ADOLESCENT MAGAZINE EXPOSURE: REAL AND
PERCEIVED IMPACT ON BODY IMAGE

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ABSTRACT

ADOLESCENT MAGAZINE EXOSURE: REAL AND PERCEIVED IMPACT ON BODY IMAGE

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A plethora of research indicates that magazine reading has an impact on body image and the perception of the idealized body. This impact tends to be harmful and in some cases is associated with the progression of eating and body dysmorphic disorders in both men and women. However, there appears to be little information on adolescent tendencies to internalize prescribed body image ideals as well as their knowledge of this impact. Using a modified version of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ), 197 high school students responded to questions about magazine reading habits and internalization of body ideals, as well as their belief in media influence. Gender and ethnicity as mediating factors were also assessed. Results suggest readers, especially female, are more likely to internalize images. While those who score highest on the SATAQ acknowledged this impact, most readers denied it. Implications are reviewed. The
electronic version of this dissertation is at OhioLink ETD Center, www.ohiolink.edu/etd.
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Background

An abundance of research indicates that magazine reading has an impact on body image and the perception of the idealized body (Cameron and Ferraro, 2004; Davison & McCabe, 2006; Durham, 1998; McCabe, Ricciardelli, Mellor, & Ball, 2005; Pardun, L’Engle & Brown, 2005; Park, 2005; Posavac, Posavac & Posavac, 1998; Van den Bulck, 2000; Wedell, Santoyo & Pettibone, 2005).

Some suggest this effect is most salient among women who are already dissatisfied with their bodies (Cameron and Ferraro, 2004; Posavac et al., 1998). In 2004, Cameron and Ferraro completed an experiment wherein participants were assigned to one of two groups, representing those “satisfied” or “unsatisfied” with their bodies, based on responses to a body image questionnaire. They were further subdivided randomly into groups of 15 depending on the magazine directed to read: Fashion, fitness or news (the control group). Following 15 minutes of reading, subjects completed a series of self-concept questionnaires. According to the authors, significant main effects using an analysis of variance supported the research hypothesis that the impact of exposure to idealized body images is greater among those women who previously noted body image concerns (Cameron and Ferraro, 2004). This effect adds credence to
results obtained by Posavac et al. (1998) in which multiple experiments revealed that image impact is mediated by an initially positive body image.

Other investigations have indicated that even brief exposure to idealized body images can have an impact on one’s perception of thinness. Recent research by Wedell et al. (2005) required two experiments varying subjects’ exposure to silhouette body images. In the first experiment, figures were presented simultaneously on a single page. In the second, they were presented successively on a computer screen. In both cases participants were asked to rate the figures on a nine point scale with regard to width and pleasantness and then respond to 19 questions related to weight, ideal weight, attitudes and activities. An analysis of variance revealed that even brief exposure to body images has an impact on the perception of thinness, and a silhouette is more apt to be judged as pleasant among wider figures. If the same image is presented in the context of those of similar size or thinner, ratings decline. Similar to Cameron and Ferraro’s (2004) study and the Posavac et al. (1998) investigation, subjects indicating discomfort with their own body image on the 19-question survey tended to judge
wider shapes more harshly regardless of the context (Wedell et al., 2005).

Still another study demonstrated that the quantity of magazine reading is highly correlated with the perception of thinness prevalence (Parks, 2005). As 432 women attending a Midwestern university viewed more magazines, they increasingly believed that such body shapes were common among women in mainstream society. Interestingly, this study did not yield similar findings when applying thin prevalence to men. Women did not perceive men in magazines as realistic images of men in mainstream society. However, caution should be taken when interpreting study results. Although the sample size is impressive, the limited age and locale of the women may not have produced entirely representative conclusions.

It seems the impact of idealized body exposure is not just pertinent to magazine reading. A survey of college students demonstrated a relationship between estimated exposure to “idealized bodies” on television and a decrease in body image scores in both men and women (Van den Bulk, 2000).

In addition, such results are not just evident among adults. It has been shown that magazines can influence adolescent perceptions and behavior as well (Durham, 1998;
Pardun et al., 2005). This is especially concerning considering outcomes of longitudinal magnetic resonance imaging (MRI) studies assessing the neurochemistry of adolescent brains (Giedd, Blumenthal, Jeffries, Castellanos, Liu, Zijdenbos, Paus, Evans, & Rapoport, 1999; Sowell, Thompson, Holmes, Jernigan, & Toga, 1999). It is argued that during the teen years, changes in the brain are as profound as that of infants and may result in greater vulnerability to external stimuli such as media messages. Social development and learning during this period can have long-lasting implications, extending far into late adulthood (Strauch, 2003). This makes research on adolescents all the more alarming and important.

One such investigation involved asking over 3,000 junior high school students to complete a questionnaire on their type of media use and sexual attitudes and behaviors (Pardun et al., 2005). Highest ranking TV shows, movies, internet sites and magazines were analyzed for sexual content, including romantic relationships, body exposure, sexual innuendo and intercourse, as well as touching and kissing. Results showed a significant association exists between adolescent sexual activity exposure and future intimacy aspirations. Although this does not mean sexual
content causes future sexual intentions, it does suggest a relationship exists.

The recent research in this area has inspired the American Psychological Association (APA) to release a task force position report on the sexualization of girls in the media (2007). In the paper, sexualization is defined as the following:

...a person’s value comes only from his or her sexual appeal or behavior, to the exclusion of other characteristics; a person is held to a standard that equates physical attractiveness (narrowly defined) with being sexy; a person is sexually objectified --that is, made into a thing for others’ sexual use, rather than seen as a person with the capacity for independent action and decision making; and/or sexuality is inappropriately imposed upon a person. All four conditions need not be present; any one is an indication of sexualization. The fourth condition (the inappropriate imposition of sexuality) is especially relevant to children. Anyone (girls, boys, men, women) can be sexualized (p.1).

They argue that virtually all media forms are guilty of sexualizing, and that this is far more common among
females than males. Furthermore, it is noted that standards of beauty are narrowly and unrealistically defined, and are increasingly focused on the projection of young children as sexy (hence the schoolgirl outfit with fishnet stockings, models in pigtails, and thongs sized for children age 7 to 10). It is APA’s position that consequences include poor concentration on mental activities, an increase in eating disorders, low self-esteem and depression, and unhealthy future sexual relationships among both girls and boys (APA, 2007).

In the most recent decade, there has been growing interest and concern about the media’s portrayal of the idealized male body and how this impacts the body image of men (Botta, 2003; Cohane & Harrison, 2001; Jones & Crawford, 2005; Leit, 2002; Gray & Pope, 2002; Pope & Olivardia, 1999; Stanford & McCabe, 2005). In one study, half of the sampled men were exposed to 30 slides of advertisements from magazines and catalogues, 20 of which featured men with “idealized” bodies (Leit et al. 2002). Afterward, participants engaged in the Somatomorphic Matrix, a computerized test of body image perception, in which individuals can visually adjust video images of men to include more or less fat and muscle. Subjects altered the images in accordance with their perception of their own
body shape, as well as the average and ideal shapes. Lastly, they were asked women’s ideal male physique. Results demonstrated that although control and experimental groups did not differ in their estimations of women’s perceptions, they varied widely with regard to their own. Men exposed to magazine images demonstrated a greater discrepancy between how they view themselves and what they consider to be ideal. Interestingly, this research also suggests that male ideals relate less to weight, but more to muscularity (Leit et al. 2002).

Recent investigations completed by Botta (2003), Cohane et al. (2001), Jones et al. (2005), Magdala Peixoto (2005), and Pope & Olivardia (1999) provide serious support for the claim that, unlike women, men are more concerned about an increase in muscle mass than weight loss. Cohane et al.’s analysis of the literature showed that body image discomfort may not be quite as common for men as it is for women, but that dissatisfaction among men is a growing concern. Interestingly, few subjects between the ages of 14 and 18 were utilized in the above studies, suggesting that results may not be entirely representative of this important adolescent demographic.

Studies by Stanford et al. (2005) and Magdala Peixoto revealed that factors other than magazine exposure may be
responsible for male body discomfort. Responses to Stanford et al.’s multiple questionnaires indicated that parents have the greatest influence on male body image. However, it is hard to ignore Pope & Olivardia’s investigative results in which they reviewed the body shapes of popular American action toys over a 30 year period. Dramatic increases in muscul arity were discovered as well as the realization that current toys commonly exceed the size of even the largest of actual bodybuilders. A 1998 action figure of Han Solo is markedly more muscular than a 1978 version.

Botta’s (2003) analysis concluded that although women are more likely affected by images in fashion magazines, men are similarly struck by fitness magazines. In both cases, images may yield bulimic-like behaviors.

There is reason to believe that girls and boys as young as first grade internalize the beauty/health ideal displayed in magazines (Harrison, 2000; Murnen et al., 2003). Muren et al. (2003) interviewed elementary-age students after showing them 4 pictures of currently popular celebrities or models. Reminiscent of previously discussed studies using adult subjects, responses to questions suggest that young girls who already demonstrate an awareness of the thin ideal for women are more likely to internalize images, considering them the beauty ideal,
something important to strive toward and compare oneself against. Like their older counterparts, this effect is believed to be mitigated by body-esteem (Murnen et al., 2003).

Harrison (2000) asked first- through third-grade students to share their TV viewing habits, as well as their ratings of a variety of line figure drawings. Ratings related to their perception of their own size, ideal size ("best for a girl/boy your age") and the ideal adult size ("best for a grown women/man"). Next they were shown drawings of the second largest and thinnest figures and asked a series of character questions, such as “Do you think this person is nice?” “Do you think this person is smart?” “Do you think this person tells the truth?” “Do you think this person has lots of friends?” Lastly, subjects completed a series of body image and eating disorder symptomology questionnaires. Results indicated that girls and boys have overall similar television viewing habits. More importantly, it was concluded that television viewing is related to the onset of eating disorder symptomology. However, it was not connected to an increase in the preference for a thin body type. The authors thus argue that children may begin dieting and exercising behaviors before they internalize thin images as the idealized body.
In short, behavior leads to thought. Also notable, boys who watch greater amounts of television tend to judge the fuller-figured female drawings as negative. Even before a boy develops a desire for muscul arity, he may already perceive larger girls poorly (Harrison, 2000). However, one may question the authenticity of young children’s responses when faced with questions posed by researchers. Leading questions and a child’s desire to please may have influenced study results.

The impact of the media is an increasing cause for concern in light of the trends regarding magazine content (Ballentine & Ogle, 2005; Nemeroff, Stein, Diehl & Smilack, 1994; Sypeck, Gray & Ahrens, 2004). Sypeck et al. (2004) investigated the development of cover models on the 4 most popular American fashion magazines from 1960-1990: Glamour, Vogue, Mademoiselle and Cosmopolitan. Body size was assessed via the Contour Drawing Rating Scale given by a variety of lay person. A follow-up measure was done, yielding an agreement rate of 99%. After viewing 552 images, logistic regression determined that over time, magazine covers are more likely to show a model’s body, rather than her face alone. The investigators followed up the original study, observing that clothing became
increasingly revealing over time as well (Sypeck et al., 2004).

Nemeroff et al. (1994) examined 12 years of Ladies Home Journal, Good Housekeeping, Playboy, Glamour, Cosmopolitan, Gentleman’s Quarterly, New Woman, Ms., and Esquire. Reviewing only articles and ignoring advertisements, the researchers assessed the frequency of weight-loss, beauty, fitness and health items. Their analysis indicated there are far more body-related articles in women’s magazines, but an overall increase of weight loss items among those health magazines traditionally considered men’s.

Several theories have been suggested in an attempt to explain the harmful connection between media exposure and body image. Social comparison theory of body image and media exposure states that individuals tend to compare their physical appearance to images in the media. Milke (1999) and Morrison et al. (2004) argued that this theory more accurately explains the process by which media influences perceptions than other proposed theories. Using 2500 questionnaires, Morrison et al. asked high school students about their degree of magazine exposure, as well as their tendency to compare themselves to images. Responses were then correlated with various measures of body image investment. Results suggested that social
comparison is a strong predictor of body image investment among men and women.

In Harrison et al.'s (1997) study, they asked college-age men and women about their viewing of several popular magazines and television shows and then related this to their responses on eating disorder symptomology and endorsement questionnaires. Media consumption, especially magazine reading, was found to be connected with women’s eating-disorder-like behaviors, feelings of inadequacy and body dissatisfaction. Among men, it correlated with their preference for personal thinness as well as in their attraction toward women.

Levine et al. (1994) used a similar methodology but applied it to a large sample of girls from a Midwestern middle school and focused on popular magazines, parent and peer influences. Again, magazine reading was determined to impact body image perception. However, family teasing was also concluded to be a significant influence, suggesting to the authors the presence of a sociocultural phenomenon.

Sociocultural theory is another popular explanation of how media impact body image. It states that individuals internalize societal pressures of the body ideal (Groesz et al., 2002; Morrison et al., 2004; Posavac et al., 1998; Stormer & Thompson, 1996; Taveras et al., 2004). That is,
the perception of beauty is based on societal standards, and societal standards are most strongly communicated via the media. This is similar to an objectification model. Objectification theory claims that girls and women are acculturated to accept outsider perspectives of beauty as their own (Fredrickson & Roberts, 1997). Fredrickson and Robert’s theory seems to be the cornerstone of the APA’s recent position paper.

In 2002, Groesz et al. completed a meta-analysis of 25 studies connecting media exposure and female body dissatisfaction. Moderating for age, pre-existing body image concerns and research methodology, they concluded that self-perception is lower after viewing thin models than after viewing those of average size, or inanimate objects. In addition, they argued that this effect is greater among teenage subjects, and supports a sociocultural perspective. However, conclusions may be limited in their representativeness. The authors neglected to share any demographic information regarding participants other than gender and age. Furthermore, there was lack of uniformity in the scales utilized, measuring a multitude of constructs, including mood, depression and self-esteem.

Some research has shown how sociocultural absorption of beauty ideals may translate into behavior. In 2004,
Taveras et al. surveyed over 11,000 teenagers and determined that as one’s desire to look like media images increases, so does one’s level of physical activity.

In Stormer and Thompson’s 1996 study, they were able to rule out early physical development as having mediating effects on media influence, but similar to Levine et al. (1994) argued that parental teasing plays a small role. More importantly, they claimed that both social learning and sociocultural aspects share responsibility for diminished body image, but that the two operate independently.

Others have postulated that social learning and sociocultural theories may overlap and work interdependently. Posavac et al. (1998) hypothesized that social comparison may be the mechanism that enables the media to negatively impact body image, perpetuating sociocultural assumptions about what is considered beautiful. However, Morrison et al.’s (2004) follow-up attempts to connect magazine exposure to social comparison were unsuccessful, thus causing them to question the idea of overlapping theories.

Although many quantitative studies concluded that the media influence perceptions of the body ideal, qualitative investigations have suggested that women are likely to
exercise critical judgment when interpreting and identifying the content, thus understanding that images may not represent realistic ideals (Tiggemann, Gardiner & Slater, 2000; Wertheim, Paxton, Schutz & Muir, 1997). Such research implies that teens exercise critical judgment regardless of race and culture.

However, further investigations indicated that this exercise in judgment may be cultural (Duke & Kreshel, 2002; Milke, 1999; Walcott, Pratt & Patell, 2003). Duke and Kreshel’s study determined that although Caucasian girls expressed a desire to look like magazine images, African American subjects preferred the beauty ideal within their own culture and attributed attractiveness in opposition to the content of most magazines. This is consistent with Milke’s (1999) investigation in which few non-white girls expressed concern regarding the impact of magazine images, while almost all white respondents believed it to be dangerous.

It is argued that media influence may be mitigated by westernization and that as women acculturate to western society, they tend to move away from traditional perceptions of the beauty ideal and adopt North American standards (Walcott et al., 2003). Furthermore, this same research contends a similar trend may be evident in the
onset of eating disorders. However, the authors leave room for the possibility that there may be differences in what constitutes an eating disorder or how it is defined. Additionally, measures of eating habits may lose psychometric value as they are translated (Walcott et al., 2003).

Clearly, there is much research regarding the impact of media and its connection to body image. While studies suggest magazine exposure is harmful, there appears to be little information on adolescent tendencies to internalize prescribed body image ideals as well as their knowledge of this impact. This seems to be a gap in research literature and is especially worthy of study given the radical changes the brain experiences during this critical developmental period, accompanied by a high susceptibility to learn and fortify enduring beliefs about oneself and the world. Furthermore, it is important to ascertain the mediating impact of gender and ethnicity. Considering the rate at which trends in male media images and ethnic diversity are changing, even a study a few years old is likely no longer representative.

Thus the present study hypothesized adolescent male and female magazines readers would be more likely to demonstrate awareness and internalization of prescribed
body images than nonreaders. Internalization and awareness were assessed with an adapted version of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ), making it applicable for use with high-school-aged students. Additionally, it was hypothesized that those with higher SATAQ scores would respond differently to questions regarding acknowledgement of media impact than those with lower scores. Lastly, this study attempted to determine the mediating impact of gender and ethnicity.

Method

Participants

One hundred ninety-seven high-school-aged students (105 girls and 92 boys) in attendance at one of three high schools within a Seattle suburb of similar demographics to the state of Washington were studied (30 self-identified as Latino, 12 as African American, 14 as Asian, 11 as Native American, 5 as Pacific Islander, 6 as Russian/Ukrainian and 119 as Caucasian). Schools similar to the demographics were chosen to enhance the degree to which the results could be generalized to high school students within the region. Following a brief explanation by the researcher, subjects received letters in a health or independent living class requesting both student and parent consent to participate in a survey regarding perceptions of body image and the
media. The form stated that once signed, a student could return it within 1 week to his/her teacher in exchange for a 5 to 10 minute survey to be completed within class time. Anonymity was assured. At the end of the consent form, parents and students were invited to email requests for study outcomes.

Materials

Survey questions were taken from the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) developed by Cusumano and Thompson in 1997, as well as another study inquiring about reading habits (Tiggemann, 2006). The SATAQ in its original form is a 14-item Likert-scaled self-report assessing the awareness and internalization of women's societal attitudes regarding thinness and beauty (Smolak, Levine and Thompson, 2001; Stormer & Thompson, 1996; Thompson, Van den Berg, Roehrig, Guarda & Heinberg, 2006). In 2001, Smolak et al. created and validity tested a version applicable to middle-school-aged boys and girls. Modifying questions and creating separate boy and girl surveys, adequate validity was obtained over all (internal consistency alpha of .87 and .90 respectively), as well as on both subscales of Awareness and Internalization. The Awareness Scales (internal consistency alphas of .75 and .82) measure
knowledge of societal appearance norms, while the Internalization Scales (internal consistency alphas of .87 and .88) assess the acceptance and agreement with such norm beliefs (Smolak et al., 2001).

Although the SATAQ’s psychometric value is unknown when applied to high-school-aged students, use of the middle school version was believed more appropriate for the purposes of this study. It is the only version incorporating male respondents and its use increased the likelihood that student reading levels would not interfere with the validity of the study’s results.

In addition, demographic information including age, grade, race/ethnicity, primary language spoken at home, number of years living in the country, and number of adults and children at home were requested. For specific survey questions, see Appendices A and B.

Procedures

Teachers were asked to keep track of received consent forms using class attendance sheets and place completed releases in a provided lock box. After 1 week and following a mid-week verbal reminder, students were instructed at the beginning of class by the researcher to take 5-10 minutes and complete the survey, working independently. Once completed, students placed the survey in the lock box.
Participating students were entered in a lottery for a $100 gift certificate redeemable at a nearby mall.

Data Analysis Plan

After the data were gathered, the mean and standard deviation of SATAQ scores were determined and the distribution of scores assessed. A two-sample t-test was then used to analyze the relationship between magazine reading habits and SATAQ scores, with higher scores reflecting greater awareness and internalization of societal attitudes related to body image ideals than lower scores. Magazine reading was a categorical variable, with students either endorsing that they read magazines in the last month or not. Similarly, participants either agreed or disagreed that magazine reading typically made them feel worse about themselves. Using a t-test, mean SATAQ scores (awareness and internalization) between those who agreed magazines had an impact and those who did not were compared. Meaningful score differences among students of varying genders and ethnicities were then analyzed.

Results

The mean score obtained on the SATAQ was 38.13 with a standard deviation of 11.87. Figure 1 illustrates the distribution of scores.
A two sample t-test for independent means was used to analyze the relationship between magazine reading and the SATAQ. Findings were that magazine readers (52.8%) scored significantly higher on the SATAQ ($M = 39.54$) than nonreaders ($M = 35.15$), $t(96) = -2.33$, $p = .01$.

However, girls obtained considerably higher SATAQ scores ($M = 40.18$) than boys ($M = 36.22$), $t(190) = 2.36$, $p = .02$. All of the girls were readers of magazines, while only 40.22% of the boys confirmed reading activity. Yet, even among magazine readers only, a comparison of SATAQ means revealed girls scored significantly higher ($M = 40.18$) than boys ($M = 34.87$), $t(56) = 2.08$, $p = .04$. SATAQ scores among boys were not meaningfully different when
comparing readers (M = 34.87) and nonreaders (M = 37.15), t(91) = .89, p = .19.

Girls who admitted that magazine reading generally makes them feel worse about themselves scored higher on the SATAQ (M = 45.67) than those who did not (M = 37.14), t(35) = 3.56, p = .001. However, few readers acknowledged being influenced by magazine images (14.79%), despite SATAQ scores that indicated otherwise.

Meaningful score differences were not apparent between students who self-identified as White (60.41%) and those who self-identified with other labels (15.23% Latino, 7.11% Asian, 6.09% African American, 5.58% Native American, 5.59% Russian and Pacific Islander, totaling 39.59% non-white), revealing similar awareness and internalization of magazine images, t(159) = -1.08, p = .28.

Discussion

As hypothesized, high school magazine readers scored higher on the SATAQ than nonreaders. This indicates that magazine readers have a greater awareness of societal attitudes related to body image ideals and tend to internalize or accept such perceptions as their own. These data support previous research concluding that magazine reading has an impact on body image (Cameron and Ferraro, 2004; Davison & McCabe, 2006; McCabe, et al., 2005; Park,
2005; Posavac, et al., 1998; Van den Bulck, 2000; Wedell, et al., 2005) and even more specifically, on the perceptions of adolescents girls (Durham, 1998; Pardun et al., 2005).

This study does not confirm previous investigative results concluding that boys demonstrate the same trend in their response to magazine reading and the internalization of the body ideal as girls (Botta, 2003; Cohane & Harrison, 2001; Jones & Crawford, 2005; Leit, 2002; Gray & Pope, 2002; Pope & Olivardia, 1999; Stanford & McCabe, 2005). SATAQ scores suggest that gender differences continue to exist. Even among readers only, girls continue to be more influenced than boys, signifying a greater awareness and internalization of magazine-prescribed body ideals. Thus, they may be at greater risk of body dissatisfaction and eating disorder symptomology. In fact, findings of this study do not support the claim that boys who read magazines are any more at risk than those who do not.

Adding to the increase in susceptibility, girls in this study more commonly engaged in magazine reading than boys. In fact 100% of the adolescent girls verified magazine exposure, where as only 40% of boys confirmed magazine reading in the last month. This indicates that
adolescent girls are not only more impacted among readers, but also more exposed.

However, the fact that all of the girls in this study read magazines and scored significantly higher than magazine-reading boys on the SATAQ presents a potential confounding variable. It is possible that girls in general experience greater internalization of media images than boys, having very little to do with actual magazine reading habits.

Still, it is meaningful that adolescent girls in this study commonly denied any negative impact from reading magazines, regardless of elevated SATAQ scores indicating internalization of body ideals. Most subjects (86.29%) stated that when they read magazines, they do not feel worse about themselves. Some claimed that exposure to magazine images even make them feel better about themselves (30%).

The reasons behind these findings are unclear. It could be that teenage girls do not realize the impact of their behavior and are in a sense naively engaging in a harmful behavior. Also possible, adolescent girls may be willing to admit that magazine reading in general can be influential, but concurrently believe that she is somehow immune. They may believe this is a phenomenon that affects
everyone but themselves. This is reminiscent of Donna Baird’s theory regarding the tendency of some adolescents to engage in sexually dangerous behavior regardless of prior knowledge and skill training (Baird, 2003) as well as an empirical investigation of teenage drinking habits and perceived immunity (Hansen, Raynor & Wolkenstein, 1991).

Another possible explanation for teen denial of magazine reading impact in spite of heightened SATAQ scores, may relate to ensuring continued reading privileges, or access to societal views of what is attractive and popular. With admission of potential damages, access may become restricted.

However, girl magazine readers who acknowledged the negative impact of reading magazines obtained the highest SATAQ scores, suggesting the greatest vulnerability. Although they understand, at least to some degree, the harmful impact, they choose to engage in the behavior anyway. This may relate to issues of peer pressure susceptibility, wanting to fit in and be up to date on societal ideals, regardless of known consequences. This certainly fits a sociocultural view that individuals internalize media prescriptions of the body ideal and are susceptible to societal pressures to conform (Groesz et al., 2002; Morrison et al., 2004; Posavac et al., 1998;
Stormer & Thompson, 1996; Taveras et al., 2004). Perhaps like many behaviors connected to peer pressure, the short-term gain seems more immediately enticing than hard-to-comprehend potential long-term damage. However, it is also possible that this knowledge of the negative impact will result in greater ease in changing the behavior, leading to better choices in the future.

Unlike the gender variable, the influence of magazine reading on SATAQ scores does not appear to be connected with participant ethnicity, as suggested by several other investigations (Duke & Kreshel, 2002; Milke, 1999; Walcott, Pratt & Patell 2003). Scores indicate a similar impact regardless of subject ethnicity or race. However, this may be related to a diversity weakness within the study’s sample. With only 39.6% of the subjects having self-identified as something other than white, and with the second-largest endorsed ethnicity having embodied only 15.2% of the sample, it is difficult to determine the degree to which such variables were allowed to permeate study results.

The lack of ethnicity effects may also relate to issues of acculturation. Although adolescents were asked about primary language spoken at home and number of years living in the country, they were not asked about perceived
level of acculturation. There was some concern that acculturation would be difficult to ascertain without the introduction of another scale. Thus it is entirely possible that scores were not influenced by ethnicity because participating subjects have experienced varying levels of acculturation, and in some cases internalized American society body ideals as much as those self-identifying as white.

In light of the MRI investigations of Giedd et al. (1999) and Sowell et al. (1999) on the malleability of adolescent brains and on-going neural connection development, study results are especially disconcerting. Much like in infancy, these data suggest that for teens, beliefs established about the self and the world are learned and solidified. Adolescent girls exposed to magazine images and their socio-cultural influence may experience more severe and long-lasting body dissatisfaction than newly-exposed pre-teen children or adults (Cameron and Ferraro, 2004; Posavac et al., 1998; Wedell et al., 2005). Many studies argue this effect may be exacerbated by the increasing discrepancy between what is considered ideal and what is achievable or even healthy (Ballentine & Ogle, 2005; Nemeroff, Stein, Diehl & Smilack, 1994; Sypeck, Gray & Ahrens, 2004), the overestimation of
the idealized body’s prevalence (Parks, 2005), and most
damaging, the acceleration of eating disorder symptoms in
the general public (Harrison et al., 1997). As developing
adolescent girls continue to internalize the prescribed
body ideals viewed in magazines, and believe them to be
something obtainable and valued within society, they are
more likely to experience body dissatisfaction, a common
precursor to eating disorder symptomology.

Furthermore, results of this study suggest high-
school-aged girls in Washington state are dismissing,
concealing or are naïve to the influence of magazine images
on their personal ideals. Determining the motivation for
the denial of such persuasion is clearly an important area
of further study. If teenagers are to play a role in
combating the harmful impact of magazine images, a level of
awareness and acceptance is likely essential.

Although this study adds further support for a socio-
cultural perspective, it does not preclude the possibility
of a combined social learning influence. As suggested by
Morrison (2004), social comparison may be the mechanism
that enables the media to negatively impact body image,
perpetuating sociocultural assumptions about what is
considered beautiful. This is an important area for future
research to address.
Additionally, further investigations may wish to focus upon the mediating effects of culture and acculturation via a more diverse sample, as well as the direction of impact trends (SATAQ scores) with an increase in magazine exposure. A major shortcoming of this study is the categorical view of readers and non-readers, as opposed to measuring the varying degrees of magazine readership. By assessing reading habits non-categorically possible confounding concerns regarding its impact on gender may be eliminated. The media will continue to fight the claim that there is a link between prescribed body images and body image disturbance. The more studies that can highlight this connection, the more empowered the public may become.

In the meanwhile, and in consideration of the results of this study, parents and guardians may wish to exert greater control or monitoring of their teenage girl's magazine and media exposure. Perhaps even more meaningful, aware teens may become armed to make better decisions about their reading habits and critical consumers of the media. Adolescents, parents and other adults may wish to pressure magazine publishers to be more thoughtful about the messages conveyed by their product. Knowing that magazine reading impacts body image among teenage girls, people can make more informed choices about their reading behaviors.
and advocate for a healthier societal view of body acceptance.
References


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APPENDIX A

Female Survey
SATAQ-F

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

**Definitely Disagree = 1**  
**Mostly Disagree = 2**  
**Neither Agree/Nor Disagree = 3**  
**Mostly Agree = 4**  
**Definitely Agree = 5**

Women who appear in TV shows and movies have the type of appearance that I see as my goal. ______

I believe that clothes look better on thin models. ______

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

I would like to look like the models in the magazines. ______

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

In society, over-weight people are regarded as unattractive. ______

Photographs of thin women make me wish I were thin. ______

Attractiveness is very important if you want to get ahead in my culture. ______

It is important for people to work hard on their figures/physiques if they want to succeed in today’s culture. ______

Most people believe that the thinner you are, the better you look. ______

People believe that the thinner you are, the better you look in clothes. ______

In today’s society, it is better to always look attractive. ______

I wish I looked like a swimsuit model. ______

I often read magazines like Cosmopolitan, Vogue, and Glamour and compare my appearance to the models. ______
Circle one or complete blank:

Gender: Female    Male

Age in years at last birthday: 13 14 15 16 17 18 19 20

Grade: 9   10   11   12

Ethnic group or race: ____________

Primary language spoken at home: ____________

Number of years living in the United States: _____

Number of adults living in home: _____

Number of children living in home (including you): _____

Number of magazines you have read in the last month_____  
Number of magazines you have read in the last week _____

List the names of magazines you have read in the last month:

____________________________

____________________________

____________________________

____________________________

____________________________

____________________________

____________________________

When I read magazines, I feel worse about my body.  T  F

When I read magazines, I feel better about my body.  T  F
APPENDIX B

Male Survey
SATAQ-M

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

Definitely Disagree = 1
Mostly Disagree = 2
Neither Agree/ Nor Disagree = 3
Mostly Agree = 4
Definitely Agree = 5

Men who appear in TV shows and movies have the type of appearance that I see as my goal. ______

I believe that clothes look better on muscular men. _____

Music videos that show muscular men make me wish that I were muscular. _____

I would like to look like the muscular men who model clothing. ______

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

In society, over-weight people are regarded as unattractive. ______

Photographs of muscular men make me wish I were muscular. ______

Attractiveness is very important if you want to get ahead in my culture. ______

It is important for people to work hard on their figures/physiques if they want to succeed in today’s culture. ______

Most people believe that the more muscular you are, the better you look. ______

People believe that the more muscular you are, the better you look in clothes. ______

In today’s society, it is better to always look attractive. ______

I wish I looked like a body builder. ______

I often read magazines like Muscle and Fitness, Sports Illustrated, and GQ, and compare my appearance to the male models in the magazines. ______
Circle one or complete blank:

Gender: Female   Male

Age in years at last birthday: 13 14 15 16 17 18 19 20

Grade: 9   10   11   12

Ethnic group or race: ____________

Primary language spoken at home: ____________

Number of years living in the United States: _____

Number of adults living in home: ____

Number of children living in home (including you): _____

Number of magazines you have read in the last month____

Number of magazines you have read in the last week ____

List the names of magazines you have read in the last month:

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

When I read magazines, I feel worse about my body.   T   F

When I read magazines, I feel better about my body.   T   F