

## FAST FOOD ADDICTION, BODY ESTEEM AND PSYCHOLOGICAL WELL- BEING AMONG UNIVERSITY STUDENTS

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### ABSTRACT

**Objective:** To determine whether fast food addiction correlate with body esteem and psychological well-being among university students.

**Study Design:** Cross sectional analytical study.

**Place and Duration of Study:** University of Lahore, Superior University and Comsats University of Lahore, from Jan to May 2019.

**Methodology:** Two hundred students of BS and M.Sc were included through purposive sampling. Only those students were included who were using fast food on regular basis (1 to 3 times per day). Participants diagnosed or under treatment of any clinical problem were not included in the study. Sample size was calculated by the software G-Power (version 3.1.9.2). Food addiction was assessed using Yale Food Addiction Scale. Body esteem was measured using Franzoi Body Esteem Questionnaire and psychological well-being was assessed using Ryff Psychological Well-being Scale.

**Results:** There were more participants who were using fast food one time (per day) 35 (17.5%), two times 84 (42%) and three times 81 (40.5%). Students who were using fast food addiction had low level of psychological well being and low level of body esteem. However, Body esteem and psychological well-being were significantly positively correlated. Fast food addicted girls had significant lower level of body esteem and psychological well being than fast food addicted boys.

**Conclusion:** The use of food addiction resulted in low level of body esteem and low psychological well being. A definitive negative correlation was found in fast food addiction with body-esteem and psychological well-being among university students.

**Keywords:** Body Esteem, Fast Food Addiction, Psychological Well-Being, Psychological problems.

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### INTRODUCTION

From the last decade, fast foods consumption has terrifyingly increased in all over the world<sup>1,2</sup>. Findings of latest studies have shown that the trend to eat fast food among Pakistani people increased as well as the number of fast food restaurants in Pakistan are noticeably raising which is alarming health issue among the Pakistani people<sup>3</sup>.

Fast foods are illustrated as fast, accessible and reasonably priced as compared to home made for human utilization meals. Fast food is delicious but it is less nutritious and contains harmful elements. Studies have found various

severe negative consequences attributed to fast food consumption e.g. Weight gain, heart problems, and increased risk of diabetes<sup>4</sup>. Similarly, use of fast food in Pakistan was correlated with obesity as well as central adiposity.

Among all age groups, adolescents are found to be relatively more interested in eating fast food<sup>5,6</sup>. The frequent use of fast food among teen age people might be attributed because of particular qualities of such foods e.g. quite to prepare, available conveniently, and relatively less expensive<sup>6</sup>. Fast food companies are targeting teen agers all over huge authorization strategies, tasty formulas and attractive poster. The dietary habits that are developed particularly in adolescents are likely to remain constant for one's rest of life. So, consumption of fast food may be particularly very significant for this age group<sup>7</sup>.

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Body esteem is one's thought of his or her body. Body-esteem is a term that refers to a person's image or view about his or her outer appearance. It has two components; perceptions about his or her look body, and feeling or emotions to that perception. According to social comparison theory people compare their body appearance with people around them. Numerous factors contribute in low level of body esteem<sup>8</sup>. Discrepancy between perceived body image and ideal body image cause low level of body esteem. Psychological well-being consists of positive relationships with others, personal mastery, autonomy, a feeling of purpose and meaning in life, and personal growth and development<sup>7</sup>. Psychological well-being is attained by achieving a state of balance affected by both challenging and rewarding life events<sup>8</sup>. Female are more concerned about their body image<sup>9</sup>. People who suffer in low level of body esteem suffer in mental and physical problems e.g. obesity, anxiety etc<sup>6</sup>. Low level of body esteem is a meticulous problem for the mental health of people<sup>7</sup>.

Fast food providers are not interested to care the physical and psychological health of people<sup>4</sup>. Hong and Peltzer added that fast food, such as sugared cocktails, fried chicken, Shurpma, hamburgers, or pizza and salty snacks rising the threat of psychiatric illness<sup>10,11</sup>. Considering the above mentioned issue of body esteem and related problems, following objectives were planned. To examine the relationship between fast food addiction, body esteem and psychological well-being of students. To assess psychological well-being among fast food addicted boys and girls. To compare level of body esteem among fast food addicted boys and girls.

## **METHODOLOGY**

This cross sectional analytical study was conducted at University of Lahore, Superior University Lahore and Comsat University of Lahore, from January to May 2019 after getting approval from Ethics Review and research Committee (SA03) from the University. Informed consent was also taken from the participants.

Sample size was calculated by the software G-Power (version 3.1.9.2). Furthermore, for the collection of size of sample Field (2005) criterion was used. A sample of this study was comprised of 200 students (boys=100, girls=100). Age range of sample was 17-23 years of university students. They were selected through purposive sampling technique. Only those students were included who were using fast food on regular basis (1 to 3 times per day). Any participant diagnosed or under treatment of any clinical problem was not included in the study. To collect the demographic information of the participants a form was prepared by the researchers including age, use of fast food (per day), gender, education and any other clinical problem.

The Yale Food Addiction Scale<sup>12</sup> was used to distinguish the individuals who were destined to show markers of substance reliance with the utilization of high fat/high sugar nourishment. This is 25 item self-report measures with responses on a 5 point Likert-type scale ranging from 0 to 4. The total score ranges from 0 to 125 with higher score representing higher 41 to 123. The index is internationally accepted by researchers for recording assess the food addiction scale.

The Body esteem scale assesses pleasure and displeasure about body figure<sup>13</sup>. The BES consists of 23 items. It is a 5-point Likert scale (1 = strong negative feelings and 5=strong positive feelings). The total score ranges from 1 to 115 with higher score representing higher 31 to 115. The index is internationally accepted by researchers for recording to the body-esteem scale.

Psychological well-being scale has 42 item<sup>14</sup>. It is a 6 points Likert scale (1 represent strongly disagree and 6 represent strongly agree). The total score ranges from 0 to 252 with higher score representing higher 68 to 224. The index is internationally accepted by researchers for recording the psychological well-being scale. The duly filled questionnaires were returned by 200 students out of 300 students (response rate 66%).

Statistical package for social sciences version 23 was used for analysis of data. Frequency and

percentage were calculated for categorical variables whereas mean was used for numerical variables. To measure the correlation of fast food with body esteem and psychological well-being Pearson correlation test was employed. Gender difference in Fast food addiction, Body esteem and Psychological well-being were determined using independent sample t-test. Alpha *p*-value  $\leq 0.05$  was considered significant.

**RESULTS**

A total of 200 students (boys=100, girls=100) were collected from 3 different universities of Lahore. Alpha coefficients of all scales used in

Table III showed the gender differences in the use of fast food addiction and described that boys eat less fast food as compared to girls. Girls have poorer psychological well being and more fast food addicted as compared to boys.

Fast food Addiction is negative relationship with Body Esteem and Psychological well-being in university students. These variables are significant correlate with each another.

**DISCUSSION**

Fast Food addiction is a serious problem where persons cannot prevent themselves from intake certain foods. Fast food providers are not

**Table-I: Descriptive statistics of the participants (n=200).**

Scales	n	Mean $\pm$ SD	$\alpha$	Potential Min-max	Actual Min-max
FFAS	25	86.59 $\pm$ 34.15	0.82	0-125	41-123
BES	23	77.44 $\pm$ 22.53	0.90	1-115	31-115
PWBS	42	164.07 $\pm$ 31.99	0.87	0-252	68-224

n = No of items, FFAS = Fast Food Addiction Scale, BES = Body Esteem Scale, PWBS = Psychological Well-being Scale

**Table-II: Correlation among study variables (n=200).**

S. No.	Variables	YFAS	PWBS	BES	<i>p</i> -values
1	FFA		-0.103**	-0.416**	** <i>p</i> < 0.01
2	PWB		-	0.236**	** <i>p</i> <0.01
3	BE			-	-

FFAS = Fast Food Addiction Scale, BE= Body Esteem, PWBS = Psychological, Well-being Scale

**Table-III: Means, standard deviation and t-value of boys and girls on Fast Food Addiction, Psychological Well-Being (PWBS), and Body Esteem (BE) scale (n = 200).**

Scales	Gender	Mean $\pm$ SD	t	<i>p</i> -value	Cohen's d
YFAS	Boys	34.49 $\pm$ 13.37	-0.12	0.001*	1.44
	Girls	31.69 $\pm$ 10.86			
PWBS	Boys	168.79 $\pm$ 8.77	-11.56	0.001*	1.54
	Girls	158.35 $\pm$ 11.56			
BE	Boys	157.68 $\pm$ 9.67	19.44	0.001*	1.44
	Girls	138.24 $\pm$ 11.46			

\**p*<.001, M=mean, SD=Standard Deviation

this study were satisfactory indicating all measures are internally consistent (table-I).

Table-II showed correlation of fast food addiction with body esteem and psychological well-being. Fast food is significantly negative correlated with psychological well being ( $r=-0.10$ , \*\**p*<0.01), and body esteem ( $r=-0.41$ , \*\**p*<0.01). whereas psychological well being is significantly positively correlated with body esteem ( $r=0.23$ , \*\**p*<0.01).

interesting to care the physical and psychological health of people<sup>15</sup>. In recent years, Fast food consumption has left negative impacts on the youngster health. The main objective of this study was to know about the fast food addiction among university students. The present study explored the relationship of fast food addiction with body esteem and psychological well being in students. Intent of this study was also to compare fast food addiction, their level of body

esteem and psychological well being in boys and girls.

In a study conducted in Germany, found that young adults who ate fast food frequently suffer from obesity and low level of body esteem<sup>16</sup>. These results matched with findings of our study. Young people prefer to eat fast foods as compared to the foods cooked at home<sup>16,17</sup>. Culture trends are one of the main reasons to increase the tendency of consumption of fast food.

Furthermore, they enjoy taste of fast foods, like fast food in friends' parties, and finally easy access to fast foods particularly in urban cities.

When use of fast food was compared in girls and boys, findings showed that boys use fast food as compared to girls. Our results are similar with the study of Sanchez-Villegas *et al.* conducted in 2016. He also identified that boys ate fast foods frequently as compared to girls<sup>18</sup>. Yahya, Zafar, Shafiq in 2013 said that Pakistani culture was different from western culture<sup>19</sup>. In Pakistan, mostly girls are not allowed to go outside at late night to attend parties or fast food restaurants with friends and families. Fast food restaurants are mostly open in evening time. Therefore, girls ate fast food less than boys. Boys are independent and more socialized than girls that they can go outside at any time than girls<sup>20</sup>.

As for as influences of fast food are concerned, findings of the present study showed positive relationship of fast food with low level of body esteem and poor psychological well being. Akman *et al.* in 2017 also conducted a study in Turkey on a sample of 300 adolescents and found similar results<sup>21</sup>. Goyal (2017) also advocated that people who use fast food suffer in obesity, low mood, and self-sympathy<sup>22</sup>. Hong and Peltzer (2017) also described that unhealthy food behaviors (consumption of fast food, caffeine, sweetened drinks and soft drinks) were negatively related with psychological well-being<sup>23</sup>. Another objective of this study was to compare level of body esteem in food addicted boys and girls. Girls scored low on body esteem level. The results of this study also showed that fast food

addicted girl's also experienced poor psychological well-being than boys. This study indicated that low level of body esteem in girls cause many psychological issues i.e. stress and low mood. Results of previous studies also matched with our results and revealed that fast food addicted girls had poor psychological well being as compared to boys<sup>23,24</sup>.

## LIMITATIONS AND RECOMMENDATION

The sample of this study was small and taken from only one city. To generalize the findings, future studies should be conducted on the large sample of all ages and collected from different cities.

## CONCLUSION

Use of fast food was found to be increasing among adolescents. Consumption of fast food at high level is increasing physical and mental health problems. This study emphasizes strong need to adopt healthy eating behaviors that are associated with lower mental distress, high body esteem and higher psychological well-being. So, the present study will not only be helpful for clinicians to treat health problems caused by fast food but to provide awareness to young people regarding harmful consequences of fast food.

## CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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