Exposure to Attractive Individuals and

Effects on Self-esteem

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Abstract

Our study focused on discovering whether individuals who were exposed to images of highly attractive models and celebrities would have a lower level of self-esteem than others who were not exposed. To determine this, we had two conditions; one group was exposed to a PowerPoint presentation containing images of highly attractive models and celebrities, and then given a two-part questionnaire to measure trait self-esteem and state self-esteem. In the control condition participants were also given the two-part questionnaire but were not exposed to the PowerPoint presentation. After evaluating the scores of both groups we determined there was no significant difference between the two groups. However, further research should be conducted on the subject due to the growing presence of body image ideals in the media.

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Prior research studies have focused on the impact media image exposure to celebrities and fashion models have on the body satisfaction and dissatisfaction, among females. Alongside focusing on body satisfaction and dissatisfaction levels, researchers have analyzed the potential effects these highly attractive images have on weight concern and body perception attitudes, specifically with regards to women. Researchers Posavac, Posavac, and Posavac (1998), focused on the exposure to attractive females in the media and the effect these images would have on young women's concern with their body weight. The Posavac et al. study incorporated three different experiments, each observing different hypotheses. Experiment one focused on attempting to find a significant interaction between exposure to highly attractive images and levels of body dissatisfaction. The finding suggested support for the hypothesis that a significant interaction did exist, as well as stating that women who entered the study with low levels of body dissatisfaction were not as affected by the image exposure. In the second experiment the researchers sought to determine if there was a main-effect between body-image perceptions and body dissatisfaction when exposed to images of women with more realistic bodies types. The findings demonstrated a main-effect did exist between the two, as well as stating that women with higher levels of body dissatisfaction reported more weight concerns. The final experiment sought to determine if women who had a high level of body satisfaction prior to image exposure would maintain the same body satisfaction level post-exposure. The findings proposed that body satisfaction levels for women who had high satisfaction levels pre-image exposure also maintained these levels post-exposure. Through the advances in research by Posavac et al. there

is an increase in understanding that exposure to highly attractive images have an effect on the individual, especially among women.

Building on the research conducted by Posavac et al., researchers Clay, Vignoles, and Dittmar (2005), performed research focusing on adolescent girls. Conducting two separate studies, one experimental and one correlational, Clay et al. pursued answers to six hypotheses. Utilizing an experimental approach, the researchers questioned whether participants who viewed magazine models would have a decreased body satisfaction level than the members of the control condition who were not exposed to any models. This hypothesis was supported and demonstrated participants exposed to the magazine models displayed lower body satisfaction scores than those in the control condition. A secondary hypothesis investigated whether participants who viewed ultra-thin models displayed decreased body satisfaction levels than individuals who were exposed to images of average-sized models. The results of the experiment concluded there was no significant difference between body satisfaction levels among either group. The third hypothesis questioned whether participants who viewed magazine models would have decreased global self-esteem levels in comparison to members of the control group. This hypothesis was supported, affirming that individuals exposed to models had lower global self-esteem scores than members of the control group who had were not exposed. A fourth hypothesis asked whether individuals who viewed ultra-thin models would have lower global self-esteem levels than participants who were exposed to images of average-sized models. Results indicated there was no significant difference among participants in the two conditions with regards to their global self-esteem scores. Lastly, the fifth hypothesis questioned if body satisfaction levels fully mediated self-esteem among participants. In support of this hypothesis, results demonstrated that body dissatisfaction fully mediated global self-esteem levels. Employing a correlational

approach, Clay et al. questioned whether awareness of societal attitudes, social comparison, and internalization of societal attitudes influenced trends as one ages between global self-esteem and body satisfaction levels. Results supported the hypothesis, stating a positive relationship between age and the three variables, awareness of sociocultural attitudes, social comparison, and internalization of societal attitudes. Due to the research conducted by Clay et al., there is a greater emphasis on determining whether state or global self-esteem is greater influenced by exposure to ultra-thin or average-sized models.

Research conducted by Ura and Preston (2015), provided information of an existing focus on determining the degree of relationship between self-esteem, body image, thin-ideal internalization, and appearance avoidance. Ura and Preston had two hypotheses. Their primary hypothesis regarded thin-ideal internalization and low levels of self-esteem; they believed there would be a positive relationship between the two factors. Adding to their primary hypothesis, the researchers believed "…body image would mediate the relationship between thin-ideal internalization and low self-esteem" (p. 19). The results of their study demonstrated the higher a participant's level of thin-ideal internalization was the more body image dissatisfaction they reported, as well as a greater decrease in self-esteem. Concerning the potential mediation of body image on the relationship between low self-esteem and thin-ideal internalization the results supported a partial mediation. Ura and Preston's secondary hypothesis sought to determine whether the variables self-esteem, body image, thin-ideal internalization, and appearance avoidance were related to one another. The results of their study supported their hypothesis, demonstrating that appearance avoidance could be impacted by an individual's body image and self-esteem as well as discovering a clear relationship between appearance avoidance and low self-esteem. In conclusion of their study, Ura and Preston stated that due to all of the participants

in their study being college students, they encouraged future research be conducted among other

age groups.

       Rollero (2013), performed research focusing on the effects of media models on men and

women's state self-esteem, well-being, and degrees of sexism. Rollero hypothesized both men

and women when exposed to objectified images of their respective gender, would display a

decrease in their level of well-being. Results displayed that both men and women, when exposed

to objectified images of their own gender, they reported lower levels of positive affect than the

control conditions. Rollero's second hypothesis proposed that women, when exposed to images

of other objectified women, would have a decrease in their state self-esteem with regard to their

physical appearance. This hypothesis was supported due to women in the control group reporting

significantly higher social and attractiveness self-esteem than women exposed to the images. A

third hypothesis sought to determine whether, "Exposure to objectified female models would

increase sexism, regardless of participants' gender" (p. 376). In support of this hypothesis,

hostile sexism and hostility towards men increased in women. Men however, scored higher than

women in their levels of hostile sexism, benevolent sexism, and benevolence towards men.

Rollero's research introduced a focus on state self-esteem, rather than previous studies which

focused on trait self-esteem. By discovering the impact media models have on men, Rollero

demonstrated the importance of conducting further research regarding men. Though Rollero

incorporates men, studies have yet to focus specifically on how exposure to highly attractive

individuals in the media, affect both trait and state self-esteem levels across the sexes. The

above-mentioned studies serve as the primary framework for our study which, seeks to determine

whether mere exposure to highly attractive individuals, be it celebrities or models, will cause a

difference in an individual's self-esteem. Our methods, findings, and suggestions will be discussed throughout the content of this paper.

Method

Participants

Women represented 78.9% of participants for the study while men represented the other 21.1%. Race varied among participants as well, resulting in 36.8% of participants identifying as White, 36.8% Hispanic, 15.8% African American, and 10.5% Asian. Participant ages ranged from 18 to 22 ($M = 19.68$, $SD = 1.20$). Participants for the study were recruited via the Angelo State University's web portal, Sona-Systems. By signing up for themselves, participants were able to choose a time that best fit their schedule. After participation, students were granted .5 point of research credit to a psychology course of their choosing.

Design and Procedure

Our research study was a between-Ss design. We had two separate groups, an experimental group, which was exposed to highly attractive images and then given a questionnaire to record their responses, and a control group, which was only given the questionnaire. We also had different participants in each condition, which also categorized the study as a between-Ss design.

The stimuli of the experimental group were color images of highly attractive male and female models and celebrities presented via PowerPoint. The images were found using the Google search engine using a filter indicating the images could be used for noncommercial reuse with modification. The images were pretested on attractiveness by a group of undergraduate psychology students using a Likert 1-10 scale to determine the level of attractiveness of the individual. The score 1 indicated the individual was not attractive, 5 designated average

attractiveness, and 10 deemed the individual extremely attractive. The scores of all the raters

were then averaged per image and 20 images with the highest average score for male targets and

20 images with the highest average score for female targets were then used in the final

PowerPoint presentation the participants were exposed to. The 40 images were displayed in a

PowerPoint presentation in three-second intervals.

In both the experimental and control condition, participants were given a questionnaire

packet which contained the Rosenberg Self-Esteem Scale (Rosenberg, 1965), a Heatherton-

Polivy Self-Esteem Scale (Heatherton & Polivy, 1991), and a demographics questionnaire. The

Rosenberg Self-Esteem Scale contained 10 items, which asked participants to note their level of

agreement to a given question in a general sense. For instance, *At times I think I am no good at*

all to which the participant responded using the scale, *1-Strongly Agree, 2-Agree, 3-Disagree, 4-*

Strongly Disagree.

Another measure that was incorporated into the questionnaire packet was the Heatherton-

Polivy Self-Esteem Scale (Heatherton & Polivy, 1991.), which measured what participants were

thinking at the current moment. The measure contained 20 items to which the participant

recorded their response using a Likert scale ranging from 1 to 5. For instance, a statement in the

Heatherton Polivy Self-Esteem Scale is, *I feel self-conscious* to which the participant responded

using the scale, *1-Not at all, 2-A little bit, 3-Somewhat, 4-Very much, and 5-Extremely.*

Upon arrival, the female researcher greeted participants as they took their seat. The

researcher waited five minutes after the scheduled time, to begin the study. Following the five

minutes, the researcher welcomed participants and instructed them to silence or turn off their

cellular devices. Participants were then informed about the approximate duration of the study and

reminded of the .5 research credit they would be receiving for their participation. The researcher

explained that they would be passing out an informed consent form and participants were

instructed to carefully read the document and if they agreed to participate in the study they

should sign and date the bottom of the form. After the participants completed the informed

consent form, the researcher collected them and placed the forms in a designated envelope. Next,

the researcher explained she would be displaying a two-minute PowerPoint presentation

containing images of twenty men and twenty women, each of which would be displayed for three

seconds, which participants were to just watch. Continuing the study, the researcher informed

participants she would provide them the questionnaire packet, face down, and they were not to

turn it over until instructed to do so. Following distribution of the questionnaire packets, the

researcher reminded participants to remain anonymous and not write their name anywhere on the

packet. Participants were then briefed on what the questionnaire packet consisted of, instructed

to take notice of the difference in scales regarding the two self-esteem measures, and asked to

answer questions on a demographics page. The demographics page asked participants to record

their age, gender, and race. The researcher then informed participants they could place their

completed questionnaires in an envelope near the door and exit quietly afterward. The researcher

also stated the participants could locate a debriefing form near the door further explaining the

study and who to contact for concerns or further information. Lastly, the researcher thanked

participants for their involvement and instructed them to begin. Participants in the control

condition were not exposed to any images; they only recorded their responses to the items in the

questionnaire packet.

Results

Our study sought to determine whether individuals who were exposed to images of

highly attractive models and celebrities would have a significantly lower self-esteem score on

both the Heatherton-Polivy and Rosenberg questionnaires, than individuals who were not exposed to the images. We predicted that there would be a significant decrease in self-esteem scores between the control group and the experimental group on both questionnaires. Because we were comparing the average self-esteem scores on both the Heatherton-Polivy and the Rosenberg questionnaire between two different conditions, we conducted two independent samples t-test.

With regards to the Heatherton-Polivy state self-esteem questionnaire, our results indicated that individuals who were exposed to the highly attractive images did not have significantly lowered state self-esteem scores ($M = 3.61$, $SD = .84$) than those who were not exposed to the images ($M = 3.52$, $SD = .82$), $t(17) = -.24$, $p = .814$, $d = .10$. Therefore, our hypothesis was not supported. Concerning the Rosenberg trait self-esteem questionnaire, our results indicated that the trait self-esteem score of individuals who were exposed to images of highly attractive individuals did not significantly decrease ($M = 1.60$, $SD = .52$) from the participants who were not exposed ($M = 1.84$, $SD = .56$), $t(17) = .96$, $p = .349$, $d = .44$. Thus, our hypothesis was not supported.

Discussion

The hypothesis we tested in this study was whether participants who were exposed to images of highly attractive individuals would have a difference in self-esteem on both the Heatherton-Polivy (1991) and Rosenberg (1965) questionnaires, in comparison to participants who were not exposed to any images. Our results did not show a statistical significance between the two groups of participants; thus, not supporting our hypothesis.

Due to the statistical test we conducted it is appropriate to say that exposure to highly attractive images that we commonly see in everyday life such as models and celebrities do not have a significant impact on either an individuals' trait or state self-esteem. I believe our

hypothesis was not supported due to our questioning procedure. Our procedure could have emphasized to the participants who were exposed to the presentation of the highly attractive images, that other peers at the university had previously scored the level of attractiveness of each image. We also could have disclosed the score each image was given and what the rating scale was. This would have allowed for participants to perform a social comparison between their own appearance and perceived attractiveness, to the highly attractive images. Similar to Rollero (2013), we exposed participants to a presentation containing images of models and celebrities. However, something Rollero incorporated in his procedure which I believe would have been beneficial for our study is he informed participants they were participating in a study regarding television viewing which was not the case. This could have minimized the probability of demand characteristics among participants. Demand characteristics according to Jackson (2012), is a term referencing a participant's desire to provide the response they believe the experimenter favors or is searching for.

Americans are exposed to various forms of media that are saturated with images of men and women who represent the current body image standards of society every day. According to Ura and Preston (2015), often times these body standards are not accurate descriptions of the average American male or female body, but rather are drastically thinner than average sized males and females. Living among such heavily emphasized body image standards, it is important to consider the possible effects the exposure to these images has on individuals. As stated by Clay, Vignoles, and Dittmar (2005), adolescents and young adults in particular, tend to have a higher desire to meet societal standards for body image and conduct self-comparisons to the images they view in the media.

Our study provided interesting insight regarding the responses of men on the state and trait self-esteem scales. Men, to our surprise, had similar differences in self-esteem as women. This indicates the increasing impact media images are having among men and their self-esteem levels. However, our study is not without limitations. One of the most important limitations our study encountered is that the majority of individuals in our study were between the ages of 18-22. Similar to Rollero (2013), all participants in our study were undergraduate college students. This along with the age range of 18-22 could have influenced the degree to which the participant's self-esteem was influence by the images. Clay, Vignoles, and Dittmar (2005), indicate in their study, age is a strong factor to consider when identifying the degree of impact ultra-thin or average-sized images of models have on the individual. For further trials of this study, I would like to have a larger group of participants to increase the amount of diversity among participants as well as to gather more accurate results and have a minimal margin of error. According to Jackson (2012), having a larger group of research study participants the amount of the statistical power of the study would increase. An increase in statistical power would increase the likelihood of finding a significant difference between the experimental and control conditions. A way to increase the sample size for the study would be to expand the participant pool to all Angelo State University faculty and students.

Further research should be conducted to better understand whether having more ethnically diverse images might lead to more accurate self-esteem scoring. Also, when determining if exposure impacts self-esteem immediately, it is best to gather data based on the Heatherton and Polivy (1991) state self-esteem instrument. When determining longitudinal effects of exposure to highly attractive images the results of the Rosenberg (1965), scale would be more appropriate. It should also take into account whether knowing what the attractiveness

score of each image is has an impact on the individual's self-perception rather than simply being told the image is attractive. Another important factor to consider is the personality of the participant. It would be interesting to discover whether some personalities are more susceptible to display a decrease in their state self-esteem after exposure to highly attractive images.

Though our findings did not support our hypothesis, it is important that individuals and researchers acknowledge the potential influences the media has on one's self-esteem, in both the present and long term. In an attempt to identify the impact highly attractive images can have on an individual it became clear men are under evaluated within existing literature. By acknowledging all individuals can be effected by the images we are exposed to in the media and better understanding how they influence one's self-concept, self-esteem, and self-perceptions we can better learn preventative measures to combat potential negative effects.

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