

# EFFECT OF EXPOSURE TO TELEVISION COMMERCIALS ON THE BODY IMAGE AND SELF-ESTEEM OF FEMALE ADOLESCENTS

Olujide A. Adekeye, Ben C. Agoha, Sussan O. Adeusi, Gbadebo Adejumo, Elizabeth I. Olowookere<sup>1</sup>

*Department of Psychology, Covenant University (NIGERIA)*

## Abstract

**Introduction:** This study investigated the effects of exposure to television commercials and magazines on the perceived body image and self-esteem of female adolescents. Young girls are becoming increasingly aware of their body image through the image of models in advertising, and image-centered ideals portrayed in the media.

**Methods:** Sixty female secondary school students between the age of 12 and 16 years participated in this experimental study. The study made use of the between-subject design by dividing the sixty participants into two groups of thirty students each for experimental and control categories. This was done using the simple random sampling of odd-even method without replacement. Two validated scales were employed to measure the study variables. The Rosenberg self-esteem scale and the Franzoi's body image scale with reliability coefficients as high as 0.78 and 0.83 respectively.

**Results:** Two hypotheses were raised and tested. Results show there is a significant difference between exposure to media and female body image ( $t = 21.82$ ,  $df = 58$ ,  $p = 0.05$ ), and self-esteem ( $t = 18.59$ ,  $df = 58$ ,  $p = 0.05$ ). The second hypothesis was also retained. It showed a positive and significant relationship between body image and self-esteem.

**Conclusion:** The study revealed that media exposure has effects on body image and self-esteem of female adolescents. Concern with appearance is not just an aberration of modern western culture because every phase in history has had its own standards of what is and is not beautiful.

**Keywords:** Television commercials, body image, self-esteem, females.

## 1 INTRODUCTION

The media have been criticized for depicting the thin woman as ideal. Some argue these images create unrealistic expectations for young women or adolescents and causes body dissatisfaction and disordered eating. The media is a pervasive and ever present entity in the lives of most individuals. It is a strong influence for constructing meaning in our everyday lives. As noted by Hargreaves and Tiggemann (2003), adolescents are more vulnerable to media images due to the fact that they have not reached the cognitive level to critically analyze and determine reasonable levels of realistic goals. Because female adolescents are malleable, they are more likely to emulate the images portrayed in the media by attempting to model themselves physically and depicting the images viewed through their actions.

According to Berberick (2010), the representation of women in the media has always been exploitative. It has, throughout the years, reduced women to being nothing more than objects to be won, prizes to be shown off, and playthings to be abused. It has also created a definition of beauty that women compare their self to. Also, men compare the women in their lives to what they see on television screens, in magazines, and on billboards. Both the self and society has suffered because of the objectification, sexism, exploitation and assessment.

Media consumption as Arnett (1995) puts it give adolescents a sense of being connected to a larger peer network. According to Berg (2001), television and diet promotions which were nonexistent in 1973 now make up about 5% of TV advertisements. Advertising conveys messages that "you are not okay" and here is "what you need to fix what is wrong". According to Kellner (1995), media images often help shape our view of the world and provide a foundation for creating values and morals. For example, mediated sources often influence the acceptance or disapproval of a behaviour or ideology. Themes of right and wrong, moral or evil, are often created and sustained in media stories or images. Stern (2004) reported on the importance of physical appearance to females. Most advertisements for women emphasize the importance of physical appearance. These adverts also urge consumers to buy

specific products and conduct certain behaviours to look as young and thin as the models represented in the image.

The great Austrian philosopher, Ludwig Wittgenstein said the human body is the best picture of the human soul (Nezlek, 1999). With no regard to race, tribe, nationality or cultural heritage of any kind, it has been discovered by psychologists, philosophers, physicians and others that the human body represents the totality of an individual's person, from personality to achievements to esteem and so on. The implication of this is exemplified by the amount of time and efforts some females exert to beautify; modify and even attempt to recreate these physical forms.

Body image encompasses an individual's body-related self-perceptions and self-attitudes and is linked to self-esteem. Many adolescent girls believe physical appearance is a major part of their self-esteem and their body is a major sense of self (American Association of University Women, 1991). As the media has proposed beauty and perfection are equivalent to self-worth or self-esteem as the case may be. Self-esteem as one of the highest ranked on Abraham Maslow's theory of needs thus refers to an individual's sense of value and worth, or the extent to which a person values, approves of, appreciates, prizes, or likes herself (Blascovich & Tomaka, 1991). Media images including TV programs, magazines, Internet, and advertising in general, all have an equally powerful effect on women's self-esteem.

According to the social learning theory (Bandura, 1977), repeated exposure to images, objects, events or as used in this study media content leads viewers to begin to accept media portrayals as representations of reality. Thus, the influence of media models on body image may be particularly powerful for women (Ahern, Bennett, & Hetherington, 2008; Hausenblas, Janelle, Gardner, & Focht, 2004; Tucci & Peters, 2008). Sociological and psychological literature on the phenomenon of media effects has shown that exposure to media depictions of the thin ideal can have damaging effects for women (Groesz, Levine, & Murnen, 2002). In Western cultures, girls' self-esteem declines substantially during middle adolescence, with changes in body image proposed as a possible explanation. Body image develops in the context of sociocultural factors, such as unrealistic media images of female beauty (Clay, Vignoles, and Dittmar (2005).

The actual causal direction of the relationship between body dissatisfaction and self-esteem remains unclear for all age cohorts (Tiggemann, 2005). To date, there are few longitudinal studies examining the temporal precedence of this relationship. On the one hand, Tiggemann (2005) found that adolescent girls, who are heavier, perceive themselves as being overweight, and are dissatisfied with their weight might be vulnerable to developing low self-esteem. In addition, another prospective analysis by Johnson and Wardle (2005) found that body dissatisfaction significantly predicted low self-esteem among adolescents. On the other hand, a number of etiological theories identify low self-esteem as a precursor for the development of body dissatisfaction or disordered eating (e.g., Button, 1990). Thus, in this study we sought to investigate the directionality of the relationship between self-esteem and body dissatisfaction specifically in young girls.

According to Rodin, Silberstein, & Striegel-Moore, (1985) as cited by Dohnt & Tiggemann (2006), body dissatisfaction, or the desire for thinness, is so prevalent among women and adolescent girls that it is now described as a "normative discontent". Years later, Phares, Steinberg, & Thompson, (2004) as cited by Dohnt & Tiggemann (2006), extended the normative discontent to include young girls.

## **1.1 Research Hypotheses**

**Ho1:** There is a significant difference between exposure to media and female body image and self-esteem

**Ho2:** There is a positive and significant relationship between body image and self-esteem.

## **1.2 Ethical Considerations**

Ethics pertain to a body of principles of right, proper or good conduct (Cohen & Swerdik, 2010). They asserted that a respondent that is involved in a research study has the right: to give informed consent; to be informed of the results; the right to privacy and confidentiality; and not to be labelled in a stigmatizing manner. Ethical clearance for the study was obtained via the principal of the selected secondary schools who coordinated with parents and guardians. Consent letters were signed by parents and returned to the researcher through the principal to give consent for their wards to participate in the present study. Assent letters were also signed by learners and returned to the researcher whereby they agreed to voluntarily participate in the study.

## 2 METHODS

Sixty female secondary school students between the age of 12 and 16 years with mean age of 14.23 participated in this experimental study. The study made use of the between-subject design by dividing the sixty participants into two groups of thirty students each for experimental and control categories. This was done using the simple random sampling of odd-even method without replacement. Two validated scales were employed to measure the study variables. The Rosenberg self-esteem scale and the Franzoi's body image scale with reliability coefficients as high as 0.78 and 0.83 respectively.

### 2.1 Measures

A questionnaire with two trajectories (self-esteem scale and Franzoi & Shields body esteem scale) was used for data collection. This was done on the basis on pre-test and post-test to test for body image and self-esteem after exposure to media, magazines, and television programmes.

#### 2.1.1 Rosenberg Self-Esteem Scale (RSE)

The Rosenberg self-esteem scale (Rosenberg, 1965) was an attempt to achieve a uni-dimensional measure of global self-esteem. The reliability and validity of the 10-item RSE is not in question because the scale is widely used. Multiple studies have been conducted to investigate the validity and reliability of the RSE. Studies that used high school or college students supported the scale's uni-dimensionality (Crandal, 1973; McCarthy & Hoge, 1982). In populations of college students, reports have indicated a one-week test-retest correlation of .82 (Fleming & Courtney, 1984) and a two-week test-retest correlation of .85 (Silber & Tippett, 1965). Depending on style, the scale ranges from 0-30, scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. The reliability of the RSE using Cronbach's alpha was 0.78. For the purpose of the current study, the scale returned a coefficient reliability of 0.85 using a test-retest reliability method.

#### 2.1.2 Body Image scale

The Franzoi and Shields body esteem scale (Franzoi, 1994) was developed to provide a self-report measure of body esteem. It is a 30-item scale with a four point Likert like format. The Body image is not susceptible to a tendency to unrealistically deny negative self attributes as it measures likes and dislikes on a wide range of issues such as from physical and sexual attractiveness to weight concern and physical condition. The scale includes questions from body esteem on a self-report basis to self-perceptions of others' opinions of self. The total score is 120 and the average body-esteem lies between 70 and 95. The reliability of the total scale using Cronbach's alpha was 0.83. However, for this study, the split-half reliability returned a coefficient of 0.79 and 3 week interval test-retest reliability of 0.83.

### 2.2 Procedure

The study was conducted with sixty (60) participants. The researchers assigned the participants to two different groups tagged Group A and B using the simple random sampling method of odd-even selection. Group A was exposed to media associated with body image and self-esteem. This served as the experimental group while the second group was the control group. The control group was not exposed to any media. Both groups were given the body image and self-esteem scales as the pre-test within the same setting under the same environmental conditions. The experimental sessions were conducted in a comfortable setting with participants sitting on padded chairs in a regulated air-conditioned room.

Three programmes were selected for viewing by the experimental group and these are Ugly Betty, Gossip girl and Americas' next top model. These were shown on alternate days for the twelve day experiment. Other forms of media exposure used were four slide shows, four magazine articles and four groups of commercial adverts portraying both body image and self-esteem. Again, this was shown alternative alongside the television programmes.

The television programmes were content edited to last for thirty minutes per episode while the slide show was for 15 minutes. The commercial adverts were also shown in 15 minutes. Theses adverts were for products relating to body image such as fashion and clothes, dieting products and weight loss, celebrity icons and plastic surgery or extreme make-overs. For the magazines, a reading time of 15 minutes was also allotted. Thus, exposure time per session for the entire experiment lasted for forty-five minutes. This includes the television programme plus any of the commercial adverts, slide

shows or reading. The experiment lasted a total of fourteen days including the pre and post-tests. A journal was recorded for each day's activities.

### 3 RESULTS

The data obtained were analyzed using the student's t-test analysis.

Table 1: Demographic Variables

Variables	Frequency	Percent
<b>Age</b>		
12-13 years	18	30.0
14-15 years	32	53.0
15-16 years	10	17.0
<b>Current Class</b>		
Senior School 1	30	50.0
Senior School 2	30	50.0

In Table 1, it was revealed that 60 participants were involved in the study. Majority of the participants are between the ages of 14 and 15 years (53%). Eighteen participants (30%) are within the 12 to 13 years while the oldest participants (15-16 years) made up the remaining 17 percent. There was a proportional distribution of participants (50% each) by class.

Table 2: Body Image of Participants Pre and Post Treatment

Group	Pre-Treatment		Post-Treatment	
	Mean	SD	Mean	SD
Experimental Group	54.52	5.28	51.12	4.49
Control Group	54.62	6.82	54.62	6.84

Table 2 shows the body image of participants before treatment. Result shows the control group had better mean score and standard deviation than the experimental group. The table further revealed the same trend after exposing the experimental group to the treatment condition.

Table 3: Self-Esteem of Participants Pre and Post Treatment

Group	Pre-Treatment		Post-Treatment	
	Mean	SD	Mean	SD
Experimental Group	10.66	5.26	8.46	3.45
Control Group	10.62	6.82	10.82	6.81

Table 3 shows the self-esteem status of participants before treatment. Result shows that the experimental group had better mean score than the control group. The post-test scores show that the control group had better mean score and standard deviation than the experimental group.

#### 3.1 Hypotheses

**Hypothesis 1: There is a significant difference between exposure to media and female body image and self-esteem**

Table 4a: Means, SD and t values of participant's exposure to media and their body image

Variation	N	Mean	SD	df	t value	Sig.
Female perception of body image before exposure to media	30	54.52	5.28	58	21.82	0.05
Female perception of body image after exposure to media	30	51.12	4.49			

**Table 4b: Means, SD and t values of participant's exposure to media and self-esteem**

Variation	N	Mean	SD	df	t value	Sig.
Female self-esteem before exposure to media	30	10.66	5.26	58	18.59	0.05
Female self-esteem after exposure to media	30	8.46	3.45			

Results show there is a significant difference between exposure to media and female body image ( $t = 21.82$ ,  $df = 58$ ,  $p = 0.05$ ), and self-esteem ( $t = 18.59$ ,  $df = 58$ ,  $p = 0.05$ ).

**Hypothesis 2: There is a positive and significant relationship between body image and self-esteem.**

Table 5: Means, SD and Correlations between body image and self-esteem

Variables	N	Mean	SD	df	Coefficient	Sig.
Female Body Image	60	0.20	5.24	59	0.85*	0.05
Female Self-Esteem	60	8.58	3.15			

\*: correlation is significant at the 0.05 level

The second hypothesis was also retained. It showed a positive and significant relationship between body image and self-esteem ( $r = 0.85$ ,  $p < 0.05$ ).

## 4 DISCUSSION

In hypothesis one, the significant difference between exposure to media and female body image and self-esteem was investigated. Results show that there is a significant difference between exposure to media and female body image ( $t = 21.82$ ,  $df = 58$ ,  $p = 0.05$ ) and self-esteem ( $t = 18.59$ ,  $df = 58$ ,  $p = 0.05$ ). During the experimental sessions, it was discovered before and after sessions that indeed quite a number of participants complained endlessly about how difficult it was to attain these perfect bodies prescribed by the media but in contrasts, still over emphasized the need to attain them in order to be completely satisfied. A 1999 study by the University of Texas found that fashion magazines indeed harm the body image of most teenage girls by revealing to them bodies that are beyond perfect and making them develop daily distaste for different body parts progressively. Female adolescents are exceptionally vulnerable to the impact that exposure to media can have on their body image as they develop an outlook on their bodies and accept the developmental changes that occurred during puberty.

On self-esteem, contents of programs, articles and TV commercials had effect on the self-esteem of the participants. The acceptance of media's presentation of the ideal body image results in lowered self-esteem and confidence. As female adolescents make comparisons between their selves and the models in magazine photos, they come to accept these beauty ideals as realistically attainable goals. As reported by Van den Buick (2000), by possessing high traits of body dissatisfaction and with the ever increasing pressure of the media, female adolescents develop more feelings of vulnerability and insecurity and as time go on; their self-esteem reduces and often gets to a point where health and life as the case may be is at great risk. Conversely, though, if a woman is not satisfied with her body, she will typically internalize the thin ideal, compare it to her own body, and then try to change herself as a result of increased negative body image. As noted by Klein (2013), the latter more closely aligns to what happens in objectification theory and suggests that a woman with already low self-esteem will be

more influenced by a higher exposure to objectified images of women in the media. She is also the woman who will seek out a certain type of media as a way to feed her already negative self-concept. She will choose to consume a certain type of media that will reinforce her already negative thoughts. For example, a woman with high body dissatisfaction is likely to consume media with images of thin and perfect models, which will then adversely affect her already negative feelings.

The second hypothesis which investigated the relationship between body image and self-esteem shows a significant positive relationship between body image and self-esteem ( $r = 0.85$ ,  $p < 0.05$ ). In this study, exposure to media resulted in a positive correlation with participant's body image and self-esteem. Adolescent body image encompasses their body-related self-perceptions and self-attitudes ultimately influence self-esteem, interpersonal confidence, eating and exercise behaviours, sexual experiences and emotional stability. However, Nezelek (1999) noted that among adolescent youth, body image and body weight dissatisfaction have been associated with a plethora of psychological ills from eating disorders to major depression surrounded majorly by the classification of low self-esteem. This study shows that satisfaction with physical appearance is a large component of self-esteem.

#### 4.1 Conclusion

In bringing this research to a conclusion, it is therefore necessary that we refer to the original aims identified at the beginning of the project in order to assess its effectiveness. This study was designed to explore the effect of exposure to television commercials on the body image and self-esteem of female adolescents. The results show that there is a significant difference between exposure to media and female body image and self-esteem and also a significant positive relationship between body image and self-esteem. Concern with appearance is not just an aberration of the western media; it is hard to imagine a world where idealized female imagery is not plastered everywhere.

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