

Influence of Lifestyle Factors Like BMI, Diet and Physical Activity in Body Image Dissatisfaction Among Adolescents and Young Adults

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ABSTRACT:

Body image refers to an individual's emotional attitudes, perceptions and beliefs regarding their own body and has a bearing on their nutritional status, which can have far-reaching consequences on their health as adolescents and young adults. This study investigates the influence of lifestyle factors such as BMI, diet, and physical activity in body image dissatisfaction among adolescents and young adults. Utilizing a cross-sectional descriptive design, data were collected from 500 participants across three colleges and two schools over a six-month period through a predesigned questionnaire and google forms with Contour drawing figure rating scale (FRS). Key findings revealed a significant prevalence of body image dissatisfaction, with 56.44% of females and 43.56% of males reporting dissatisfaction. Females exhibited higher levels of dissatisfaction compared to males.

Keywords: Body Image Dissatisfaction, Adolescents, Young Adults, Figure Rating Scale, BMI, Diet, and Physical activity.

1. INTRODUCTION:

Body image is the term used to describe a person's emotional attitudes, perceptions, and beliefs about their own body. These ideas can have a significant negative impact on an individual's nutritional status and ultimately affect their mental and physical health as adults and adolescents. ⁽¹⁾There are mainly four aspects of body image:

1. **Perceptual:** The way you see yourself is not always the correct representation of what you actually look like. For example, you can believe that you are overweight when in reality you are skinny.
2. **Affective:** what you like or dislike about your body looks. It is a focus on appearance, weight, shape, and body parts.
3. **Cognitive:** The way you think about yourself which ties to what you believe about yourself. This is the way you view your physical self. This component of body image often leads to constant criticism

and concerned thinking. For example, if you were more muscular or smaller, you might believe that you would be more well-liked.

4. **Behavioural:** Your actions in relation to your body image are reflected here. People who are dissatisfied with their bodies may decide to attempt a restricted diet, increase their exercise, or get cosmetic surgery.

Body image is defined as an individual's mental assessment of the aspects, forms, and features of their entire body as well as the emotions connected to these features. The subjective element of body image also includes a person's satisfaction with their size or certain body components. Adolescence is a period characterized by important biological, physical, psychological and social changes, and body image disturbance, especially due to dissatisfaction with one's own body, is frequently observed during this phase of life⁽³⁾.

Physical activity and adolescents have a beneficial relationship. Children who engage in sufficient and frequent motor and sports activities see their bodies more accurately and experience less discomfort from them. In any case, females displayed more discontent and unease with their outward look than did their male counterparts; nonetheless, untrained boys are also susceptible to body image issues during adolescent development.⁽⁴⁾ Body image disturbance, particularly as a result of dissatisfaction with one's own body, is often noted throughout this era of life. Adolescence is a period marked by significant biological, physical, psychological, and social changes. Many variables, including family, friends, the media, and society at large, can contribute to negative body image; however, the media and society seem to be the main source of pressure, imposing an athletic image for men and a "thin-ideal" for female beauty. Although everyone is subject to this pressure, teenagers are particularly susceptible to it⁽³⁾

Their dietary status and general well-being are being challenged. These results indicate that there is a pressing need to use every avenue available to support teenage females in maintaining healthy weight and eating habits.⁽⁵⁾ The perspective of an adolescent's body since it directly impacts nutrition, exercise, and overall health in the short- and long-term.

2.STUDY METHODOLOGY:

STUDY DESIGN:

This study was designed as a Cross-Sectional Descriptive Study , which was carried out in 2 Schools and 3 Colleges, Thiruvalla taluk, Kerala for a time-period of 6 months. The sample size was determined to be 500 participants. The study was conducted after receiving approval from the Institutional Review Board of Nazareth College of Pharmacy ,Othara ,Thiruvalla.

For this study, a set of pre-determined criteria was developed:

- **INCLUSION CRITERIA:**
- Population of age between 13-25.
- **EXCLUSION CRITERIA:**
- Pediatrics below age 12 .
- Differently abled student population.
- Pregnant and breastfeeding women.

Sources Of Data:

The data required for the study was collected from the schools and colleges.

Data Collection Technique:

A pilot study was conducted at Nazareth college of Pharmacy using a pre-designed questionnaire to assess

the feasibility of the proposed study. Participants were enrolled in the study according to the inclusion and exclusion criteria. The data was collected through Community visits to the Schools and Colleges of Thiruvalla Taluk. Participants were asked to fill out a prepared questionnaire to determine the prevalence of body image dissatisfaction and the influence of life style factors like BMI, Diet and Physical activity. Individuals were provided with a brief introduction regarding the study and confidentiality of data was explained to them. The pre-designed questionnaire forms were provided to the school students and google forms to the rest and they were collected back. A short verbal awareness were given

Data Collection Tools:

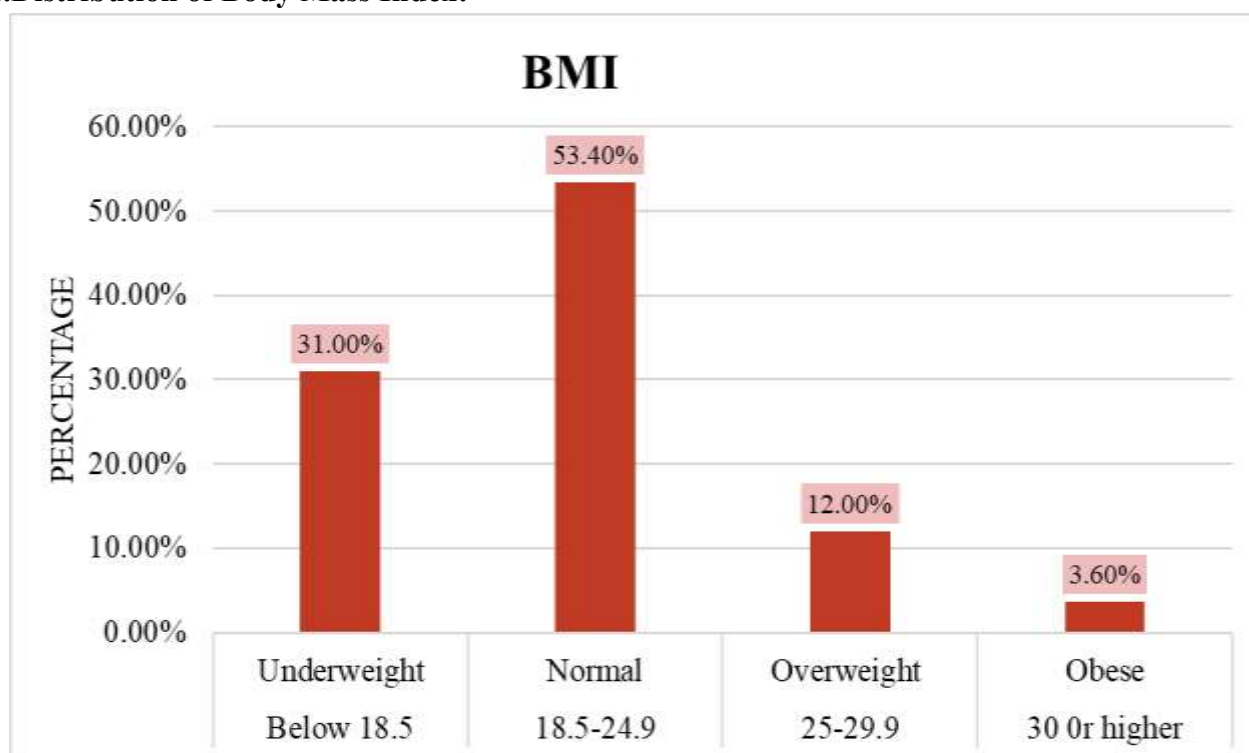
- Pre-Designed Questionnaire
- Google forms
- Informed Consent form

Statistical Analysis: The data collected were entered in the MS excel 2021 version and results were analyzed as tabular form and percentage.

3. RESULTS:

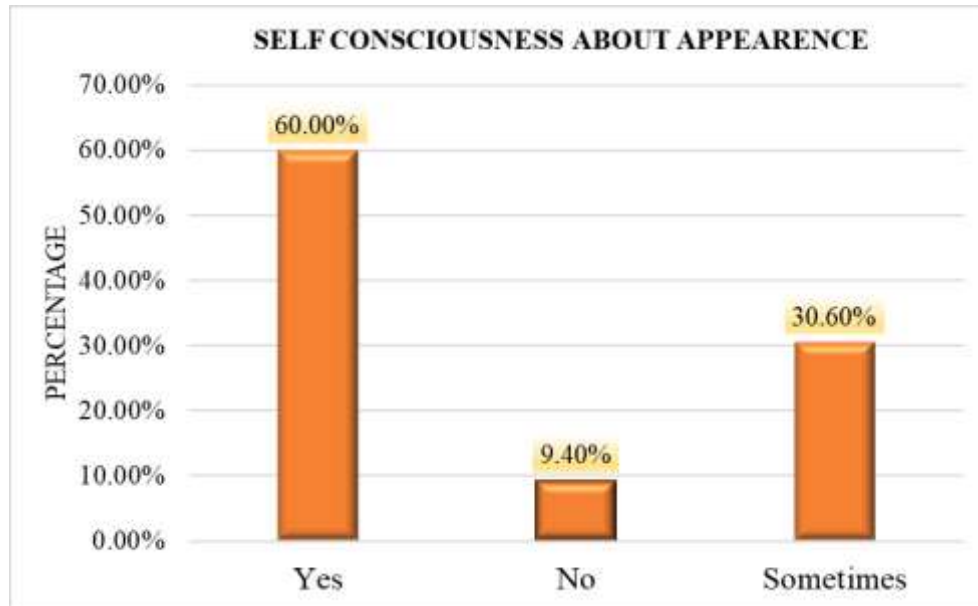
LIFESTYLE FACTORS INFLUENCING STUDY PARTICIPANTS

3.1. Distribution of Body Mass Index:



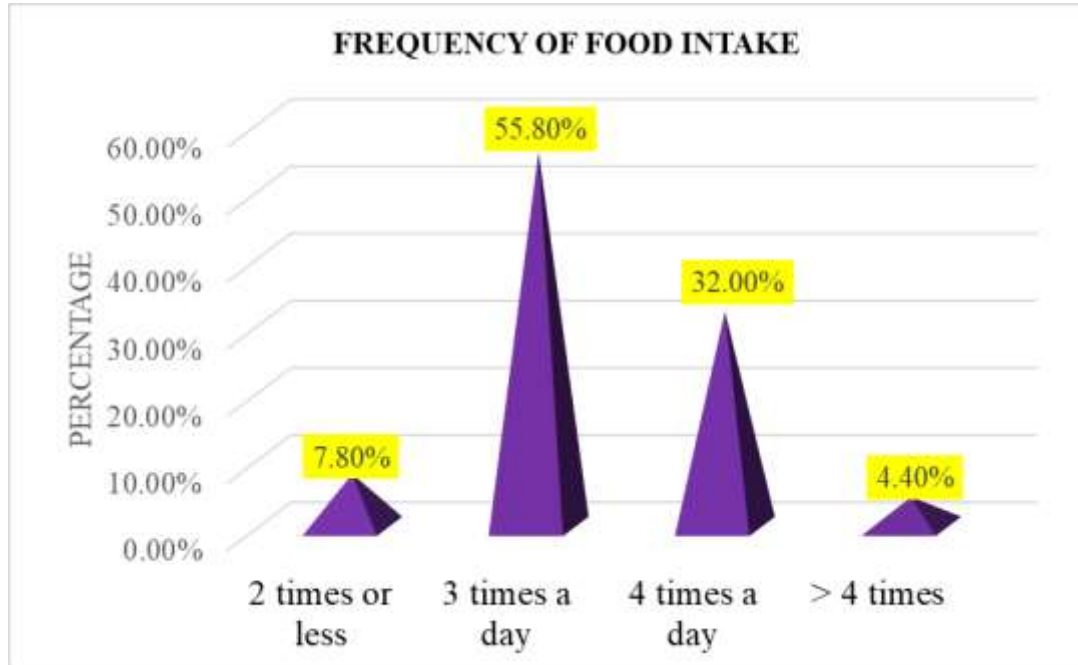
Out of the 500 participants in the study were separated into four categories depending on their BMI, with 31% of them being underweight, 53.40% being normal, 12% being overweight and 3.6% being obese.

3.2.DATA ON SELF CONSCIOUSNESS ABOUT APPEARANCE AMONG STUDY PARTICIPANTS.



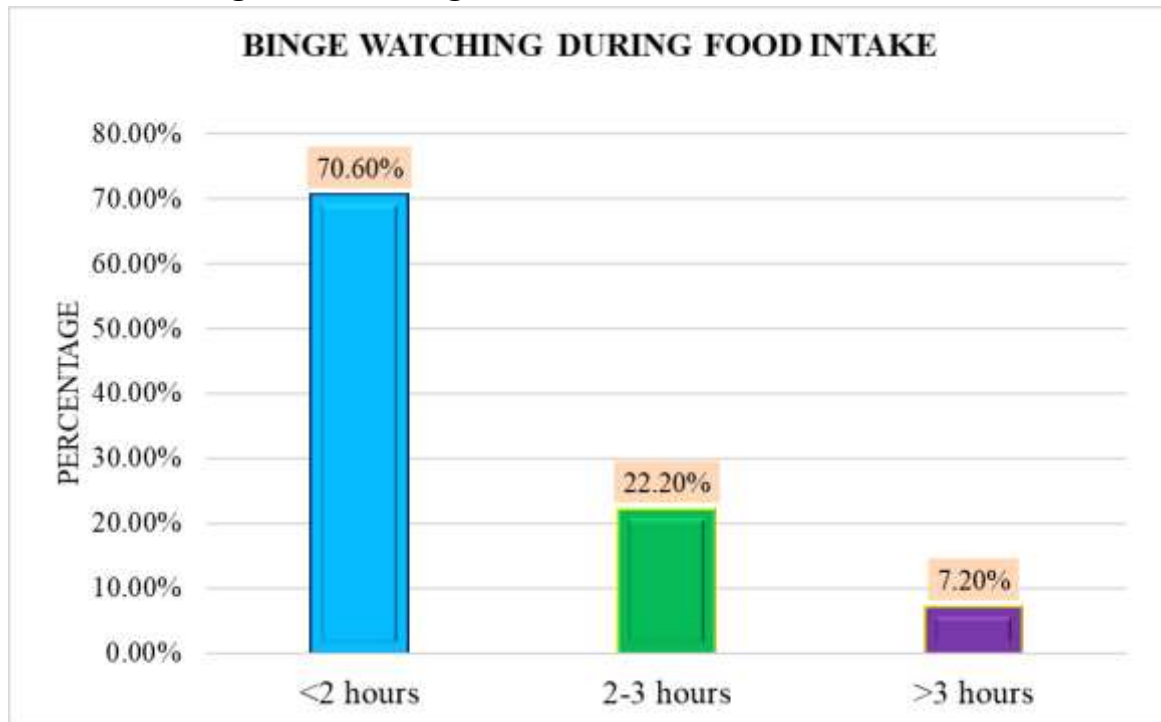
Out of the total 500 study participants 60.00% of them were self conscious about their appearance ,9.40 % were not all concerned and about 30.60% were sometimes conscious about their appearance.

3.3.Distribution On Frequency Of Food Intake.



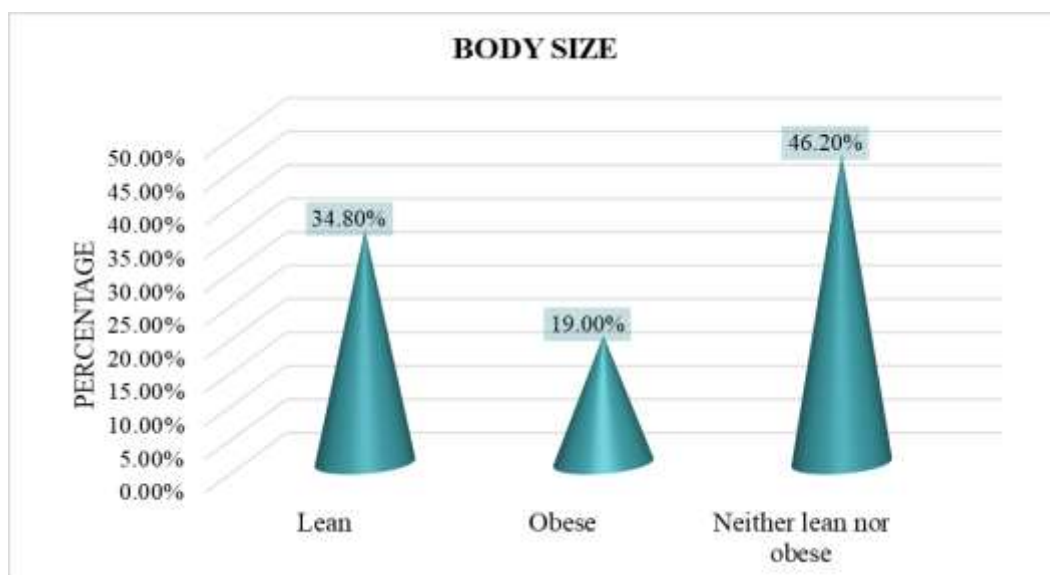
Of the 500 participants frequency of food intake among the study participants ,7.80% eat 2 times or less per day ,55.80% eat 3 times a day,32% eat 4 times and about 4.40% eat greater than 4 times a day.

3.4. Distribution Of Binge Watch During Food Intake.



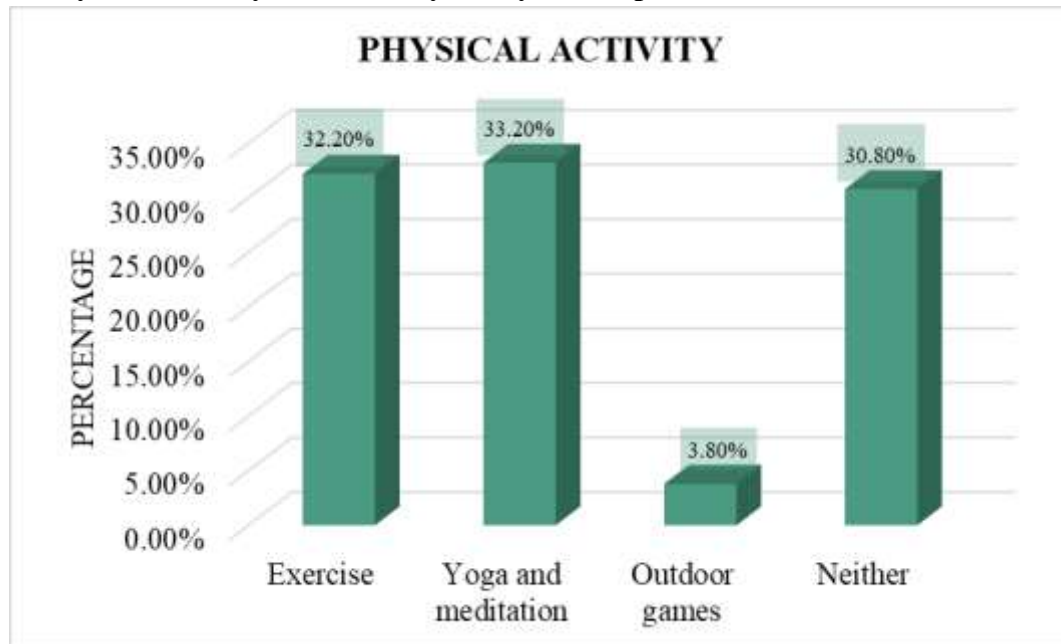
The above graph shows that frequency of food intake during binge watch among the 500 study participants, 70.60% of them binge watches for less than 2 hour , 22.20% for 2-3 hours and 7.20% for more than 2 hours.

3.5. Distrubution On How One Feels About Their Body Size.



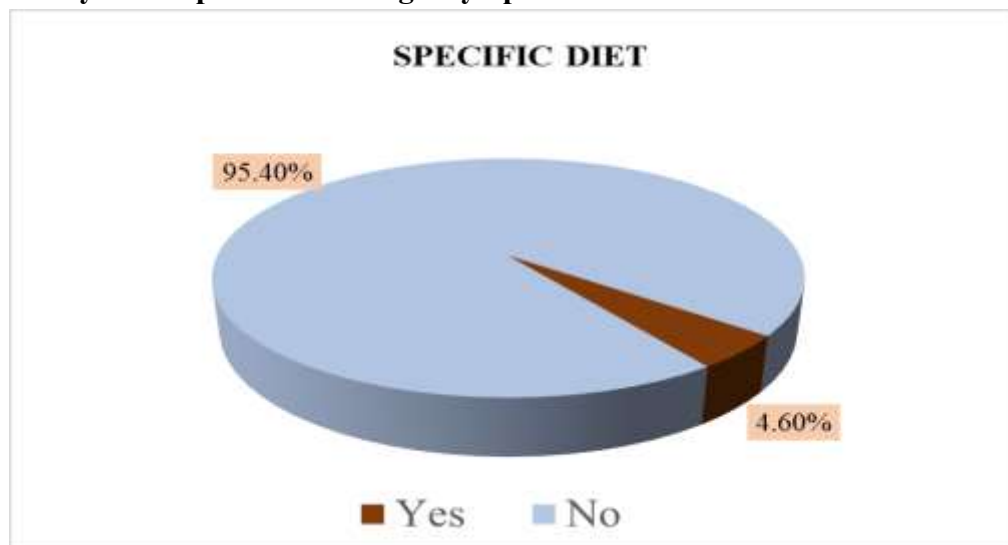
Out of 500 participants in the study ,34.80% feels they are lean ,19.00% feels they are obese and 46.20% feels that they are neither lean or obese.

3.6.Data On Physical Activity Followed By Study Participants



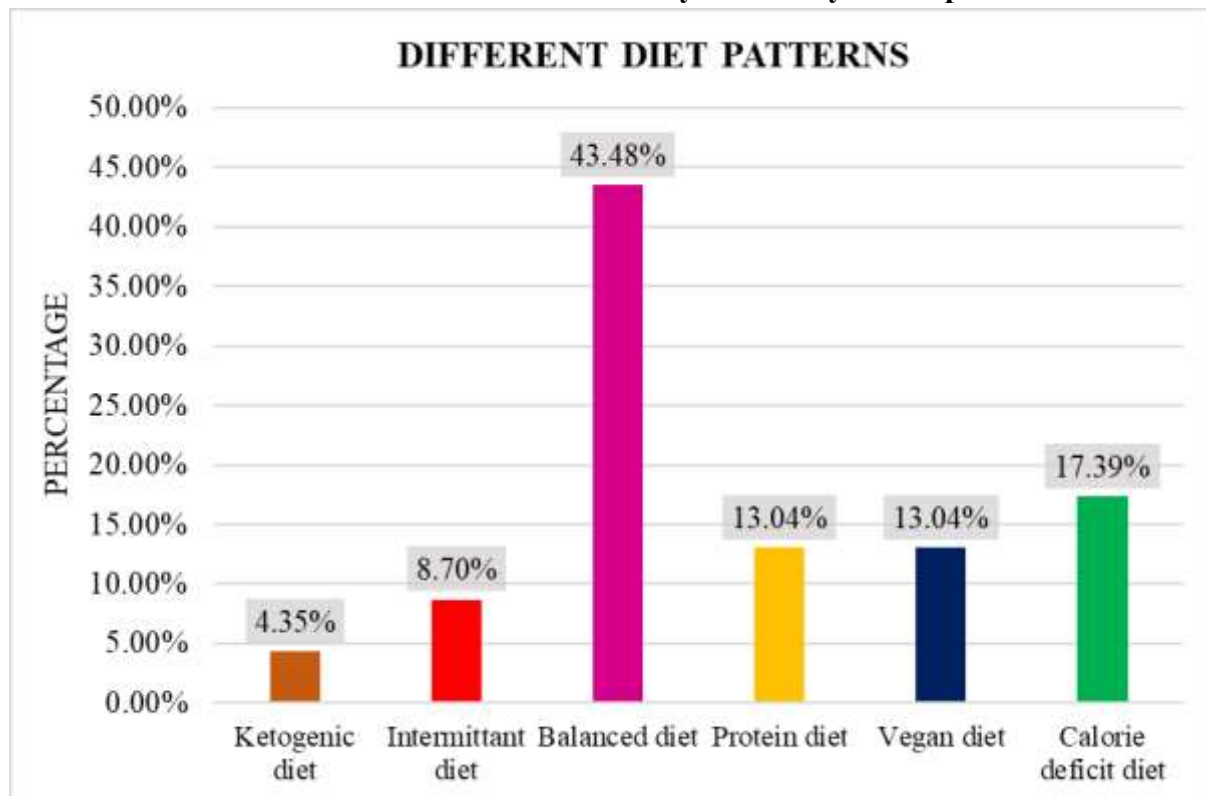
The above graph shows that out of the 500 population of the study 32.20% follows exercise, 33.20 % follows yoga and meditation, 3.8 % follows outdoor games and 30.80% follows neither physical activities.

3.7.Data On Study Participants Following Any Specific Diet.



Among the 500 participants the aforementioned pie chart shows that 95.40% of the study participants never followed a diet and 4.60% follows different kinds of diet patterns.

3.8. Distribution Of Different Diet Patterns Followed By The Study Participants.



Among the 500 participants 23 of them responded to follow a specific diet. The different diet patterns followed by the study participants were 4.35% followed Ketogenic diet, 8.70% followed Intermittent diet, 43.48% followed Balanced diet, 13.04% followed Protein diet, 13.04% followed Vegan diet and 17.39% followed Calorie deficit diet.

4. DISCUSSION:

Many people, especially teenagers and young adults, struggle with how they feel about their bodies. This often happens when there's a noticeable difference between how they wish they looked and how they actually see themselves. These negative thoughts and feelings about appearance are what we call "body image dissatisfaction." It's not just about looks—body image includes all the feelings, beliefs, and perceptions someone has about their own body.⁽¹²⁾

Feeling unhappy with one's body can affect both physical and mental health, especially during those important years of growing up. Friends, family, the media, and society as a whole all play a role in shaping how we see ourselves.

The objective of this study was to assess how widespread body image dissatisfaction is among adolescents and young adults. The study included 500 school and college students and followed a cross-sectional design. Data was collected through structured questionnaires and Google Forms.

Regarding the prevalence of body image dissatisfaction, out of 500 study participants 73.00% (365) study participants have body image dissatisfaction and remaining 27.00% (135) participants were satisfied with their body image.

BMI is a widely used method to categorize individuals based on body weight. In this study, 500 participants were grouped into four BMI categories: 31% were underweight, 53.4% had a normal weight, 12% were overweight, and 3.6% were classified as obese.

Lifestyle factors influencing study participants:

Among the 500 participants, 70.6% reported binge-watching while eating within two hours of screen time, 22.2% for 2–3 hours, and 7.2% for more than three hours⁽⁷⁾. When it came to body image, 88% were concerned about their appearance, while 12% were not. Physical activity showed a positive trend, with 69.2% engaging in activities like exercise, yoga, or outdoor games, whereas 30.8% did not participate in any.⁽⁸⁾ Only 4.6% followed specific diets such as the ketogenic or balanced diet, and the remaining 95.4% did not follow any structured dietary plan. Regarding eating habits, 87.8% ate regularly (3–4 meals a day), 7.8% had restricted intake, and 4.4% reported excessive eating.⁽⁹⁾

5. CONCLUSION:

This study shows that a large number of teenagers and young adults—about 73%—are worried about how they look. The results suggest that concerns about body image are often tied to everyday habits, like how much time people spend on screens, how active they are, and what they eat. While most young people in the study ate regular meals and got some exercise, only a small group actually followed a specific diet. The significant influence of societal, familial, and media-driven pressures on self-perception underscores the need for targeted interventions. Promoting body positivity, balanced nutrition, and healthy routines can help reduce dissatisfaction and support the overall well-being of young individuals during these formative years.

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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