

The Impact of Media on Affective and Cognitive Variables Thought to be Related to Eating Disorders

Marko Bozovic

Abstract: Eating disorders, namely Anorexia Nervosa and Bulimia Nervosa, have been in the spotlight for the past several decades due to their devastating effects on individuals' mental and physical wellbeing. Numerous past research studies have shown that powerful sociocultural factors, among which is the media, contribute to the development and perpetuation of eating disorder symptomatology. The present effort set out to retrace the steps of past research with an aim of determining which forms of media are considered to impact affective and cognitive variables related to eating disorders. In this endeavor the internalization of the thin-body ideal was detected in the cases of exposure to television, music videos and websites, but not the print media. In essence, this review shows that media, a very powerful sociocultural stakeholder, "manipulates" feelings of women regarding their bodies and appearances in general.

Introduction

Eating disorders have been a topic of interest for many psychologists in the past decades. According to the Diagnostic and Statistical Manual of Mental Disorders (4th ed., Text Revision), the key feature of eating disorders is serious and harmful disordered eating behavior (American Psychiatric Association, 2000, p. 583). The DSM-IV-TR differentiates between two main diagnoses of eating disorders – Anorexia Nervosa and Bulimia Nervosa. While Anorexia Nervosa is characterized by one's efforts to reduce normal body weight to a level, which is harmful and potentially lethal, Bulimia Nervosa involves incidence of binge eating followed by inappropriate behaviors aimed at compensating for the instances, such as vomiting, excessive exercise, and misuse of dietary supplements, etc. The common attribute of both of the disorders is a distortion of perception of self - individuals suffering from eating disorders erroneously view their body figure and weight as bigger than they actually are.

Research conducted on eating disorders in the past have found that the occurrence of eating disorders could be mainly accredited to sociocultural factors (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999, as cited by Tiggeman & Slater, 2003); one of the most powerful factors being the media since it has the ability to impose various desirability ideals on members of societies around the world (Andersen & DiDomenico, 1992; Nemeroff, Stein, Diehl, & Smilack, 1994; Stice, 1994, as cited by Tiggeman & Slater, 2003). However, the relationship between eating disorders and the media is not causal; rather, there are numerous confounding affective and cognitive variables that are thought to be related to eating disorders, such as the thin-ideal internalization, body dissatisfaction, comparison processing, mood, self-esteem, etc. (Harrison & Hefner, 2006; Tiggemann & Slater, 2003; Bardone-Cone & Cass, 2006; Engeln-Maddox, 2006).

In the present review, I will attempt to show that most forms of media dealt with in this piece (television, music videos, websites, and magazines) do have a considerable impact on variables related to eating disorders and thus, the disorders themselves. Firstly, I will consider the impact of television and music videos, followed by the influence of websites and, subsequently, magazines on

variables that are thought to be related to eating pathology in females. Studies will be reviewed to demonstrate this influence and show how certain forms of media do, as a matter of fact, have some bearing on human affective and cognitive processes, which, in turn, lead to eating disorder symptomatology.

Review

Television and music videos

In today's world, electronic media such as television are seen as significant sociocultural factors that influence individuals' day-to-day life (Andersen & DiDomenico, 1992; Nemeroff, Stein, Diehl, & Smilack, 1994; Stice, 1994, as cited by Tiggeman & Slater, 2003). Numerous studies to-date have focused on the impact of television on individuals' perception of self and appearance (Harrison & Hefner, 2006; Tiggeman & Slater, 2003).

Research by Harrison and Hefner (2006) sought to investigate whether a connection could be established between preadolescent girls' body ideals, eating pathology and exposure to television and magazines. This study measured preadolescent girls' initial media exposure, their current, desired and future body ideals, and eating pathology, at two instances one year apart. Harrison and Hefner (2006) hypothesized that television and magazine exposure would be predictive of preadolescent girls' body ideals in adulthood. Moreover, it was predicted that television would exert a stronger influence on body ideations than magazines, and that television would be a predictor of eating disorder symptoms. During the course of the study, each of the 257 participants from a group of racially-diverse preadolescent girls had to select three images depicting their perception of how they looked (current body ideal), how they wanted to look (desired body ideal), and what they wanted to look like when they grew up (future body ideal). Besides selecting the images, the girls also had to complete a 26-item Children's Eating Attitudes Test, and report their television and magazine exposure. Harrison and Hefner (2006) found that increased television viewing measured initially was related to an increase in eating pathology one year later. Moreover, it was found that television exposure was correlated with preadolescent girls' future body ideals – the more television exposure, the thinner the

future body ideal – indicating greater internalization of the thin-ideal which is omnipresent in today’s television. All in all, the findings obtained in this study indicate that television exposure has a strong influence on body perception and ideation, and consequently, eating disorder symptomatology regardless of age or race.

Furthermore, Tiggemann and Slater (2003) explored the impact of electronic media, especially music videos, on variables that are thought to have a significant relation to eating disorders. The study aimed at investigating the effects thin body imagery in music videos has on female mood and body satisfaction. Tiggemann and Slater (2003) predicted that comparison processing, negative mood, and body dissatisfaction would increase due to thin-body internalization and social comparison. The 84 female participants were asked to view several music video excerpts; however, they were divided into an experimental (music videos that emphasize appearance) and a control condition (appearance-neutral music videos). Before and after actually seeing the excerpts, the participants filled out a questionnaire about their mood and body dissatisfaction, as well as measures of appearance and comparison processing. The results obtained in this research study show that, upon seeing the video, the participants in the experimental condition felt comparatively fatter, less confident, physically appealing, and satisfied with their bodies than the participants who got to see the appearance-neutral music videos in the control condition. All things considered, Tiggemann and Slater’s (2003) study found that just a brief exposure to images of thin and attractive females led to an increase in body dissatisfaction, paving a way for the conclusion that television programming has a negative effect on women’s perception of their bodies and attractiveness.

Websites

Bardone-Cone and Cass’ (2006) pioneering work on the impact of pro-anorexia websites on young women is the first known attempt of this kind in the scientific community. Besides the fact that their impact has never been investigated before, pro-anorexia websites are of interest to Bardone-Cone and Cass (2006) since they are thought to pose a great deal of danger to their visitors through the encouragement of disordered eating and various unhealthy practices. This groundbreaking pilot study sought to gain a better understanding of the potential influence viewing a pro-anorexia website could have on young women, since the pro-anorexia phenomenon advocates anorexia, not as a psychological disorder, but rather a lifestyle choice, and thus, might be more appealing of an option for susceptible populations.

The study by Bardone-Cone and Cass (2006) focused on 24 female undergraduate students from an introductory psychology course. The participants were divided into 3 conditions – experimental (pro-anorexia website), comparison (female fashion website with models of average appearance and body weight) and control (home décor website). Before and after getting a chance to explore the assigned website for 25 minutes, which was designed by the researchers so as to ensure that no confounding variables were present, each participant was asked to fill out several measures accounting for positive and negative affect, state self-esteem, appearance self-efficacy (ability to achieve a desired weight or body figure), perceived weight status and perceived attractiveness to the opposite sex.

The results obtained by Bardone-Cone and Cass (2006) show that negative affect increased after the participants viewed the researcher-made pro-anorexia website. Moreover, positive affect decreased (pro-anorexia website condition) or remained the

same/similar (comparison and control conditions) across all three experimental groups. Upon viewing the pro-anorexia website, a substantial decrease in self-esteem among the female participants in that group was recorded. Likewise, female participants who viewed the pro-anorexia website felt less secure and certain about their ability to achieve their desired body weight and figure, as compared to participants in other experimental conditions. In addition, upon exploring the pro-anorexia website, it was recorded that the participants in that condition felt more aware of their body weight, felt heavier and less attractive to members of the opposite sex.

The conclusions of the Bardone-Cone and Cass’ (2006) study indicate that pro-anorexia websites do impact females affectively and cognitively. Pro-anorexia websites are generally quite “aggressive” in advocating the thin-body ideal, and accentuate the social and personal undesirability of having a body that is larger than the ideal. While the study only explored the immediate effects of viewing a pro-anorexia website and did so on quite a small sample, it is a good starting point for future research. The study certainly found that exploring a pro-anorexia portal did, in fact, impact variables that are thought to be related to eating disorders – thin-ideal internalization, body dissatisfaction, mood, self-esteem, etc. The conclusions of the Bardone-Cone and Cass (2006) study go along with the findings obtained in numerous previous studies – media images that are related to physical appearance impact individuals’ body image, their self-esteem and mood.

Print media

As previously mentioned, Harrison and Hefner (2006) explored the impact of magazines on preadolescent girls’ body ideals and disorder eating parallel to their investigation of the influence of television exposure. It should be noted that most forms of media (magazines especially) are influenced by the advancements in computer technology. Image retouching and other image enhancement techniques result in an unrealistic portrayal of female appearance and body shape in the media and thus, increase a gap between those sizes, shapes and forms that are seen as normal in everyday life and those that are seen as normal by the media (Kilbourne, 1994, as cited by Engeln-Maddox, 2006). In their longitudinal study, Harrison and Hefner (2006) posited that both television and magazine exposure would be predictive of preadolescent girls’ body ideals in adulthood. However, the studies held that magazine exposure would not be as good of a predictor of body ideations as the television programming. Harrison and Hefner (2006) failed to confirm their hypothesis regarding the future body ideal for magazines indicating that magazine exposure did not influence how preadolescent girls viewed their bodies in adulthood regardless of frequency of magazines reading. Essentially, magazine exposure was found to be less predictive of body ideas as compared to television.

Despite the fact that Harrison and Hefner (2006) failed to obtain significant results on the impact of magazines on body ideals and body satisfaction, several other studies (Stice et al., 1994, 2001; Hargreaves & Tiggemann, 2003, as cited by Harrison & Hefner, 2006) managed to attain findings that indicate that print media exposure is, in fact, correlated with an increased yearning for thinness and hence may lead to eating disorder symptomatology. A study by Engeln-Maddox (2006) to some extent indirectly supports the view that print media and, more precisely, images in general, do, as a matter of fact, have a bearing on women’s body ideals. Engeln-Maddox (2006) explored the rewards women believe are related to having a media-perfect body. The hypothesis put forward

posited that thin-body internalization occurred if women attached positive life changes to having a media-perfect appearance. In turn, this internalization would be predictive of appearance related dissatisfaction. A group of 109 female undergraduate students was asked about their opinions on whether and how their lives would change if they had a media-perfect body, as well as to evaluate each of the life changes in terms of realism and optimism. Engeln-Maddox (2006) found that optimistic and realistic expectations of possessing a media-perfect body were significantly correlated with both thin-body internalization and personal body dissatisfaction.

Discussion

In the present paper, an attempt was made to show that media – television, music videos, websites and print media – as a sociocultural factor has a strong influence on body image and body dissatisfaction in females. While all of the research studies reviewed here concur with the previously posited idea that media is an influential factor in body perception and satisfaction (Harrison & Hefner, 2006; Tiggeman & Slater 2003; Bardone-Cone & Cass, 2006; Engeln-Maddox, 2006), the study by Harrison and Hefner (2006) failed to obtain support for their suppositions on magazine exposure. This could have been due to the fact that magazine exposure was measured with self-report items, which puts the actual truthfulness and accuracy of data in question. Moreover, Harrison and Hefner's (2006) study did not control for what kind of television programs preadolescent girls were exposed to and they also did not control for the kind of magazines they read during the one-year period. However, the reason for obtaining significant results for television viewing and not for magazine exposure could be due to the fact that in today's television it is inevitable to experience the thin-body ideal since it is omnipresent, not so much in children's television, as much as in commercials that come on every so often. Whether preadolescent girls would be exposed to the thin-body ideal while reading magazines depends solely on the type of magazines they read; however, the exposure to the ideal on television does not depend on television program selection per se. Nonetheless, credit should be given to Harrison and Hefner (2006) since their study was the only one that extensively controlled for potential effects of age and race on body ideal and eating pathology, and was also a study that had the greatest number of participants involved, thus deeming it generalizable. It should be noted that the study by Engeln-Maddox (2006) also attempted to racially diversify the participant sample, but not as extensively as Harrison and Hefner (2006).

On a different note, one should be aware of the fact that most of the studies reviewed in the present piece investigated immediate effects of media exposure on participants involved. Studies by Tiggemann and Slater (2003), Bardone-Cone and Cass (2006) and Engeln-Maddox (2006) all investigated the immediate impact of different types of media on variables that are associated with eating disorder symptomatology. On the other hand, the study by Harrison and Hefner (2006) was longitudinally designed and measured body ideals and eating pathology one year apart. Despite the fact that longitudinally designed studies have an advantage over studies which deal with immediate effects of variables since they allow a more complex approach to the issue being investigated, the value of

other studies should not be minimized because they provide invaluable insights into issues at hand.

Moreover, the study by Bardone-Cone and Cass (2006) was a first known empirical study to investigate the impact of pro-anorexia websites on body dissatisfaction and mood, as well as a diapason of other variables such as appearance self-efficacy, perceived weight status and perceived attractiveness. The main drawback of this study was the fact that it only used 24 participants limiting its generalizability. However, it should be noted that this was just a pilot study rather than a full-scale research. Additionally, as mentioned previously, this study only looked at immediate effects of pro-anorexia website exposure. It would be interesting to conduct a longitudinal study and see whether symptoms of eating pathology developed over time in female participants from the pilot study as a result of this brief exposure to a pro-anorexia website. Moreover, it would also be intriguing to see if any of the information female participants saw on the researcher-made website triggered them to seek more information on the pro-anorexia phenomenon. It should be noted that these suggestions for future research carry with them numerous ethical implications and, if undertaken, researchers should pay close attention to carefully developing their research instruments.

All of the above reviewed studies come to the same conclusion: media does, in fact, influence female body perception and satisfaction. However, most of the studies that explore the problematics of media and variables associated with eating pathology focus largely on females, while neglecting how males perceive their own bodies, as well as bodies of their partners. The potential influence of the increasing male body objectification in the media on males, as well as females, could be a topic for further contemplation and research. In addition, besides broadening the research so as to include males, future research studies could focus their efforts on exploring the impact of the internet (not just pro-anorexia websites) on variables associated with eating disorders, as well as involve more participants and racially-diversify the samples.

All things considered, upon reviewing several research endeavors, one could conclude that media in its different forms does, as a matter of fact, influence variables that are associated with eating disorder symptomatology. Despite the fact that magazines were found not to influence body perception and satisfaction in one of the studies reviewed here, this discovery should be taken with hesitation since an array of research studies claim otherwise. Overall, variables, such as thin-body idealization, body dissatisfaction, comparison processing, mood, self-esteem, all play a role in the development and perpetuation of eating pathology. Media, a very powerful sociocultural stakeholder, "manipulates" feelings of women regarding their bodies and appearances in general. Nonetheless, on a more personal note, it should be discerned that we as conscious human beings do have the ability to tune out "manipulations" that we are not comfortable with; it is just a matter of whether or not we are willing to utilize that ability.

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