Food Addiction, Body Image, Subjective Happiness and Social Media Addiction among Food Bloggers:

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ABSTRACT:

The study examined the relationship between food addiction, body image, subjective happiness and social media addiction among food blogger. The study also investigated if there were any gender differences in food addiction, body image, subjective happiness, and social media addiction between male and female food bloggers. The sample consisted of 121 food bloggers (in the age range of 17-35) out of which 61 were male food bloggers and 60 were female food bloggers. The food bloggers were selected from social media platforms such as Instagram, Facebook. The food bloggers were administered Yale Food Addiction Scale (YFAS) by Ashley N. Gerhardt, William R. Corbin, Kelly D. Brownell (2012), Body Shape Questionnaire-16 item short form version (BSQ) by Cooper et al, (1986), Subjective Happiness Scale by Lyubomirsky, S. & Lepper, H.S. (1999) and Bergen Social Media Addiction Scale (BSMAS) by Andreassen, et al. (2012). Pearson correlation coefficient was used to investigate the relationship between food addiction, body image, subjective happiness and social media addiction. Independent samples t-test was used to examine the gender differences in food addiction, body image, subjective happiness and social media addiction. The analysis revealed that there was significant gender difference in subjective happiness among food bloggers. Male food bloggers experienced more subjective happiness than female food bloggers. There was no significant gender difference in food addiction, body image and social media addiction among male and female food bloggers. There was a significant positive relationship between food addiction and body image among food bloggers.

Keywords: Food addiction, Body image, Subjective happiness, Social media addiction, Food bloggers.

INTRODUCTION:

The first and most basic need for an individual’s survival is air water and food. Food is the essential part of an individual’s life. The energy and nutrients to grow and develop, be healthy and active, to move, work, play, think and learn is achieved from food. In the present world people opt for variety of food in their plate than being trapped to the same foods day in and day out. However, for many individuals, food has become as
addictive as drugs are to a substance abuser. In the recent times, the idea of being addicted to food has been gaining much support. Recent studies and experiments in animals and humans show that the pleasure center of the brain that are triggered for drugs like cocaine and heroin are also activated by food, especially highly palatable food.

Food addiction is a behavioral addiction that is characterized by compulsive consumption of palatable (e.g., high fat and high sugar) foods, the types of food which markedly activate the reward system in humans and other animals, despite adverse consequences. (Ashley N. Gearhardt, 2012). The compulsive overeaters who engage in frequent episodes of uncontrolled eating (also known as binge eating) are referred to as food addicts. Food addicts often depend on the good feeling they obtain from consuming certain kinds of food, which often perpetuates a continued need to eat even if not hungry. An individual may develop addiction because of biological, psychological, or social reasons. Food binging may be followed by feelings of guilt and depression. Some individuals may cancel their plans for the next day because they "feel fat". Individuals concerned with their body image may opt for low fat or non-fat foods as alternative as foods containing fat are frequently perceived as high calorie.

Body image is a person’s perception of the aesthetics or sexual attractiveness of their own body (Paul Schilder, 2000). The desire to lose weight is highly correlated with poor body image. Comparing one’s weight or body shape with what society and media tells is the ideal body size and shape can result in body dissatisfaction or poor body image. Gender differences related to body image are increasingly prevalent between men and women. Although it is commonly known that women are dissatisfied with their body image. In recent times, men are becoming more negatively affected than women are. Body image takes a different meaning as men and women age. Importance attached to physical appearance decreases with age.

Subjective happiness is when one may conceivably appraise oneself as a very happy person, despite having only a somewhat happy life. Conversely one may identify oneself as a generally unhappy person, despite having felt “pleased”, “proud”, or “particularly excited”, in the previous month.” (Lyubomirsky & Lepper, 1999) Individuals who do acts of kindness for others are happier than those that only treat themselves. It has been found that those who have meaning and purpose in what they do experience high measures of subjective well-being based on their experiences with flow.

One of the most common activities among people today is using social media websites. Any web site that allow social interaction is considered a social media site, including social networking sites such as Face book, Twitter, Instagram etc. social media has both positive and negative impact on one’s life. On the positive, it helps people to connect with each other, while on the negative side unfortunately people are addicted to it. Social media addiction is defined as being overly concerned about social media driven by uncontrollable motivation to log onto or use social media, and devoting so much time and effort to social media that it impairs other important life areas. (Andreassen & Pallesan, 2012).
A person who writes blogs on food is known as a food blogger. A complex interweaving of “foodie” or gourmet interest in cooking with those of blog writing and photography is known as food blogging. (Cox, Andrew M, 2011) The majority of blogs use pictures taken by the blogger and some of them focus specifically on food photography. Food bloggers are people who review restaurants for quality of food, price range and service; give a much more detailed version of a restaurant guide.

REVIEW OF LITERATURE:

Burrows, et al., (2017) determined the overlapping features of Binge Eating Disorder and Food Addiction through comparison of the individual scales of commonly used tools, the binge eating scale (BES) and the Yale food addiction scale (YFAS). The study demonstrated the overlap between BED and FA, and highlighted the possible unique differences between the forms of disordered eating. The study composed of anonymous online survey data from Australian adults above 18 years of age (n=1334). The binge eating was assessed through the BES and addictive eating behaviors were assessed through the YFAS. The severity and prevalence of both food addiction and binge eating increased across weight categories. Total BES score and the BES emotion factor were most often associated with food addiction symptom, demonstrated to produce stronger correlation with food addiction symptoms.

Babaei, et al., (2017) examined the variables of impulse control and emotional regulation in patients with food addiction compared to control group. Multivariate analysis was conducted to evaluate each variable. The sample consisted of 60 men of whom thirty were patients admitted to a clinic for food addiction as research group; another 30 people were part of control group. The Yale Food Addiction Scale was administered for diagnosis and research groups, and the impulse control was assessed using The Barratt Impulsiveness Scale. Graz Difficulties in Emotional Regulation Scale was administered to assess emotional regulation. It was inferred that impaired impulse control and emotional regulation are important. Patients with food addiction had high impulsivity and lower emotion regulation compared to the control group.

Uysal, et al., (2013) investigated the mediating effects of Facebook addiction on the relationship between subjective vitality and subjective happiness. The Face book addiction scale, the subjective vitality scale, and the subjective happiness scale were administered on 297 university students. It was inferred that the relationship between subjective vitality and subjective happiness was partially mediated because of Facebook addiction.

Paul, et al., (2015) investigated the source of happiness: comparison between male and female. The study highlighted the importance of directing more systematic research, particularly in context of cross-cultural understanding of happiness in youth. The study was conducted on research scholars in order to understand the phenomena from their perspective. The subjective happiness scale was developed and administered on 60 research scholars from central university equally divided into two groups male (n=30) and female (n=30). The analyses of data revealed that the score were not statistically significant between male and female scholars.
Internet surfing, going out to restaurant, self-confidence were some unique sources of happiness for female. Whereas, sports, less family burden, accepting change easily were sources of happiness for male.

Goldfield, et al.,() examined body image, binge eating and bulimia nervosa in male bodybuilders. The study was conducted on men with bulimia nervosa, competitive male body builders, and recreational male body builders on a broad range of eating attitudes and behaviors and psychological characteristics to more accurately determine similarities among the group. Anonymous questionnaires were designed to assess eating attitudes, body image, weight and shape preoccupation, prevalence of binge eating, weight loss practices, lifetime rates of eating disorders, anabolic androgenic steroid (AAS) use, and general psychological factors. 22 Men with Bulimia Nervosa, 27 Competitive Male Body Builders, and 25 Recreational Male Body Builder were administered on the questionnaire. Men with bulimia nervosa and male body builders especially competitors appear to share many eating related features but few general psychological ones.

Arumugan, et al., (2015) analyzed fast food addiction. The objective was to assess the prevalence and its risk factors of the quick food addiction among adults. Community based cross sectional study was conducted on the outskirts of Chennai in India. The questionnaires were administered on 541 individuals of adult age group selected randomly. Among the study population, 58.8% were male, 82.8% belonged to nuclear family and 65.1% were from class one socio economic status. The prevalence of fast food addiction was moderately high among male gender. Therefore, interventions should be made to create awareness among general population about the risk factors and consequences in consuming large amount of fast food.

OBJECTIVES:

The following were the objectives of the study:

- To assess potential food addiction among food bloggers,
- To determine the relationship between food addiction, body image, subjective happiness and social media addiction.
- To examine difference in food addiction, body image, subjective happiness and social media addiction among male and female food bloggers
HYPOTHESES:

The following hypotheses were formulated:

- There will be no significant relationship between food addiction and body image among food bloggers
- There will be no significant relationship between food addiction and subjective happiness among food bloggers
- There will be no significant relationship between food addiction and social media among food bloggers
- There will be no significant relationship between body image and subjective happiness among food bloggers
- There will be no significant relationship between body image and social media addiction among food bloggers
- There will be no significant relationship between subjective happiness and social media addiction among food bloggers
- There will be no significant difference in food addiction among male and female food bloggers
- There will be no significant difference in body image among male and female food bloggers
- There will be no significant difference in subjective happiness among male and female food bloggers
- There will be no significant difference in social media addiction among male and female food bloggers

DESCRIPTION OF THE TOOLS:

**Yale Food Addiction Scale:** The YFAS was designed by Ashley Gearhardt, et al. (2012) This is a 25-item, self-report scale to measure the symptoms of food addiction that have occurred over the past 12 months. This scale includes mixed response categories (that is, items that are presented in either a dichotomous or a likert type format). The questionnaire is reliable and valid. Internal consistency was marginal to good, ranging from $\alpha=0.63$ to 0.84. The test-retest reliability for food addiction diagnosis was substantial, $= 0.73$

**Body shape questionnaire:** BSQ was developed by Cooper, P.J, M.J. Taylor, Z. Cooper & C.G. Fairburn (1986). The BSQ is a self-report measure of the body shape. The 16-item short form version was used. The scale is a six point likert scale with options never - always. The higher scores indicate marked body concern. The body shape questionnaire is reliable and valid.

**Subjective Happiness scale:** subjective happiness developed by Lyubomirsky, S. & Lepper, H. S. (1999). Also known as General Happiness Scale. A 4-item scale designed to measure subjective happiness. Each of items is completed by choosing one of 7 options that finish a given sentence fragment. The options are different for each of the four questions. The Subjective Happiness Scale has high internal consistency, which was found to be stable across samples. Test-retest suggested good to excellent reliability.
Bergen Social Media Addiction Scale (BSMAS) is an adaptation of the Bergen Face book Addiction Scale (BFAS) developed by Andreassen (2012). The scale contains 6 items reflecting core addiction elements. The factor structure of the scale was good and coefficient alpha was .83. A 3 week test retest reliability coefficient was .86

RESEARCH DESIGN:

The research was a cross-sectional, ex-post facto research.

SAMPLE:

The sample consisted of 121 food bloggers (age range of 17-35). Out of the 121, 61 were male food bloggers and 60 were female food bloggers.

STATISTICAL ANALYSIS:

- Pearson product-moment correlation was conducted to examine the relationship between Food addiction, Body image, Subjective happiness and Social media addiction.

- Independent sample t-test was used to investigate if there exist any gender differences between Food addiction, Body image, Subjective happiness and Social media addiction.

Table 1:

*Pearson’s Product Moment correlation between Food addiction and Body image among food bloggers.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food addiction</td>
<td>121</td>
<td>0.390**</td>
</tr>
<tr>
<td>Body image</td>
<td>121</td>
<td></td>
</tr>
</tbody>
</table>

**P<0.01

The correlation co-efficient between food addiction and body image is r (119) = 0.390**, p<0 .01. This indicates that there is significant positive correlation between food addiction and body image among food bloggers. This shows that there is a significant positive relationship between the two variables. Thus, it can be inferred that food bloggers who experience food addiction are more likely to be dissatisfied with their body image. Hence, we reject the null hypothesis stating there is no correlation between food addiction and body shape among food bloggers. Similar findings were reported by Nevin sanlier (2016) who examined the
correlation between body mass index, body image, food addiction and depression among university students. The results indicated that there was a negative correlation between food addiction, depression and body image.

Table 2:

*Pearson’s Product Moment correlation between Food addiction and Subjective Happiness among food bloggers.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food addiction</td>
<td>121</td>
<td>-0.048 NS</td>
</tr>
<tr>
<td>Subjective Happiness</td>
<td>121</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The correlation co-efficient between food addiction and subjective happiness is \( r (119) = -0.048 \). This indicates that there is no significant correlation between food addiction and subjective happiness among food bloggers. This shows that there is a no significant relationship between the two variables. Hence, we fail to reject the null hypothesis stating there is no correlation between food addiction and subjective happiness among food bloggers.

Table 3:

*Pearson’s Product Moment correlation between Food addiction and Social Media among food bloggers.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food addiction</td>
<td>121</td>
<td>-0.048 NS</td>
</tr>
<tr>
<td>Social Media</td>
<td>121</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The correlation co-efficient between food addiction and social media addiction is \( r (119) = -0.048 \). This indicates that there is no significant correlation between food addiction and social media addiction among food bloggers. This shows that there is a no significant relationship between the two variables. Hence, we fail to reject the null hypothesis stating there is no correlation between food addiction and social media addiction among food bloggers.
Table 4:

*Pearson’s Product Moment correlation between Body image and Subjective Happiness among food bloggers.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body image</td>
<td>121</td>
<td>-0.172 NS</td>
</tr>
<tr>
<td>Subjective Happiness</td>
<td>121</td>
<td>NS</td>
</tr>
</tbody>
</table>

The correlation co-efficient between body image and subjective happiness is $r (119) = -0.172$. This indicates that there is no significant correlation between body image and subjective happiness among food bloggers. This shows that there is no relationship between the two variables. Hence, we fail to reject the null hypothesis stating there is no correlation between food addiction and subjective happiness among food bloggers.

Table 5:

*Pearson’s Product Moment correlation between Body image and Social Media Addiction among food bloggers.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body image</td>
<td>121</td>
<td>-0.172 NS</td>
</tr>
<tr>
<td>Social Media Addiction</td>
<td>121</td>
<td>NS</td>
</tr>
</tbody>
</table>

The correlation co-efficient between body image and social media addiction is $r (119) = -0.172$. This indicates that there is no significant correlation between body image and social media addiction among food bloggers. This shows that there is no significant relationship between the two variables. Hence, we fail to reject the null hypothesis stating there is no correlation between body image and social media addiction among food bloggers.
Table 6: Pearson’s Product Moment correlation between Subjective Happiness and Social Media Addiction among food bloggers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective Happiness</td>
<td>121</td>
<td>-0.063 NS</td>
</tr>
<tr>
<td>Social Media Addiction</td>
<td>121</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The correlation co-efficient between subjective happiness and social media addiction is \( r (119) = -0.063 \). This indicates that there is no significant correlation between subjective happiness and social media addiction among food bloggers. This shows that there is no significant relationship between the two variables. Hence, we fail to reject the null hypothesis stating that there is no correlation between food addiction and subjective happiness among food bloggers.

Table 7: Showing the Mean, Standard Deviation, ‘t’ value on Food addiction between male and female bloggers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>CR value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food addiction</td>
<td>Male bloggers</td>
<td>61</td>
<td>26.56</td>
<td>10.49</td>
<td>0.841 NS</td>
</tr>
<tr>
<td></td>
<td>Female bloggers</td>
<td>60</td>
<td>24.92</td>
<td>10.97</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The results indicate that there is no significant gender difference in food addiction among male and female food bloggers \( t (119) = 0.841 \). Male food bloggers food addiction scores (M=26.56, SD=10.49) do not differ significantly from female food bloggers food addiction scores (M=24.92, SD= 10.97). Hence, we fail to reject the null hypothesis stating that there is no significant gender difference in food addiction among male and female food bloggers.
Table 8:  
Showing the Mean, Standard Deviation, ‘t’ value on Body image between male and female bloggers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>CR value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Image</td>
<td>Male bloggers</td>
<td>61</td>
<td>21.11</td>
<td>6.63</td>
<td>1.843 NS</td>
</tr>
<tr>
<td></td>
<td>Female bloggers</td>
<td>60</td>
<td>23.35</td>
<td>6.70</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The results indicate that there is no significant gender difference in body image among male and female food bloggers. Male food bloggers body image scores (M=21.11, SD=6.63) do not differ significantly from female food bloggers body image scores (M=23.35, SD=6.70). Hence, we fail to reject the null hypothesis stating that there is no significant gender difference in food addiction among male and female food bloggers. Similar research findings by Edwards() demonstrated the impact of body image on fit bit use: a comparison across gender. The results indicated that there was a significant difference in body image among females and males, although the differences were subtle.

Table 9:  
Showing the Mean, Standard Deviation, ‘t’ value on Subjective Happiness between male and female bloggers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>CR value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective Happiness</td>
<td>Male bloggers</td>
<td>61</td>
<td>21.36</td>
<td>3.18</td>
<td>3.244**</td>
</tr>
<tr>
<td></td>
<td>Female bloggers</td>
<td>60</td>
<td>19.45</td>
<td>3.29</td>
<td></td>
</tr>
</tbody>
</table>

**P<0.01

The results indicate that there is significant gender difference in subjective happiness among food bloggers. There was a significant difference in gender, t (119) = 3.244**, p< 0.01, with male food bloggers attaining higher subjective happiness scores (M= 21.36, SD=3.18) than females (M= 19.45, SD=3.29). Hence, we reject the null hypothesis stating that there is no significant gender difference in subjective happiness among food bloggers. Research finding reported by Paul, Hassan, Khan (2015) demonstrated subjective happiness among male and female research scholars. The results indicated that there was no significant difference among subjective happiness of male and female research scholars.
Table 10:
Showing the Mean, Standard Deviation, ‘t’ value for Social Media Addiction between male and female bloggers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>CR value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media Addiction</td>
<td>Male bloggers</td>
<td>61</td>
<td>16.85</td>
<td>3.80</td>
<td>1.88 NS</td>
</tr>
<tr>
<td>Social Media Addiction</td>
<td>Female bloggers</td>
<td>60</td>
<td>18.32</td>
<td>4.72</td>
<td></td>
</tr>
</tbody>
</table>

NS Not Significant

The results indicate that there is no significant gender difference in social media addiction among food bloggers, t (119) = 1.88. Male food bloggers social media addiction scores (M= 16.85, SD = 3.80) did not significantly differ from female food bloggers scores (M=18.32, SD=4.72). Hence, we fail to reject the null hypothesis stating that there is no significant gender difference in social media addiction among food bloggers. Similar research findings demonstrated both male and females addiction to technology, but males and females use different online activities (Kuss et al., 2014). Males are more likely to become ‘addicted’ to online video gaming, cyber-pornography, and online gambling, while females tend to develop addictive use of social media, texting, and online shopping (Andreassen et al., 2013;)

CONCLUSIONS:

The study examined the relationship between food addiction, body image, subjective happiness and social media addiction among male and female food bloggers and assessed whether there were any gender differences in food addiction, body image, subjective happiness and social media addiction among male and female food bloggers.

The findings of the study were as follows

- There is a positive significant relationship between food addiction and body image among food bloggers. Food bloggers who experience food addiction are more likely to be dissatisfied with their body image
- There is no significant relationship between food addiction and subjective happiness among food bloggers.
- There is no significant relationship between food addiction and social media addiction among food bloggers.
• There is no significant relationship between body image and subjective happiness among food bloggers.
• There is no significant relationship between body image and social media addiction among food bloggers.
• There is no significant relationship between subjective happiness and social media addiction among food bloggers.
• There is a significant gender difference in subjective happiness among male and female food bloggers. Male food bloggers experience more subjective happiness than female food bloggers.
• There is no gender difference in food addiction among male and female food bloggers.
• There is no gender difference in body image among male and female food bloggers
• There is no gender difference in social media addiction among male and female food bloggers

LIMITATIONS:

1. The study was conducted with a sample size of only 121 food bloggers.
2. The study was limited to the geographical location of India.
3. The study was conducted only on food bloggers who review restaurants.

SUGGESTIONS FOR FURTHER RESEARCH:

1. The study could be expanded over a wider location.
2. The study could be inclusive of a larger sample size.

IMPLICATIONS:

Food bloggers found to experience food addiction and dissatisfaction about their body image. Food bloggers may experience feelings of guilt due to dissatisfaction about their body shapes, which in turn leads to binge eating. Food bloggers can be informed about ‘Mindfulness based eating awareness training program by Jean Kristeller’ which has been proven to be effective can be. Psychological intervention to help them cope with body dissatisfaction.
REFERENCES:


