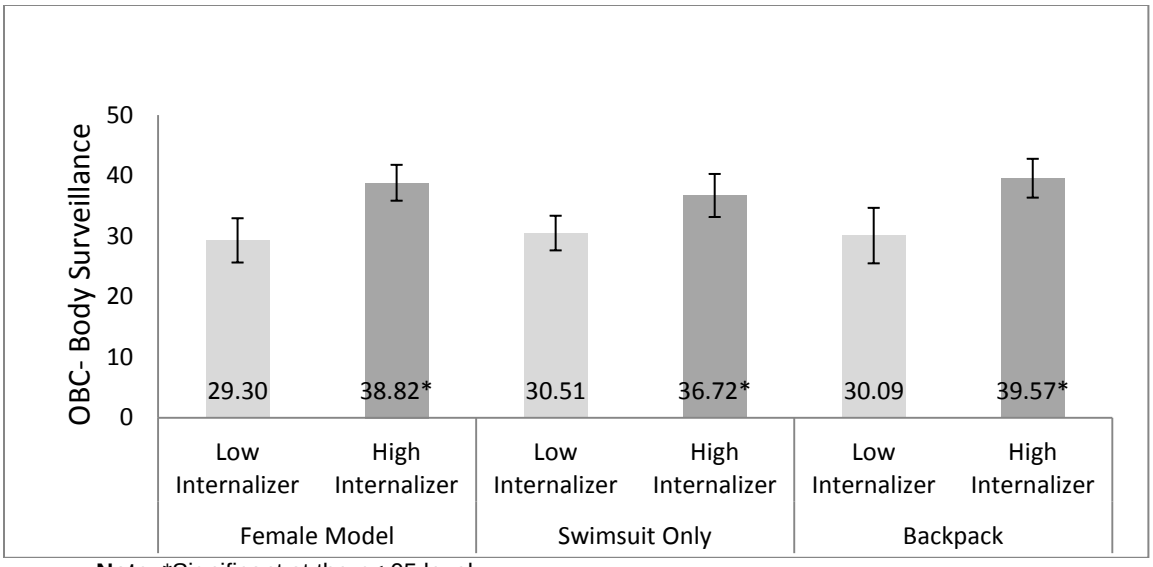
Table 3.
Frequencies for each condition.

Image Type			Internalization		
	n	Percent		n	Percent
Female Model	58	32.2	Low Internalizer	91	50.6
Swimsuit only	65	36.1			
Backpack	57	31.7	High Internalizer	87	48.3



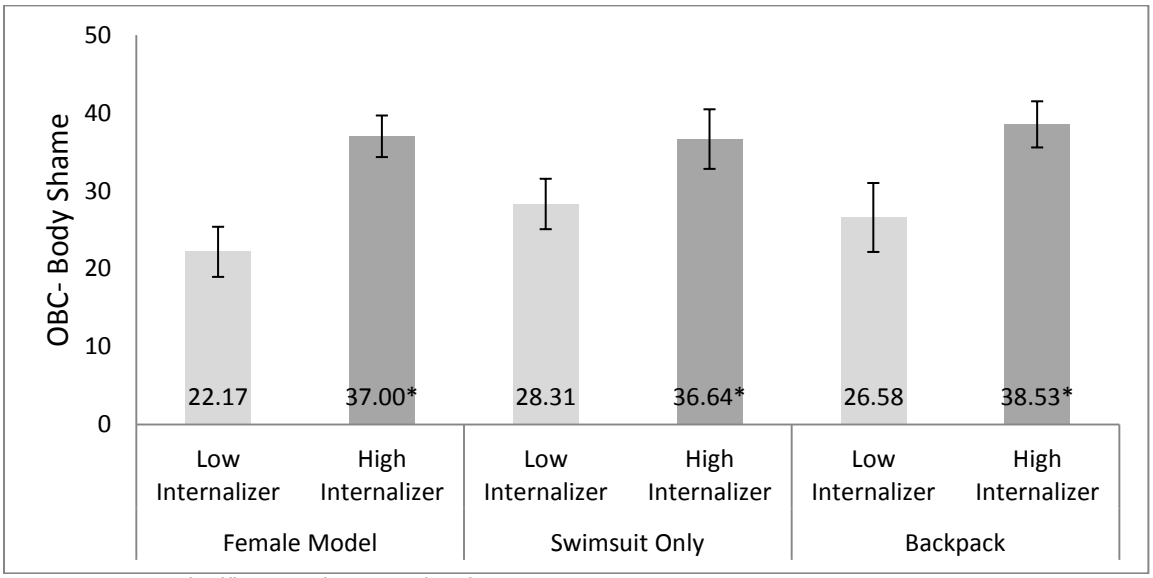
Note. *Significant at the *p*<.05 level

Figure 1. Average ratings on the Body Appreciation scale (BAS-2) corresponding to each condition.



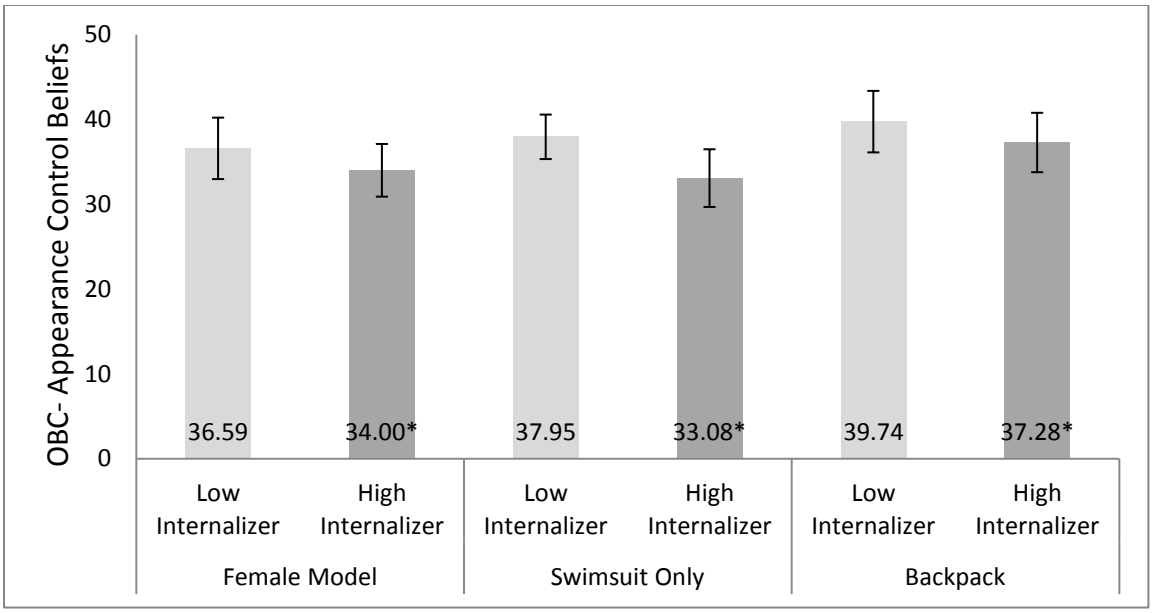
Note. *Significant at the *p*<.05 level

Figure 2. Average ratings on the Objectified Body Consciousness (OBC) body surveillance subscale corresponding to each condition.



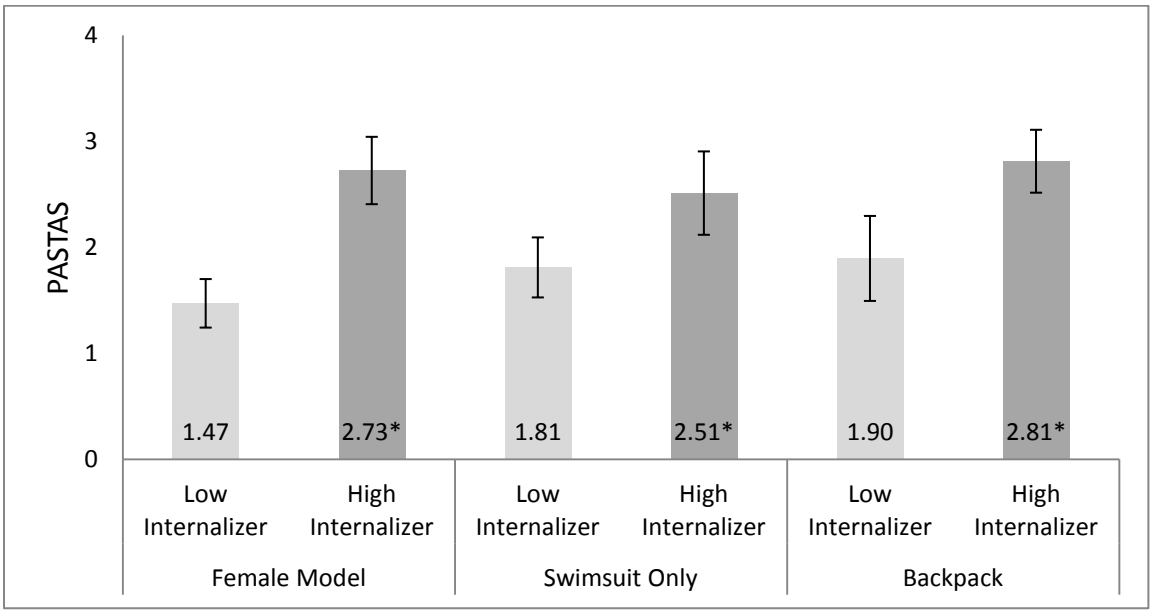
Note. *Significant at the *p*<.05 level

Figure 3. Average ratings on the Objectified Body Consciousness (OBC) body shame subscale corresponding to each condition.



Note. *Significant at the *p*<.05 level

Figure 4. Average ratings on the Objectified Body Consciousness (OBC) appearance control beliefs subscale corresponding to each condition.



Note. *Significant at the *p*<.05 level

Figure 5. Average ratings on the Physical Appearance State and Trait Anxiety scale (PASTAS: state version) corresponding to each condition.

In accordance with the hypothesized potential impact of socially desirable responding and/or demographic factors on the predicted effects, correlations between the dependent variables, scores on the SDS-17, and demographics were examined for significant correlations to determine whether a two-way ANCOVA should be conducted. In contrast to Dittmar and Howard (2004), age did not significantly correlate with any of the dependent variables, however;

scores on the SDS-17 did demonstrate a significant correlation (*p*'s ranged from .006 – less than .001) with four of the dependent variables (BAS-2, OBC: body surveillance, OBC: body shame, and PASTAS). ANCOVAs were conducted with SDS-17 entered as a covariate to determine whether this altered the pattern of results found above. The two-way ANCOVAs further substantiated the results above by demonstrating that the main effect of internalization remained significant for all the tested dependent variables (BAS-2, OBC: body surveillance, OBC: body shame, and PASTAS: $p < .001$; OBC: appearance control beliefs: $p = .04$) as listed in Table 4.

Table 4.
Summary of 3x2 ANCOVAs for each body image measure with SDS-17 score as covariate.

Image Type	*F*	*p*	partial η^2
BAS-2	0.76	.47	.01
OBC - body surveillance	0.04	.96	.00
OBC - body shame	2.00	.14	.03
OBC - appearance control beliefs	1.89	.16	.02
PASTAS	1.25	.29	.02
Internalization	*F*	*p*	partial η^2
BAS-2	22.51	.000*	.13
OBC - body surveillance	31.40	.000*	.17
OBC - body shame	63.62	.000*	.29
OBC - appearance control beliefs	4.53	.04*	.03
PASTAS	44.78	.000*	.22
Image Type x Internalization	*F*	*p*	partial η^2
BAS-2	2.03	.14	.03
OBC - body surveillance	0.16	.85	.002
OBC - body shame	1.03	.36	.01
OBC - appearance control beliefs	0.69	.51	.008
PASTAS	1.14	.32	.01

Note. *Significant at the $p<.05$ level

Since the overall results and significant effects did not change with the addition of SDS-17 as a covariate, these results will not be discussed further. In accordance with Dittmar and Howard (2004), occupational field significantly correlated with scores on the OBC body shame subscale ($p = .02$), but there were not enough participants per cell for each condition to examine this relationship further with the data collected for the current study. Time duration to complete the study was also examined as a potential covariate but did not result in any significant

correlations with any dependent variables so it was not examined further. Some additional analyses[1] were conducted to further examine the main predictions of the study with the use of alternate inferential techniques; the details of these analyses can be found in Table 5.

Table 5.
Summary of multiple regression analyses (enter method) for each body image measure.

Image Type	Unstandardized b	SE of b	β	*p*
BAS-2	-0.52	0.82	-0.04	.53
OBC: body surveillance	.14	.81	.01	.86
OBC: body shame	1.12	.81	.08	.17
OBC: appearance control beliefs	1.72	.83	.15	.05
PASTAS	.11	.08	.09	.17
Internalization	Unstandardized b	SE of b	β	*p*
BAS-2	-.57	.09	-.46	.000*
OBC: body surveillance	.75	.09	.56	.000*
OBC: body shame	.89	.09	.62	.000*
OBC: appearance control beliefs	-.34	.09	-.28	.000*
PASTAS	.07	.009	.53	.000*

Note. *Significant at the $p<.05$ level

Mate Preferences

The exploratory hypothesis (4) concerning the relationship between body image and mate preferences were examined with 3 x 2 ANOVAs using the same independent variables of image type (3) and internalization (2). An ANOVA was conducted for each physical attractiveness rating, sexual attractiveness rating, interest in a short-term sexual encounter with the target, and interest in a long-term sexual encounter with the target for each level of target attractiveness (low/ moderate/ high) to result in 12 analyses. To first determine whether the attractiveness manipulation was successful, a paired-samples *t*-test was conducted for each level of attractiveness comparing the average rating collected for this study and the average rating collected previously to categorize the target faces into their respective levels of attractiveness. The results determined that the average ratings were not significantly different between the

[1] A multiple regression analysis was conducted to examine the influence of maintaining the SATAQ on a continuous scale and resulted in the same statistically significant finding (main effect of internalization) with no additional effects. This finding will not be discussed further here, as it did not alter the main findings for this study.

samples ($p_{\text{Low Attractiveness}} = .70$; $p_{\text{Moderate Attractiveness}} = .84$; $p_{\text{High Attractiveness}} = .69$) indicating a successful manipulation of target attractiveness for the current study.

Evaluations of the physical attractiveness of the target images demonstrated a main effect of internalization for the high attractive targets only, $F(1, 152) = 3.96$, $p = .05$, $\eta^2 = .03$ ($M_{\text{High Internalizers}} = 5.58$, $SD = 1.01$, $M_{\text{Low Internalizers}} = 5.19$, $SD = 1.12$) with high internalizers rating targets higher on physical attractiveness compared to low internalizers. The main effect of image type was also significant only for the high attractive targets, $F(1, 152) = 4.26$, $p = .02$, $\eta^2 = .05$. Post hoc analysis revealed that target physical attractiveness was rated significantly higher by participants in the backpack condition ($M = 5.72$, $SD = 1.01$) compared to the female model condition ($M = 5.12$, $SD = 1.24$). No differences were identified between the swimsuit only condition compared to either the female model or backpack condition. The interaction effects were non-significant for all target attractiveness levels concerning evaluations of target physical attractiveness.

Evaluations of the sexual attractiveness of the target images demonstrated a main effect for internalization for the moderately attractive images only, $F(1, 149) = 6.57$, $p = .01$, $\eta^2 = .04$ ($M_{\text{High Internalizers}} = 4.46$, $SD = 1.00$, $M_{\text{Low Internalizers}} = 4.02$, $SD = 1.00$). The main effect of internalization was non-significant for the high and low attractive targets ($p = .07$ and .13, respectively). High internalizers rated moderately attractive targets as more sexually attractive than did low internalizers. There was also a main effect of image type for the high attractive images, $F(1, 150) = 4.91$, $p = .009$, $\eta^2 = .06$ with participants assigned to the backpack condition ($M = 5.66$, $SD = 0.99$) rating target sexual attractiveness as significantly higher than both the swimsuit only ($M = 5.19$, $SD = 1.03$) and female model condition ($M = 4.98$, $SD = 1.28$). A significant difference was not found between the swimsuit only and female model conditions. There were no significant main effects of image type for the moderately attractive or low

attractive targets and there were no significant interaction effects found for any of the sexual attractiveness ratings. Ratings of physical attractiveness and sexual attractiveness were significantly, positively correlated across all levels of target attractiveness as seen in Table 6.

Table 6.
Correlation matrix for ratings of target physical attractiveness and target sexual attractiveness.

		Physical Attractiveness			Sexual Attractiveness		
		High Attractive Target	Moderately Attractive Target	Low Attractive Target	High Attractive Target	Moderately Attractive Target	Low Attractive Target
Physical Attractiveness	High Attractive Target	1					
	Moderately Attractive Target	.727**	1				
	Low Attractive Target	.286**	.645**	1			
Sexual Attractiveness	High Attractive Target	.941**	.697**	.273**	1		
	Moderately Attractive Target	.698**	.939**	.633**	.699**	1	
	Low Attractive Target	.196*	.580**	.945**	.214**	.618**	1

Note. **. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Ratings of short-term interest in a sexual encounter with the individual pictured in the target image revealed significant main effects of internalization for the high attractive targets, $F(1, 154) = 9.98$, $p = .002$, $\eta^2 = .06$ ($M_{\text{High Internalizers}} = 2.96$, $SD = 1.14$, $M_{\text{Low Internalizers}} = 2.34$, $SD = 1.16$), the moderately attractive targets, $F(1, 154) = 12.06$, $p = .001$, $\eta^2 = .07$ ($M_{\text{High Internalizers}} = 2.19$, $SD = 0.96$, $M_{\text{Low Internalizers}} = 1.69$, $SD = 0.80$), and the low attractive targets, $F(1, 153) = 5.56$, $p = .02$, $\eta^2 = .04$ ($M_{\text{High Internalizers}} = 1.67$, $SD = 0.75$, $M_{\text{Low Internalizers}} = 1.41$, $SD = 0.61$). The results indicated that high internalizers demonstrated greater interest in a short-term sexual encounter than low internalizers across all levels of target attractiveness. There were no significant main effects found for image type and no significant interaction effects.

As far as interest in a long-term sexual encounter with the individual presented in target images, significant main effects of internalization were found for the high attractive targets, $F(1, 153) = 7.49$, $p = .007$, $\eta^2 = .05$ ($M_{\text{High Internalizers}} = 2.84$, $SD = 1.09$, $M_{\text{Low Internalizers}} = 2.30$, $SD = 1.14$), the moderately attractive targets, $F(1, 154) = 9.71$, $p = .002$, $\eta^2 = .06$ ($M_{\text{High Internalizers}} = 2.20$, $SD = 0.90$, $M_{\text{Low Internalizers}} = 1.77$, $SD = 0.79$), and the low attractive targets, $F(1, 155) = 4.72$, $p = .03$, $\eta^2 = .03$ ($M_{\text{High Internalizers}} = 1.66$, $SD = 0.76$, $M_{\text{Low Internalizers}} = 1.42$, $SD = 0.58$). Again, the results indicated that high internalizers consistently demonstrated greater interest in a long-term sexual encounter with targets of all attractiveness levels compared to low internalizers. There were no significant main effects of image type or interaction effects found for any level of target attractiveness. Inferential analyses for mate preferences are displayed in Table 7. Figures 6-9 and Table 8 display descriptive statistics for mate preferences by target attractiveness.

Table 7.
Summary of the (12) 3x2 ANOVAs for each mate preference variable.

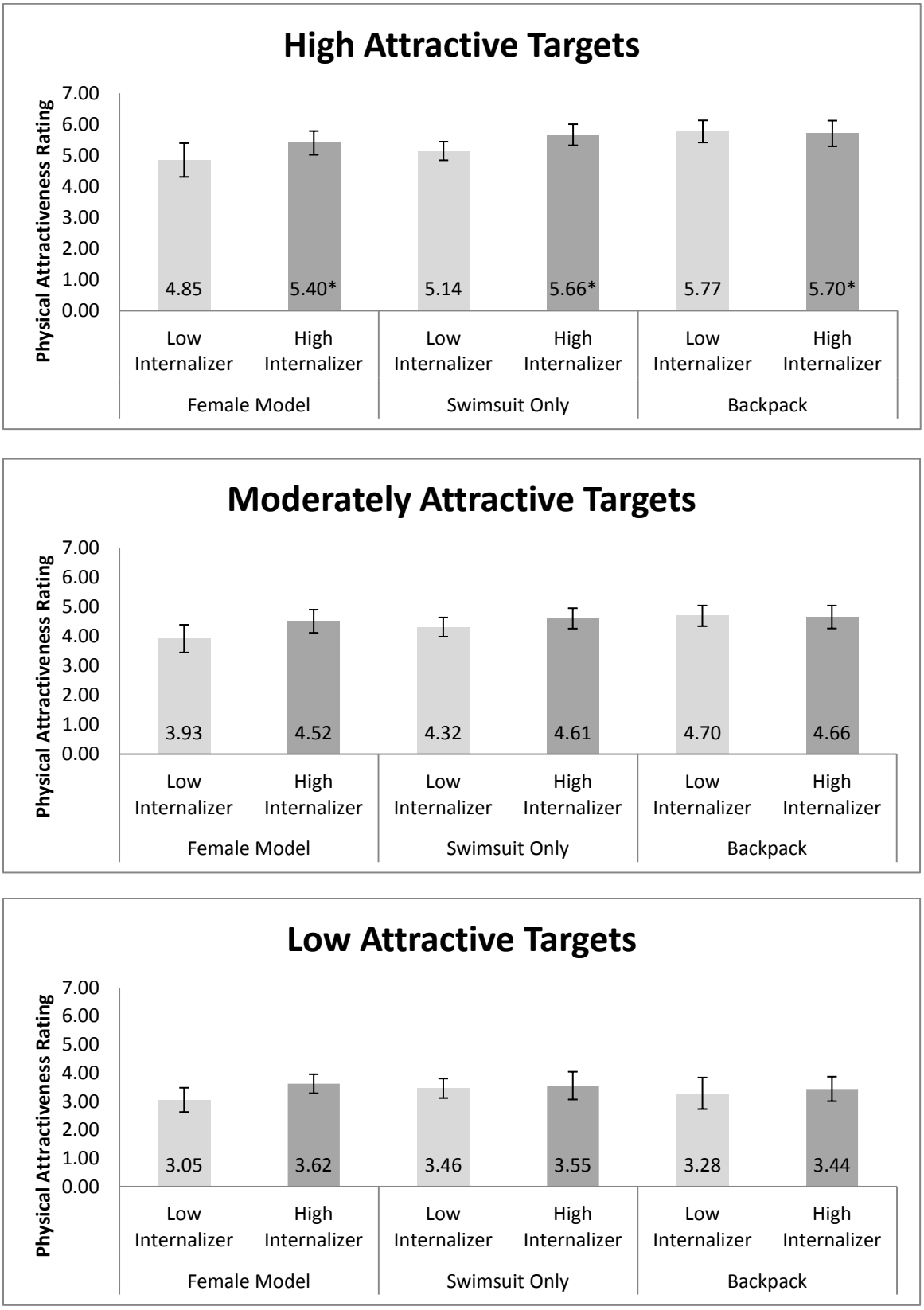
	High Attractive Target			Moderately Attractive Target			Low Attractive Target		
Image Type	*F*	*p*	partial η^2	*F*	*p*	partial η^2	*F*	*p*	partial η^2
Physical Attractiveness	4.26	.02*	.05	2.57	.08	.03	0.38	.69	.005
Sexual Attractiveness	4.90	.009*	.06	0.86	.43	.01	0.13	.88	.002
Short-Term Interest	1.60	.21	.02	0.12	.88	.002	0.24	.79	.003
Long-term Interest	1.52	.22	.02	0.13	.88	.002	0.48	.62	.006
	High Attractive Target			Moderately Attractive Target			Low Attractive Target		
Internalization	*F*	*p*	partial η^2	*F*	*p*	partial η^2	*F*	*p*	partial η^2
Physical Attractiveness	3.96	.05*	.03	2.99	.09	.02	2.33	.13	.02
Sexual Attractiveness	3.34	.07	.02	6.56	.01*	.04	2.36	.13	.02
Short-Term Interest	9.97	.002*	.06	12.06	.001*	.07	5.56	.02*	.04
Long-term Interest	7.49	.007*	.05	9.71	.002*	.06	4.72	.03*	.03
	High Attractive Target			Moderately Attractive Target			Low Attractive Target		
Image Type x Internalization	*F*	*p*	partial η^2	*F*	*p*	partial η^2	*F*	*p*	partial η^2
Physical Attractiveness	1.36	.26	.02	1.21	.30	.02	0.71	.49	.009

Sexual Attractiveness	1.66	.19	.02	1.63	.20	.02	0.41	.66	.005
Short-Term Interest	2.22	.11	.03	0.88	.42	.01	1.23	.30	.02
Long-term Interest	2.07	.13	.03	1.18	.31	.02	0.71	.50	.009

Note. *Significant at the $p<.05$ level

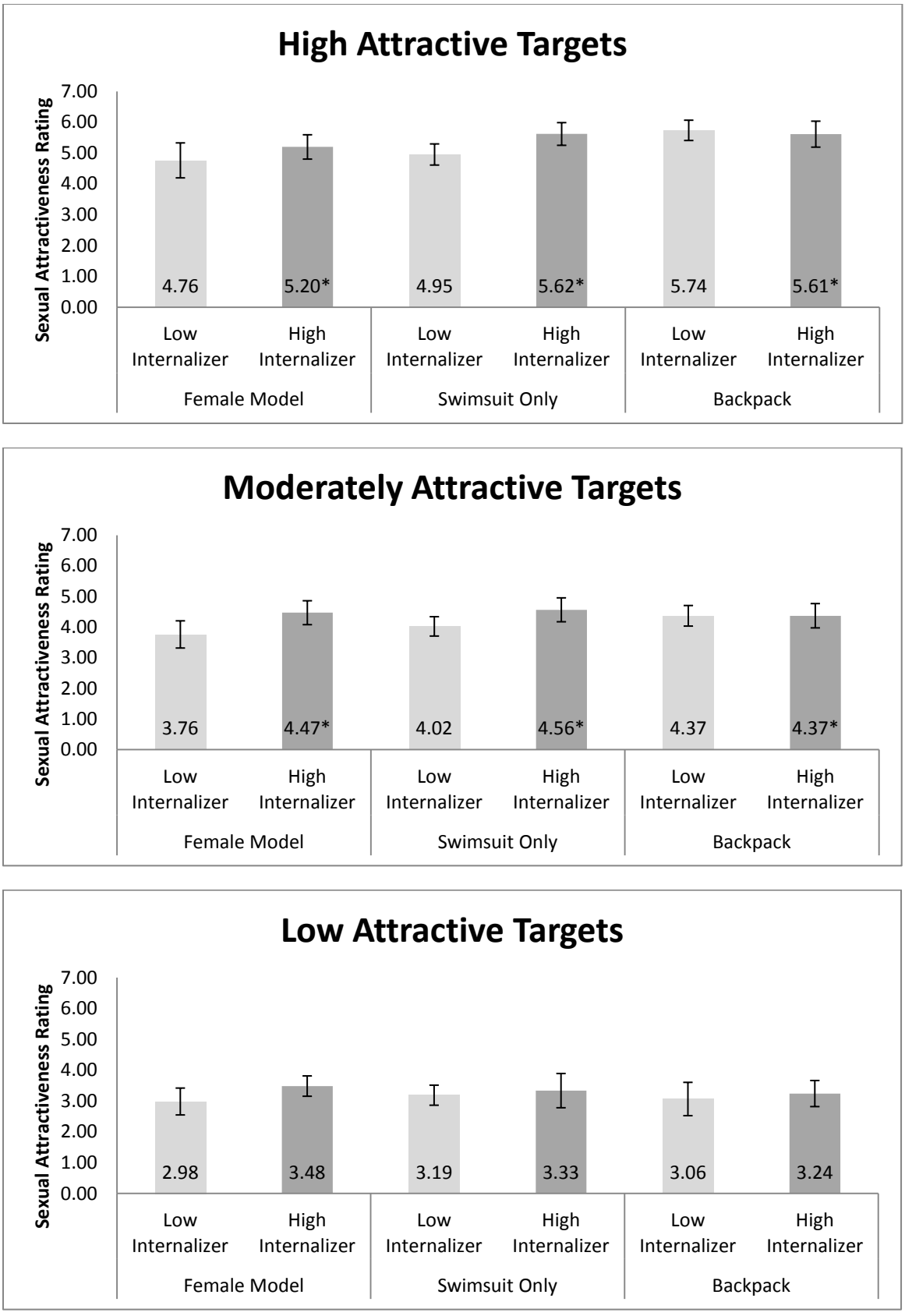
Table 8.
Descriptive statistics for mate preference items by target attractiveness.

	High Attractive Targets		Moderately Attractive Targets		Low Attractive Targets	
	n	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Physical Attractiveness	160	5.39 (1.08)	161	4.45 (1.02)	162	3.41 (1.10)
Sexual Attractiveness	158	5.27 (1.10)	156	4.24 (1.01)	156	3.22 (1.08)
Short-term Sexual Interest	162	2.64 (1.18)	162	1.94 (0.91)	161	1.53 (0.69)
Long-term Sexual Interest	161	2.56 (1.14)	162	1.99 (0.87)	163	1.54 (0.68)



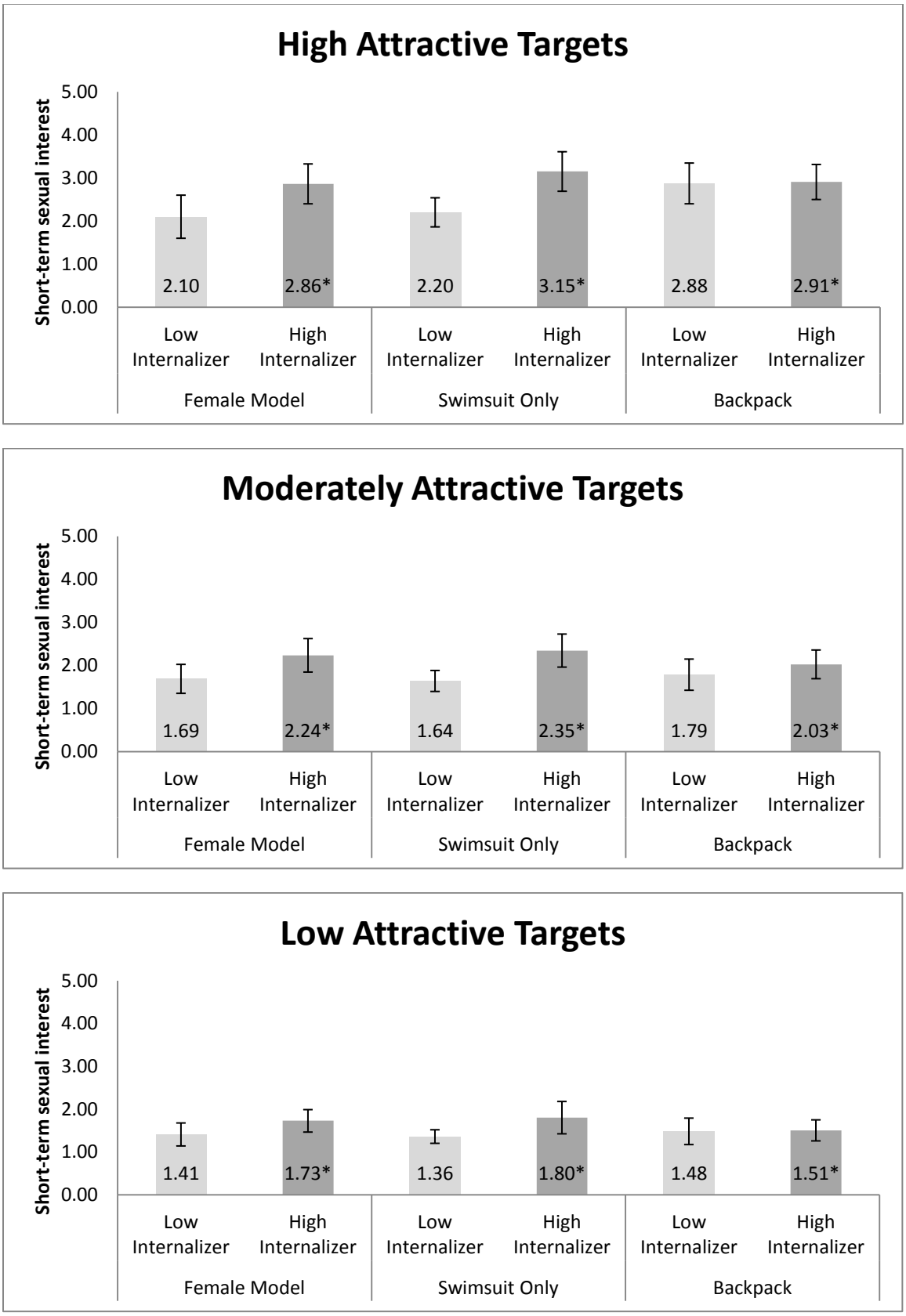
Note. *Significant at the $p<.05$ level

Figure 6. Physical attractiveness ratings for each level of target attractiveness.



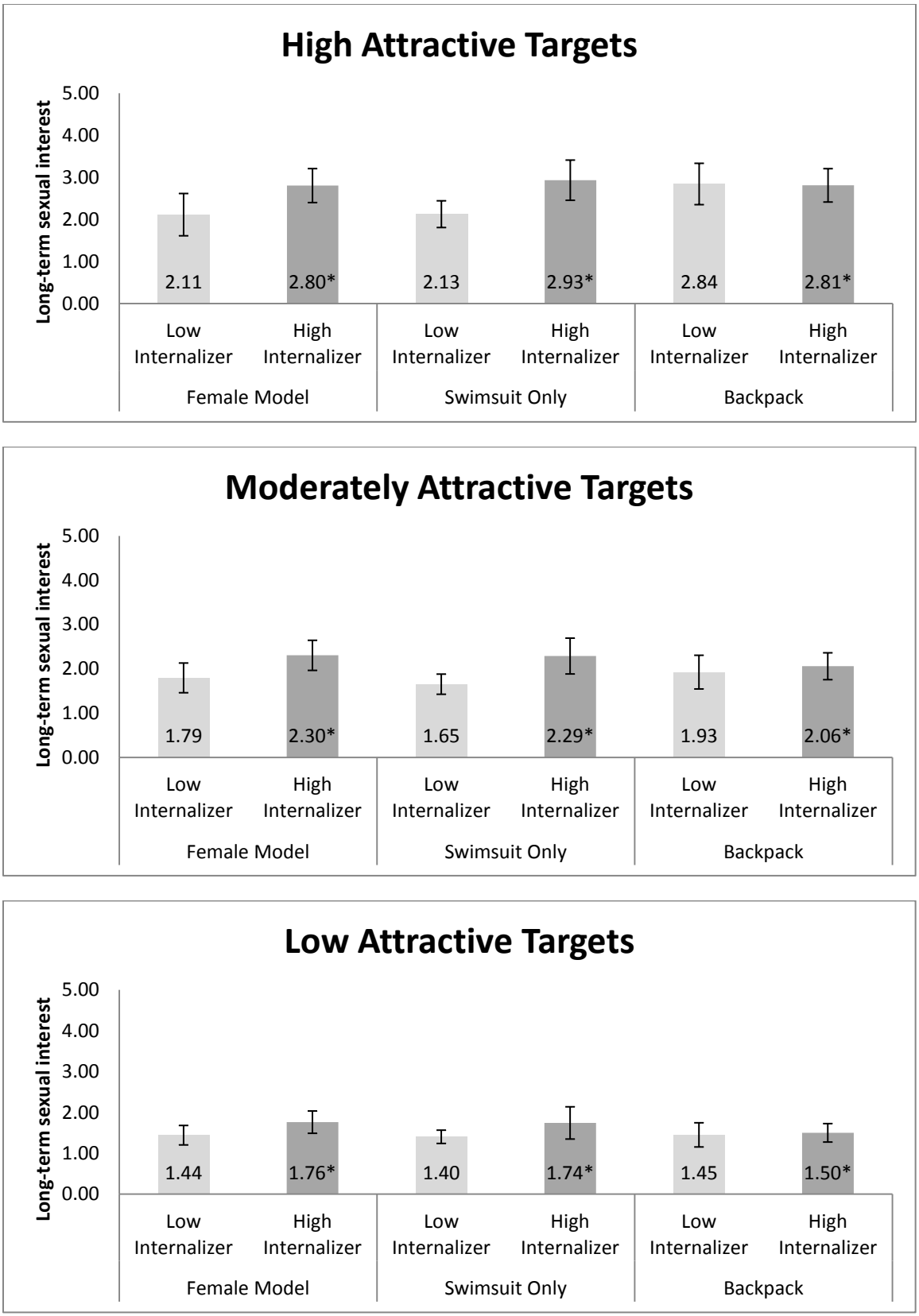
Note. *Significant at the $p<.05$ level

Figure 7. Sexual attractiveness ratings for each level of target attractiveness.



Note. *Significant at the $p<.05$ level

Figure 8. Short-term sexual interest ratings for each level of target attractiveness.



Note. *Significant at the $p<.05$ level

Figure 9. Long-term sexual interest ratings for each level of target attractiveness.

CHAPTER IV: DISCUSSION

The results of the current study partially supported the hypothesis that viewing media advertisements containing thin-idealized images of females and/or the degree to which sociocultural standards of physical attractiveness were internalized would prompt heightened body dissatisfaction among young females. The specific predictions included that (1) participants assigned to view images with a female model present would experience greater body dissatisfaction compared to viewing other image types, (2) high internalizers were expected to indicate greater body dissatisfaction compared to low internalizers, and (3) participants assigned to the female model condition that were categorized as high internalizers would report the greatest body dissatisfaction compared to any other combination of image type and internalization. The main effect of image type (hypothesis 1) was not statistically significant here (p = .12 - .79) which suggests that the specific stimuli used in this study did not result in a strong enough manipulation to reveal the hypothesized effect or that the effect does not exist. Additionally, the hypothesized interaction effect of image type x internalization (hypothesis 3) was also not statistically significant (p = .10 - .72), unsurprising as the main effect of image type was not significant. However, the main effect of internalization (hypothesis 2) was statistically significant across all dependent variables measuring body image (p = .02 - < .001) supporting the prediction that high internalizers experienced greater body dissatisfaction compared to low internalizers. Perceptions of the physical body and the consequences females may experience as measured across a number of conceptualizations of body image include decreased body appreciation, increased body surveillance, increased body shame, decreased appearance control beliefs (i.e., ability to control weight and appearance), and increased state anxiety regarding specific weight-related body parts commonly associated with physical appearance (Fredrickson & Roberts, 1997; Heinberg, 1995; Hesse-Biber et al., 2006; McKinley & Hyde, 1996; Reed,

Thompson, Brannick, & Sacco, 1991; Tylka & Wood-Barcalow, 2005). These results support previous research demonstrating that females who internalize sociocultural appearance ideals are at greater risk of experiencing body image disturbances associated with the drive for thinness (Grabe et al., 2008; Myers & Crowther, 2009).

Dittmar and Howard (2004) demonstrated that females who internalized appearance-focused ideals were significantly more likely to experience anxiety associated with specific body parts associated with weight and perceptions of physical appearance ($M_{\text{High Internalizers}} = 3.06$, $M_{\text{Low Internalizers}} = 2.25$) and this pattern was similarly found in the current study ($M_{\text{High Internalizers}} = 2.70$, $M_{\text{Low Internalizers}} = 1.73$). The effect sizes representing the influence of internalization as determined by Dittmar and Howard (2004) and the current study ($\eta^2 = .26$ and $\eta^2 = .23$, respectively) were comparable in magnitude, further demonstrating that internalization had a significant and seemingly consistent connection to female likelihood of experiencing body dissatisfaction across studies. The current findings substantiated Dittmar and Howard's (2004) results while also indicating female internalization of cultural ideals as an essential trait to measure when conducting research seeking to identify whether exposure to idealized images propagated by the media negatively impact female body image. Studies examining body dissatisfaction tend to focus on a single conceptualization of body image so the current study sought to implement a design measuring multiple aspects of body image to further understand the complexity of body image disturbances among females.

Body image is a multifaceted concept that involves many aspects of the physical self. The measurement of multiple attributes contributing to the construction of body image helped to clarify how specific conceptualizations of body image were impacted by the elements of the study. All of the dependent variables concerning body image demonstrated significant effects in relation to the variable of internalization to indicate that female body dissatisfaction extends to

conceptualizations of body appreciation, body surveillance, body shame, appearance control beliefs, and state anxiety of weight-related body parts. In conjunction with the results of Dittmar and Howard (2004), this extension of the current study demonstrated that the consequences of negative body evaluation reach beyond state feelings of anxiety and/or dissatisfaction with specified body parts to suggest that these effects may seep into other conceptualizations of body image, signifying that the impact of body dissatisfaction may be more extensive than demonstrated by previous research.

While scores on the SATAQ ranged from 8 – 40, the descriptive statistics (M = 25.53, SD = 7.55) indicate that the majority of scores fell between 17.98 and 33.08 which are at or above the 45th percentile on the scale. Since there were not many participants that scored below this, this suggests that the image type main effect may have been non-significant because most of the participants may have been similarly affected, irrespective of image type, which did not allow for enough variance between participants designated as high or low scorers to demonstrate the predicted effect. Indeed, when examining only the descriptive statistics for each image type, the scores demonstrate similar variance, particularly in regard to the mean scores, (e.g., Female model: M = 36.00; Swimsuit only: M = 35.12; Backpack: M = 34.38). This suggests that the majority of the data collected here was perhaps too similar with too low of variance to reveal the predicted effect. Dittmar and Howard (2004) found that their effects were significantly impacted by occupation which further suggests that this may be an important factor to measure when conducting research examining how females body image may be influenced by both internalization and exposure to thin-ideal female bodies. Similarly, previous studies have demonstrated that ethnicity[2] can be another risk factor for experiencing body dissatisfaction

[2] Analyses conducted with only white participants resulted in the same pattern of results; internalization demonstrated a significant main effect for all body image measures. The only exception to this was a significant interaction effect resulting for the BAS-2 variable indicating that high internalizers viewing female model images

resulting from the variables of interest here since young, *white* females are the prototypical body most commonly associated with both appearance ideals and representation in visual media (Warren, Gleaves, Cepeda-Benito, Fernandez, & Rodriguez-Ruis, 2005).

The wording of body image measures are typically fairly straightforward, which can make it relatively easy for participants to infer the research topic of interest; however, analyses conducted with scores on the SDS-17 applied as a covariate did not alter the overall pattern of results to further indicate that the effects found here were not merely due to demand characteristics or response bias associated with social desirability. Even as the image type manipulation was not successful here, the internalization manipulation demonstrated a strong, consistent effect across the sample. This implies that when females internalized ideals to a greater extent, the connections between appearance evaluation and body image can filter into other elements of life and significantly influence other important aspects of the female experience such as evaluations of prospective romantic mates.

The exploratory hypothesis (4) sought to examine how exposure to image type and internalization impacted the evaluation of prospective mates in terms of physical and sexual attractiveness along with interest in both a short-term and long-term sexual encounter with male targets of varying levels of physical attractiveness. Since this hypothesis was exploratory in nature, no specific predictions were formulated concerning direction of the proposed relationships between these factors. The results indicated that high internalizing females perceived the physical and sexual attractiveness of target images of prospective romantic mates more favorably than low internalizers in relation to the high attractive and moderately attractive targets, respectively. Females that internalized ideals to a greater extent indicated significantly higher interest in both a short-term and long-term sexual encounter with targets across all levels

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demonstrated significantly lower body appreciation compared to other combinations of condition. As this was not a main prediction for this study, these results will not be discussed further here.

of attractiveness compared to low internalizers. The degree to which females internalize sociocultural ideals seemed to influence not only how females perceived their own bodies, but also how they perceived the mate value of prospective romantic mates. This can be understood in terms of the establishment of a lower limit of an acceptable level of physical attractiveness of a prospective romantic mate. People tend to express interest and subsequently pair with romantic mates of a similar attractiveness level to themselves. The elevated ratings by high internalizers concerning their mate preferences suggests that they experienced a decrease in evaluations of their own attractiveness which was subsequently reflected in their increased ratings of target physical/sexual attractiveness and increased interest in both a short-term and long-term sexual encounter with targets of all attractiveness levels compared to low internalizers.

Body attractiveness is an important criterion both sexes consider when evaluating both the mate qualities they possess and prospective mates display (Confer et al., 2010). Physical attractiveness is the primary trait prioritized by males when appraising the appeal of prospective female mates (Shackelford et al., 2005; Thornhill & Gangestad, 1999). As a result of internalizing the sociocultural importance of appearance, high internalizing females are likely to be vigilant for opportunities to verify their adherence to ideals of physical attractiveness, particularly in relation to their mate appeal (Atari et al., 2017; Buss & Schmitt, 1993; Clarke & Griffin, 2008). One avenue through which this can occur is via the pursuit and acceptance of successful mating opportunities (Rammsayer & Troche, 2013). Females seem to be aware of the importance allocated to body attractiveness when males are seeking a mate, especially a mate inferred to be of high quality (Confer et al., 2010). Higher frequencies of beneficial mating opportunities are allotted to females displaying higher degrees of body attractiveness (Buss & Shackelford, 2008; Fisher at al., 2016; Perilloux et al., 2013), so perhaps the high internalizers in this study were more receptive to opportunities to hypothetically confirm their achievement of

thinness and beauty ideals as reflected by their favorable ratings of the targets. The elevation of their ratings suggests that high internalizing females perceived themselves and potential romantic mates differently compared to those who internalized ideals to a lesser extent.

Limitations

Dittmar and Howard (2004) demonstrated that exposure to thin-idealized media advertisements can trigger heightened body dissatisfaction among females, particularly among females that internalize sociocultural standards of body attractiveness to a greater degree. The current study did not demonstrate the same statistical pattern resulting from image type exposure as it only replicated the finding that high internalizers expressed greater body dissatisfaction compared to low internalizers; however, this may be more of a consequence of research design rather than cut and dry evidence that exposure to idealized images does not influence body dissatisfaction. While the findings here were not entirely as expected, there are many explanations as to why this may have been the end result.

The manipulation of image type consisted of nine images of either an advertisement featuring a thin-idealized female model in a swimsuit, the same swimsuit displayed on a white background with no model present, or a backpack from the same clothing retailer. Past research suggests that less may be more when it comes to stimuli presentation in this field (Ashikali & Dittmar, 2012; Aubrey, 2006; Dittmar & Howard, 2004), so perhaps the number of stimuli used here was excessive and resulted in participant fatigue rather than adequate exposure to the manipulation. While completion time did not appear on the surface to require more time than a typical online study of this length (M = 27.11 min), perhaps the number of items became burdensome to the point that participants did not take the time to consciously view and evaluate

each stimuli throughout the entirety of the survey thus reducing the capability of the image type manipulation to produce the predicted effect.[3]

Exposure time to each image was not standardized which may have allowed participants to click through the survey questions without really looking at the images once they got used to the presentation format of items. With the face validity of many body image measures in mind, four questions of marketing effectiveness were embedded among each stimuli image to disguise the true purpose of the study, but perhaps this too was excessive and a less complex survey with fewer items would have resulted in a more controlled manipulation to achieve the predicted main effect of image type.

Turk Prime was the online platform used to collect responses for the current study. The use of this data collection technique allowed for a more representative collection of responses to increase the generalizability of results compared to studies that collect convenience samples from college-aged populations; however, this also resulted in a considerable amount of unusable data (n = 284) due to ineligible participants electing to complete the study. The choice to utilize online data collection was anticipated to be relatively quick and simple, but instead resulted in an excessive amount of time and resources wasted due to the necessity to review each response for inclusion criteria in lieu of participants accurately determining their own eligibility prior to beginning the study.

Methods of online data collection also leave open the possibility that participants were working on multiple tasks concurrently instead of focusing the entirety of their attention on the current study. Even with the administration of attention checks, there was no way to verify that participants were focused primarily on completion of this study which may have contributed to

[3] Correlations between time completion and the dependent variables were conducted to examine the possibility that time duration might be useful to examine as a covariate but did not result in any significant correlations to pursue. While time completion was not a significant covariate, it is possible that attention to each stimulus contributed to the results, however the current data does not provide a way to assess how much participants truly viewed and focused on each stimulus.

the null effect of image type. While the value of online data collection still has its merits, the limitations experienced here suggest that body image research may be most informative when conducted in a laboratory setting in order to help standardize important procedures such as stimuli exposure, task-focus, and overall adequacy of research design that may be achieved through pilot testing feedback.

Future Directions

The non-significant main effect of image type was not expected, but may be promising in so far as informing intervention practices aimed at reducing the experience of body dissatisfaction among females. Since exposure to thin-idealized images of women in the media alone did not produce the predicted effect here, perhaps the more pressing issue to be addressed concerns the internalization of sociocultural ideals. Females that strive to achieve an idealized body type are at a heightened risk for developing disordered eating practices that can take a toll on both their physical and mental health due to the level of exertion and restraint required when attempting to cultivate the body into the idealized physical form (Fredrickson & Roberts, 1997; Gangi & Koterba, 2017; Grogan, 2017; Hesse-Biber et al., 2006). Yet, not all females appear to internalize appearance-focused standards to the same degree which gives promise that it may be possible to educate young females to recognize idealized standards as both highly unrealistic and vastly unobtainable (Dittmar & Howard, 2004; Grabe et al., 2008; Hesse-Biber et al., 2006).

The pervasive exposure to visual media in Western culture is typically not discussed in social circles or a general educational setting which drastically limits opportunities for young people to become aware that media presentations of the body revolve around idealized body forms that are based far from an achievable reality for the vast majority of people. Increasing opportunities to teach young females to consume visual media from a critical perspective would hopefully allow them to be cognizant of the importance of separating ideals from reality.

Adopting this viewpoint may provide youth with tools to resist internalizing unrealistic conceptualizations of beauty and appearance, which could ultimately lead to reduced instances of body dissatisfaction and the consequences that may follow. Incorporating individually-based evaluations of the self formulated from personal interpretations of attractiveness, rather than from biased perspectives influenced by patriarchal principles, may ultimately discourage the propensity to value and/or scrutinize females primarily for their appearance over other attributes.

Episodes of female body dissatisfaction may persist beyond the current moment of the experience to have a lasting, more substantial impact upon the daily lives of females than previously assumed (Fredrickson & Roberts, 1997). The extent of impact over time cannot be inferred here since the current experiment only examined participant data utilizing a cross-sectional design which suggests that the implementation of longitudinal studies may help shed some light on this inquiry. Greater internalization of ideals can spur negative evaluations of the self that increase body image disturbances; however, it is difficult to ascertain whether the participants in this study actually experienced decreased evaluations of their own attractiveness or whether they merely experience greater body dissatisfaction on a routine basis. This inquiry would be more discernible if self-rated attractiveness had been collected both prior to and after exposure to the manipulation, but this factor was unfortunately not fully considered during methodology development. Similarly, collection of more objective assessments of participant appearance, such as BMI and body type, should be collected in future studies to assist with the identification of whether body image disturbances were occurring. In addition, even though females are typically more accurate than males when assessing their own level of attractiveness (Grogan, 2017), people generally tend to exhibit a biased view of their physical self which also makes it a difficult variable to assess accurately through self-report. The lack of a main effect of image type similarly reduces the ability to infer whether viewing thin-idealized media images

may exacerbate this effect or whether exposure to visual media has any notable influence on this phenomenon.

In contrast to Dittmar and Howard (2004), the current study did not utilize advertisements containing an average-sized female model as a condition of the manipulation. A primary goal of their study was to investigate advertisement effectiveness in relation to model body size whereas here it concerned a principal examination of whether viewing thin-idealized female bodies impacted body dissatisfaction. The image type manipulation here was unsuccessful which suggests that perhaps comparing stimuli featuring various body sizes of females would have been a more powerful comparison condition rather than a clothing article (swimsuit), even one typically associated with the public display of body composition. Mere exposure to this type of clothing article did not appear to initiate any sort of comparison process whereas exposure to female bodies, even those that are not typically touted for their idealized shape, would likely have a greater chance of triggering an appearance-focused comparison. Similarly, it would be interesting to examine whether viewing any sort of female body would incite such comparisons, specifically with stimuli of non-traditional bodies that are rarely displayed in any highly publicized form (e.g., androgynous-looking bodies, obese bodies, female transgender bodies, disabled bodies, etc.). While it was assumed that female appearance comparison with sociocultural ideals was the mechanism responsible for the outcomes here, this factor was not explicitly manipulated which leaves open the possibly that some unmeasured or unexamined variable may have been responsible for this pattern of findings.

Data on occupation field was collected in this study but was not examined further. Occupation did demonstrate a significant correlation with scores on the OBC body shame subscale, but the number of participants per cell was too few to inquire further into this prospective relationship. Dittmar and Howard (2004) showed that females involved in

professions with a minimal emphasis on appearance (i.e., secondary school teachers) reported greater state anxiety associated with weight-related body parts as compared to females employed in fashion advertising, a field which likely places a much higher emphasis on thinness ideals. Further investigation into how occupation may influence one's vulnerability to internalizing ideals may serve to further illuminate this phenomenon in future research.

Future studies in this area should be mindful of stimuli selection and also the procedures used to present it. The stimuli selected for use here was associated with a retailer whose products and advertisements are highly publicized in relation to the promotion of a thin-idealized appearance. While this was purposeful as far as selecting stimuli clearly representing thin-idealized female bodies, this may have greatly reduced the presumed neutral nature of the backpack condition since the Victoria's Secret logo is clearly visible on all their products. This consequence allowed for participants to potentially make associations between this product and related appearance ideals rather than demonstrating exposure to a neutral product. Additionally, Victoria's Secret products are marketed toward a specific population (young, affluent, white females) which may have resulted in participants focusing on the brand in question rather than the primarily on the presentation of female thinness ideals. The lack of a significant main effect of image type suggested that the procedure utilized here did not adequately control certain factors that may have contributed to the null results since previous research has been rather reliable in demonstrating an effect on body image resulting from exposure to idealized female bodies (Ashikali & Dittmar, 2012; Aubrey, 2006; Dittmar & Howard, 2004; Grabe et al., 2006; Grogan, 2017; Hesse-Biber et al., 2006; Tiggeman & McGill, 2004; Tiggeman & Polivy, 2010). Should this study be replicated in the future, the ideal methodology employed to maximize the chance of revealing predicted effects seems to involve a few vital factors.

A more restricted process of selecting stimuli to reduce the total number of images in addition to controlling the exposure time to each image could presumably encourage participants to more fully engage with stimuli. This could increase the chances of revealing the alleged relationship between exposure to thin-idealized media and the occurrence of heightened body dissatisfaction among females. In line with this revision would be implementing the study in a lab-setting to be reassured that participants were focused primarily on the task at hand rather than relying solely on participant adherence to task focus during online administration. While the exploratory element of mate preference investigated here was too appealing to exclude, the study may have involved too many parts to be able to fully infer whether each set of dependent variables were influenced by exposure to thin-idealized female bodies. Overall, the findings of the current study resulted in more questions than answers; this was, arguably, a strength of the study as science involves a never ending process of discovering some answers with the intent of formulating more questions to pursue.

Conclusion

The overall results of the current study support previous research indicating that instances of female body dissatisfaction are impacted by the degree to which females internalize appearance-focused ideals of body image (Dittmar & Howard, 2004). Females that internalized ideals to a greater extent were more likely to experience body dissatisfaction in relation to a number of aspects of body image disturbances including body appreciation, body surveillance, body shame, appearance control beliefs, and state anxiety surrounding weight-related body parts (Fredrickson & Roberts, 1997; Myers & Crowther, 2009). Due to the nature of appearance-based social comparisons occurring most frequently in an upward fashion, high internalizers are more likely to ruminate on the existence of discrepancies between their physical body and that of the idealized body, prompting them to experience body dissatisfaction. Additionally, internalization

also appeared to impact female assessment of prospective mate appeal as demonstrated by the elevated ratings of mate preferences by females demonstrating a high degree of internalizing appearance standards.

The socialized necessity for females to be beautiful serves to limit not only how they are perceived by others, but similarly reinforces the obligation to perceive themselves as never quite measuring up to unrealistic portrayals of beauty that are consistently presented as though they were obtainable to all. Fredrickson and Roberts (1997) suggest that females are socialized to view their bodies as objects intended to be observed from an outsider's perspective. This is thought to encourage a tendency to self-objectify and increase instances of body surveillance that exist to compare one's actual body with the idealized body prescribed by sociocultural standards of attractiveness. Social Comparison theory (Festinger, 1954) similarly states that appearance-focused comparisons occur most frequently in an upward manner, especially for females (Myers & Crowther, 2009). By habitually comparing their appearance to other females that more closely approximate strict beauty criteria than they do, females are prone to ruminate on the existence of any discrepancies or physical shortcomings that contrast the established prototype of thinness and physical attractiveness (Hesse-Biber et al., 2006). Evolutionary theory posits that favorable mating opportunities for heterosexual females are limited by how their physical appearance is perceived by prospective male mates (Buss & Schmitt, 1993; Buss & Shackelford, 2006; Clarke & Griffin, 2008) to encourage females to constantly be mindful of how they are presenting themselves, especially in social contexts. Meticulous use of beauty accentuating behaviors can accomplish the task of increasing a female's appeal in terms of her mate quality, but also in relation to her likelihood of receiving valued social rewards associated with perceptions of attractiveness such as peer acceptance along with favorable assumptions or impressions concerning personality, character attributes, or even work ethic (Hu et al., 2018; Trekels &

Eggermont, 2017b; Todorov et al., 2015; Perilloux et al., 2013). Taken together, these theories insinuate that females are most likely to defer to an outsider's perspective of their physical being in order to monitor her status due to the immense pressure that exists to conform to sociocultural ideals from an early age, no matter the physical or mental cost of this futile pursuit (Fredrickson & Roberts, 1997; Grogan, 2017).

The restrictions concerning what constitutes an acceptable female physical form as imposed by Western culture compels females of all ages to play into social constructions of appearance to enhance not only social acceptance, but also attaining and/or retaining societal positions associated with notions of power, status, or high social ranking (Clarke, 2018; Gangi & Koterba, 2017; Grogan, 2017). The consistent presentation of thinness and beauty ideals transmitted by the media in conjunction with the ideologies identified by these theoretical perspectives act as a reinforcing feedback loop to keep females focused on the drive to achieve the ideal appearance which is, arguably, the primary avenue available to them to increase their social and economic standing in attempts to achieve interpersonal success.

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Appendix A

Social Desirability Scale-17 (SDS)

Instructions. Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. It if describes you, select the world "true"; if not, select the word "false".

1.	I sometimes litter	True	False
2.	I always admit my mistakes openly and face the potential negative consequences.	True	False
3.	In traffic I am always polite and considerate of others.	True	False
4.	I always accept others' opinions, even when they don't agree with my own.	True	False
5.	I take out my bad moods on others now and then.	True	False
6.	There has been an occasion when I took advantage of someone else.	True	False
7.	In conversations I always listen attentively and let others finish their sentences.	True	False
8.	I never hesitate to help someone in case of emergency.	True	False
9.	When I have made a promise, I keep it – no ifs, ands, or buts.	True	False
10.	I occasionally speak badly of others behind their back.	True	False
11.	I would never live off other people .	True	False
12.	I always stay friendly and courteous with other people, even when I am stressed out.	True	False
13.	During arguments I always stay objective and matter-of-fact.	True	False
14.	There has been at least one occasion when I failed to return an item that I borrowed.	True	False
15.	I always eat a healthy diet.	True	False
16.	Sometimes I only help because I expect something in return.	True	False

Appendix B

Sociocultural Attitudes towards Appearance Questionnaire: Internalization scale (SATAQ)

Instructions. Please read each of the following items and circle the number that best reflects your agreement with the statement.

1. Women who appear in TV shows and movie project the type of appearance that I see as my goal.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

2. I believe that clothes look better on thin models.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

3. Music videos that show thin women make me wish I were thin.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

4. I do not wish to look like the models in magazines.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

5. I tend to compare my body to people in magazines and on TV.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

6. Photographs of thin women make me wish that I were thin.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

7. I wish I looked like a swimsuit model.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

8. I often read magazines like *Cosmopolitan*, *Vogue*, and *Glamour* and compare my appearance to the models.

   1 2 3 4 5
   completely disagree neither agree or disagree completely agree

Appendix C

Self-Objectification Questionnaire (SOQ)

Instructions We are interested in how people think about their bodies. The questions below identify 10 different body attributes. We would like you to *rank order* these body attributes from that which has the *greatest impact* on your physical self-concept (rank this a "1"), to that which has the *least impact* on your physical self-concept (rank this a "10").

Note: It does not matter *how* you describe yourself in terms of each attribute. For example, fitness level can have a great impact on your physical self-concept regardless of whether you consider yourself to be physically fit, not physically fit, or any level in between.

Please first consider all attributes simultaneously, and record your rank ordering by writing the ranks in the rightmost column.

IMPORTANT: *Do Not Assign the Same Rank to More Than One Attribute!*

1 = greatest impact
2 = next greatest impact
..
9 = next to least impact
10 = least impact

When considering your *physical self-concept . . .*

1 . . . what rank do you assign to *physical coordination?* _____
2. . . .what rank do you assign to *health?* _____
3. . . .what rank do you assign to *weight?* _____
4. . . .what rank do you assign to *strength?* _____
5. . . .what rank do you assign to *sex appeal?* _____
6. . . .what rank do you assign to *physical attractiveness?* _____
7. . . .what rank do you assign to *energy level (e.g., stamina)?* _____
8. . . .what rank do you assign to *firm/sculpted muscles?* _____
9. . . .what rank do you assign to *physical fitness level?* _____
10. . . .what rank do you assign to *measurements (e.g., chest, waist, hips)?* _____

Appendix D

Twenty Statements Test (TST)

Instructions: Many different factors can have an impact on people's views of themselves. Please take a moment to think about how you feel about yourself and your identity. In the ten blanks below, please make 10 different statements about yourself and your identity that complete the sentence "I am _____". Complete the statements as if you were describing yourself to yourself, not to somebody else.

1 . . . I am _____

2. . . . I am _____

3. . . . I am _____

4. . . . I am _____

5. . . . I am _____

6. . . . I am _____

7. . . . I am _____

8. . . . I am _____

9. . . . I am _____

10. . . I am _____

Appendix E

The Body-Appreciation Scale-2 (BAS-2)

Instructions. For each item, please indicate whether the question is true about you never, seldom, sometimes, often, or always.

1. I respect my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

2. I feel good about my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

3. I feel that my body has at least some good qualities.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

4. I take a positive attitude towards my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

5. I am attentive to my body's needs.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

6. I feel love for my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

7. I appreciate the different and unique characteristics of my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

8. My behavior reveals my positive attitude toward my body; for example, I hold my head high and smile.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

9. I am comfortable in my body.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

10. I feel like I am beautiful even if I am different from media images of attractive people (e.g., models, actresses/actors).

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

Appendix F

Objectified Body Consciousness Scale (OBC)

Instructions. Please indicate a response to each statement using the following 7-point scale. You may select N/A for a statement if you feel the item does not apply to you.

For each item, the following response scale should be used:

1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree, 8 = n/a

Surveillance Scale

1. I rarely think about how I look.*
2. I think it is more important that my clothes are comfortable than whether they look good on me.*
3. I think more about how my body feels than how my body looks.*
4. I rarely compare how I look with how other people look.*
5. During the day, I think about how I look many times.
6. I often worry about whether the clothes I am wearing make me look good.
7. I rarely worry about how I look to other people.*
8. I am more concerned with what my body can do than how it looks.*

Body Shame Scale

9. When I can't control my weight, I feel like something must be wrong with me.
10. I feel ashamed of myself when I haven't made the best effort to look my best.
11. I feel like I must be a bad person when I don't look as good as I could.
12. I would be ashamed for people to know what I really weigh.
13. I never worry that something is wrong with me when I am not exercising as much as I should.*
14. When I'm not exercising enough, I question whether I am a good enough person.
15. Even when I can't control my weight, I think I'm an okay person.*
16. When I'm not the size I think I should be, I feel ashamed.

Control Scale

17. I think a person is pretty much stuck with the looks they are born with.*
18. A large part of being in shape is having that kind of body in the first place.*
19. I think a person can look pretty much how they want to if they are willing to work at it.
20. I really don't think I have much control over how my body looks.*
21. I think a person's weight is mostly determined by the genes they are born with.*
22. It doesn't matter how hard I try to change my weight, it's probably always going to be about the same.*
23. I can weigh what I'm supposed to when I try hard enough.
24. The shape you are in depends mostly on your genes.*

Appendix G

Physical Appearance State and Traits Anxiety Scale (PASTAS): State Version

Instructions. The statements listed below are to be used to describe how anxious, tense, or nervous you feel *right now* about your body (use the following scale).

Not at all 0	Slightly 1	Moderately 2	Very much so 3	Exceptionally so 4

Right now, I feel *anxious, tense,* or *nervous* about:

1. The extent to which I look overweight	0	1	2	3	4
2. My thighs	0	1	2	3	4
3. My buttocks	0	1	2	3	4
4. My hips	0	1	2	3	4
5. My stomach	0	1	2	3	4
6. My legs	0	1	2	3	4
7. My waist	0	1	2	3	4
8. My muscle tone	0	1	2	3	4
9. My ears	0	1	2	3	4
10. My lips	0	1	2	3	4
11. My wrists	0	1	2	3	4
12. My hands	0	1	2	3	4
13. My forehead	0	1	2	3	4
14. My neck	0	1	2	3	4
15. My chin	0	1	2	3	4
16. My feet	0	1	2	3	4

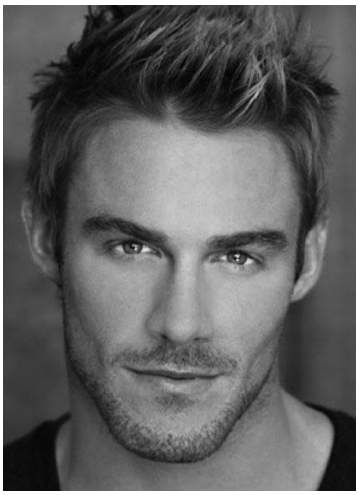
Appendix H

Prospective Mate Target Images (one example from each category)

Low Attractiveness

Moderate Attractiveness

High Attractiveness



Appendix I

Mate Preference items

Instructions. Look at each image carefully before making your selection.

Rate each model's photograph for facial attractiveness and sexual attractiveness using the following scale: 1 (*very unattractive*), 4 (*neither attractive nor unattractive*), 7 (*very attractive*).

Rate your interest in having a short-term and long-term encounter with this model using the following scale: 1 (*no interest*), 3 (*moderate interest*), 5 (*very high interest*)

1. How would you rate the *physical* attractiveness of this model's face?

1	2	3	4	5	6	7	8
Very unattractive			Neither attractive nor unattractive				Very Attractive

2. How would you rate the *sexual* attractiveness of this model?

1	2	3	4	5	6	7	8
Very unattractive			Neither attractive nor unattractive				Very Attractive

3. How would you rate your interest in having a *short-term (i.e., single encounter only)* sexual encounter with this model?

1	2	3	4	5
No Interest		Moderate Interest		Very high Interest

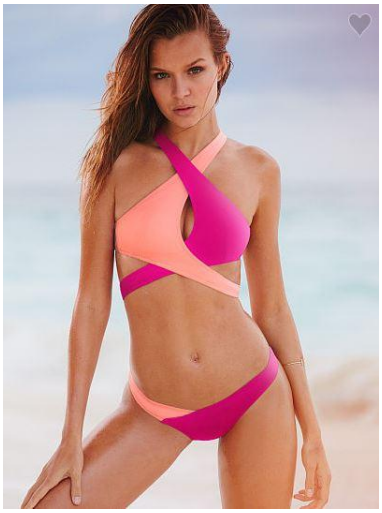
4. How would you rate your interest in having a *long-term (i.e., multiple encounters over a period of time)* sexual encounter with this model?

1	2	3	4	5
No Interest		Moderate Interest		Very high Interest

Appendix J

Stimuli Images (one example for each image type)

Female Model Condition



Swimsuit Only Condition

Backpack Condition