The influence of media exposure on body image and health behaviors: Does personality make a difference?

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Degree Type
Dissertation

Degree Name
Doctor of Psychology (PsyD)

Committee Chair
Shawn E. Davis, Ph.D.

Subject Categories
Psychiatry and Psychology

Comments
Library Use: LIH

This dissertation is available at CommonKnowledge: https://commons.pacificu.edu/spp/1101
THE INFLUENCE OF MEDIA EXPOSURE ON BODY IMAGE AND HEALTH BEHAVIORS: DOES PERSONALITY MAKE A DIFFERENCE?

A DISSERTATION

SUBMITTED TO THE FACULTY OF

SCHOOL OF PROFESSIONAL PSYCHOLOGY

PACIFIC UNIVERSITY

HILLSBORO, OREGON

BY

KALIN E. BURKHARDT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PSYCHOLOGY

October 17, 2013
Abstract

Thin ideal images are represented throughout the media both in print and on screen. Women in the media are portrayed as thin while men are portrayed as muscular. Exposure to these unrealistic representations in the media often is associated with individuals experiencing body dissatisfaction and participating in unhealthy behaviors. Personality differences are one explanation as to why individuals react to images in the media differently. Neuroticism specifically has been found to be associated with body dissatisfaction and detrimental health behaviors whereas agreeableness, conscientiousness, and extroversion have been associated with positive health behaviors. The present study further examines the relationships between personality style, media exposure, body image and dissatisfaction, as well as health behaviors. Male and female participants 18 years and older completed an online survey regarding their current health behaviors, evaluation of body image quality of life, body dissatisfaction, personality traits, and media exposure. Neuroticism was negatively associated with body image quality of life and healthy activities, and was positively associated with body dissatisfaction. Extraversion was positively associated with body image quality of life. Conscientiousness was associated with healthy activities and health consciousness. Use of active types of media was associated with participation in various types of physical activity.
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Acknowledgments

I would like to express my sincere gratitude to my thesis advisor, Dr. Shawn Davis, for supporting me throughout the long process of this study. I would also like to thank my reader, Dr. Katherine Elder, for sharing her knowledge and input on the specific topics covered in this project.
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The Influence of Media Exposure on Body Image and Health Behaviors: Does Personality Make a Difference?

Introduction

The media is overrun with thin ideal images on screen and in print. Many people, the majority being female, are negatively influenced by the slender models depicted in advertisements, television shows, and beauty magazines. Males also receive negative messages from the media, however, the focus is on muscularity rather than thinness, especially in fitness magazines. Negative reactions can lead to body dissatisfaction, as well as unhealthy eating and exercise behaviors and attitudes. Personality traits may be one variable that explains why some people react differently than others to thin ideal media images.

Personality

The Five-Factor Model (FFM) is a widely used classification system in research to describe personality styles (Costa & McCrae, 1995; Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, & Gough, 2006; McCrae & Costa, 1987). This model consists of five domains: extraversion, conscientiousness, neuroticism, agreeableness, and openness to experience. There is evidence that the FFM has both convergent and discriminant validity when measured both across self-report instruments and peer-report instruments (McCrae & Costa, 1987). Within each of the five domains, which can be thought of as being a continuum of one’s personality, there are six specific facets that more specifically describe the overall domain. For the most part, the traits within the facets of a single domain only exist within one category. However, some traits are present more than once across multiple domains (Costa & McCrae, 1995). This makes sense given that individual personality styles do not fit completely within one domain or another. See Table 1 for domains and the respective facets (Costa & McCrae, 1995).
Table 1. *Personality Domains and Facets.*

<table>
<thead>
<tr>
<th>Neuroticism</th>
<th>Extraversion</th>
<th>Openness to Experience</th>
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<tr>
<td>Impulsivity</td>
<td>Excitement seeking</td>
<td>Ideas</td>
<td>Modesty</td>
<td>Self-discipline</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>Positive emotions</td>
<td>Values</td>
<td>Tender-mindedness</td>
<td>Deliberation</td>
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</table>

Costa and McCrae (1995) stress the importance of examining all of the traits in one domain together, not individually. Doing so individually could give a false picture of one’s personality profile. Also, these authors explain that using a domain to convey the overall personality style is preferred to only using facet descriptors in order to provide a more comprehensive picture of a person. Furthermore, individual facets are helpful in describing specific behaviors or feelings within a domain.

**Media and Body Image**

Idealistic thin and beautiful images in the media are difficult to escape. Consumers of media are constantly bombarded with information on how to lose weight and obtain beauty and the perfect look. In recent studies, researchers have noted that, in the United States, 94% of women portrayed in television shows are skinnier than the average American woman (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). The media also successfully depict
people who have been airbrushed as authentic (Agliata & Tantleff-Dunn, 2004). Images in print and on television or movies have been blamed for poor body image among women. Increased exposure to the media and its influential pressure on the public to be thin can be a serious risk factor for body dissatisfaction, preoccupation with weight, and disordered eating behavior (Lopez-Guimera, Levine, Sanchez-Carracedo, & Fauquet, 2010).

Researchers have identified various predictors of body dissatisfaction. In a study on adolescent girls, obesity was one of the strongest factors that lead to body dissatisfaction in adolescents (Stice & Whitenton, 2002). Perceived pressure to be thin, thin-ideal internalization, as well as low perceived social support were also risk factors of poor body image. When young girls are heavier and they view ultrathin models in the media and possibly have peers who value thinness, they are likely to feel pressure to be thin and cannot meet that social demand. They, therefore, are primed to develop increased body dissatisfaction. This body dissatisfaction can continue on into adulthood, especially if they are continually exposed to thin-ideal images in the media.

Displeasure with one’s body is not solely related to viewing thin ideal images in the media. Krones, Stice, Batres, and Orjada (2005) found that young women reported body dissatisfaction after briefly viewing a thin confederate compared to women who were exposed to a confederate of a more average physique. This is further support that peer pressure can be a risk factor of body dissatisfaction. However, there was no evidence to support that in vivo exposure to a thin-ideal peer resulted in negative affect or physiological arousal.

Body dissatisfaction, specifically feeling fat, is not solely limited to those who are overweight. In one study, many women who reported feeling fat had an objective body weight at or below the norm. Women who felt more overweight were those who endorsed higher
perfectionism, even when one’s drive to be perfect was unrelated to body size. The authors found that these women reported feeling strong social pressures to be thin as well. Those that felt fat were likely to engage in disordered eating behaviors, such as binge eating, eating in response to negative emotions, dieting, and perceived lack of control over food (Striegel-Moore, McAvay, & Rodin, 1986).

Fouts and Burggraf (2000) evaluated 18 prime-time television comedies and the female characters portrayed on the popular shows. They found that 67% of the female characters had a weight that was below average and only 5% were above the average weight. Not surprisingly, the proportion of weight distribution does not match the societal weight distribution for women. The female characters received more negative comments from male characters the heavier they were. There was also positive audience reaction, such as laughter, to the negative weight comments. The authors expressed that female viewers are likely receiving the message that they must abide by the “thin ideal” in order to avoid ridicule from men. Men may receive the message that it is tolerable to make negative comments about women’s weight. Popular television shows strengthen female stereotypes that women who are overweight are not as attractive or desirable as thinner women and are the target of jokes.

In a similar study, Fouts and Vaughn (2002) examined how different sized males are depicted in the media. In contrast to the above study, 33% of male characters were below average weight, and 13% were above average weight. Again, this representation of weight for males does not represent that of society, which further emphasizes thinner body sizes for males. It also stresses the value society has on muscular male figures who are larger due to an athletic physique. However, based on the percentages for both females and males on television who are underweight and overweight, it is more acceptable for a male to be overweight than it is for a
female. The authors found that heavier men received few negative comments from women about their weight, and when they did it was not followed by audience laughter. Furthermore, male characters who were heavier were more likely to make negative comments about their own weight, which were then followed by audience laughter. The authors concluded that this behavior could indicate low self-esteem and is a socially acceptable way for men to communicate about weight.

Media sources use visual images to target males and females in different ways. Consequently, men and women react to images in the media differently. Agliata and Tantleff-Dunn (2004) noted that women are more concerned with being thin while men are more concerned with being muscular. According to Abell and Richards (1996), men do not wish to be perceived as heavier, but rather as stronger and more muscular. In fact, one study examining the content of popular magazines found that there were more diet-related advertisements and articles in women’s magazines and more exercise and weight-lifting advertisements and articles in magazines targeting men (Andersen & DiDomenico, 1992).

Similar to women, men have been bombarded with increased amounts of ideal muscular images in the media in the past several decades, such as Playgirl, Chippendales, and the movie Rambo. Young children are even exposed to the muscular ideal through toy action figures sporting unrealistically large and defined muscles (Agliata & Tantleff-Dunn, 2004). Whereas women are more likely than men to compare themselves to images they see in the media (Peck & Locken, 2004), men are not immune to the media’s messages about an ideal body image.

Diedrichs and Lee (2010) examined the impact of media images on both male’s and female’s body images. Men and women rated advertisements with average-sized male models to be equally as effective as advertisements with muscular models or without models. The authors
speculated that males rated average-sized models positively because average-sized models seemed less caught up in their self-image. In addition, male participants rated advertisements with muscular models to be less effective than advertisements without models. There was no difference in body satisfaction between men who viewed average models and men who viewed muscular models. The researchers suggested that men viewing muscular models might think that the muscular models conveyed vanity or homosexuality, traits that could be seen as unappealing. Furthermore, men who viewed average models reported a more positive body image than did those who viewed advertisements without models. Researchers suggested that men might have felt a connection to the average models because they felt they belonged to a group that was thought to have a good appearance. For women, there was no body satisfaction difference between viewing average or muscular male models.

Women of all ages, including preteens and older adults will often compare themselves to images in the media (Bissel & Rask, 2010; Halliwell & Dittmar, 2004; Lopez-Guimera, Levine, Sanchez-Carracedo, & Fauquet, 2010; Peck & Loken, 2004; Yamamiya et al., 2005). For example, a study on women’s reactions to the Dove Campaign for Average Beauty, featured models “with many different attributes, of all ages, races, shapes and sizes” (p. 646). As predicted, participants rated plus-size models less attractive than the Dove model and the Dove model less attractive than the thin model. Participants who viewed the Dove model or plus-size model had a noteworthy discrepancy between their actual and ideal selves, as was expected. Also, the women in the study were reportedly more dissatisfied with their own bodies if they believed that thin women were more attractive and successful in society than larger women (Bissel & Rask, 2010).
In another study, Mask and Blanchard (2011) examined how women reacted differently to thin ideal media images. In contrast to viewing inanimate objects, women who viewed thin female models reported experiencing a more negative affect, as well as higher size dissatisfaction. Women were more likely to report negative affect and size dissatisfaction if they reported external pressures that drive them to eat healthy. The authors speculated the drive to eat healthy by internal forces of self-worth, or autonomy, acts as a protective factor against negative reactions about a person’s body image in relation to viewing thin images in the media. They further speculated that women who were more autonomous in their eating behaviors viewed thin models as the societal ideal of female beauty. In contrast, women whose eating behaviors were less autonomous saw the thin models as a standard of how they should look.

Agliata and Tantleff-Dunn (2004) compared body dissatisfaction among college-aged men who viewed commercials portraying ideal males to young men who viewed commercials without ideal images. The researchers found that men who viewed the ideal images reported more muscle dissatisfaction while the other group reported no change in body dissatisfaction. The participants who viewed the ideal images also reported an increase in depression. The researchers noted that ideal images in the media might not only be impacting one’s self-image, but also broader aspects of one’s self-evaluation.

Media images may also influence how men and women view other women in daily life. According to Peck and Loken (2004), thin women portrayed in the media can change the way men view women. Men may view women with an average weight or who are heavier to be less attractive than women who are thinner. Men, then, would start to expect thinness from a woman even though their expectations are unattainable. Women could also start to have higher expectations of attractiveness standards of other women. Specifically, women may view other
women in general as less attractive after viewing attractive and thin models in the media (Peck & Locken, 2004).

Peck and Locken (2004) conducted a study comparing models set in traditional advertisements to those in non-traditional settings in advertisements. They found that both women and men rated larger-sized models to be more attractive when presented in non-traditional magazines, specifically women were more likely than men to consider larger models attractive. This is, perhaps, because men and women can relate to larger models and see their body types as more attainable. The authors concluded that viewing larger models may lead women to think more positively about their own bodies and in turn think more positively about larger models. However, the authors cautioned that just presenting larger models in traditional and non-traditional venues may not be enough to change the thought process of media consumers. They suggested that larger models should be presented in a way that promotes awareness of a healthy body image (Peck & Locken, 2004).

Similarly, in a qualitative study that included responses from college-aged men and women, participants reported a desire to see “normal,” “healthy,” and “average” sized people represented in the media. The participants reportedly believed that depictions of more average-sized people in the media could help encourage a healthy body image. However, the respondents cautioned away from the use of overweight or obese people in the media, as not to “normalize obesity and encourage unhealthy behavior” (p. 263). They paired words such as “unattractive,” “repugnant,” and “unequivocally unhealthy” with being larger or overweight (Diedrichs, Lee, & Kelly, 2011, p. 263), which further perpetuates the stigma surrounding obesity.

Interestingly, young adults recognize the harm that the media can have on people’s body images, though at the same time they believe that overweight representations in the media are
also harmful. They call for more “normal” and “average” models in the media at a time when more and more adults are overweight and being overweight is becoming more normal and common.

Others suggest that there is a difference between a model’s “thinness” and “attractiveness.” Halliwell and Dittmar (2004) empirically demonstrated that for women, viewing thin models resulted in increased levels of anxiety towards one’s body. The attractiveness of the thin or average-sized models led to no differences in anxiety among female participants. In addition, women rated models on their advertising effectiveness based on their attractiveness, not their thinness. This is in contrast to the general beliefs of the advertising industry that “thinness” sells and “fatness” does not (Halliwell & Dittmar, 2004).

Male and female respondents in a different study also believed that average-sized models would still be effective in selling products because average people can better relate to someone who looks like them rather than a too-thin “ideal” model. Participants in this study pointed out that even if there is an increase in the use of average-sized models in mainstream media, the general public may have a difficult time accepting the change in model size. People may not find the average-sized models as attractive because consumers are so accustomed to viewing thin female and muscular male models that they have accepted the thin and muscular ideal as standard for advertisements (Diedrichs et al., 2011).

**Internalization**

Another factor that plays a role in the relationship between media and body image is internalization of the thin ideal. It is believed that thin women are so commonly depicted throughout various types of media and so their thin figures become accepted as the normal, expected, and attractive. Women often internalize these ideals as what they should strive for,
even though female media images are frequently thinner than the actual population of women. Internalization of media images and attitudes favoring thinness and attractiveness appear to moderate women’s anxiety regarding their own body (Halliwell & Dittmar, 2004). Viewing thin ideal media can increase the level of internalizing the thin ideal, which can then lead to further body dissatisfaction and disordered eating patterns (Grabe et al., 2008).

Researchers have examined internalization as a mediating factor linking media exposure and disordered eating behaviors. Stice, Schupak-Neuber, Shaw, and Stein (1994) found that internalization of sociocultural pressures to have a thin body type is a mediator between exposure to thin ideal images in the media and eating pathology. They further found that internalization of the thin ideal was a predictor of body dissatisfaction, which in turn was related to disordered eating patterns.

Cafri, Yamamiya, Brannick, and Thompson (2005) conducted a meta-analysis to examine various socioecultural factors that influence issues with body image in young women. These researchers found that women who internalize society-based body image standards will demonstrate more body image issues than those who are only aware of such standards. Their findings also suggest that women who feel external pressures to be thin are also more likely to express more issues with body image than those who do not.

Even brief exposure to thin ideal images in the media can have detrimental affects on women’s body image for those who internalize the images. Yamamiya et al. (2005) exposed women to only 5 minutes of thin-and-beautiful media images and found that women who tend to have a higher level of thin ideal internalization reported more negative body image than women who endorsed lower levels of media internalization. The authors suggest that continuous media exposure can have a cumulative affect on body image in those who internalize media’s
messages. However, when the high-internalizing women were provided with information on media literacy, they reported less of a negative body image response. It is interesting to note that women who endorsed low levels of internalization were not affected by the brief media exposure. Yamamiya and colleagues suggested that media literacy, as an intervention, can be helpful in reducing negative body image.

**Impact of Magazines**

Magazines, specifically, have been found to influence the internalization of ideal body types for both men and women. Men and women who read fitness and beauty oriented magazines, respectively, are more likely to have more disordered eating behaviors and be more distressed with their physical appearance compared to those who do not read such magazines. The internalization of social ideals mediated the relationship between images viewed in magazines and body dissatisfaction for both genders. In addition, men and women were also thought to be strongly influenced by self-objectification, in that they internalized the strong messages of what one should look like from the media (Morry & Staska, 2001).

Researchers found that magazine ads can have a direct negative affect on women’s body image (Turner, Hamilton, Jacobs, Angood, & Dwyer, 1997). Female participants who viewed popular fashion magazines for 13 minutes reported heightened preoccupation with thinness, body dissatisfaction, frustration about weight, and fear about not complying with the thin idea. These participants also expressed a desire to weigh less and hold a more negative impression of themselves compared to women who viewed news magazines. Furthermore, women who perceived themselves as being overweight reported higher body dissatisfaction after viewing the fashion magazines compared to those who viewed the news magazines.
In a study that focused on men’s reactions to male models depicted in men’s magazines, men who viewed images of male models reported increased body dissatisfaction compared to men who viewed advertisements without models (Baird & Grieve, 2006). The researchers concluded that, similar to women, men view ideal images of muscular men in the media and compare themselves negatively to the models. Furthermore, the more dissatisfied men are with their bodies, the more they may be at risk for developing disordered eating behaviors or muscle dysmorphia. The authors note, however, that men and women receive a disproportionate amount of social pressure to conform to the socially constructed ideal body. They argue that while women are limited to their appearance to increase social status, men appear to have additional methods in which to improve social status, such as employment and income. However, societal pressures on males to obtain a muscular body have increased.

**Health Behaviors**

Thin ideal images in the media have been linked to various unhealthy behaviors related to eating and exercise. Viewers often attempt to obtain similar bodies to what they see depicted in the media and develop unhealthy habits such as purging, under eating, and over exercising. For example in a meta-analysis of 77 experimental and correlational studies, Grabe et al. (2008) demonstrated that viewing thin images in the media are associated with disordered eating attitudes and behaviors, including extreme dieting, binging, and purging.

In another study, Mask and Blanchard (2011) compared young women who were motivated to follow certain eating behaviors either by their own values of eating healthy and finding pleasure in preparing and consuming meals or by outside forces, such as other people in their lives, as well as placing self-worth values upon themselves in relation to food choices. The authors found that the women who were more dissatisfied with their bodies were more likely to
set avoidance eating rules for themselves, such as avoiding eating dessert, in order to control their diet. Also, the women who were more motivated by their own values of healthy eating were more apt to control their eating habits by keeping track of their food intake over the next few weeks while the women motivated by external cues were more likely to greatly reduce or avoid eating altogether. Further, women who were reportedly more self-directed in their eating habits were more prone to monitor their food intake in response to viewing media images of the “thin ideal” than the women who reported to be less self-directed in their eating behaviors.

**Personality, Media, Body Image, and Health Behaviors**

Roberts and Good (2010) examined the relationship between the five-factor personality traits and female college students’ body dissatisfaction. Participants viewed thin and plus-sized models from magazine and Internet sources. Researchers found that women who endorsed higher levels of neuroticism were more affected by media images compared to women with lower levels of neuroticism. More specifically, women who reported higher levels of neuroticism felt more dissatisfied with their own bodies after viewing images of idealized women. They felt less dissatisfied with their own bodies after viewing media images of plus-sized women. In contrast, women with high levels of conscientiousness, agreeableness, and extraversion reported a positive body image after viewing idealized media images. Also, women who reported higher level of openness to experience reported more body dissatisfaction after viewing heavier models.

The researchers of the above study concluded that many women believe that an idealized body is achievable. They suggested that such women might already view themselves in their ideal body when viewing ideal images. Furthermore, women with high confidence or self-efficacy (related to higher conscientiousness) may see idealized images in the media and
perceive them as motivation to achieve a more idealized body rather than feeling discouraged by the images. In contrast, women who have higher levels of neuroticism are less emotionally stable and have lower self-efficacy. Compared to women with other personality types, women with high levels of neuroticism may feel intimidated by idealized body images in the media rather than motivated (Roberts & Good, 2010).

Courneya and Hellsten (1998) examined the relationships between personality, exercise habits, motives, and barriers in undergraduate males and females. The researchers found that participants who endorsed higher levels of neuroticism reported participating in less strenuous physical activity and were less adherent to an exercise program. Also, those who reported higher levels of neuroticism were reportedly more motivated to exercise by appearance and weight, and less motivated by enjoyment.

In contrast, participants who endorsed higher levels of extraversion and conscientiousness reported participating in more strenuous exercise and were more adherent to an exercise program. Those who endorsed higher levels of openness to experience and conscientiousness also reported higher levels of moderate exercise. Participants who expressed higher levels of extraversion were reportedly motivated to exercise by health, stress, and enjoyment, while those who expressed higher levels of openness were also motivated to exercise by stress and enjoyment. In addition, participants who endorsed higher levels of conscientiousness cited health as their motivation to exercise (Courneya & Hellsten, 1998).

It is interesting to note that for those participants characterized by higher levels of neuroticism, lack of energy and motivation, along with embarrassment, were significant factors keeping them from exercising. In contrast, those who were characterized by higher levels of extraversion and conscientiousness were less likely to perceive lack of energy, lack of
motivation, or embarrassment as a barrier to exercise. Participants who endorsed higher levels of exercise also viewed lack of energy as less of a barrier to exercise (Courneya & Hellsten, 1998).

In general, neuroticism has been linked to negative health behaviors and attitudes. As previously mentioned, people who endorse higher levels of neuroticism are more likely to be negatively influenced by the media in terms of body dissatisfaction, yet the same group of people tend to put in less effort into exercise. Individuals with higher levels of neuroticism are motivated by appearance and weight concerns while people with higher levels of extraversion, conscientiousness, and openness to experience are motivated more by health-related concerns. These three personality styles, along with agreeableness, are associated with a more positive body image and more positive health behaviors. However, these findings are based on studies that included only undergraduate students and therefore cannot be generalized to adults of all ages.

In conclusion, messages portrayed through television, magazines, and advertisements can detrimentally influence how people feel about their bodies. However, the media affect both men and women differently. Not all women, for example, hold a negative body image after viewing thin ideal models. Some researchers believe that depending on one’s personality style, a person may be more or less predisposed to feeling dissatisfied with his or her body after viewing thin ideal images in the media.

Current study

The aforementioned studies focus on the relationships between media exposure and body image, as well as the relationships between personality and body image or health behaviors. The majority of the literature includes samples consisting of young women. Given the limited scope
of samples and topics in the previously discussed studies, the present study extends such research of individuals’ perceived body image, type of media exposure, and health oriented beliefs and behaviors. The present study includes both men and women representing ages spanning from young adults from the age of 18 through older adults above the age of 60.

**Hypotheses**

1a. It is hypothesized that personality type will be a significant predictor of body image quality of life (as measured by the Body Image Quality of Life Inventory). It is expected that neuroticism will be negatively related to body image quality of life. All other personality types are expected to be positively related to body image quality of life.

1b. It is hypothesized that exposure to fashion-related media (as measured by the Media Exposure Questionnaire) will be a significant contributing predictor of body image quality of life beyond personality type.

2a. It is hypothesized that personality type will be a significant predictor of health related behaviors, (as measured by the Healthy Activities questionnaire). It is expected that neuroticism will be negatively related to positive health behaviors. All other personality types are expected to be positively related to positive health behaviors.

2b. It is hypothesized that exposure to fashion-related media (as measured by the Media Exposure Questionnaire) will be a significant contributing predictor of positive health behavior beyond personality type. Increased exposure to fashion, however, is expected to be a negative predictor.

Additional media content and differences between male and female participants will be explored.
Method

Participants were 226 adults between 18 and 77 years of age (84% were female, $M_{\text{age}} = 37.19, SD = 14.23$; 16% were male, $M_{\text{age}} = 37.89, SD = 12.75$). The majority of the participants were White (87.4%), with remaining participants self-identifying as Black (3.3%), Asian (3.3%), Latino (2.8%), or other (3.3%). Participants were recruited through an online social network site utilizing a snowball methodology. The participants did not receive compensation for their participation.

Materials and Procedure

An online recruitment message included a link that directed the participants to the study website. Upon entering the study site, the participant was presented with an informed consent document. Next, the participant completed a brief demographics questionnaire (Appendix A) and the following survey instruments:

**General Health Questionnaire** (Appendix B). The General Health Questionnaire, which was created by the principle investigator of the present study, is a brief questionnaire that assessed basic health behaviors and attitudes towards one’s health. The measure consists of seven items, with questions related to an individual’s current eating and exercise behaviors.

**Health Consciousness** (Appendix C). The Health Consciousness Scale (Dutta-Bergman, 1994) is an assessment of an individual’s awareness of following a healthy lifestyle. The scale consists of five items with responses measured on a 1 to 5 Likert-type scale with one representing *strongly disagree*, and five representing *strongly agree*. The Cronbach’s alpha for this scale has been reported as .72 (Dutta-Bergman, 1994).

**Health Information Orientation** (Appendix D). The Health Information Orientation Scale (Dutta-Bergman, 1994) is an assessment of an individual’s use of resources for health
information. The scale consists of eight items within which individuals respond using a 1 to 5 Likert-type scale with one representing *strongly disagree* and five representing *strongly disagree*. Cronbach’s alpha for the aggregated scale has been reported as .87 (Dutta-Bergman, 1994).

**Health Oriented Beliefs** (Appendix E). The Health Oriented Beliefs Scale (Dutta-Bergman, 1994) is an assessment of an individual’s beliefs regarding the importance of a series of health behaviors. This scale consists of eight items wherein participants are asked to “Please rate each of the following health behaviors on a scale of 1 to 5 depending on how important you think that behavior is for your overall health.” (Dutta-Bergman, 1994).

**Healthy Activities** (Appendix F). In this measure, participants are asked in a dichotomous *Yes* or *No* format whether or not they participate in a variety of the healthy activities such as “eating a diet that is low in fat” and “maintaining a healthy body weight” (Dutta-Bergman, 1994).

**The Body Image Quality of Life Inventory** (BIQLI, Appendix G). The Body Image Quality of Life Inventory (Cash & Fleming, 2002) was used in the assessment of how a variety of body image conceptualizations influence an individual’s quality of life.

**The Multidimensional Body-Self Relations Questionnaire** (MBSRQ, Appendix H). The Multidimensional Body-Self Relations Questionnaire (Brown, Cash, & Mikulka, 1990) was used in the assessment of an individual’s body-image attitude.

**Media Exposure Questionnaire** (MEQ, Appendix I). The Media Exposure Questionnaire (Davis & Echanove, 2012) is a measure used to assess the frequency and qualitative nature of exposure to various forms of media.
IPIP Broad-Bandwidth Inventory Assessing NEO-PI-R Domains (Appendix J). The IPIP measure (Goldberg, 1999) is used in the identification of personality domain following the five-factor structure proposed by McCrae and Costa. The IPIP measure identifies the following domains: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The IPIP has been found to have strong internal consistency (.70 - .82 across domains) and is strongly correlated with the NEO-PI-R (Goldberg, 1999).

Once the participant completed the survey measures, they were informed that their participation was concluded and they were thanked for their time.

This research has been approved by the Pacific University Institutional Review Board. Each of the surveys included above, excluding those in Appendix A and B are available in the public domain.
Results

Male and female scores on all study variables were compared (see Table 2). There were
differences found on one variable, Health Oriented Beliefs, which contributes minimal
usefulness to the overall study. Therefore, the following analyses were conducted without the
consideration of gender.

Table 2. Gender Differences Among Study Variables.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Male Mean</th>
<th>Female Mean</th>
<th>T-value</th>
<th>2-tail significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBSRQ-AE</td>
<td>.12</td>
<td>.04</td>
<td>.86</td>
<td>.39</td>
</tr>
<tr>
<td>MBSRQ-AO</td>
<td>.21</td>
<td>.23</td>
<td>-.43</td>
<td>.67</td>
</tr>
<tr>
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<td>.25</td>
<td>.41</td>
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<td>.32</td>
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<td>.30</td>
<td>.48</td>
<td>-1.38</td>
<td>.17</td>
</tr>
<tr>
<td>BIQLI</td>
<td>.66</td>
<td>.53</td>
<td>.56</td>
<td>.58</td>
</tr>
<tr>
<td>Health Consciousness</td>
<td>21.98</td>
<td>21.58</td>
<td>.69</td>
<td>.49</td>
</tr>
<tr>
<td>Health Info Orientation</td>
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<td>31.36</td>
<td>-1.35</td>
<td>.18</td>
</tr>
<tr>
<td>Health Oriented Beliefs</td>
<td>33.05</td>
<td>34.68</td>
<td>-2.48*</td>
<td>.01</td>
</tr>
<tr>
<td>Healthy Activities</td>
<td>4.73</td>
<td>4.68</td>
<td>.17</td>
<td>.86</td>
</tr>
<tr>
<td>IPIP Neuroticism</td>
<td>24.11</td>
<td>25.14</td>
<td>-.70</td>
<td>.48</td>
</tr>
<tr>
<td>IPIP Extraversion</td>
<td>32.03</td>
<td>34.16</td>
<td>-1.44</td>
<td>.15</td>
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<tr>
<td>IPIP Openness to Exp</td>
<td>38.69</td>
<td>40.09</td>
<td>-1.24</td>
<td>.22</td>
</tr>
<tr>
<td>IPIP Agreeableness</td>
<td>37.77</td>
<td>38.26</td>
<td>-.45</td>
<td>.65</td>
</tr>
<tr>
<td>IPIP Conscientiousness</td>
<td>37.17</td>
<td>37.76</td>
<td>-.44</td>
<td>.65</td>
</tr>
</tbody>
</table>

* p < .05
Body Image Quality of Life

A linear regression analysis was conducted to evaluate the relationship of personality type to scores on the BIQLI. The simple regression was statistically significant (F(5, 195) = 14.43, \( p < .001 \)). Specifically, neuroticism was significantly negatively associated with scores on the BIQLI (\( b = -.42 \)) and extraversion was significantly positively related (\( b = .14 \)). In a second step, fashion-related media scores were entered into the regression equation to determine if they accounted for a significant amount of additional variance in BIQLI scores. This additional information, however, was not a significant contributor beyond personality information entered in the initial step.

Health Behaviors and Health Consciousness

A linear regression analysis was also conducted to evaluate the relationship of personality type to Healthy Activities. The simple regression was statistically significant (F(5, 213) = 5.03, \( p < .001 \)). Specifically, neuroticism was significantly negatively associated with Healthy Activities (\( b = -.17 \)). Conscientiousness was significantly positively related to Healthy Activities (\( b = .21 \)). Similar to analyses relating to the BIQLI, fashion-related media scores were not a significant additional contributor to Healthy Activities.

A linear regression analysis was also conducted to evaluate the relationship of personality type to Health Consciousness. The simple regression was statistically significant (F(5, 211) = 4.23, \( p < .001 \)). Specifically, conscientiousness was significantly positively associated with Health Conscientiousness (\( b = .19 \)). As with the above analysis, fashion-related media scores were not a significant additional contributor to Health Consciousness.

A linear regression analysis was also conducted to evaluate the relationship of personality type to Health Oriented Beliefs. The simple regression was not statistically significant (F(5, 210)
A further linear regression analysis was conducted to evaluate the relationship of personality type to Health Information Orientation. The simple regression was not statistically significant ($F(5, 210) = 1.77, p = .12$).

**Multidimensional Body-Self Relations Questionnaire**

The following results are based on exploratory findings. A linear regression analysis was conducted to evaluate the relationship of personality type to scores on the MBSRQ. Four subscales on this measure were examined: Appearance Evaluation, Appearance Orientation, Overweight Preoccupation, and Self Classified Weight. For Appearance Evaluation, the simple regression was statistically significant ($F(5, 68) = 5.50, p < .05$). Specifically, neuroticism was significantly negatively associated with scores on the Appearance Evaluation scale ($b = -.65$). For Overweight Preoccupation, the simple regression was statistically significant ($F(5, 68) = 2.60, p < .05$). Specifically, neuroticism was significantly positively associated with scores on the Overweight Preoccupation scale ($b = .40$). For Appearance Orientation, the simple regression was not statistically significant ($F(5, 68) = .81, p = .55$). The simple regression for Self Classified Weight was also not significant ($F(5, 68) = 1.34, p = .26$).

In a second step, fashion-related media scores were entered into the regression equation to determine if they accounted for a significant amount of additional variance in the scores on each of the subscales of the MBSRQ. This additional information, however, was not a significant contributor beyond personality information entered in the initial step.

**Media Use**

The following results are based on exploratory findings. The amount of time participants spent using various sources of media were compared to different aspects of body image and health behaviors. Specifically, there was a significant relationship found between cell phone use
and BIQLI scores so that the more time people spent on their cell phones, the higher body image quality of life was reported, \( r(161) = .16, p < .05 \). The amount of time people spent reading newspapers was positively associated with how many times per week participants reported exercising, \( r(72) = .30, p < .01 \). Furthermore, the period of time people spent on the Internet was positively associated with playing organized sports, \( r(163) = .16, p < .05 \). Finally, there was a positive relationship found between the amount of time participants spent viewing magazines or books and participating in yoga or Pilates, \( r(142) = .24, p < .01 \).
Discussion

Previous research, reviewed above, has demonstrated that the media is saturated with thin-ideal images of women and muscular images of men that are not representative of the average person. Men and women in the general public respond to these images in various ways, and often negatively. There are various reasons why individuals react differently to ideal images in the media. The current study focuses on personality as a factor in differences in body image and health behaviors in relation to media exposure. It extends upon previous research focusing on individuals’ perceived body image, type of media exposure, and health oriented beliefs and behaviors.

Consistent with the hypothesis, neuroticism was found to be a negative predictor of body image quality of life. Also, extraversion was found to be a positive predictor of body image quality of life. These findings are consistent with research by Roberts and Good (2010) in that college age women who endorsed higher levels of neuroticism expressed higher levels of intimidation, less emotional stability, and lower self-efficacy after viewing thin-ideal media images, suggesting worse quality of life in relation to body image and the media. In addition, women who endorsed higher levels of extraversion were more satisfied with their body image quality of life. However, unlike the results of Roberts and Good, the other three personality traits were not significant predictors of body image.

As expected, neuroticism was a negative predictor of participating in healthy activities. Furthermore, conscientiousness positively predicted participants’ involvement in healthy activities. Courneya and Hellsten (1998) found similar results in that people who reported higher levels of neuroticism partake in less vigorous exercise compared to those who are conscientious, reporting participation in more vigorous activities. It seems as though people who reported
higher levels of neuroticism are displeased with their body image, however they are less likely to resort to healthy means of addressing their body dissatisfaction.

In addition, conscientiousness was a positive predictor of health conscientiousness. Health consciousness is described as the extent to which someone incorporates health and wellness into everyday life. Individuals who are more health conscious hold value exercise and eating well as preventative measures (Dutta-Bergman, 1994). In order to follow a healthy lifestyle in a preventative manner, one must be self-disciplined, achievement striving, and deliberate. It takes competence in order to understand what one needs to do in order to live healthily. These are the facets that contribute to conscientiousness (Costa & McCrae, 1995).

Furthermore, neuroticism was found to be a negative predictor of Appearance Evaluation. In other words, people with higher levels of neuroticism tended to be unhappier with their physical appearance (Cash, 2000). The current findings that individuals who acknowledge higher levels of neuroticism also acknowledge a general dissatisfaction or unhappiness with their physical appearance reflect those within the Roberts and Good (2010) investigation in that higher neuroticism in women was associated with increased body dissatisfaction.

Neuroticism was also found to be a negative predictor of Overweight Preoccupation, meaning that those who endorsed higher levels of neuroticism were more likely to experience fat anxiety, weight vigilance, dieting, and weight restraint (Cash, 2000). Features of neuroticism include anxiety and vulnerability (Costa & McCrae, 1995), which are likely contributing factors in participants' reports of feeling dissatisfied with their bodies, fat anxiety, and weight vigilance. Striegel-Moore et al. (1986) found that women feel fat even if they are not overweight. The researchers attributed this to strong social pressures to be thin, the media likely playing the role of one of the social pressures. Study participants who reported feeling fat also were more likely
to develop disordered eating behaviors (Striegel-Moore et al., 1986), reflecting the current findings that neuroticism was linked with dieting and weight restraint.

It is interesting that no differences were found among personality styles and Appearance orientation. This measure indicates how much a person is invested in his or her appearance, as well as participation in grooming behaviors and attention to appearance (Cash, 2000). No personality differences were found for self-classified weight either. This measure is indicative of how individuals perceive and label their weight, specifically under or overweight (Cash, 2000). If people were vigilant or anxious about their weight and dieting, it would seem likely that they would also have a strong interest in their overall appearance. It would also be expected that the concern about weight would lead individuals to place a judgment or label on their weight. Perhaps the concern about how one looks as a result of personal grooming and satisfaction with overall appearance are mutually exclusive.

Various relationships were found between media use and involvement in physical activity. Participants who reported increased use of their cell phone also endorsed a more positive body image. The more time people spent reading the newspaper, the more time they spent exercising in general. Similarly, participants who spent more time on the Internet were more likely to play organized sports. Also, the more time participants spent reading magazines or books were more involved in yoga or Pilates. Dutta-Bergman (1994) found that people who seek out information most from newspapers, magazines, the Internet, and interpersonal networks are more health-oriented. In other words, they are more concerned about being healthy. The author described these types of media as “active” and as a preferred method for information seeking for those people who are more health-conscious. According to Dutta-Bergman, television and radio are considered to be passive types of media, and preferred by those who are
less health-oriented and less concerned about being healthy. Therefore, people who seek information from active sources are more likely to follow a more active lifestyle. It is interesting, however, that different physical activities in the current study were related to different media types. One would expect that physical activity of any type would be associated with the use of all active media sources, rather than one or another.

Contrary to the stated hypothesis, viewing fashion-related media was not associated with body image quality of life. The lack of significant findings was surprising, given that various studies have linked viewing fashion-related media and negative body image in both men and women (Baird & Grieve, 2006; Turner et al., 1997). One possible explanation for this is that the questions were not tapping into appropriate constructs that capture one’s experience of viewing fashion-related media. Viewing fashion-related media was also not associated with health behaviors. Perhaps it is not fashion-related content specifically that is related to negative body image. Rather, media images in general portraying thin ideal body types in advertisements and entertainment may be playing a large role in body dissatisfaction and body image quality of life.

Another possible explanation for the lack of findings regarding fashion-related media and body dissatisfaction is that consumers of popular media are desensitized to the thin-ideal images in the media due to inescapable displays of thin models, actors, and actresses. Viewers are therefore not as negatively affected by viewing such images because they are accustomed to them. It is also believed that women at different stages of life are more or less susceptible to internalizing the thin ideal, which can lead to higher levels of body dissatisfaction, (Cusumano & Thompson, 1997), and therefore, future research comparing different age groups and body image may be more informative.
Personality style has been one explanation for differences in reactions to the media in terms of body image, as well as participation in health behaviors. An alternative explanation for these variations is the self-determination theory (Mask & Blanchard, 2010). According to this theory, people are motivated to do certain things based on a spectrum of behavior regulations. Those who are high in self-determinism are thought to have a strong sense of self that is “integrated, unified, and non-contingent” (p. 490). Those who are low in self-determinism are believed to have a more “compartmentalized and disintegrated sense of self” (p. 490).

Researchers have found that high general self-determination acts as a protective factor against body dissatisfaction in response to media exposure for women. Female participants with high self-determinism were less likely to endorse the sociocultural beliefs regarding the thin ideal. It was also found that women low in self-determinism perceived more pressure from the media to be thin (Mask & Blanchard, 2010).

Women, and likely men, who feel as though they have more self-determinism and control of their life appear less likely to experience body dissatisfaction after media exposure. Perhaps there is a connection between personality type and self-determinism, which could be explored in future studies. As previously mentioned, people with higher levels of neuroticism are more motivated to exercise by weight and physical appearance whereas the motivation to exercise for those who have higher levels of the other four personality styles includes enjoyment, stress reduction, and health (Courneya & Hellsten, 1998).

**Limitations and Future Directions**

The first limitation of the present study is that only self-report measures were used. It is possible that participants reported health behaviors and attitudes in a more socially desirable way. They may have also reported inaccurate body image attitudes. A second limitation is the
unequal representation in terms of gender and age. The majority of respondents were young females and so it was not possible to make comparisons between men and women of different age categories. A third limitation was the use of snowball sampling, which did not allow for true random sampling. Although the sampling method was nonrandom, there was a varied representation of ages and geographical locations among the participants. However, considering the wide age range of participants in the present study (i.e., between college-aged young adults and older adults), this study may exhibit a higher degree of generalizability than many studies that only utilize college students.

Most of the current research focuses on body image of white women in relation to media exposure. Future research should include more diverse populations, specifically racial and sexual minorities. Most of the popular media is aimed at a gender normative population who is mostly white. It would be interesting to examine the reactions that diverse populations have to media images in terms of body satisfaction and health behaviors. Furthermore, comparing different age groups could provide additional data, specifically in regards to an age of heightened sensitivity to and internalization of thin ideal media images.

The topic of desensitization would also be important to further examine. The media is more inundated than ever before with thin ideal images. There is also an increase in awareness of Photoshopped models and society’s unrealistic standards of perfection and beauty. Studies that examine health and body image attitudes as well as desensitization could help to determine whether or not education on increased awareness of the thin ideal have affected consumers’ reactions to images in the media.

As demonstrated in previous literature, neuroticism is associated with poor body image quality of life and body dissatisfaction. Despite the fact that those who endorse higher levels of
neuroticism are unhappy with their bodies, they are more likely to participate in fewer healthy behaviors and control their weight with dieting and food restriction, which can often be unhealthy and dangerous. In contrast, extraversion is associated with a positive body image quality of life, however it does not predict body dissatisfaction. People who endorse higher levels of conscientiousness participate in more healthy activities and are more conscious about their health. In regards to media use, participants who use more active mean of information gathering are more likely to engage in increased levels of exercise. Viewing fashion related media does not contribute to body dissatisfaction or health behaviors, possibly because images depicted in fashion content in the media are not much different than images in general shown on screen and print media alike, no matter the content. It is likely that personality is not the only aspect that determines body image and health behaviors and attitudes in relation to the media. Therefore, it is encouraged that other factors, such as self-determination, be further explored with regards to body image, eating, and other health behaviors.
References


Krones, P. G., Stice, E., Batres, C., & Orjada, K. (2005). In vivo social comparison to a thin-


Peck, J., & Loken, B. (2004). When will larger-sized female models in advertisements be
viewed positively? The moderating effects of instructional frame, gender, and need for


eating disorder symptomology: An examination of mediating mechanisms. *Journal of
Abnormal Psychology, 103*, 836-840.

longitudinal investigation. *Developmental Psychology, 38*, 669-678. doi:10.1037//0012-
1649.38.5.669

Striegel-Moore, R., McAvay, G., & Rodin, J. (1986). Psychological and behavioral correlates of

of fashion magazines on the body image satisfaction of college women: An exploratory

exposure to thin-and-beautiful media images: Body image effects of media-ideal
doi:10.1016/j.bodyim.2004.11.001
Appendix A

Demographic Questionnaire

Please respond to each of the following…

Age: _____

Gender: _____

Ethnicity: ____________________

Occupation: ____________________

What is the highest level of education completed?

_____ Some High School

_____ High School Diploma

_____ Some College

_____ Technical or Trade school certificate or degree

_____ 2-year degree

_____ 4-year degree

_____ Some graduate-level training

_____ Graduate degree
Appendix B

General Health Questionnaire

Please mark and X in the appropriate box next to each question

Do you consider yourself a healthy eater?  Yes: _____  No: _____

Do you consider yourself
_____ Underweight?
_____ Normal/healthy weight?
_____ Overweight?

Are you on a “diet”?  Yes: _____  No: _____

What is your typical level of exercise?
_____ None
_____ Light
_____ Moderate
_____ Intense

How many times per week do you exercise?
_____ 0-1
_____ 2-3
_____ 4-7

Please select all that apply:

What type of physical activities do you participate in?
_____ Cardiovascular activities (e.g. running, walking briskly, using the elliptical machine, swimming)
_____ Lifting weights
_____ Playing an organized sport (e.g. soccer, basketball)
_____ Yoga, Pilates, or a similar form of exercise
_____ Other

Are you happy with your body?     Yes: _____  No: _____
Appendix C

Health Consciousness

For each of the following statements please indicate how much you agree or disagree by assigning a number between 1 and 5 to each item. 1 represents “strongly disagree” and 5 represents “strongly disagree.”

_____ Living life in the best possible health is very important to me.

_____ Eating right, exercising, and taking preventative measures will keep the healthy for life.

_____ My health depends on how well I take care of myself.

_____ I actively try to prevent disease and illness.

_____ I do everything I can to stay healthy.
Appendix D

Health information orientation

For each of the following statements please indicate how much you agree or disagree by assigning a number between 1 and 5 to each item. 1 represents “strongly disagree” and 5 represents “strongly disagree.”

_____ I make a point to read and watch stories about health.

_____ I really enjoy learning about health issues.

_____ To be and stay healthy it’s critical to be informed about health issues.

_____ The amount of health information available today makes it easier for me to take care of my health.

_____ When I take medicine I try to get as much information as possible about its benefits and side effects.

_____ I need to know about health issues so I can keep myself and my family healthy.

_____ Before making a decision about my health, I find out everything I can about this issue.

_____ It is important to me to be informed about health issues.
Appendix E

Health oriented beliefs

Please RATE each of the following health behaviors on a scale of 1 to 5 depending on how important you think that behavior is for your overall health.

_____ Eating a diet that is low in fat.

_____ Eating lots of fruits, vegetables and greens.

_____ Drinking plenty of water every day.

_____ Taking vitamins and mineral supplements regularly.

_____ Exercising regularly.

_____ Not smoking cigarettes.

_____ Not drinking alcohol or drinking in moderation.

_____ Maintaining a healthy body weight.
Appendix F

Healthy activities

Please **PLACE an X** for each of these behaviors **that you currently perform** to maintain your health.

_____ Eating a diet that is low in fat

_____ Eating lots of fruits, vegetables and grains

_____ Drinking plenty of water every day

_____ Taking vitamins and minerals supplements regularly

_____ Exercising regularly

_____ Not smoking cigarettes

_____ Drinking alcohol or drinking in moderation

_____ Maintaining a healthy body weight
Appendix G

The Body Image Quality of Life Inventory Questionnaire

Instructions: Different people have different feelings about their physical appearance. These feelings are called “body image.” Some people are generally satisfied with their looks, while others are dissatisfied. At the same time, people differ in terms of how their body-image experiences affect other aspects of their lives. Body image may have positive effects, negative effects, or no effect at all. Listed below are various ways that your own body image may or may not influence your life. For each item, indicate how and how much your feelings about your appearance affect that aspect of your life using the scale below.

Before answering each item, think carefully about the answer that most accurately reflects how your body image usually affects you.

<table>
<thead>
<tr>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Negative Effect</td>
<td>Moderately Negative Effect</td>
<td>Slightly Negative Effect</td>
<td>No Effect</td>
<td>Slightly Positive Effect</td>
<td>Moderately Positive Effect</td>
<td>Very Positive Effect</td>
</tr>
</tbody>
</table>

1. My basic feelings about myself—feelings of personal adequacy and self worth.
2. My feelings about my adequacy as a man or woman—feelings of masculinity or femininity.
3. My interactions with people of my own sex.
4. My interactions with people of the other sex.
5. My experiences when I meet new people.
6. My experiences at work or at school.
7. My relationships with friends.
8. My relationships with family members.
9. My day-to-day emotions.
10. My satisfaction with my life in general.
11. My feelings of acceptability as a sexual partner.
12. My enjoyment of my sex life.
13. My ability to control what and how much I eat.
14. My ability to control my weight.
15. My activities for physical exercise.
16. My willingness to do things that might call attention to my appearance.
17. My daily “grooming” activities (i.e., getting dressed and physically ready for the day).
Appendix H

Multidimensional Body-Self Relations Questionnaire - Appearance Scales

Using the following scale, indicate your level of agreement with each of the following:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Definitely Disagree</td>
<td>Mostly Disagree</td>
<td>Neither Disagree nor Agree</td>
<td>Mostly Agree</td>
<td>Definitely Agree</td>
</tr>
</tbody>
</table>

2. I am careful to buy clothes that will make me look my best.
3. My body is sexually appealing.
4. I constantly worry about being or becoming fat.
5. I like my looks just the way they are.
6. I check my appearance in a mirror whenever I can.
7. Before going out, I usually spend a lot of time getting ready.
8. I am very conscious of even small changes in my weight.
9. I like the way I look without my clothes on.
10. I am self-conscious if my grooming isn't right.
11. I usually wear whatever is handy without caring how it looks.
12. I like the way my clothes fit me.
13. I don't care what people think about my appearance.
14. I take special care with my hair grooming.
15. I dislike my physique.
16. It is important that I always look good.
17. I use very few grooming products.
18. Most people would consider me good-looking.
19. I am physically unattractive.
20. I never think about my appearance.
21. I am always trying to improve my physical appearance.
22. I am on a weight-loss diet.

23. I have tried to lose weight by fasting or going on crash diets.
   1. Never
   2. Rarely
   3. Sometimes
   4. Often
   5. Very Often

24. I think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
4. Somewhat Overweight
5. Very Overweight

25. From looking at me, most other people would think I am:
   1. Very Underweight
   2. Somewhat Underweight
   3. Normal Weight
   4. Somewhat Overweight
   5. Very Overweight

Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Dissatisfied</td>
<td>Mostly Dissatisfied</td>
<td>Neither Dissatisfied nor Satisfied</td>
<td>Mostly Satisfied</td>
<td>Very Satisfied</td>
</tr>
</tbody>
</table>

26. Face (facial features, complexion)
27. Hair (color, thickness, texture)
28. Lower torso (buttocks, hips, thighs, legs)
29. Mid torso (waist, stomach)
30. Upper torso (chest or breasts, shoulders, arms)
31. Muscle tone
32. Weight
33. Height
34. Overall appearance
Appendix I

Media Exposure Questionnaire – Individual Adult (MEQ-IA)

Television
Do you watch television? Yes _______ No _______

How many hours in a normal day do you spend watching television? _______

Indicate how often you watch the following types of television broadcast:

<table>
<thead>
<tr>
<th>Type</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiction / Drama</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comedy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children and Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multicultural / International</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Shopping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Broadcasts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentaries / Non-Fiction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk Shows</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

How many televisions do you regularly use in your household? _______

Indicate which room(s) of your house has a television:

Living / Family Room  _______
Den/Study  _______
Bedroom  _______
Kitchen  _______
Other  ________________  _______

Do you have the television turned on even when you are not actively watching?
Yes  _______  No  _______
If you suddenly didn’t have television, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Very Negative Affect</th>
<th>Slightly Negative Affect</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive Affect</th>
<th>Very Positive Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Internet**

Do you ever access the Internet? Yes _______ No _______

How many hours in a normal day do you spend on the Internet? _______

Indicate how often you visit the following types of websites:

<table>
<thead>
<tr>
<th>News / Politics</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business / Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Movies / Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashion / Lifestyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education / Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jobs / Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious and Inspirational</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How often do you engage in the following on the Internet?

<table>
<thead>
<tr>
<th>Listening to Podcasts</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Networking (e.g., Facebook, Twitter, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movies / Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing Games Online</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Shopping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create / Manage Your Own Website</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you suddenly did not have access to the Internet, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Very Negative Affect</th>
<th>Slightly Negative Affect</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive Affect</th>
<th>Very Positive Affect</th>
</tr>
</thead>
</table>

**Magazines / Books (Electronic or Print)**

Do you read magazines and/or books?  Yes _______  No _______

How many hours in a normal week do you spend reading magazines and/or books?

_______

Indicate how often you read the following types of magazines and/or books:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News / Politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School / Textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Fiction (e.g., Biographies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiction and Literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion and Inspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Improvement</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you suddenly did not have access to magazines or books, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Very Negative Affect</th>
<th>Slightly Negative Affect</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive Affect</th>
<th>Very Positive Affect</th>
</tr>
</thead>
</table>
Newspapers (Electronic or Print)
Do you read newspapers?  Yes _______  No _______

How many hours in a normal week do you spend reading newspapers?  _______

Indicate how often you read the following sections within the newspaper:

<table>
<thead>
<tr>
<th>Section</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local News</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National News</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International News</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashion / Lifestyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editorial / Opinion</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science / Technology</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

If you suddenly did not have access to the newspaper, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Affect</th>
<th>Very Negative</th>
<th>Slightly Negative</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Radio
Do you listen to the radio?  Yes _______  No _______

How many hours in a normal day do you spend listening to the radio?  _______

Indicate how often you listen to the following types of radio broadcasts:

<table>
<thead>
<tr>
<th>Broadcast Type</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News / Politics / Talk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Broadcasting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If you suddenly did not have access to the radio, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Very Negative Affect</th>
<th>Slightly Negative Affect</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive Affect</th>
<th>Very Positive Affect</th>
</tr>
</thead>
</table>

**Cell Phone**
Do you have access to a cell phone? Yes _______ No _______

How many hours in a normal day do you spend on a cell phone? _______

How often do you engage in the following on a cell phone?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking on the Phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texting / Instant Messaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Networking (e.g., Facebook, Twitter, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movies / Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing Games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Internet Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking / Looking at Pictures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking / Looking at Video</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you suddenly did not have access to a cell phone, how would it affect you emotionally?

<table>
<thead>
<tr>
<th>Very Negative Affect</th>
<th>Slightly Negative Affect</th>
<th>Neutral / No Affect</th>
<th>Slightly Positive Affect</th>
<th>Very Positive Affect</th>
</tr>
</thead>
</table>

What is your overall opinion of each of the following types of media?

<table>
<thead>
<tr>
<th>Media Type</th>
<th>Very Negative</th>
<th>Slightly Negative</th>
<th>Neutral</th>
<th>Slightly Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines /</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate your reason for using each of the following forms of media:

<table>
<thead>
<tr>
<th>Form of Media</th>
<th>Don’t use this form of media</th>
<th>Only because I have to (e.g., work)</th>
<th>Only because I want to</th>
<th>Because I both need and want to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magazines / Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide any additional information regarding your individual media exposure not addressed in the previous questions:
Appendix J

IPIP Broad-Bandwidth Inventory Assessing NEO PI-R Domains

Please use the rating scale below to describe how accurately each statement describes you.

Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age.

Please read each statement carefully, and then indicate the choice corresponds to the number on the following scale.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Inaccurate</td>
<td>Moderately Inaccurate</td>
<td>Neither Inaccurate nor Accurate</td>
<td>Moderately Accurate</td>
<td>Very Accurate</td>
</tr>
</tbody>
</table>

1. Often feel blue.
2. Dislike myself.
3. Am often down in the dumps.
4. Have frequent mood swings.
5. Rarely get irritated.
5. Seldom feel blue.
6. Feel comfortable with myself.
7. Am not easily bothered by things.
8. Am very pleased with myself.
9. Feel comfortable around people.
10. Make friends easily.
11. Am skilled in handling social situations.
12. Am the life of the party.
13. Know how to captivate people.
14. Have little to say.
15. Keep in the background.
16. Would describe my experiences as somewhat dull.
17. Don't like to draw attention to myself.
18. Don't talk a lot.
19. Believe in the importance of art.
20. Have a vivid imagination.
21. Tend to vote for liberal political candidates.
22. Carry the conversation to a higher level.
23. Enjoy hearing new ideas.
25. Do not like art.
26. Avoid philosophical discussions.
27. Do not enjoy going to art museums.
28. Tend to vote for conservative political candidates.
29. Have a good word for everyone.
30. Believe that others have good intentions.
31. Respect others.
32. Accept people as they are.
33. Make people feel at ease.
34. Have a sharp tongue.
35. Cut others to pieces.
36. Suspect hidden motives in others.
37. Get back at others.
38. Insult people.
39. Am always prepared.
40. Pay attention to details.
41. Get chores done right away.
42. Carry out my plans.
43. Make plans and stick to them.
44. Waste my time.
45. Find it difficult to get down to work.
46. Do just enough work to get by.
47. Don't see things through.
48. Shirk my duties.