



“A Study On Effects Of Dietary Restraints And Moods And Feelings On Young Adults”: A Quantitative Study

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Abstract:

Dietary restraint is a self-induced, a forced behaviour by an individual on oneself, where they limit their calorie intake or limit their appetite to achieve a certain type of desired body. One usually thinks of dietary restraint because of their perception of self and how their body looks. People usually confuse dietary restraint with diet/dieting, but it does not seem to be similar on any basis. Dieting is a very methodological and well thought process where an actual expert or professional is involved who has good knowledge about food and nutrition where as dietary restraint is just ones cognitive control over their calorie intake which is quite not what happens in a diet.

Mood, on the other hand mood is an affective state which describes ones state of mind, whether they are in a happy, sad, excited, anxious mood. Moods usually last longer than emotions, when compared. The nature of moods is also said to be very specific to the state of mind of the individual &/ or the situation that they are in.

In this research article, the researcher is trying to draw a correlation between dietary restraint & mood using the Three Factor Eating Questionnaire- r18 (TEFQ- r18) and the Moods & Feelings Questionnaire (long version)(MFQ) on a sample of 100 individuals, both males and females were a part of this research.

Introduction:Dietary Restraint:

Dietary restraint is a behaviour where usually individuals limit or restrict themselves from eating some kinds of food items. It is limiting oneself from eating something

Dietary restraint can either be because an individual is following a specific type of diet to reduce weight for some reason or it can be because of some problems like negative body image, comparison of oneself to someone else on social media or also because of eating disorders also. Dietary restraint can also be observed because of some physical or psychological illness. Usually when one has fever, their food intake decreases, in

the same way when one is going through some psychological illness like anxiety or depression or any other, we may observe dietary restraint. The research studies the effect of dieting or dietary restraint behaviour on physical and cognitive aspects of functioning. A lot of people start dieting or follow a restricted type of behaviour specifically with the food they eat. At times a lot of people feel negative about their body because maybe they don't fit in the standards set by the society and most of them think about changing ourselves but at times most of those people can't keep up with the process of losing weight but if we are regular, if people follow a proper plan and a schedule & if we be specific many, their journey does become much more entangled and easier. It's just a matter of patience and self belief. As the researcher mentioned above that a lot of people do start "dieting", but many don't know what it exactly means. Some just think that eating less or cutting out carbs or fasting at times would help them get their goal. Well it's true in a way, they do lose weight but it's a healthy way of losing weight. It affects their physical and mental functioning in different ways we never even thought of.

There are a lot of diets that are available today but many people just feel that they can we take up any of these diets based on either how fast their results are or based on what they feel is convenient for them or are according to their liking. But that's not how it works. They should always consult a dietician or a nutritionist before doing something like this. Their knowledge on all this stuff is much more than us.

Dieting is something that has grabbed a lot of attention in the past few years. Initially it was because of people's obsession over fitness but now it's majorly just to "fit in" in the society and its limited standards. Some of these people also have a restricted type of eating behaviour because of eating disorders like binge-eating or bulimia or anorexia. One important thing that might get affected due to dietary restraint is ones mood and feelings. And that is what we will be establishing from this research.

Dietary restraint is a self forced behaviour where an individual eats or starts eating less than usually, in simple terms they limit their calorie intake to reduce body weight & have a certain type of desired body. Mood is ones state of mind & how an individual is feeling in that moment or in that situation. A lot of individuals, lately, have been very concerned about their body and how they look, which is good but in this case the individuals' outlook on self is mostly negative, and that is why the way they cope through this is also negative. Following is dietary restraint is common in a lot of fitness influencers but their definition of restraint is quite different than what people with negative body image have.

A lot of these fitness influencers are like models to people but a lot of these people don't really understand the process that goes behind the making or the achieving the kind of the physique that they desire and hence their lack of knowledge is what leads them to take a wrong decision. Their wrong perception of diet or dietary restraint leads to other physical or psychological problems. One such problem can be changes in mood and how one feels. In this study, the research studies the correlation between both the variables.

Moods & Feelings:

Moods differ from feelings in three important ways. To begin with, moods appear to last much longer than emotions, lasting hours or even days, while emotions can only last minutes. Second, emotions are focused on a particular subject, such as an individual or a circumstance, whereas moods are more amorphous and have no recognisable object. A mood is an overall feeling rather than a reaction to a specific situation. In comparison, you may not realise you're in a good or bad mood until you think about how you respond to circumstances. Mood is described as a collection of persistent feelings linked to evaluative and cognitive states that influence future judgments, feelings, and behaviour (Olié, J. P., 1993). Positive and negative valences are often used to characterise moods. In other words, people often discuss whether they are in a good or poor mood.

Moods are affective states that are diffused and unfocused, that is, not oriented toward a single object. They are still present and form the backdrop of our moment-to-moment experiences, but their intensity varies over time.

Two essential characteristics that

differentiate moods (e.g., feeling happy vs. depressed, feeling calm vs. tense) from emotions are directness and time pattern (e.g., pride, anger, or sadness). Emotions, in contrast to moods, are phasic affective states directed at a particular target (e.g., being proud of something) (i.e., have a moment of onset and then dissipate). There is no clear start or end date and there is no deliberate object that triggers the bad mood. It can last for hours, days, weeks, or even months at a time. Negative moods can influence how people perceive and translate the world around them, as well as how they act. Positive mood is associated with high energy and low stress, whereas negative mood is associated with low energy and high tension. In this study the researcher studies the correlation between these very two variables, i.e. Dietary Restraint & Moods and feelings.

METHODOLOGY

Aim : The present study aims in establishing a relationship between dietary restraints and moods and feelings.

Objectives :

-Investigate the correlations between dietary restraints (such as restrictive diets, calorie counting, or specific dietary patterns) and mood states (such as depression, anxiety, stress, or overall emotional well-being) to identify potential associations.

-Investigate the underlying mechanisms through which dietary restraints influence mood and emotions, including physiological pathways and psychological factors (such as self-esteem, body image, or perceived control over eating)

SAMPLING

Inclusive Criteria

Participant age should be between 18-22years

There should be willingness to participate in the study.

Exclusive Criteria

Participants who are not between the age 18-22 years.

Participants who are not willing to participate in the study.

Variables:

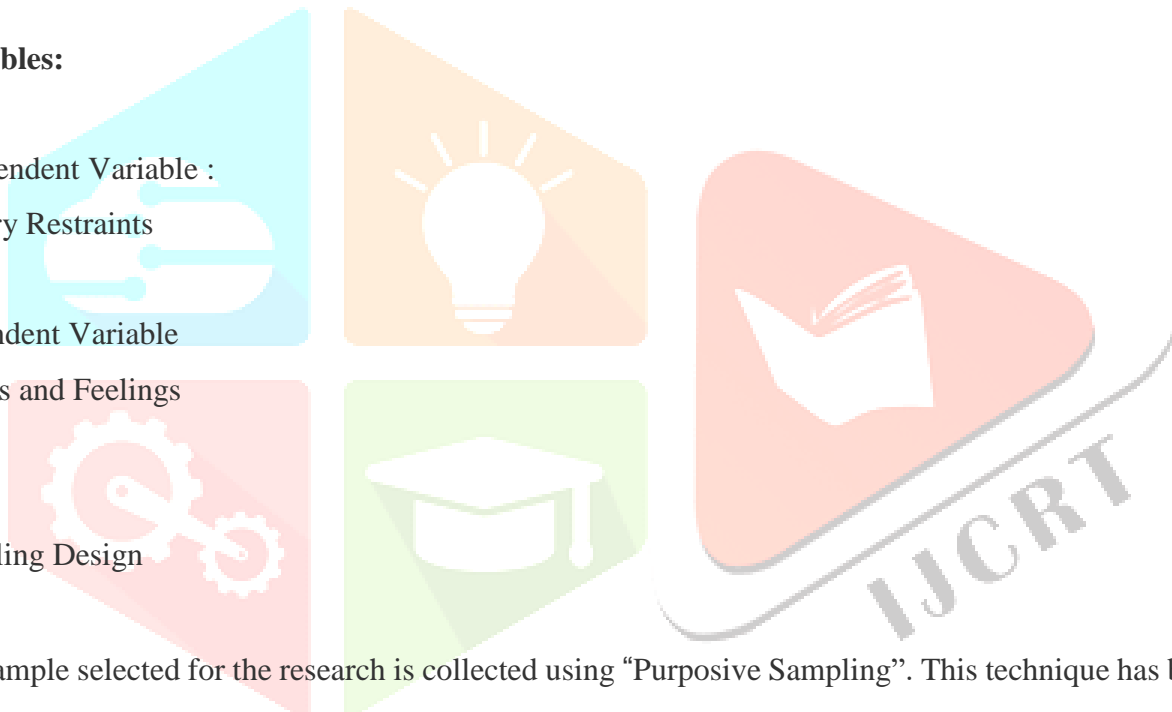
Independent Variable :

Dietary Restraints

Dependent Variable

Moods and Feelings

Sampling Design



The sample selected for the research is collected using “Purposive Sampling”. This technique has been used as it fits perfectly with the topic selected by the research. The age group selected was between 18-22 years . So anyone between that age range

could participate in the research. This age group consists of teenagers. The total number of participants that participated in this research is 100, using the google form were 70% and the rest were collected through physical questionnaire.

Measures/ Tools:

The two tools used by the researcher in this research are:-

1. Moods & Feelings Questionnaire (MFQ) (long version) &
2. Three- Factor Eating Questionnaire (TEFQ).

(A.) The Moods & Feelings Questionnaire (MFQ) was developed by Adrian Angold and Elizabeth J. Costello in 1987. The MFQ consists of a series of 33 descriptive phrases regarding how the subject has been feeling recently. The MFQ has 6 versions, but we used one of the version which is the Adult Self - Report.

(B.) Three- Factor Eating Questionnaire (TEFQ) :

The Three-Factor Eating Questionnaire (r18) by Karlsson et al. is an updated 18-item version of the TEFQ (2000). The 18-item TFEQ revision (Karlsson, Persson, Sjöström, & Sullivan, 2000) was created to minimise item number, assess construct validity, and improve psychometric properties of the original version of the scale (Stunkard & Messick, 1985).

Karlsson, Persson, Sjöström, & Sullivan (2000) used a split-sample of 4,377 obese men and women ages 37-57 from a larger study (Ns = 2193 and 2184) to build the scale. There was a lot of convergence between two sub-scales from the original version (Disinhibition and Hunger), as well as a new element linked to depression, as was a new factor related to emotional eating. To account for this factor structure, three new sub-scales were created: (1) Cognitive Restraint, (2) Uncontrolled Eating, and (3) Emotional Eating. Multi-trait/multi- item scaling tests revealed high levels of item-scale convergent validity ($r_s >.45$) and item-discriminant validity ($r_s .40$) across the two independent samples. Sub-scales were also trustworthy ($s >.76$). Uncontrolled Eating and Emotional Eating had the greatest association between sub-scales ($r =.39$). Emotional Eating was linked to low mood, anxiety, and depression, indicating construct validity.

Following that, the TFEQ-properties R18's were investigated in a general (non-obese) population of 520 adults and 234 teenagers/young adults (De Lauzon et al., 2004). Unit-scale convergent validity was supported by multi-trait/multi-item scaling tests (all but one item had ($r_s >.40$), and only one item failed the item-discriminant validity criterion) (i.e. had a higher correlation with a sub scale it was not assigned to). The reliability was adequate ($s >.78$). Sub-scales predicted eating behaviour in terms of construct validity, though comparisons were more prominent in the adult sample. In adults, Cognitive Restraint was linked to eating a healthy diet, such as eating more leafy greens and consuming less sugar. Emotional Eating was linked to snacking, whereas Uncontrolled Eating was linked to energy-dense food consumption. Cognitive Restraint expected a lower consumption of energy-dense foods in adolescents and young adults.

Procedure:

Procedure for data collection involved data from a total of 70 respondents through online questionnaire that were circulated via WhatsApp, LinkedIn. The remaining data was collected through physical questionnaire. The researcher used a purposive sampling method to select participants. Once the desired responses were obtained, the responses were then copied to an excel sheet and was then segregated. After the segregated data was obtained the researcher then ran through Analysis of the data using the respective techniques. A varied sample of participants was made possible by the use of both physical and online surveys, and purposive sampling techniques made sure that the sample was representative of the intended audience. In order to derive significant findings from research, correct and trustworthy data must be endured, which was made possible by the data cleaning process.

RESULTS

Statistical Analysis

Various statistical techniques were employed using SPSS software to rigorously test the hypotheses outline in the study. These techniques encompassed t-test, a distinct purpose in elucidating the effects of dietary restraints in moods and feeling.

T- test were utilised to investigate potential difference between male and female participants terms of their levels of dietary restraints in moods and feeling.

Descriptive Statistics:

a) Correlation:

After performing the necessary statistical analysis, we see that there is a correlation between the two variables but the correlation seen here is positive (0.398) but it is a weak correlation

Table 1:

	<i>TEFQ</i>	<i>MFQ</i>
<i>TEFQ</i>	1	
<i>MFQ</i>	0.39819388	1

Preliminary Analysis:

Prior to investigating the relationship between the variables, the researcher conducted preliminary descriptive analysis from the data collected of the participants. The researcher examined whether his respondents' age, sex, whether they are following any diet, etc., were associated significantly with our variables.

Inferential Statistics (t-test):

To find the significance between the relation of:

Sex & TEFQ:

In table 3, we study the relationship between dietary restraint in men & women using the Three factor Eating Questionnaire (TEFQ), where the scores of both the sexes were analysed using a t-test. In the following table we can see that t-critical is greater than t-stat ($t\text{-cri} > t\text{-stat}$) and the difference was significant, so here we do not reject the null hypothesis.

Table 3:

<u>t-test : Two samples assuming equal variances.</u>		
	<u>Variable 1</u>	<u>Variable 2</u>
Mean	46.75806452	39.2972973
Variance	2550.678213	57.38138138
T- Value: 0.890823569		
Critical value one tail: 1.66071461		
Critical value two tailed: 1.984723186		

Diet & TEFQ:

In table 4, we study the relationship between dietary restraint in men & women based on whether they follow any specific diet or not, using the TEFQ, where the scores were analysed based on whether they follow any specific diet or not, using a t-test. In the following table we can see that t-critical is much greater than t-stat ($t\text{-cri} \gg t\text{-stat}$) the difference was significant, so here we do not reject the null hypothesis.

Table 4:

<u>t-test ; Two samples assuming equal variances.</u>		
	<u>Variable 1</u>	<u>Variable 2</u>
Mean	39.32	41.705882 35
Variance	71.625945 95	64.470588 24
T- Value: -1.05892736		
<u>Critical value one tail: 1.661961084</u>		
<u>Critical value two tailed: 1.986674541</u>		

Sex & MFQ:

In table 5, we study Moods & Feeling in men & women using the Moods & Feelings Questionnaire (MFQ), where the scores of both the sexes were analysed using a t-test. In the following table we can see that t-critical is greater than t-stat ($t_{\text{critical}} > t_{\text{stat}}$) the difference was significant, so here we do not reject the null hypothesis.

Table 5:

<u>t-test : Two samples assuming equal variances.</u>		
	<u>Variable 1</u>	<u>Variable 2</u>
Mean	28.189189 19	30.354838 71
Variance	403.21321 32	336.33104 18
T- Value: -0.548556663		
Critical value one tail: 1.66071461		
Critical value two tailed: 1.66071461		

Diet & MFQ:

In table 6, we study the relationship between dietary restraint in men & women based on whether they follow any specific diet or not, using the MFQ, where the scores were analysed based on whether they follow any specific diet or not, using a t-test. In the following table we can see that t-critical is much greater than t-stat ($t_{\text{cri}} > t_{\text{stat}}$) the difference was significant, so here we do not reject the null hypothesis.

Table 6:

<u>t-test : Two samples assuming equal variances.</u>		
	<u>Variable 1</u>	<u>Variable 2</u>
Mean	29.12	28.882352 94
Variance	357.32324 32	410.98529 41
T- Value: 0.04618932		
Critical value one tail: 1.661961084		
Critical value two tailed: 1.986674541		

DISCUSSION

Overview of the study & Discussion of the findings:

This study aims to find a correlation between Dietary Restraint and Moods & Feelings. Dietary restrained, in simple words, is defined as one's cognitive effort to eating less or controlled eating & moods are defined as a state of mind where how one feels lasts for a longer period of time & moods also mood is how one feels overall about a certain situation or object or person.

The study was conducted on a population of 100 people out of which 63 were females and 37 were males. Out of all the participants 76% of the total were not following any diet, 17% of the total were following a diet and the remaining 7% didn't follow any specific diet.

According to Herman & Mack (1975) dietary restraint is the cognitive effort of an individual

to restrict or limit their food intake or control their calorie limit in order to reduce weight. In a study by Dakanlis, A. , et. al. , in the result of the study the researcher stated that males may not really experience being judged or evaluated for their body in the way females might be.

He further stated that under the system that we live in where a certain type of body is objectified or idolised, negative body image of oneself are often thought to cause binge eating through dietary restraint.

In another article by Bublitz, G. M. , et. al. (2010) , the researcher did mention in her article that women are more concerned with their body mass/ weight or the way look as compared to men, hence the chances of dieting or dietary restraint will be more in women than in men and there are other various researchers and researches that support this statement (Eg: Heatherton, Herman, et. al. 1991).

The researcher further mentioned that food consumption may increase when one is in a negative mood state, and they find food as an easy way to escape their negative mood.

In an article by Köster, P. E. and Mojet, J. (2015), the researchers mentioned that restrained

eaters who feel as sense of loss of control over self while eating, often complained of experiencing negative mood.

An other article by Coughlan, E. and Yeomans, M. (2008) their findings reveal a clear link between negative and positive mood & voluntary food consumption, which is mediated by an association between restrained eating & self reported over eating tendency.

In accordance to this paper, referring to table 5 & 6 we observe that there is a great significant difference between the values for t-stat & t-cri, hence we can say that the sex of the individual & the fact that whether or not they are following a specific diet does not affect their mood significantly (as we can the values on the MFQ scale in the tables). The same was observed in tables 3 & 4, where the scores of the participants on the TEFQ scales were not quite dependent on the sex of the participants or whether they are following any diet.

In a research article by Howard, S. et. al. (2005), the researcher in his results mentioned that mood and binge eating are in a way related to each other. The researcher mentioned that mood of an individual usually was worse before a binge eating episode and the same was with their self concept.

Also as we can see in table 1, after performing the necessary statistical analysis, we see that there is a correlation between the two variables but the correlation seen here is positive (0.398) but it is a low correlation, that means it's a positive low correlation.

In table 3 we can see that $t\text{-cri} > t\text{-stat}$, and so it is in table 4, 5 & 6. Since the value of t-cri is not significant with the value of t-stat in any of the tables, we do not reject the null hypothesis, i.e. "There will be no significant correlation between Dietary Restraint & Moods and feelings."

Hence from the findings of this study, the researcher adds that due to the low or weak correlation between the variables, dietary restraint & moods and feelings are not significantly correlated with each other. One of the reasons for this result can be the big ratio difference between males and females.

(VII.) SUMMARY & RECOMMENDATIONS

Summary:

To summarise the entire study, the researcher wanted to study the correlation between Dietary restraint & Moods and Feelings. The researcher had a total sample of 100 participants, both males and females. The tools used in this study by the researcher were TEFQ- r18 (the revised version) and the MFQ (long version). The research then segregated the samples, acquired through the google forms, in the way they were desired and then the analysis was done. First the correlation between both the variables was obtained and then the t-test was run on the segregated variables as we can see in tables 3, 4, 5 & 6. The correlation that was established between

the variables was a positive low correlation (0.389) and the correlation between the segregated variables that were, firstly, Sex of individuals & TEFQ, Diet of individuals & TEFQ & secondly, Sex of individuals and MFQ and Diet of individuals & MFQ. In these t-test that were conducted the critical value (t-crit) was greater than the statistical value (t-stat) in all of the t-tests which says that there is not a very significant correlation. This means that, there is a very weak correlation between dietary restraint and moods & feelings. Since the correlation between the variables is weak, the correlation is not significant enough to reject the null hypothesis. Hence we do not reject the null hypothesis.

Recommendations:

- 1) For further research, having a larger sample to get a better correlation between the variables.
- 2) Having a stronger background of literature review would help the researcher deliver a much better quality of content of history of research done in this field or on this topic.
- 3) The tools used by the researcher were not used much in previous research conducted in the similar area hence if for future studies, the original & not the revised versions of these tools can also be one recommendation.
- 4) Using more specific variables to study, example to study the correlation between Dietary Restraint & Positive/Negative mood rather than just 'mood'. Doing this would give the research a specific direction of study.

Conclusion:

As we can see that the correlation established between the variables was a positive low correlation (0.389) & the correlation between the segregated variables that were, firstly, Sex of individuals & TEFQ, Diet of individuals & TEFQ & secondly, Sex of individuals and MFQ and Diet of individuals & MFQ. In these t-test that were conducted the critical value (t-crit) was greater than the statistical value (t-stat) in all of the t-tests which says that there is not a very significant correlation. This means that, there is a very weak correlation between dietary restraint and moods & feelings.

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