

WEIGHT MANAGEMENT CONCERNS AND BODY COMPOSITION ACROSS KERALA'S EDUCATIONAL INSTITUTIONS

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Abstract

The study investigates the levels of weight concerns and Body Mass Index (BMI) among college-going women across three types of higher education institutions in Kerala—government, aided, and unaided. A total of 1,775 female students participated in the study. Weight concerns were assessed using the standardized Weight Concerns Scale (Killen et al., 1994), while BMI was calculated based on the World Health Organization (2004) guidelines. The descriptive analysis revealed that students from unaided institutions exhibited higher mean scores in both weight concerns and BMI compared to those in government and aided institutions. ANOVA results confirmed that the differences in weight concerns ($F=7.470$, $p<0.05$) and BMI ($F=6.866$, $p<0.05$) across institutional types were statistically significant. These findings suggest that institutional environments and associated sociocultural factors may influence both body image perceptions and physical health indicators among young women. The study emphasizes the need to implement targeted interventions and wellness programs within educational institutions to promote a healthier body image and lifestyle among female students.

Introduction

A major global public health problem is the rising incidence of weight-related issues among young adults. A commonly used measure of nutritional status, body mass index (BMI), is essential for determining whether a population is underweight, overweight, or obese, particularly in young people who are transitioning into lifelong lifestyle habits. Higher education institutions in India, especially in the state of Kerala, are important places to study health behaviours and body weight trends since they house a broad sociocultural and economic student body.

College students are particularly susceptible to adopting unhealthy eating habits, leading sedentary lives, experiencing academic stress, and being exposed to changing beauty standards, all of which can affect how they perceive their bodies and how they behave in terms of their health. Their decision-making independence grows as they go from youth to adulthood, frequently bringing with it lifestyle adjustments that could put them at risk for unhealthy weight gain or anxiety related to weight. According to studies, students' access to health services, awareness campaigns, peer pressure, and academic pressure may be indirectly impacted by their type of institution—private, government, or assisted—which may then have an impact on their eating habits and self-perception of body image.

Kerala provides a distinctive setting for examining these topics because of its strong educational system and high literacy rates. Nevertheless, little study has been done comparing students' weight and BMI concerns throughout the state's many higher education institutions, despite improvements in health and education. The majority of research that is currently accessible has either concentrated on gender-based or urban-rural disparities without giving enough thought to how the institutional environment influences students' health-related behaviours.

Consequently, the purpose of this study is to look into the trends in Body Mass Index and the frequency of weight-related issues among students in Kerala's public, assisted, and private higher education institutions. By examining these differences, the study hopes to advance knowledge of how institutions affect students' physical and mental health, providing insightful information that will help institutional administrators, health educators, and legislators create more focused wellness initiatives in the context of higher education.

Procedure

The study was conducted across three types institutions of Kerala: Government, Aided and Unaided, a total of 1775 college women from the colleges were surveyed. Following instruments were used for the survey.

Weight Concerns Scale (Killenet al., 1994)

Weight Concerns scale (WCS) estimating concern with weight associated with body image in women. The WCS is one-dimensional instruments consist of five items answered using a 7-point Likert scale, that assesses fear of weight gain, worry about weight, diet history and

perceived fatness. WCS consists of five questions. For question's 1, 2 and 5 consist of five choices of answer and for the question's 3 and 4 contains 7 and 4 choices of answer respectively. The total score ranges from 0-100. The scores 52 and above indicates an increased risk of developing an eating disorder within 4 years for adolescent girls.

Body Mass Index (W.H.O, 2004)

Body Mass Index (BMI) is a valid indicator for finding out whether the body weight of an individual is appropriate for the height. BMI is calculated by finding the ratio of weight to height measured in kilograms/metres². Measured height and weight values are calculated to categorize weight status according to Body Mass Index. The score is classified as underweight, normal and overweight if BMI lesser than 18.5, BMI between 18.5-24.9 and BMI greater than 25 respectively.

Analysis and results

Table.1

Descriptive statistics of weight concern and BMI on type of institutions

Dependent variable	Demographic variable	Category	Mean	Std. Deviation	N
Weight concerns	Institution	Government	25.395	19.015	630
		Aided	26.882	20.405	604
		Unaided	29.786	19.455	541
		Total	27.354	19.62	1775
BMI	Institution	Government	19.72	2.762	630
		Aided	19.97	2.917	604
		Unaided	20.36	3.124	541
		Total	20.00	2.938	1775

Table 1 presents the descriptive statistics for the dependent variables weight concerns and BMI across the three types of institutions of Kerala. The mean score for weight

concerns was 27.354 with a standard deviation of 19.62, indicating moderate variation in weight concerns. For BMI, the overall mean score was 20.00 (SD = 2.938).

Table 2 ANOVA on weight concerns and BMI with Institution

Source	Demographic variable	Type III Sum of squares	df	Mean square	F	Sig. (P-value)
Weight concerns	Institution	5673.792	2	2836.896	7.470	.001*
BMI	Institution	117.815	2	58.907	6.866	.001*

* Significant at .05 level

The ANOVA result on Table 2 reveals that, the dependent variable weight concerns is statistically significant differences with institution ($F=7.470$, $p<0.05$) and BMI class ($F=6.866$, $p<0.05$). Estimated marginal means on mean score of weight concerns and BMI among institutions were presented in figure 1&2

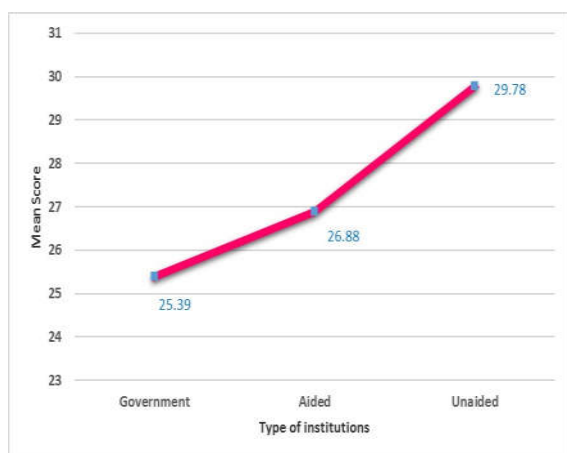


Figure.1

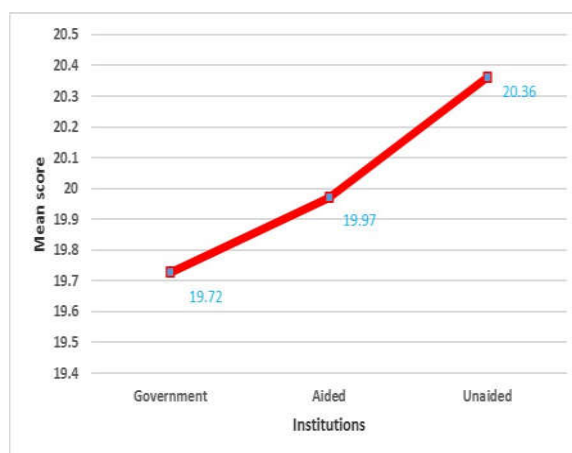


Figure.2

Conclusion

The current study investigated the body mass index (BMI) and weight worries of college-bound women in Kerala's three categories of higher education institutions: government, assisted, and unaided. The study examined a sizable sample size of 1,775 participants using standardized instruments such the Body Mass Index classification

(WHO, 2004) and the Weight Concerns Scale (Killen et al., 1994), improving the findings' representativeness and reliability.

The findings showed that there were notable variations in BMI and weight concerns throughout institutional types. Compared to their counterparts at government and assisted institutions, women enrolled in unaided institutions showed higher mean weight concern scores. Likewise, there was an increase in BMI levels from government to private institutions. These differences were statistically significant ($p < 0.05$) for both weight concerns and BMI, according to the ANOVA results.

These results imply that young women's opinions of their bodies and actual weight status may be influenced by institutional setting. Women in unassisted institutions are more likely to be concerned about their weight, which could indicate increased social pressures or environmental variables pertaining to ideals of fitness and appearance. Additionally, even though the BMI variations fall within the normal range, they suggest possible food and lifestyle variations caused by socioeconomic backgrounds and institutional environments.

Overall, this study underscores the importance of addressing body image issues and promoting healthy lifestyle practices among female college students, particularly in contexts where academic and social pressures may amplify concerns related to appearance and body weight. Institutional policies and student wellness programs should be inclusive of psychological and physical health interventions to foster balanced and informed perspectives on body image and nutrition among young women.

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