Investigating the Effects of Instagram on Creating Body Image 14-30 Years Old Female and Male Users in Tehran Province Using Littleton Body Image Questionnaire

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Abstract

This study was an attempt to examine the effects of Instagram on creating body image 14-30 years old female and male users in Tehran province by using Littleton body image questionnaire. The participants of the study were one hundred and twenty Iranian men and women in Tehran province. This study used two groups (total N = 120) to explore relations between Instagram social media use and body image in early adolescent girls and boys (ages 14-30). The participants were given Littleton questionnaire. Two tests were run to analyze the results of the study. Kruskal-wallis test for data analysis were used to examine the research question about body image. Another test was single sample t-test to evaluate Dissatisfaction and embarrassment of the person to hide the perceived defects. So the finding revealed that Instagram does not affect the women and men worries about their appearance in social performance.

Keywords: Instagram, body image, Littleton questionnaire

1. Introduction

The relationship between social media like instagram and body image is often explored using the theory of social comparison, which holds that people compare themselves to people they think are similar to them. (Perloff, R. M., 2014)

In recent years, social networks have emerged as a very popular form of online communication such as;Instagram, especially among young people (Perloff, R. M., 2014). Have different electronics such as computers, smartphones, tablet computers and other forms of technology (Perloff, R. M., 2014). Compared to other popular mass media, social media is multifaceted and gives people the access they need to create their own private profile and share data and images with other users on their social networks (Buhlmann, U. et al., 2010).

Apart from all this, Instagram has been able to transform the fashion industry in such a way that various brands in the field of fashion must have an active presence on Instagram in order to achieve more progress. It has created different people and companies that increase communication and they had different body image (Crerand, C. E. et al., 2017)

This information shows the value of Instagram as well as the impact of Instagram on shaping the body image of 14 to 30 years old male and female users, and therefore it is important to examine the experiences of users in this social network.

People's perceptions of the body include their thoughts, feelings, and personal perceptions of the aesthetics or sexual attractiveness of their bodies (del Mar Bibiloni, M. et al., 2017). The meaning of people's perception of their body is used in some fields such as neuroscience, psychology, medicine, psychiatry, psychoanalysis, philosophy, cultural studies and feminist. The media also makes extensive use of this concept. Body image can be unpleasant ("negative body") or pleasant ("positive body"). He may feel aware or embarrassed and may feel that other people are more attractive (Derenne, J. L. et al., 2006). At a time when social networks and pages are very important and have a high status and are constantly used in our daily lives, also people can get likes on Instagram. People are even influenced by the culture and ideals that exist in their society due to differences in gender and age, and emotionally and mentally their perceptions of their body and physical appearance are shaped by the culture in which they live. The act of humiliating a person by making fun of or criticizing a person's physiological appearance.

Low self-esteem is one of the most important factors in diseases, but other than these patients feel uncomfortable and disgusted with their body and turn their attention to the fact that this causes other disorders and diseases or increases the risks. And the complications of the disease are such as eating disorders, mental illness and isolation (Derenne, J. L. et al., 2006). In eating disorders, an unpleasant perception of body shape can lead to a misunderstanding of the body image, which leads to a disorder in the body image, in different perceptions of the whole body.

Body discomfort is also characterized by deformity, an obsessive-compulsive disorder defined by concerns about certain aspects of a person's body (usually the face, skin, or hair) that are severely defective and require certain actions. It is necessary to hide or remove it. Often, people with poor body image try to change their body through methods such as diet or cosmetic surgery. On the other hand, a positive perception of the body is a correct and clear understanding of the face, praise and appreciation of one's body, and understanding that a person's appearance does not reflect his personality or value (Derenne, J. L. et al., 2006).

There are many reasons for the formation of body image, for example, the constructive nature of the family environment, mental illness, biological abilities and environmental factors for obesity or malnutrition, and cultural expectations (eg, media and politics). People who are underweight or obese may have an unpleasant perception of their body image.

However, when people are constantly stressed and shown the beauty of losing weight and warned of the risks of obesity, people who are normal weight or overweight on the BMI scale Are more at risk of poor body image. (Dittmar, H. et al., 2004) "the researchers expected women to feel worse about their bodies after seeing very slim models than any other models, if they internalized the slimming ideal, so they would repeat the previous findings." (Entezari, S. et al., 2012)

Research published in 2007 by the American Psychological Association found that culturally depersonalizing women increases their anxiety and worry about issues related to their perception of their bodies (Dittmar, H. et al., 2004). The Australian Senate Standing Committee on Child Sexual Exploration found in the media similar data correlated with body image (Entezari, S. et al., 2012). However, researchers are very concerned because they believe that the results of this research do not have a solid basis, so there is a possibility of error in their results (Grogan, S. et al., 2016). The previous studies are conducted as follows: Some researchers attributed the increase in popularity for aesthetic procedures to negative body image because they believed that one's physical appearance was based upon which an individual's body image was psychologically built. In fact, the only rationale for performing aesthetic plastic surgery is to improve the patient's psychological well-being (Ha, S. et al., 2019; Junne, F. et al., 2016).

2. Methodology

The present study investigates the effects of Instagram on creating body image 14-30 year old female and male users in Tehran province using Littleton body image questionnaire. It deals with explaining the participants, data collection and data analyses, instrument and the procedure employed to conduct the study.

2.1 Participants

The participants of the study were females and males who were selected from among a total number of 120. The participants were all females, males and their ages range from 14-30.

2.2 Tests

Two tests were administered to examine this study. Appropriate littelton questionnire (kruskal-wallis) for data analysis were used to examine the research question. Another test was single sample t-test to evaluate Dissatisfaction and embarrassment of the person to hide the perceived defects.

2.3 Questionnaires

This littelton questionnaire was developed by Littleton et al. In 2005 this questionnaire assesses fear of body image The Littleton Body Image Fear Questionnaire (BICI) has 19 questions and two components as follows:

The first one is dissatisfaction and embarrassment of one's appearance, checking and hiding perceived defects.

The second one is the degree of anxiety about appearance interferes with a person's social performance. This questionnaire has validity, reliability and reliability and scoring.

Being beautiful and having good physical features is a pleasure for anyone, regardless of whether they are a woman or a man. In today's society, different people make changes in their appearance because they are looking for more beauty like instagram models. Of course, beauty is completely relative and every person is beautiful with every appearance.

2.4 Characteristics of the Person with a Negative Body

Fear of a negative body image can permeate a wide range of behavior. One of the things that can be done to evaluate a negative body image is to check yourself too much in the mirror; For example, a person who does not like his nose and constantly stands in front of the mirror and checks his nose. It lead to they have bad body image.

Another example is concern and embarrassment; a person who is afraid of body image may feel embarrassed or worried about being in the community and having a negative body image. At other times, a person who fears a negative evaluation may try to hide the member from a negative perception because of a misconception. To assess the fear of body image this questionnaire can be used and get good information by interpreting and scoring.

2.5 Scoring Method

This questionnaire was designed in 2005 by Littleton et al. The littelton questionnire contains 19 questions, each of which has five options that are scored from 1 (never) to 5 (always). In Iran, Basakonejad and Ghaffari in 2007 reported 95% validity of this test based on internal consistency by Cronbach's alpha method (Kristjánsdóttir, H. et al., 2019). Entezari and Alavizadeh (2011) also reported 89% internal consistency using Cronbach's alpha test. The correlation coefficient of each question with the total score of the questionnaire was from 0.32 to 0.72 with an average of 0.62. Also, Cronbach's first and second factor alpha coefficients were 0.92 and 0.76, respectively, and the correlation coefficient between the two factors was 0.69. In the present study, the reliability of the body image concern questionnaire and its subscales was calculated by Cronbach's al. (Littleton, H. L. et al., 2005)

Options of this questionnaire are never, rarely, sometimes, often, and always.

Scores are 1 2 3 4 5.

To get the total score of the littelton questionnaire, calculate the total score of all the questions together. This score will range from 19 to 95. To interpret this score, use the following table.

Table 1. Interpretation points

always	often	sometimes	rarely	never	points
5	4	3	2	1	score

Table 2. total score of questionnaire

interpretation	score
Fear of body image Very little or no fear of body image	19-37
Fear of low body image	38-52
Fear of the average body image	53-69
Fear of high body image	Above 70

Table 3. dimensions and the number of questions related to each dimension

Relevant questions	dimension
1-3-5-8-9-14-15-16-17-18-19	Dissatisfaction and embarrassment of one's appearance, checking and hiding perceived defects
2-4-6-7-10-11-12-13	The degree of interference of anxiety about appearance in a person's social performance

2.6 Reliability and Validity

Littleton et al. (2005) evaluated the reliability of this questionnaire by internal consistency method and obtained Cronbach's alpha coefficient of 0.93. The correlation coefficient of each question with the total score of the questionnaire was from 0.32 to 0.72 with an average of 0.62. Also, Cronbach's first and second factor alpha coefficients were 0.92 and 0.76, respectively, and the correlation coefficient between the two factors was 0.69. In the present study, the reliability of the body image concern questionnaire and its subscales was calculated by

Cronbach's alpha method, which was 0.86 for the whole questionnaire, 0.84 for the first subscale (apparent dissatisfaction) and 0.71 for the second subscale (performance interference). Which indicates the acceptable reliability of the questionnaire? In Basaknejad and Ghaffari (2007) research, the correlation coefficient between the body image fear scale and the fear of negative evaluation of physical appearance was 0.55 and the correlation coefficients of the body image fear scale with the fear of negative evaluation scale were 0.43, which means are. (National Association of Anorexia Nervosa and Associated Disorders, 2020).

3. Data Analysis

The research question was formulated to examine the effects of Instagram on creating body image 14-30 years old female and male users in Tehran province using Littleton body image questionnaire. After classifying the information & data collected, it is processed and analyzed the results of findings of this study are expressed after determining the normality of the data, appropriate tests (kruskal-wallis) for data analysis were used to examine the research question.

The statistic with the test is respectfully presented in the following tables.

The hypothesis 1: Instagram has an effect on creating a body image of 14 to 30 years old woman users in Tehran province.

$$H0: p \neq 0 \tag{1}$$

The opposite hypothesis: Instagram has no effect on creating a body image of 14 to 30 years old female users in Tehran province.

$$0 = h0:0 \tag{2}$$

Table 4. Descriptive statistics for the kruskal-wallis test in females

	Chi-square amount	The amount of freedom	Significance of sig test
Kruskal- wallis test	35.434	3	00:00

Table 5. Interpretation of descriptive statistics for the kruskal-wallis test in females

interpretation	number	average
Fear of body image is very low or no fear of body	44	22.50
fear of body is low	11	50.0
Fear of body is medium	4	57.5
Fear of body is much	1	60.00

As can be seen the calculated littelton questionnire value is significant, sig is less than 0/05, so the opposite hypothesis is accepted and the statistical hypothesis is accepted with 0/95 confidence, and the result can be generalized to the Instagram community to create an image. The body of 14 to 30 years' old female users in Tehran province has no effect.

Table 6. Descriptive Statistics for the test in females

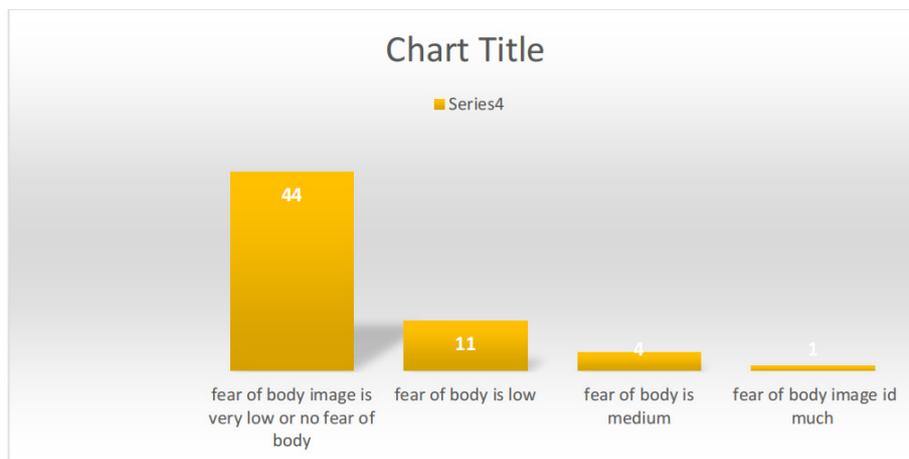|	number	min	max	average	Criterion deviation error	Standard deviation
hypothesis	60	19.00	80.00	34.6500	1.51915	11.76727

Figure 1. Descriptive statistics for the test in women

The hypothesis 2: Instagram has an effect on creating a body image of 14 to 30 years old man users in Tehran province.

$$H0: p \neq 0 \tag{3}$$

The opposite hypothesis: Instagram has no effect on creating a body image of 14 to 30 years old male users in Tehran province.

$$0=h0:0 \tag{4}$$

Table 7. Descriptive statistics for the kruskal-wallis test in males

	Chi -square	Freedom amount	Significance of the test sig
Kruskal-wallis	91.392	3	00.00

Table 8. Interpretation of descriptive statistics for the kruskal-wallis test in males

interpretation	number	average
Fear of body image is very low or no fear of body	71	36
fear of body is low	35	89
Fear of body is medium	12	112.5
Fear of body is much	2	119.5

Given the information in Table 8, the calculated test value is significant, sig is less than 0/05, so the opposite hypothesis is accepted & the statistical hypothesis is accepted with 0/95 confidence, & the result can be generalized to the Instagram community to create an image. The body of 14 to30 years' old male users in Tehran province has no effect.

Table 9. Descriptive Statistics for the test in males

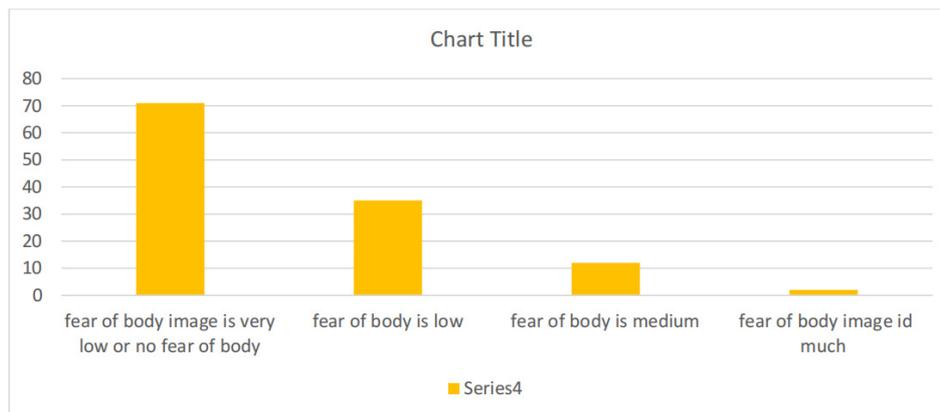| Standard deviation	Criterion deviation error	average	max	min	number
12.19	1.11	37.4	80	19	122

Figure 2. Descriptive statistics for the test in men

Dissatisfaction and embarrassment of the person to hide the perceived defects by single sample t-test.

The hypothesis 1: Instagram affects woman in dissatisfaction and embarrassment of their appearance, checking and hiding perceived defects.

$$H0: p \neq 0 \tag{5}$$

The opposite hypothesis1: Instagram does not affect women in dissatisfaction and embarrassment of their appearance, checking and hiding perceived defects.

$$0 = h0:0 \tag{6}$$

Table 10. Descriptive statistic of dissatisfaction of women by using single sample test

The variable name	number	Average Criterion deviation error	average	Coefficient t	sig
Dissatisfaction and embarrassment of one's appearance	60	3.39	1.71	-10.65	0.00

Table 11. Descriptive statistic of dissatisfaction of women by using single sample test

	number	min	max	average	Criterion deviation error	Standard deviation
Hypothesis 1	60	1.00	3.73	1.7076	.07436	.57596

Concerns about the appearance of the individual in social functioning

(One sample T test)

The hypothesis 2: Instagram affects men concerns about their appearance interfere with social performance.

$$H0: p \neq 0 \tag{7}$$

The opposite hypothesis 2: Instagram does not affect the degree of men concerns about their appearance in social performance.

Table 12. Descriptive statistic of dissatisfaction of men by using single sample test

The variable name	number	Average Criterion deviation error	average	Coefficient t	sig
Concern interference	60	0.1	1.98	-4.90	0.00

According to the table above, as can be seen the calculated test value is significant, sig is less than 0/05, so the opposite hypothesis is accepted & the statistical hypothesis is accepted with 0/95 confidence, & the result can be generalized to society, Instagram does not affect the degree to which women worry about their appearance in social performance.

Dissatisfaction and embarrassment of the person to hide the perceived defects by using single sample t-test.

The hypothesis 1: Instagram affects men in dissatisfaction and embarrassment of their appearance, checking and hiding perceived defects.

$$H0: \ p \neq 0 \tag{8}$$

The opposite hypothesis1: Instagram does not affect men in dissatisfaction and embarrassment of their appearance, checking and hiding perceived defects.

$$0=h0:0 \tag{9}$$

Table 13. Descriptive statistic of dissatisfaction of men by using single sample test

The variable name	number	Average Criterion deviation error	average	Coefficient t	sig
Dissatisfaction & embarrassment of one's appearance	120	-.71	1.79	-12.79	0.00

One can easily understand the calculated test value is significant, sig is less than 0/05, so the opposite hypothesis is accepted & the statistical hypothesis is accepted with 0/95 confidence, & the result can be generalized to society, Instagram in men has no effect on a person dissatisfaction & embarrassment of their appearance & checking & hiding perceived defects.

Table 14. Descriptive statistic of dissatisfaction of men by using single sample test

	number	min	max	average	Average Criterion deviation error	Standard deviation	number
Hypothesis valid N (list wise)	120	1.00	3.82	1.7879	0.5569	.61005	.372

Concerns about the appearance of the individual in social functioning (one sample T test)

The hypothesis 2: Instagram affects men of concerns about their appearance interfere with social performance.

$$H0: p \neq 0 \tag{10}$$

The opposite hypothesis 2: Instagram does not affect the degree of men worry about their appearance in social performance.

$$0=h0:0 \tag{11}$$

Table 15. Concerns about the appearance of the individual in social functioning (one sample T test)

The variable name	number	Average Criterion deviation error	average	Coefficient T	sig
Concern interference	120	0.83	1.98	-4.32	0.00

As can be seen the calculated test value is significant, sig is less than 0/05, so the opposite hypothesis is accepted & the statistical hypothesis is accepted with 0/95 confidence, & the result can be generalized to society, Instagram does not affect the degree to which women worry about their appearance in social performance.

Table 16. Descriptive Statistics of Concerns about the appearance of the individual in social functioning (one sample T test)

	number	min	max	average	Criterion deviation error	Standard deviation
hypothesis	120	1.00	4.88	2.1719	.07594	.83185

The study was an attempt to investigate the impact of Instagram on creating body image 14-30 years' old female and male users in Tehran province using Littleton body image questionnaire. The findings generally supported the hypothesis that taking and posting. These results all yielded no effect sizes. The researchers did not find significant effects of Instagram on all of the dependent variables of interest in the current study.

4. Conclusion

In today's societies where the main beauty goals of adolescent and young people, especially girls, are to be fit and lean, changes caused by puberty put more pressure on them to meet these goals. They spend a lot of time (and money) thinking about their body image and concerning about their body shape. BIC is one's wrong

perception, feelings and thoughts of appearance and body which leads to significant distress and/or impairment (National Eating Disorders Association, 2017) depression and anxiety (Perloff, R. M. et al., 2014) lower quality of life (Sarwer, D. B. et al., 2004) weight concerns (Sarwer, D. B. et al., 1998) and eating disorders (Stefanone, M. A. et al., 2011) Various studies have been conducted to determine the effects of Instagram on creating body image of female and male users in Tehran province using Littleton body image questionnaire. It has been reported differently in various studies. There is no official estimate of the study, and it is difficult to obtain these estimates since people usually try to hide this disorder. In this study, the researchers attempted to estimate among girls and boys in Iran. The findings of the study reveal that there are not statistically significant between Males and Females who received questionnaires. So Instagram does not affect the degree of women and men worries about their appearance in social performance.

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