

Available online at <http://www.ijims.com>

ISSN: 2348 – 0343

Sectional Approach Towards Extensive Analysis of Psychological Aspects of Obesity

Navin Kumar^{1*}, Pranjay Gupta², Ashish Tiwari², Inayat Singh², Sarthak Agrawal², Shashank Agrawal²

1. Assistant Professor, VIT University, Vellore, India

2 Dept. of Electronics and Communication, V.I.T. University, Vellore, India

*Corresponding Author: Navin Kumar

Abstract

The study on “Psychological aspects of obesity” deals with a pervasive belief amongst the common people as well as the people suffering from obesity about this psychopathological disease. In order to implement the main aim of our study we used some propitiating tools by assuaging our study in mainly three categories namely psychological aspects before obesity, after obesity and during obesity. For better analysis, we analyzed the responses that were based on the survey taken from various groups on the basis of their physique. The survey was extensively taken on the basis of questionnaire from set of students including normal and obese people. As we all know that the feelings of common peoples are generally stigmatized when talked about obesity. So after this study we are expecting that there would be reduction in such negative social beliefs which would ease and elevate the social persona of obese people and with this study we recommend certain aspects on which an obese can overpower the psychological strengths of controlled group.

Keywords: hyperphagia, seclusive, Cognitive behavior therapy, Classical conditioning Classical conditioning, mental health, psychological wellbeing, SF-36

Introduction

Psychological aspects of obesity : Obesity is a physical ambiguity that is being misinterpreted by most of the people in the society .General perception of people toward obese is negative and oppressive in nature. The main causes of obesity can have a wide spectrum. It is not at all necessary that all the people who are obese will have the same cause and effect behind their physical condition. Also it is not necessary that the schemas of all the obese people and common people is same towards each other. Now in the influence of societal stigma it becomes difficult for such challenged peoples to survive and excel. So the need of the time is providing a helping hand to such people to elevate their condition in society and using them as an asset rather than liability.

Literature Review

The study done by Walter W. Hamburg (1957) discusses about eating habits of a human being and how it is having an impact on obesity. Author has hypothetically related psychology to the hyperphagia of obese people. The study recommended that each obese person differs in terms of genetic, metabolic, hormonal and other factors, hence they must be treated differently. A lot of research have been done under this topic. According to Mehrabian (1980) the food consumption is more in case of boredom, depression, fatigue and in case of fear, tension, pain. Lyman (1982) did a survey and according to him during positive emotions we intake healthy food and during negative emotions we consume junk food and all, so he concluded that negative emotions lead to obesity whereas patel and schlundt (2001) state that in both positive and negative emotions the food intake is higher then in neutral state and positive emotions have more effect on food intake. Macht (1999)being more specific concluded that there is increase in careless or irregular eating in case of anger instead of joy in which there is increase in hedonic eating. He also concluded that the joy and the anger overpower the influence of fear

and sadness on eating. Alejandro Magallares et al. (2014) compared psychological well-being of a person is highly dependent on as physical as well as mental state. In this study an extensive comparison was done on the readings that were found by considering the PWB and Spanish version of SF36 scale. It was found that while psychological well-being was considered controlled people were better than obese but on SF36 scale there was not much difference between the traits. Also while the self-concept was considered obese were much aware of themselves as compared to controlled set of people. Burch (1973) proposed that the obese will overeat both in case of emotional tension and uncomfortable sensation and feeling. According to it they will need an external force or stimuli to understand them how to differentiate or when to stop that is not the case with normal persons. To evaluate eating behavior of obese people Schachter et al. (1968) proposed that the strong emotions of fear or anxiety would lead to suppress the consumption in case of normal people but it will not affect the eating behaviour of obese people due to their insensitivity towards internal cues or signals. So in stress normal people will decrease their eating but it will have no effect on obese people because they need external cues. So there is a lot of complexity in the eating behaviour of obese people. Regarding the psychology of obese people who went through bariatric surgery researchers from the University of Otago, New Zealand, the Canterbury District Health Board, UK, and Maastricht University, the Netherlands Non-surgical suggested that treatments of obesity are not long term. Bariatric surgery can be used for some people but not for everyone. Treatment of obesity should have behavior perspective of people in which eating behaviors are most important. Other factors such as sedentary behavior are important but eating behaviors are mainly focused.

In the paper by Sanjay Kalra et al. (2012) various diverse groups on the basis of rural and urban diversity were considered and statistics were presented to show the obesity trends in India. Along with this statistics corresponding to different sexes and age group were considered and presented to support the study done by us in our paper. In 1985, the National Institutes of Health described obesity as creating 'An enormous psychological burden'. The most serious psychological aspect of an obese person are self-confidence, physique and emotional well-being.

Current Study

Current study is done on the basis of surveys and interviews taken from people having controlled and uncontrolled weight i.e. normal and obese people. The survey mainly involved two sections corresponding to people's perception towards obese and self-perception of obese. On the basis of statistics taken from the survey we divided our study into 4 sections in which section 1 corresponds to physical and psychological causes of obesity and our assumptions were strengthened by the examples taken from different authors. In section 2. We considered psychology of obese where various aspects such as self-concept, public presentation and concept about their eating habits. Followed by this we made a comparison between controlled and uncontrolled weight group. Then on the basis of our survey we recorded and transcribed the responses of common people towards obese people. In section 3 we compared psychological methods that can be used to treat obesity and also provided evidences on psychological effects on individual after bariatric surgery. Section 4 comprises scenario of obesity persisting in India and some suggestions were made for improvement of this scenario.

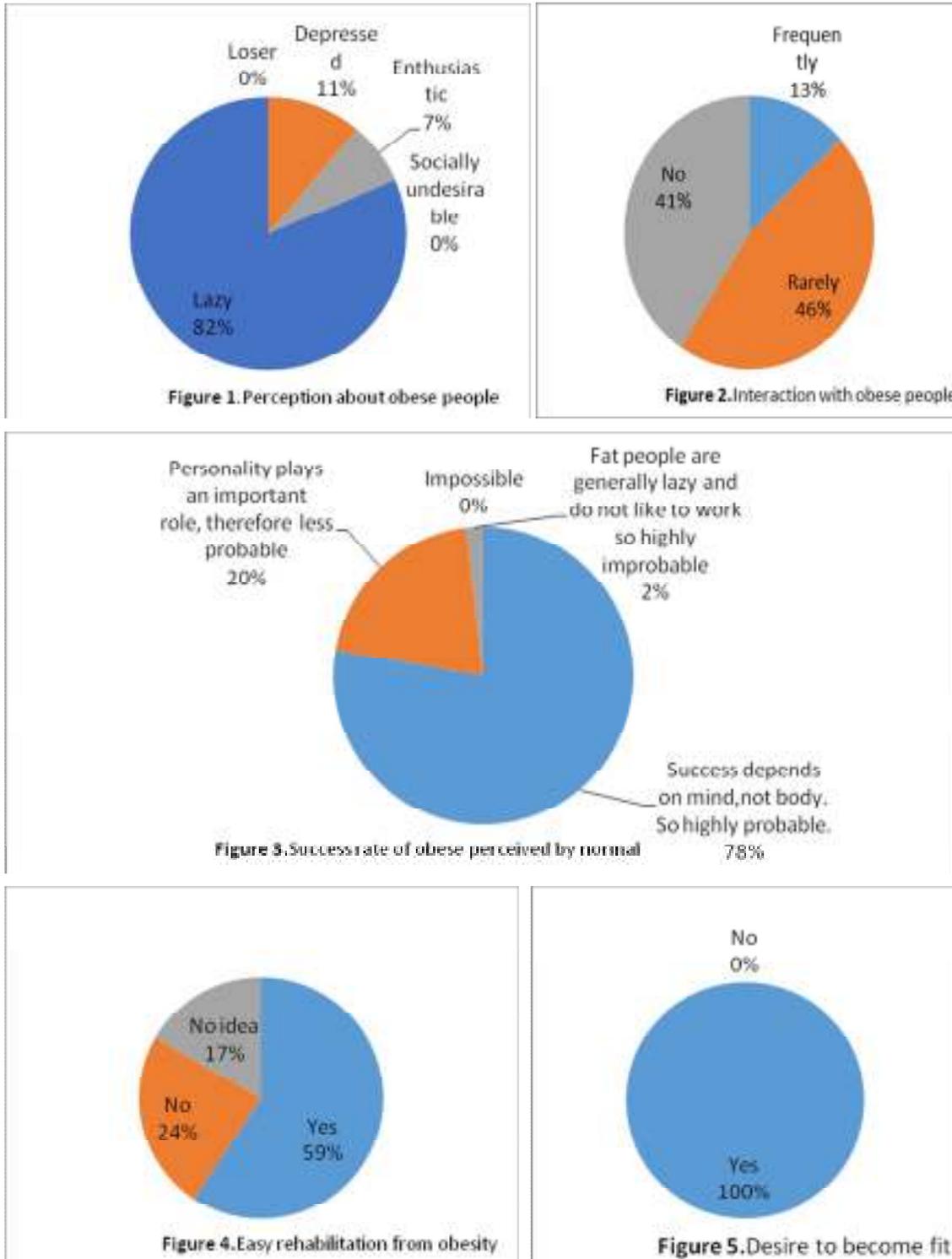
Participants Involved

Survey involved sample size of 58 students in which 54 were under normal weight category and rest 4 were obese. Corresponding to body mass index, for normal people it was considered between 18 to 25 and for obese it was considered above 34. Amongst 54 normal people there were 45 males and 9 females with age lying between 19 to 23. All the responses are from college going students among which 35 people are from Vellore Institute of Technology and rest from other Indian Universities.

Materials and procedure

In this study we considered responses from 58 participants to the questionnaire and formed a conclusion on the basis of it. Firstly we took survey by reaching each participant personally after which every response was compiled and pie charts were made corresponding to the responses. Later the pie charts were transcoded and results were compared to previous studies. Then a conclusion was made on the basis of comparison.

Statistical Analysis



Discussion

Section1: Psychological causes of obesity

Now days many people have a misconception that obesity is due to bad eating habits. But it may occur due to hormonal changes, genetic reasons, metabolic reactions or biological disturbances. Any individual suffering from endocrine disorder can also be obese. According to one definition of obesity is changes caused when the intake of food is more than the caloric requirements of the body. We feel that obesity is related only to physical problems, but after doing some study we found that it is more of a mental problem than physical. Before we had a misconception that it is easy to become normal from obese. But it is not the case, as they can be transformed easily in physical case, but mental rehabilitation is not that easy. In the survey conducted 28% of the common people agreed that the main cause of obesity is overeating, while 64% said that there are various other reasons for obesity. When same survey was taken from obese people, 50% agreed to overeating and 50% agreed to other reasons. The main reason behind this is there are misconceptions about the causes of obesity amongst the normal crowd which is reflected in our survey. Obesity problem is increasing drastically these days. It is having a negative effect on youth. They refrain from indulging into any sort of activities which are enjoyed by children of their age. Hence they fail to develop skills which might give them happiness. They think that by exposing their unshapely figure, they will become a subject of amusement for others. And this fear of embarrassment is so great that they become seclusive. They give up everything they used to enjoy, they avoid large groups and finally they stay away from their friends. This have a great impact on their feeling. They become discouraged while doing challenging task. They go into depression just because of some rejection. Thus it is really important for people to understand how serious this issue is. And if proper steps are not taken by the victim and his family, it will have a very adverse effect on both his body as well as mind. According to Banting (1863) "Letter on Corpulence, Addressed to the public" "No man laboring under obesity can be quite insensible to the sneers and remarks of the cruel and injudicious in public assemblies, public vehicles or the ordinary street traffic; nor to the annoyance of finding no adequate space in a public assembly if he should seek amusement or need refreshment, and therefore he naturally keeps away as much as possible from places where he is likely to be made the object of taunts and remarks of others". Although it was published in 1863, but this problem is still being faced by obese people.

In order to understand the development of obesity, we must know the difference between hunger and appetite. According to the article of Janowitz (1949) "We regard hunger as resulting from biochemical, physiologic and nutritional equilibrium within the body. When these internal disturbances reach a certain threshold, the individual perceives his hunger as an uncomfortable, even painful set of feelings which lead them to replenish nutrients by eating. This behavior is nutritionally appropriate and therefore rational to us." Appetite is referred to as a desire to eat. Emotions play a vital role on appetite. Grief, sorrow, love, happiness, excitement, depression cause marked changes in appetite. Appetite can be controlled by controlling our emotion, but hunger can't be controlled. Normally it is found that the only child or the youngest child of the family becomes obese. This is because all the extra care and love is shown to him in the form of overfeeding and depriving him from doing tasks which he must do by himself. Thus his intake of calories becomes more than his energy expenditure making fat or obese. At certain time when mother scolds her child she tries to bribe him by giving food he likes. This makes him defensive when he faces stress and uses food to control it. In Psychological aspects of obesity by Hilde Bruch (1958), an example of woman was provided who was so addicted to reduce stress with food that she was unable to control her cravings. There are 2 major classes in which we categorized people according to cause of obesity:

Group-I: Overeating due to stress. According to the survey we found that the main reason for overeating amongst obese people were the activities that leads to a stressful situation.

Group-II: Overeating due to addiction of food. In this category, we included those people who are emotionally unstable and instead of lot of attempts they are unable to control their desire to eat in excess. In our survey all the obese people were unable to control their desire to eat their favorite food. As every human is unique and so is his cause for obesity, hence they must be treated in different ways. They are emotionally weak, hence intense care and security should be shown to them. They should be encouraged to enter into groups and learn some skills of their interest. It will give them confidence. If they are not willing to reduce weight, then they must not be forced; as it is healthier to be fat than to be indulged into bad activities like smoking, drugs, alcohol etc. We should never underestimate these people because according to Palinurus, C.C. *The unquiet grave* "Imprisoned in every fat man, a thin one is wildly signaling to be let out".

Section 2: Psychology of obese person and its comparison with normal person's psychology

a) Comparison between controlled and uncontrolled group

Generally it is being observed that most of the studies that are done on obese generally deal with the adverse effect of this condition but since all the studies are based on certain criterions that are unable to cover all the aspects which leads to ambiguous result. According to the discussions that were done earlier regarding measurement of psychological well-being of obese the measurement parameters involve criteria's such as self-acceptance, relationship, social status and emotional stability. But according to us it is highly probable that obese person personality might be misjudged so we require a much robust technique to accomplish the task of evaluating positive perspectives of obese. In order to compare the mental schema of an obese and normal person the statistics that we have acquired from our survey were analyzed and transcoded while comparing it with the results from the work done by Alejandro Magallares et.al.(2014) who compared results from different techniques such as SF36 and Psychological well-being scale to find the anomaly .Now according to the comparison done on mental health and psychological wellbeing scale by Ryff's scale and SF36 respectively it was found that the results we got were not static rather on certain scenarios such as when social perception was considered it was found that obese people are not far away from controlled group. According to our survey we have explored a new possibility of research on additional criteria's that can be included to justify the psychological well-being of an obese person. We personally took interview from four obese people and found some contrasting results. According to SF36 scale it was found that the decision making capabilities of obese is lesser than that of the controlled group but in our survey we found that most of the obese(66%) responded positively in their decision making capabilities. Alejandro Magallares et.al. (2014) did mentioned about positive self-perception which we got similar in our case. Since we have used a positive psychology approach we also observed that obese people showed a great enthusiasm for becoming fit rather than the controlled groups who generally consider themselves fit. The observations that we made were matching to certain extent with the SF36 scale while considering similar parameters such as emotional framework, relationship status, personal growth etc.Also according to Melissa J. Black et al.(2014) plays a crucial role in our support to provide us with some important results regarding positive psychology of an obese .In this study it was found that when an weight uncontrollable target is considered his quality of managing anger was higher in case of Effort and non-effort situation . Along with this we also inferred a major point that situation also plays a major role in deciding what is the psychological stature of an obese person like when obese people exert more effort in reducing their weight than there level of life evaluation increase although they generate a feel of disgust towards other obese people.

b) Psychology of Other people towards obese

A survey was done by Crandall in 1994. He did the survey on the basis of three factors i.e. Dislike, fear of fat, and willpower. According to his survey, there was a very high percentage of people, i.e. near about 70-75% of people who don't like obese people as they are lazy which is also proven in our survey. According to his survey people think that 37% of the people can be successful which a big difference is as our survey was done on a very small scale. And also this survey was done in year 1994 and ours was done in 2015 there is a huge time gap and as we know mentality changes with the time. And also according to him 70-75% of people think that it is possible for an obese person to reduce his weight by doing exercise and having proper diet control which almost matches with our survey that is 60%. Also, his survey shows that 80-85% of people want to become fit and in our survey, it is 100% that is almost matching his survey. From the comparison of the surveys we can say that now the mentality of people has changes with time for obese person as now they believe that an obese person can be successful but one fact has remained same that is they don't like obese people much. And now people understand the importance of becoming fit and they believe that it is possible for an obese person to become thin.

Section 3: Psychology of a person being treated from obesity

a) General causes and effect of psychological imbalance after treatment

According to us there are two different aspects that motivate or demotivate the obese people which affect the ways of their treatment. Need for treatment varies with mental framework of a person. Person with less self-esteem prefer bariatric surgery whereas people with strong mindset prefer slow change in there physique. According to the survey conducted by Jennifer C. Collins (2009) et al. up to 70% obese people that consider bariatric surgery are already suffering from psychiatric disorder. There are various other behavioral and psychological treatment methods that don't involve bariatric surgery. Behavior or cognitive therapy can be used for bringing modification in the diet or exercise of the lifestyle of an individual. So this is a traditional natural therapy. Classical conditioning helps in that sector where some eating behavior are attached with some external activities like if we are watching movie and if previously we are used to eat some snacks while watching so we will not be able to control . So it helps us to extinguish the external cues or triggers. Cognitive behavior therapy (CBT) involves various things or activities that changes our behavior and emotions like self-monitoring (exercise and food control), stress management, solving problems of others related to obesity or help them to set a goal regarding weight loss. According to the survey for a successful adjustment a post-surgery support is very much needed. The patient should know or keep it in mind that bariatric surgery is a stomach surgery not a mind surgery so they still have to control their emotions and behavior so that we don't put on weight again as it is highly probable. After surgery also their emotions remains unchanged so struggles are common post-surgery. So patient thinks that they have not lost that much weight that they have thought before surgery that can lead to frustrations and behavior disorder. Post-surgery diet plays a main role after surgery. Some start in taking their previous diet that they used to take before surgery and due to their increasing weight they get stressed and eat more. So they need a psychologist that can alter their behavior or prescribe them a proper diet and teach them various cognitive methods to cope up with their feeling. There can be other type of problem in which the patient is uncomfortable in his new looks or body image due to rapid weight loss . So it takes time to adopt new body shape. According to keys et al. (1950) the weight loss may lead to various psychological mood changes. It can cause depression, irritability and moodiness.

b) Psychological effects of non-surgical treatment methods

Non-surgical treatments of obesity are not long term. Bariatric surgery can be used for some people but not for everyone. Treatment of obesity should have behavior perspective of people in which eating behaviors are most

important. Other factors such as sedentary behavior are important but eating behaviors are mainly focused. According to us psychological treatment for obesity is a branch which is not fully explored but initial research shows that it can be helpful in combating obesity problem though this process fails in case of extreme obesity but initial stages can be cured without any of physical side effects. Researchers need to focus on this type of treatment more because it can cure obesity more than what surgical methods can do. This topic is important since some people are afraid of surgical treatment due to which they are ready to live with obesity. Psychological treatments are helpful in this situation. Though psychological treatment is for a limited time of period but people can be treated frequently. People need to understand this topic since it will not have a side effect on physical health. This type of treatment might have social and mental effects on various people according to their ability of combating stress. People might face depression or feel disgusted if some of their favorite food is prohibited. But these effects are temporary and are only during the treatment which can be minimized through counseling compared to surgical treatment where physical side effects can extend to a lifetime. Treatment approaches for these eating behaviors stem from those used for eating disorders and include cognitive behavior therapy (CBT). CBT is based on principles that control feelings and behaviors. This involves being aware of negative thoughts and responding to them in a positive way. This therapy has yielded mixed results. Appetite-focused CBT helps people pay attention to their hunger and satiety cues and could help them respond better. Dissonance-inducing activities are effective for changing eating symptoms. Dissonance refers to two conflicting beliefs. This mental state is unpleasant and motivates people to change their thoughts consistently due to which people tend to eat things which they should not.

Section 4: Obesity in India

In India most of the food has main ingredients as oil and butter which are the main factors behind the tremendous rise in obesity levels in India. Now the question arises that why there is such a rise in statistics in recent years? The main reason behind this is the involvement of U.S.-based food companies in the Indian market. According to statistics provided by the national family health survey of India it was found that in India 12.1% of males and 16% of women are suffering from this dreadful condition. We cannot consider a single reason behind this phenomenon because since India is a developing country and still not that rich that all of its citizens have access to pizzas and burgers. Therefore we divided our study into two parts where the first part covers obesity in rural areas and the second provides us the cause of obesity amongst urban peoples. Later we provided differences between obesity amongst men and women in India. Here the main analysis was done on the basis of statistics presented in a survey by Sanjay Kalra et al. (2012) and inferences were drawn along with some suggestions about how to reduce this disease psychologically so that we can convert obese people to an asset of the country. As we know that India is a developing nation, the growth of a nation highly depends upon the human resources of that country. Now according to the statistics presented by the National Family Health Service 5% of the country's population is suffering from obesity and most of them are either obese or on the verge of becoming obese. As per the data presented by Sanjay Kalra et al. (2012) while the rural and urban population was considered the rate of change of urban population obesity was around 2.3% a year whereas in case of rural population the rate was quite slow and was around 1.8% per year. One more fact that was shown in the study was that the initial percentage of people having obesity was quite less in rural India as compared to the urban subpart. The fact that lies behind is the urbanization of rural places and the introduction of technologies such as the internet and television which reduced the physical activities which were prevalent earlier in rural areas. In India's urban population most of the youths are highly influenced by external factors whereas people of age more than 35 are influenced by both the cases equally. Various social influences such as by friends, family, environment come under external factors whereas internal factors

involve stress, desire to eat more etc. as presented in earlier part of this paper . In rural area the only psychological reason for increase in obesity is mentality to copy urban culture and behave and eat in the same way as urban people do. Along with this illiteracy of rural mothers also leads to obesity in child at later stage.

Limitation and Future Direction

Due to less amount of people that we were able to manage since the survey was on voluntary basis, therefore the conclusions that were made may give some ambiguity. Also not much stress was given on BMI since controlled group people were having an average BMI of 22 and obese were having an average BMI of 32. In this study we tried to attenuate the negative psychological beliefs for obese people which might contradict to the findings of other researchers. On the basis of the study that we have done there can be a vast scope of improving the psychological status of obese by agglomerating all the concepts discussed in the paper. Also there is a scope of research on psychology of obese people in developing nations such as India about which only statistical data is provided in this paper.

Application

According to the work we have done we believe that it would help normal people and psychologists to deal with this problem. It would help psychologists to identify and treat obesity on the basis of psychological causes, which might help the person to get motivated to loose weight rather than getting depressed. Lastly keeping obesity in mind if certain policies are implemented by the government, then it could help in converting obese people from liability to asset for the nation.

Relevance

Our research is important in the field of social and ethical issues since a lot of research is going on for treating obesity physiologically rather than psychologically, Our work will help in treating the patients and the disease by knowing the psychology behind such behaviors and such condition. As we have divided our research in sections so it provides a lucid approach to understand and treat this problem step by step.

Conclusion

The present study mainly deals with the psychological aspects of obesity that can actually help in motivating obese people and rejuvenating them with enthusiasm. Firstly we saw that there can be both psychological and physiological causes of obesity hence the treatment should be given accordingly. Also results demonstrate that the mentality of future generation is changing towards obesity in a drastic manner. Obese people are becoming self-conscious and are trying to make themselves mentally and physically strong. After bariatric surgery there are chances of losing control over mind and temper by an obese person, so a proper counselling is needed before any such surgery. Lastly we found that in India obesity is increasing exponentially and is negatively affecting the mental health of Indians especially in present generation and we made some suggestions to overcome the situation.

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