

IMPACT OF SOCIAL MEDIA ON EATING HABITS AND EXERCISING BEHAVIOR

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Abstract

This study was conducted to explore the association present between use of social media with different eating habits and exercising behaviors. The study has two hypotheses stating to see the impact of social media on eating habits and impact of social media on exercising behaviors. It was tested by a convenient sample of N= 250 participants, consisting of 70 males, 179 females and 1 preferred not to say, ranging from 17 to 33 years of age, from diverse educational backgrounds. Data collection was collected using correlational quantitative survey design via an online quantitative measure consisting of Bergen Social Media Addiction Scale having 6 items, Godin Leisure-Time Questionnaire consisting of 2 items and Adult Eating Behavior Questionnaire having 35 items. The analysis of data was done using Statistical Package of Social Sciences SPSS 24, running a t-test revealed that there is no significant relationship existing between the impact of social media on either eating habits or exercising behaviors.

Keywords: Social Media, Eating Habits, Exercising Behaviour

I. INTRODUCTION

It is hard to believe that barely a decade ago social media was in its initial times and had not yet picked up footing. While a few decades back huge aggregates of cash would be spent on calls, and months would be spent sitting tight for letters, this has all changed partially because of social media. Social media has totally changed the manner by which individuals communicate with each other; it has deleted geographical limits that were once present. It has not just changed the manner by which individuals convey, it has additionally changed what and how much information can be gotten to. This may not generally be something worth being thankful for, as being presented to this information can prompt unreasonable desires and ideas of what is the standard.

Advertising recently has been depicting what the media accept to be the ideal in various parts of life, for example the ideal vehicle, the ideal home, the ideal body type. The ideal body type is a part of publicizing on social media that can have very hurtful impacts on the public. High levels of body dissatisfaction have been reported in recent years (Levine, M. P., & Smolak, L. (2002). Approximately 40% of adolescent girls are not satisfied with their bodies in the United States as reported by research (Presnell, K., Bearman, S. K., & Stice, E. (2004). Similarly, in samples taken from UK, 48% reported to be dissatisfied with their body shape and 22% reported being too fat

(Sands & Wardle, 2003) with these figures seem to be increasing with age as 50% of 11-16 reported they were not satisfied (White, J., & Halliwell, E. (2010). Along with a numerous numbers of researches on females, there has been a significant increase in male body image as well (Pope, H., Pope, H. G., Phillips, K. A., & Olivardia, R. (2000). In a society that focuses heavily on physical appearance, could social media be at fault for these increases? There is convincing evidence present in research which portrays that the unrealistic body image ideals the media displays causes body dissatisfaction (Grabe, Ward, & Hyde, 2008).

II. LITERATURE REVIEW

A. Social Media:

Social media is a kind of socializing platform that exists over the internet; it is a standard development that asks about the youngsters and adolescents by redesigning correspondence, social affiliation, and even specific aptitudes. (Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr-Stephenson, B. & Tripp, L. (2010)). (Horst, et al., 2010) With advancements there has been increased consumption of social media and serious impacts have been observed amongst the population that is a frequent consumer of social media. Numerous researches have been conducted on the impact that social media creates on individuals as well as the society. Electronic interpersonal interaction is an online affiliation website where people collaborate to develop, offer and change their ideas and comments as for any information. During the earlier decade, online long reach interpersonal interaction correspondence has caused critical changes in the way people pass on and collaborate. A detailed descriptive study was conducted among top 2 regarded colleges in Chennai with a sample of 90 respondents. It consisted questions for demographic data, the pattern of social media use, social relationship and impacts on health and wellbeing. The results found that there is a noteworthy relationship between time spent on social media and the number of social networking sites. There is a positive correlation between experiencing feelings of anxiousness and the time spent on social networking sites being more active than real life. It can be concluded that with greater utilization of social media, the number of social networking sites and a lot of time being spent on social networking sites is influencing the emotional wellness of students, for example, students tend to experience anxiety, tension and depression to a greater extent. (Rajesh & Priya, 2020) This research shows the negative impact that use of social media creates on the mental health of students who spend excessive hours over the internet using social networking sites.

Social media does not only impact the mental health of its users but rather has serious implications on self-esteem. It has been found that people who use social media have lower self-esteem because people indulge themselves in comparing themselves to other people using social networking sites. In order to test this phenomenon a study was conducted in Institute of business Management. 150 undergraduate students took part, and were asked to give information through questionnaire surveys and interviews. This study was restricted to the understudies of IoBM and Facebook, being the most well-known social networking site was utilized as the representative agent of social

media. Correlation and regression model was run on the data with the assistance of SPSS to test the connection between social media and self-esteem. The results propose approximately 88% individuals take part in making social comparison on Facebook and out of the 88%, 98% of the examinations are upward social comparison. Furthermore, this research demonstrated there that there is a strong correlation between social media and self-esteem. Greater time spent on social-media makes the confidence of people decline. One hour spent on Facebook day by day brings about a 5.574 decrease in the self-esteem score of a person. (Jan, Soomro, & Ahmed, 2017)

Use of social media does not only have an impact on well-being or mental health rather, social media can also be held responsible for influencing consumer behavior and dictating choice. The objective of this study was to explore the function of social media in buying decision behavior of a consumer. A quantitative survey was used to explore how much experiences are changed by the consumption of social media. Customer sentiments on items and administrations are progressively overwhelmed by outsiders in advanced spaces, which thus impact conclusions in the disconnected space. social media has connected with buyers, as advertising agencies have no influence over the substance, timing, or repetition of online conversations among customers. Results show that online media use impacts buyer fulfillment in the phases of data search and alternative evaluation, with fulfillment getting intensified as the customer moves along the cycle towards the last phase of making a choice and post-buying assessment. (Gupta & Chopra, 2020) It is evident from this research that not only does social media have the power to influence choices but it also has the capacity of providing satisfaction to the client after purchase.

Influence of social media on its users can also be observed in the context of eating habits. Social media plays a big role in influencing people's health practices and eating habits. To analyze the relationship between use of social media and eating concerns in a large sample of young adults. Cross-sectional study was conducted. 1,765 young adults between the ages of 19 to 32 years were randomly selected from a national probability based online non-volunteer panel to participate in the study. An eating concerns scale was used from two validated measures: the SCOFF Questionnaire and the Eating Disorder Screen for Primary Care. Social media use (counting Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit) was surveyed utilizing both volume (time every day) and recurrence (visits every week). In order to investigate the relationship between eating concerns and online media use, regression was used, controlling for all covariates. The results showed that in Comparison with those in the lower quartile, people who fell into higher quartiles for social media volume and recurrence had altogether more prominent chances of having eating concerns There was significantly positive linear relationship between the social media use and eating concerns. The outcomes from this investigation demonstrate a strong and predictable relationship between social media use and eating concerns in young adults between 19 to 32 years. This affiliation was evident whether online media utilization was estimated as volume or recurrence. (Sidani, J. E., Shensa, A., Hoffman, B., Hanmer, J., & Primack, B. A. (2016)

Social media is such a powerful tool that, not only does it have the power to influence human preferences, satisfaction, life choices, but it can also promote businesses and help industries flourish. One such research was conducted in Bangladesh on its tourism industry. Bangladesh has numerous beautiful destinations and potential however, due to absence of a proper infrastructure, the travel industry has not risen as a developed industry. There are many travel puts that are as yet not used as traveler locations or perceived by their characteristic magnificence. Subsequently web-based media can change this current setting. Social media users are sharing their perspectives on better places by means of Web 2.0 that were not recognized previously. So the significance of online media is extending in the domain of promoting a business. The aim of this study was to discover the effect of this social media platform, explicitly on the young adults that may advance the travel industry of Bangladesh in the worldwide circle. A survey method was implied on 160 understudies as respondents from various universities to analyze the impact of online media in the travel industry. The results shows that among all university students, practically 92.3% of the students who were either enrolled in public and private universities utilize online social media platforms to search places for tourism and vacations, while most of the students of the 71.1% invest the energy on Facebook. These outcomes show the reliance of students on social media and the travel industry pages individually. The investigation discovers online media as a solid device in extending the travel industry in Bangladesh. (Rahman, N. N., & Begum, M. (2020). These researches clearly indicate how strong the tool of social media is and the power it possesses in influencing the behavior of its consumers. Social media has immense power and potential so much so that it can convince people to act in a certain way and make certain choices. Cambridge Analytica is a very powerful example of how social media can influence people.

B. Eating Habit

"Eating Habits" is how a person chooses to eat. This can include what types of food an individual eats, the quantity consumed and when it is consumed (Wen, T. H., Tchong, W. L., & Ching, G. S., 2015) Food and numerous exercises related with it assume a fundamental part in human life and in this way have a significant economic, psychological social and cultural importance in the everyday lives of the consumers (Mennell, S., Murcott, A., & Van Otterloo, A. H., 1992). Meals that are consumed while feeling positive and negative are greater than meals eaten in a neutral mood (Patel, K. A., & Schlundt, D. G. (2001) and nature of emotions (sadness vs joy) can affect motivation to eat and eating reactions (Macht, M., Roth, S., & Ellgring, H., 2002). Dietary conduct in youngsters is governed by the intricate interplay of elements at both environmental and individual level and selecting food is an important consumer behavior having quite a few long-term outcomes for an individual such as health and longevity and to society, health cost (Deshpande, S., Basil, M. D., & Basil, D. Z., 2009).

Paxton et al (1991) conducted a survey to determine body image and weight loss beliefs and behaviors in 221 male and 341 female high school students. It was observed that body dissatisfaction and weight loss behaviors were related closely and females were seen to have a significantly higher dissatisfaction with their bodies compared to males. Edman et al (2005) also

examined gender differences in the relationship between negative emotions, body dissatisfaction, exercise and disordered eating behavior. This was observed among obese college student comprising of 88 males and 102 females. It was found that disordered eating, body dissatisfaction and more frequent dieting were higher in females than in males. A research was conducted by Lee (2010) at a university in the Southwestern United States as they reported their healthy eating behavior and the characteristics of healthy food. The results showed that healthy foods could be classified from certain characteristics such as “low calorie food”, “low greasy food and healthy drink” and “low cholesterol food.” The demographic characteristics also significantly affected the perception of healthy food. Compared to other types of food, there were few differing factors found for “healthy food” decisions in the population of college students showing a significant positive correlation between health concerns and awareness about healthy foods. Less thin models were used to experimentally test the impact of displaying television commercials on mood, body restricted anxiety and food consumption in contrast with impact of commercials using thin models. 110 young women were made to watch a neutral movie which was interrupted by two commercial breaks, in a naturalistic setting. Real commercials were used in the commercial breaks with either less thin or thin models or neutral commercials. The participants were also allowed access to freely eat snack food while their mood and body restricted anxiety was assessed. It was reported that when women were exposed to commercials using less thin models, their mood was negative which led them to eat less. It was implied that using such thin models for commercials affects a woman’s wellbeing. (Anschutz, D. J., Engels, R. C., Becker, E. S., & Van Strien, T. (2009).

Opuku (2016) aimed to explore School Snacks and Lunch Programs (SSLP) in Saskatoon, Canada since they are of developing attention as answers for the rising obesity and food insecurity are looked for. SSLP offer sustenance to hungry students during school hours yet they likewise can impact kids’ dietary patterns, to build up economical and good dieting designs and to accordingly prevent childhood obesity and overweight. The reason for these multiple studies was to 1) increase an insight of primary school students and staff view of school lunches and snacks, and 2) inspect the effect of a SSLP on children’s food decisions. Data was gathered through a survey with the administrators and network school organizers of 13 grade schools in Saskatoon, Saskatchewan and group interviews with students who were the essential recipients of a SSLP. Results indicated that students and staff both had positive perspectives on their schools’ lunches and snacks, and accepted that the SSLP gives a platform for advancing healthy eating. This study additionally uncovered that the SSLP may have spurred students to practice healthy eating in and outside of school. The outcomes strengthen the significance of school-based projects in advancing healthy ways of life among children.

C. Exercising Behaviour

Exercise is any form of a physical activity that involves an individual with increased heart beat afar from the resting levels. Exercise is a subset of physical activity that is planned, structured, repetitive, and purposeful in the sense that improvement or maintenance of physical fitness is the objective (WHO, W. (2010) Global recommendations on physical activity for health,. It consists

of cardiovascular exercises, strength and resistance training, and flexibility that includes meditation as mindfulness and several other exercises that have developed over time. Exercise itself is considered as a healthy activity that enhances and gives strength to the functions of body and mind.

As the world is advancing the habits of exercises are also changing. From the research, it is found that people have made habits of exercising by making a variation in its course and meaning. (Jurgens, D., McCorriston, J., & Ruths, D. (2015, April) An Analysis of Exercising Behavior in Online Populations a research paper on social media site situated around the fitness and exercise network. Utilizing a background marked by over 3 million exercises from 188 thousand people, showing that people's practicing propensities follow significant practices that coordinate various inspirations and which have solid segment inclinations toward gender and even age. From history can be seen that people made exercising habits to get rid of body fat by burning calories/fat as from being fat to thin to be accepted in society. With the advancement of technology, especially with the incessant use of social media, now exercise habits are also used for people who struggle with mental problems such as depression, anxiety, etc. (Ekeland et al., 2004) Computerized searches in MEDLINE, EMBASE, The Cochrane Controlled Trials Register (CENTRAL), CINAHL, PsycINFO and ERIC, Two reviewers independently selected trials for incorporation, evaluated the validity of included preliminaries and extricated data information. The results indicate that exercise has positive short term effects on self-esteem in children and young people. They stated that exercise may be an important measure in improving children's self-esteem. Nowadays exercise is given importance to improve self-esteem in children and young people, adapting exercising habits to reduce the signs and symptoms, to treat and attain wellbeing and peacefulness of mind, that many people do so by downloading meditation applications in the cell phones as part of exercise of mind and body. (Strelan, Mehaffey, & Tiggemann, 2003), in self-objectification and esteem in young women: The Mediating Role of Reasons for Exercise stated that these exercise that women gave reasons for were found to intervene the relationships between self-objectification and body satisfaction, body esteem, and self-esteem habits that incorporate expanded self-perception fulfillment, more elevated levels of confidence. According to (Ma, X., Chen, G., & Xiao, J. (2010, November) (Teodoro & Naaman, 2013) (Kendall, L., Hartzler, A., Klasnja, P., & Pratt, W. (2011) stated through their work that social media provides people with better approaches to carry out their fitness related goals, including following exercises and examining fitness related subjects with similar people. Exercising is not limited to achieving only mind and body wellness and satisfaction, but as tough as the competition is getting into the era of social media, from the recent research it is proved that people use social media for exercise to keep up with the social world, to be physically challenged. It is no longer remained only a model's job to attain a certain sort of perfectionism, of body image, but it is also seen, especially in young individuals to be making exercising habits under the influence of social media for example; Fourteen days or thirty days/abs challenges on the social applications on Cell phones, YouTube, Instagram, Facebook and many their social applications. (Mburu-Matiba, L. (2015) The Impact of

Exercise (Physical Activity) And Healthy Lifestyle (eating) Among the Youth: A Literature Review found that such individuals share similar values, mentality, and models to fit body regarding what they ought to eat, how frequently they should work out, with whom they practice with, and as per what set of rules are controlled by this culture. Wellness culture includes its industry, which incorporates athletic apparel, gear, nourishment, and fitness club. (Singer, singer, Hauenblas, & Janelle, 2001) exercise is known to have a huge positive effect comparable to physical and mental prosperity. Where people are comparing one another constantly to compete, achieve self-worth, self-satisfaction and which can result in positive and negative impact on mental and physical being of individuals, either enhance or result in disorders as well, it is all happening under the influence of social media.

With the emergence of social media and technology, people have not only become conscious about looks and seeking flawless body image, but have also incessantly started spending a plethora of time on physical activities and adapting new exercising habits. Where social media is used as a tool these days to cater any problem regarding health, it has also proven to have an impact on exercising habits of young adults. It has many pros and cons that result in introducing new exercising habits in individuals across the world. Among different trends and "hashtags" on social media applications, it is quite hard to ignore some factual information that over 15 million people are following, tags and posts of people on #fitspiration and #dailychallenge to keep themselves up-to-date and fit. There are several cell phone applications zeroed in on wellbeing and fitness, that capacity to follow your objectives, give tips or even incorporate full exercises and sound plans.

There are numerous influencers, coaches and bloggers sharing their tips and triumphs to be found on various social media platforms that followers trust them enough to keep up with. All these facts are supported by recent researches on how social media has an impact on exercising habits of individuals. (Klassen, K. M., Douglass, C. H., Brennan, L., Truby, H., & Lim, M. S. (2018) stated in an International Journal of Behavioral Nutrition and Physical Activity, named Social media use for nutrition outcomes in young adults: A mixed-methods, systematic review conducted research and study designs that included both quantitative, such as experimental and observational studies, and qualitative, such as focus groups and interviews, approaches. In a total, twenty one studies in the 1/9 randomized controlled trials, social media was utilized as one part of a multi-faceted mediation. The interventions had a positive, factual, critical effect on wholesome results in 1/9 trials. Commitment with the online media part of mediations differed, from 3 to 69%. Youthful grownups seem, by all accounts, to be available for getting good dieting and recipe tips through web-based media, be that as it may, they are hesitant to share individual weight-related data on their online interpersonal organizations.

(Al-Hazzaa, Abahussain, Alsobayel, Qahwaji, & Musaiger, 2011) conducted a school-based cross-sectional study on physical activity, sedentary behaviors and dietary habits among Saudi adolescents relative to age, gender and region in three different cities and the participants were 2908 secondary-school males (1401) and females (1507) aged 14-19 years, randomly selected and they used a multistage stratified sampling technique. The measurements included weight, height,

sedentary behaviors (TV viewing, playing video games and computer use), physical activity using a validated questionnaire and dietary habits that resulted in a very high proportion (84% for males and 91.2% for females) of adolescents spending 2 hours daily on social media applications by giving screen time daily and half of the which male and female did not meet daily physical activity guidelines. Physical activity had a significant ($p < 0.05$) positive relationship with fruit and vegetable intake but not with sedentary behaviors. The stats of the study showed there is a need for promoting active living and healthy eating and reducing sedentary behaviors among children and adolescents.

III. THEORATICAL FRAMEWORK

Independent variable is social media and dependent variables are eating habits and exercising behavior. Relationship between these variables was tested in this research based on the following theories.

A. Social Comparison Theory

Social Comparison Theory suggests that individuals have the inclination to assess and rate their capacities and attributes (Festinger, 1954); this can turn into a challenge when attempting to assess certain parts of their lives as often there is no obvious estimation. Without any such estimation, social comparison follows by contrasting their capacities and attributes with those of others. Those whom individuals decide to contrast themselves with vary upon specific circumstances; however large individuals contrast themselves with those apparent to be similar. This theory suggests that there are two social comparisons which are downward and upward social comparison. A downward comparison is the point at which a person perspectives the individual they are contrasting themselves with as less, or more worse off, and this can lead to a lift in self-esteem. Research has demonstrated that people are not generally impartial while assessing, they can now and again self-improve, and thus this lift in self-esteem might be unwarranted (Van de Mortel, T. F. (2008). An upward social comparison is the point at which an individual looks at oneself to somebody they consider to be better than them leading to negative feelings of depression and low self-esteem. Festinger (1954) believed inside the region of capacities, individuals have a propensity for looking upwards, with the goal that an individual has an objective to focus on and an arrangement to accomplish such results. (Festinger, L. (1954) was the first to establish the term social comparison, yet comparing ourselves with others isn't a new idea. The conformity study by Asch, S. E. (1952) in which members intentionally offered erroneous responses, and thus they assessed their own perception, re-thinking themselves and regularly adjusting their responses to conform to the social group. Theories propose that social comparison is one of a few processes by which people make suppositions about their own degree of physical appeal; this can bring about body satisfaction issues. Specifically when females compare themselves with media pictures, which present an unreachable thin ideal, it is likely they will create disappointment with their own bodies. (Shaw, J., & Waller, G. (1995).

B. Cultivation Theory

Cultivation theory (Gerbner, 1998) proposes that media creates an impact over time through constantly having an exposure to it and spending hours viewing it. Cultivation theory is characterized as "the independent contributions television viewing makes conceptions of social reality". Gerbner researched whether frequent TV viewers were bound to see the world in understanding what they had been seeing on TV. While TV won't foresee what an individual will do after viewing, rather it places an association between what is viewed on TV and the reality of the world. Morgan and Shanahan noted that TV watchers frequently search for programs that fortify their current convictions, thus reinforcing their beliefs (Morgan, M., & Shanahan, J. (2010)). Note that cultivation theory doesn't work to create beliefs rather it simply works to reinforce the already created beliefs. Shrum & Bischak, 2009 noted that the more 'thin ideal' pictures ladies are presented, the more open they become to it. Also, the positive connotation that is related with the thin ideal may likewise become more accessible. Contrastingly, the more negatives related towards overweight individuals that are watched, the more retrievable they might be, inculcating the feelings of significance of keeping up a thin body shape. These affiliations may serve to authorize social perspectives with respect to weight and its social consequences for example being thin is acceptable, being overweight is terrible. Ladies who are presented with thin ideals on TV, have shown higher body disappointment and express a longing to shed pounds to attain the thin ideal. (Van den Bulck, J., 2000).

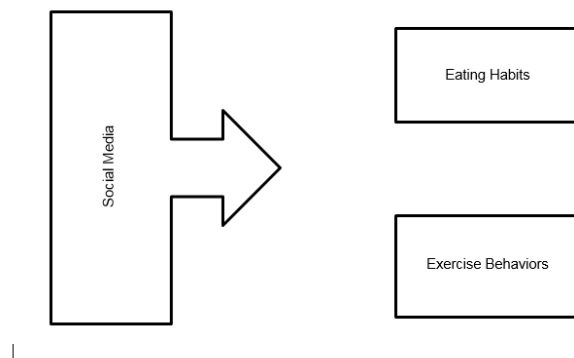
Likewise, Myers and Biocca 13 (1992) noticed that body disappointment and disappointment is identified with cultivation effects and it might take just thirty minutes of watching TV for this impact to be apparent on body shape. (Philip Jr, N. (1992) However, Eisend and Moller (1997) conducted a study and found out that body disappointment is influenced by the measure of time spent watching television, it influencing the viewers' impression of themselves, as opposed to changing their perspective on the real world. (Eisend, M., & Möller, J. (2007)

C. Self Determination Theory

The self-determination theory was introduced by (Deci, E. L., & Ryan, R. M. (1985)), described people have motivation as a basic factor that allows them to change and grow, this theory explains that people are motivated by the basis of three factors that are inborn and comes naturally as their psychological needs, that are autonomy, connection and competence. Once these three needs are met a person can become self-determined. According to the theory, intrinsic motivation plays an important part in keeping an individual focused and it is why they are able to achieve behavioral rewards such as exercise or any physical activity. There is an inner will and need that drives a person towards growth, change and accomplishing the fulfillment of any task.

A systematic review (Teixeira, Exercise, physical activity, and self-determination theory: A systematic review, 2012) was conducted that included experimental, cross-sectional, and prospective studies to measure exercise, physical activity, and self-determination theory. It studied SDT-based interventions aimed at increasing exercise behavior to check and find out

autonomy/need support and need satisfaction, exercise motives, goals and exercise self-regulations. The quantitative analysis of the research showed consistent support for a positive relation between more autonomous forms of motivation and exercise. Another research was taken out in relation to the self-determination theory (Wilson, 2007) studied the relationship between exercise motives and physical self-esteem in female exercise participants by using self-determination theory, the study was conducted on female participants selected from university based exercise classes and were asked to report their motives for exercising during the second week, and their degrees of physical self-esteem during Week 12, of a 15 week exercise class. Bivariate correlations showed that activity intentions showed an evaluated example of relationships. They additionally proposed that lone self-sufficient exercise intentions (motives) were related with higher physical self-esteem. Discriminant work examination revealed that more autonomous exercise motives accurately ordered 83.3% of the group with high physical self-esteem and 88.9% of the group with low physical self-esteem. The results uphold with Ryan and Deci's affirmations and recommend that autonomous exercise motives play a significant role in positive physical self-esteem in the exercise activity space. They discovered the advance use of self-determination theory in the exercise space and further understanding of physical self-esteem improvement.



IV. SIGNIFICANCE OF THE STUDY

The main purpose of research is to work on the relationship between social media and its impact on eating and exercising habits, by proving this theory and contributing to developing knowledge in the field of Health psychology. This research will highlight the importance of research by providing a tool for building knowledge and for facilitating learning. Moreover, it would serve as a contribution in the field of Health Psychology in Pakistan as not much work has been done. It will also encourage further study in this area.

Hypothesis

1. Social media will have an impact on exercising behaviors
2. Social media will have an impact on eating habits.

V. METHODOLOGY

A. Research Design

We are using quantitative design with an approach of correlational components as we are using the survey method for this study, including 3 questionnaires that will be filled by the participants.

B. Participants

The sample size of 250 participants is included in the research with the target population of a university going undergraduate students residing in Pakistan.

C. Exclusion criteria. Participants with age range between 17 to 33 years are excluded because our goal is to study young population's frequent usage of social media with their relationship of eating and exercising habits

D. Inclusion criteria. Participants are selected on the basis of our target population as youth those come under the age range of 17 to 33 years, to gather the information regarding the usage of social media and its impact on their eating patterns and exercising habits,

VI. MATERIALS

A. Consent Form. This is the first form that the participants have to fill, where it will be documented that our group from Institute of Professional Psychology, Bahria University, students of eighth semester, will be conducting a research on the current topic that we want them to participate in the research and fill in the questionnaires. Their participation in the research is completely voluntary which means that there are no monetary rewards or any course credits will be awarded to them.

The participants would be asked to read the form thoroughly, and if they agree to participate they would sign it confirming that they have given us the consent to go ahead.

B. Demographic Information

In this form basic information about the participants will be asked. This would include their name, date of birth, age, country and city they live in, gender, religion, ethnicity, qualification, profession, and marital status.

C. The Bergen Social Media Addiction Scale (BSMAS) (Andreasson et al. 2017):

This scale consists of six questions that consists of a five point Likert scale ranging from 1-5, where 1 is very rarely and 5 is very often. It measures the addiction of social media over the past one year. The items are in correspondence to the diagnostic criteria given by American Psychiatry Association in 1994. To attain the total raw scores the response on all six items are added together the higher the score the greater social media addiction is found. This scale is a revised version of Bergen Facebook addiction scale (BGAS; Andreasson et al. 2012) which has been validated previously. The revised version includes all social media applications. The scale follows good psychometric properties and has also been translated in various languages.

D. Godin leisure scale (Godin, G., Shaphard, R. J. 1997)

This scale measures the level of activity of the participants and is divided into two sections. The first section consists of questions regarding the intensity of activity from mild, moderate, and strenuous over the past week. In this section the scores are calculated as $(9 \times \text{strenuous}) + (5 \times \text{moderate}) + (3 \times \text{mild})$. The results were termed in units and activities less than 14 units were labelled as insufficient activity, scores between 14 to 23 units were labelled as moderate activity and scores 24 units and above were labelled as strenuous activity. The second section asked questions related to how often participants engage in physical activity and the responses were to be given in terms of often, sometimes, or never. This scale was found to be valid in a study conducted on 306 healthy adult comparisons and (Godin & Shapard, 1997) it was found that this scale successfully discriminated between fit and unfit people.

E. Adult eating behavior (Hunot et al. 2016)

This scale measures the attitude of individuals and their eating habits. This scale was developed from the Child eating behavior questionnaire (CEBQ) and was made into a self-report for adults. It consists of 35 items which were to be responded to on 5 point scale 1. Strongly disagree to 5 strongly agree. The participants had to read the statements and choose their options. These 35 items were split into eight categories as Hunger (H), Food Responsiveness (FR), Emotional overeating (EOR), Enjoyment of food (EOF), Satiety responsiveness (SR), Emotional under eating (EUE), Food fussiness (FF), and Slow eating (SE). In this scale there were 4 items that were reverse coded. The reliability was tested for this scale on a sample of two adults with a one year time lap in 2013 and 2014 (test-retest reliability).

VII. PROCEDURE

The questionnaires used were Godin Leisure-Time Questionnaire (GLT-Q), The Bergen Social Media Addiction Scale (BSMA) and Adult Eating Behavior Questionnaire (AEB-Q). All the participants are required to fill up the questionnaire regarding social media, eating, and exercising habits. Firstly, the participants fill out the consent form attached on the first page of the questionnaire in which they agree to willingly participate in the research and are made aware that their identity will remain confidential and they have the right to withdraw at any point in time. Once they fill out the consent form they then proceed to fill the demographic sheet which enables us to collect the basic information regarding the participants' age, gender and educational level. Lastly, they fill out the questionnaire attached in which the participants self-report the usage of social media, their exercising and eating habits.

VIII.RESULTS

Table 1: Demographics

Gender	Number of Participants
Males	70
Females	179
Prefer not to say	1
Total	250

Table 2. This table shows the representation of correlation between exercise patterns and social media usage

	Strenuous_exercise	Moderate_exercise	Mild_exercise	Social_media_usage
Strenuous_exercis Pearson Correlation Sig.(2-tailed) N	1 250	.322** .000 249	.147* .020 249	.025 .699 250
Moderate_exercis Pearson Correlation Sig.(2-tailed) N	.322** .000 249	1 249	.322** .000 .248	-.011 .858 249
Mild_exercise Pearson Correlation Sig.(2-tailed) N	.147* .020 249	.322** .000 248	1 249	-.048 .452 249
Social_media_usage Pearson Correlation Sig.(2-tailed) N	.025 .699 250	-.011 .858 249	-.048 .452 249	1 250

*Correlation is significant at the 0.05 level (2 tailed)

**Correlation is significant at the 0.01 level (2 tailed)

This table shows the representation of correlation between exercise patterns and the significance of correlation, that strenuous exercise in Pearson correlation with moderate exercise shows 0.01 significance level, at mild exercise shows 0.05 significance level. In the second row moderate exercise shows significance level of 0.01 by the same value as .322** and moderate exercise in Pearson correlation shows with mild exercise at 0.01 level significance with .322** The correlation between mild exercise and strenuous exercise was found to 0.05 significant with 0.01 significance with moderate exercise.

Table 3. This table shows the representation of correlation between eating habits and social media usage

		Social_med ia_usage	Enjoyment of_food	Emotional _overeating	Emotional_ undereating	Food_fu sion	Food_re sponsive ness	Hunger	Slowness _in_eating	Satiated_r esponse
Social_med ia_usage	Pearson Correlation Sig.(2- tailed) N	1 250	.160* 250	.225** 250	.022 250	.137* 250	.075 250	.191** 250	.049 250	.016 250
Enjoyment _of_food	Pearson Correlation Sig.(2- tailed) N	.160* 250	1 250	.318** 250	-.198** 250	.251** 250	.405** 250	.388** 250	-.121 250	-.307** 250
Emotional_ overeating	Pearson Correlation Sig.(2- tailed) N	.225** 250	.318** 250	1 250	-.575** 250	.080 250	.262** 250	.417** 250	.045 250	-.147* 250
Emotional_ undereating	Pearson Correlation Sig.(2- tailed) N	.022 250	-.198** 250	-.575** 250	1 250	.068 250	-.116 250	-.089 250	.138* 250	.330** 250
Food_fusio ns	Pearson Correlation Sig.(2- tailed) N	.137* 250	.251** 250	.080 250	.068 250	1 250	.228** 250	.233** 250	.124 250	.074 250
Food_respo nsiveness	Pearson Correlation Sig.(2- tailed) N	.075 250	.450** 250	.262** 250	-.116 250	.228** 250	1 250	.546** 250	.063 250	-.145* 250
Hunger	Pearson Correlation Sig.(2- tailed) N	.191** 250	.388** 2550	.417** 250	-.089 250	.233** 250	.546** 250	1 250	.136* 250	.015 250
Slowness_ in_eating	Pearson Correlation Sig.(2- tailed) N	.049 250	-.121 250	.045 250	.138* 250	.124 250	.063 250	.136* 250	1 250	.340** 250
Satiated_re sponse	Pearson Correlation Sig.(2- tailed) N	.016 250	-.307** 250	-.147* 250	.330** 250	.074 250	-.145* 250	.015 250	.340** 250	1 250

*Correlation is significant at the 0.05 level (2 tailed)

**Correlation is significant at the 0.01 level (2 tailed)

This table examines the Pearson's correlation between Social media usage, Enjoyment of food, Emotional overeating , Emotional under eating, Food fusion, Food responsiveness, Hunger,

Slowness in eating, Satiated response. To study and examine the correlation as relationship between social media usage and eating habits.

IX. DISCUSSION

The objective of this study was to investigate the differences and relationships between the influences of social media on exercising and eating habits in males and females. The instrumental measures used to investigate and study these relationships were Bergen Social Media Addiction Scale (Andreasson et al., 2017), to assess the usage of social media in young adults, Another instrument used Godin-Leisure Scale to assess the level of activity amongst the participants. Lastly, the Adult Eating Behavior Questionnaire (Hunot et al., 2016) was used to find out the eating behavior and patterns of the participants. There was no significant relationship found between social media and eating habits. Similarly, there was no significant relationship found between social media and exercising behavior.

Hypothesis one states that social media will impact the eating habits in young adults between the ages of seventeen till thirty three was investigated in this research study and it was found that there is a weak correlation between social media usage and eating habits. This finding has also been supported by previous research on Factors that were found to affect eating habits of Ghanaian Adolescents (Amos et al., 2012). This study investigated three factors that could possibly influence eating habits of adolescents in Ghana. These three factors included parental influence, peer influence, and influence of social media. To investigate these factors 150 participants were randomly selected from a high school population of Ghana. Eating habits Questionnaire for adolescence was administered on them and it was found that peer pressure influenced eating habits among adolescents however, there was no significant correlation found between parental influence on eating habits and use of social media on eating habits. This validates the findings of our research as well which also found that there was no significant relationship between social media usage and eating habits.

Hypothesis 2 claims that social media will have an impact on exercising behavior as researched on individuals aged between 18 and 33. A weak correlation was observed between the two variables as no significant relationship was seen. One of the previous researches conducted on comparing appearances influencing body image of women (Fardouly, Pinkusb, & Vartaniana, 2017) investigated comparison on three measures which were in person, magazines and social media. The Ecological Momentary Assessment method was used on undergraduate female students who were asked to fill a survey online, five times a day at random times. The results did show upwards social comparison associated with social media however, the impact of social media was not seen on diet and exercise. This research proves that social media, otherwise considered important, has also been deemed not having a strong impact in terms of its effects on different aspects of lifestyle. Research has also claimed to check how different interventions on social media influence individuals to improve their health related behaviors and since it is a complex place, which does have a lot of interventions that have the tendency to leave an impact on individuals

may not guarantee the same results and requires more research to be conducted in the field of health and social media (Maher, Ryan, Kernot, & Podsiadl, 2016)

LIMITATION

One of the limitations of this research study is that it was conducted as a partial fulfilment of the requirements of an undergraduate degree program which lead to restraints of conducting research in line with the institutional ethics. Another limitation of this study was that there were financial constraints as research grants were not available for undergraduate degree programs which restricted us from collecting wide scale data from different parts of Pakistan and the world. Additionally, another limitation faced in this research study was that the participant age limit was very narrowed down to people of age group 17-33 only. This research does not give us information about the use of social media in other age groups and the impact social media has on their eating habits and exercising behavior.

FUTURE RECOMMENDATION

The sampling method that was used for this research study was convenience sampling in which the questionnaires were distributed and filled online by the participants. Hence, a large number of data was obtained. Furthermore, the identity of participants was kept anonymous which allowed participants to be more honest. Additionally, previously there was no research done in Pakistan studying the impact of social media and linking it to exercising behavior and eating habits making it a unique contribution to the research in health psychology domain within Pakistan.

IMPLICATION

For future research, some factors that need to be kept in mind and improved upon as well are using Body Parts Satisfaction Scale Revised version so that participants are given an open margin to specifically rate what they feel about different body parts rather than providing an overall generalized feedback on their body. Moreover, measures specific to gender were not used either to observe the impact of males and females feeling differently about their body parts and how gender plays a role in different attitudes of perceiving social media and its impact and a general feedback of how males differ from females on the variable of body satisfaction. Using Figure Rating Scale (FRS) would help in knowing what relationship exists between a participant's current body type and their ideal body type with respect to body satisfaction. Future studies should also keep in mind to gather the participant's Body Mass Index (BMI) to benefit from knowing what level of discrepancy is present in current and ideal body type of participants and make an evaluation on them. This study could have further used a scale coupled with Godin-Leisure Questionnaire that measured the motives that run behind exercising behavior in people. This is because previous research has deemed the purpose and motivation that makes people exercise equally important as the exercising behavior itself.

CONCLUSION

A lot of factors can impact eating habits and exercising behaviors and how they impact each other. The study did not prove the suggested hypothesis of social media's impact on the dependent variables of eating habits and exercising behavior. This means that there might be other factors apart from social media involved that this study did not check that may have either positive or negative impacts on the eating habits and exercising behaviors of young adults. This study could have taken benefit if the participants were also tested on their motives that may have any impact on their health related behaviors.

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