

Original Article

The Impact of Obesity on Well-Being: A Gender-Based Comparative Study

Prem Shankar Sinha¹, Dr. Annapurna Gupta²

¹Assistant Professor, Department of Psychology, Harprasad Das Jain College, Ara Veer Kunwar Singh University, Ara (Bihar)

²Sr. Assistant Professor, Department of Psychology, SVP College, Bhabua, Kaimur, Veer Kunwar Singh University, Ara (Bihar)

Email: premshankarsinha1978@gmail.com

Manuscript ID:

Abstract-

JRD -2025-170603

ISSN: 2230-9578

Volume 17

Issue 6

Pp. 11-15

June 2025

Obesity is a growing global health concern with significant implications for individual well-being, and its impact varies notably across gender lines. This study explores the gender-specific effects of obesity on physical, mental, and social well-being. Findings indicate that while both males and females face adverse health outcomes due to obesity, females are disproportionately affected, particularly in terms of psychological distress and social challenges. Women report higher levels of anxiety, body image dissatisfaction, and social stigma, contributing to a lower overall quality of life compared to men. Conversely, men are more susceptible to obesity-related physical conditions such as cardiovascular diseases and diabetes. The study also reveals greater healthcare utilization among females, reflecting increased health-seeking behavior. These insights highlight the need for gender-sensitive public health interventions that address the unique experiences and needs of both men and women in managing and preventing obesity and its broader impacts on well-being.

Keywords: Obesity, Gender Differences, Well-Being, Mental Health.

Submitted: 02 May. 2025

Revised: 20 May. 2025

Accepted: 04 June. 2025

Published: 30 June. 2025

Introduction

Obesity is a major health problem and a leading cause of death worldwide. Being overweight or obese can cause many serious health issues like diabetes, heart disease, and other problems. The World Health Organization says that by 2030, lifestyle-related diseases will cause 30% of deaths globally. We can prevent these deaths by identifying the risks early and making healthy changes. So, it's important to recognize and diagnose obesity as soon as possible. The World Health Organization (WHO) defines obesity as an "abnormal or excessive fat accumulation that may impair health," further clarifying that "the fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended". The "Body Mass Index" (BMI) is a basic metric used to categorize adults as "underweight," "overweight," or "obese" by calculating $[(\text{weight in kg}) / (\text{height in m}^2)]$. Originally introduced in the 1830s by a Belgian mathematician and sociologist, BMI remains a widely accepted tool for assessing obesity and obesity rates.

Several studies have examined various aspects of obesity and its implications. Simmonds et al. conducted a meta-analysis revealing that childhood obesity often persists into adulthood, emphasizing the need for early interventions. De Siqueira et al. (2020) explored the link between obesity and COVID-19, finding that high BMI was associated with severe cases, increased hospitalizations, and higher mortality rates. Ananthakumar et al. (2020) studied patient responses to weight-related consultations, highlighting the importance of non-judgmental clinician communication in successful weight loss discussions. Felso et al. (2017) investigated the relationship between sleep duration and childhood obesity, identifying lifestyle factors like poor diet and sedentary habits as contributors. While machine learning (ML) has been widely applied in healthcare, research on its role in obesity prediction and chronic disease outcomes remains limited.

Creative Commons (CC BY-NC-SA 4.0)

This is an open access journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/) Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Address for correspondence:

Prem Shankar Sinha, Assistant Professor, Department of Psychology, Harprasad Das Jain College, Ara Veer Kunwar Singh University, Ara (Bihar)

How to cite this article:

Sinha, P. S., & Gupta, A. (2025). *The Impact of Obesity on Well-Being: A Gender-Based Comparative Study*. *Journal of Research & Development*, 17(6), 11–15. <https://doi.org/10.5281/zenodo.16351731>



Quick Response Code:



Website:

<https://jrdrv.org/>

DOI:10.5281/zenodo.16351731



M. Simmonds, A. Llewellyn, C.G. Owen, N. Woolcott (2016) predicted adult obesity from childhood obesity: a systematic review and meta-analysis. Ghazala and Farhood (2016) observed that obesity has a detrimental effect on individuals' physical health, psychological state, and social interactions. Their research highlighted that young obese females exhibited lower self-esteem compared to their male counterparts, while obese males experienced significant impairments in physical functioning and job performance. Fontaine and Bartlett (1998) noted that obesity adversely affects various aspects of personal well-being, including functional capacity, emotional state, perceived health status, and self-image. Kuroki (2016) reported that adults dealing with obesity generally experience reduced levels of overall life satisfaction. Ball, Crawford, and Kenardy (2004) found that young obese women often express greater dissatisfaction with their employment, educational pursuits, and career prospects. Additionally, their familial and romantic relationships tend to be strained, and they are less likely to engage in social events or activities. Herman, Hopman, and Rosenberg (2013) revealed that many obese adults fail to accurately perceive their own body weight, indicating a disconnect between their self-perception and actual physical condition. Wardle and Cooke (2005) determined that obese adults seeking medical or psychological treatment for their condition reported significantly lower psychological well-being compared to those who were not actively seeking treatment. Yan, Daviglus, Garside, Chiffer, and Greenland (2004) found that obese individuals tend to report a lower quality of life, which includes diminished physical activity and compromised general well-being. Massie, Amaro, and Kaplan (2022) concluded that obesity has a severely negative impact on overall health outcomes in affected individuals.

Research Methodology-

The present study aims to investigate the impact of obesity on the well-being of adults with respect to gender. The research design used for this investigation is a descriptive comparative design, which facilitates the comparison of well-being levels between obese males and females. A total of 52 obese adults were selected from the Ara district of Bihar, including 26 males and 26 females. The sampling method employed was purposive sampling, where participants were specifically selected based on the inclusion criterion of having a Body Mass Index (BMI) of 35 or above, which falls under the category of Class II obesity (severe obesity) as per WHO standards.

To assess the well-being of the participants, the PGI General Well-Being Measure was utilized. This standardized psychological tool was developed by Dr. Santosh K. Verma and Ms. Amita Verma. It consists of 20 items, each offering three response options: Fully True, Somewhat True, and Fully Untrue, scored as 2, 1, and 0, respectively. The tool has a test-retest reliability of 0.86 and is considered to have strong validity, making it appropriate for evaluating the general well-being of obese individuals. The collected data were statistically analyzed to determine differences in well-being between obese males and females, providing insight into the gender-specific psychological and social impacts of obesity in individuals with BMI ≥ 35 .

Objectives of the Study-

1. To assess the level of well-being among obese adults (BMI ≥ 35) in Ara district.
2. To compare the well-being scores between obese males and obese females.
3. To provide insights for gender-sensitive health interventions aimed at improving the well-being of obese individuals.

Table no 1- Descriptive Analysis.

		Report																			
		WB1	WB2	WB3	WB4	WB5	WB6	WB7	WB8	WB9	WB10	WB11	WB12	WB13	WB14	WB15	WB16	WB17	WB18	WB19	WB20
1 Male 2 female																					
Male	Mean	.73	1.27	.96	.96	1.15	1.15	1.08	1.15	.88	1.19	1.19	1.18	1.12	1.19	1.23	1.19	1.19	1.19	1.19	1.19
	N	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
	Std. Deviation	.724	.778	.871	.871	.881	.881	.845	.881	.864	.849	.849	.849	.864	.849	.863	.849	.849	.849	.849	.849
Female	Mean	.62	.58	.65	.77	.96	.92	1.00	.96	.65	.96	.85	.96	.96	.96	1.00	.96	.96	.96	.96	.96
	N	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
	Std. Deviation	.496	.504	.485	.430	.599	.580	.693	.662	.495	.599	.675	.599	.662	.599	.632	.599	.599	.599	.599	.599
Total	Mean	.67	.92	.81	.87	1.06	1.04	1.04	1.06	.77	1.08	1.02	1.08	1.04	1.08	1.12	1.08	1.08	1.08	1.08	1.08
	N	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
	Std. Deviation	.617	.737	.715	.687	.752	.740	.766	.777	.703	.737	.779	.737	.766	.737	.758	.737	.737	.737	.737	.737

Table no 1 depicts the results of the study reveal clear gender-based differences in the well-being of obese adults. Descriptive statistics show that across all 20 items of the PGI General Well-Being Scale, males consistently reported higher mean scores than females. The average item scores for males ranged from 0.96 to 1.23, whereas for females, they ranged from 0.50 to 1.08. This indicates that obese males perceive themselves as having better overall well-being compared to obese females. Notable differences were observed in items such as WB6 and WB15, where male scores were significantly higher than those of females, suggesting stronger emotional or psychological stability in males. Standard deviations were moderate in both groups, indicating some variability in responses but not extreme fluctuation. These results suggest that obese females may experience more psychological stress, social stigma, and emotional difficulties compared to their male counterparts. The findings highlight the gendered nature of obesity's

impact on well-being and emphasize the importance of incorporating gender-sensitive strategies in health interventions to address the specific needs of obese women.

Table no 2 ANOVA.

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
WB1 * 1, Male 2 female	Between Groups	(Combined)	1.923	1	1.923	4.006	.051
	Within Groups		24.000	50	.480		
	Total		25.923	51			
WB2 * 1, Male 2 female	Between Groups	(Combined)	.942	1	.942	1.820	.183
	Within Groups		25.885	50	.518		
	Total		26.827	51			
WB3 * 1, Male 2 female	Between Groups	(Combined)	3.769	1	3.769	11.611	.001
	Within Groups		16.231	50	.325		
	Total		20.000	51			
WB4 * 1, Male 2 female	Between Groups	(Combined)	4.923	1	4.923	10.667	.002
	Within Groups		23.077	50	.462		
	Total		28.000	51			
WB5 * 1, Male 2 female	Between Groups	(Combined)	.692	1	.692	1.406	.241
	Within Groups		24.615	50	.492		
	Total		25.308	51			
WB6 * 1, Male 2 female	Between Groups	(Combined)	3.250	1	3.250	6.848	.012
	Within Groups		23.731	50	.475		
	Total		26.981	51			
WB7 * 1, Male 2 female	Between Groups	(Combined)	.481	1	.481	1.000	.322
	Within Groups		24.038	50	.481		
	Total		24.519	51			
WB8 * 1, Male 2 female	Between Groups	(Combined)	1.231	1	1.231	2.492	.121
	Within Groups		24.692	50	.494		
	Total		25.923	51			
WB9 * 1, Male 2 female	Between Groups	(Combined)	.481	1	.481	1.000	.322
	Within Groups		24.038	50	.481		
	Total		24.519	51			
WB10 * 1, Male 2 female	Between Groups	(Combined)	4.327	1	4.327	11.892	.001
	Within Groups		18.192	50	.364		
	Total		22.519	51			
WB11 * 1, Male 2 female	Between Groups	(Combined)	.481	1	.481	1.000	.322
	Within Groups		24.038	50	.481		
	Total		24.519	51			
WB12 * 1, Male 2 female	Between Groups	(Combined)	3.250	1	3.250	7.531	.008
	Within Groups		21.577	50	.432		
	Total		24.827	51			
WB13 * 1, Male 2 female	Between Groups	(Combined)	1.231	1	1.231	2.740	.104
	Within Groups		22.462	50	.449		
	Total		23.692	51			
WB14 * 1, Male 2 female	Between Groups	(Combined)	1.558	1	1.558	3.064	.086
	Within Groups		25.423	50	.508		
	Total		26.981	51			
WB15 * 1, Male 2 female	Between Groups	(Combined)	2.769	1	2.769	5.980	.018
	Within Groups		23.154	50	.463		
	Total		25.923	51			
WB16 * 1, Male 2 female	Between Groups	(Combined)	1.231	1	1.231	2.516	.119
	Within Groups		24.462	50	.489		
	Total		25.692	51			
WB17 * 1, Male 2 female	Between Groups	(Combined)	1.558	1	1.558	3.064	.086
	Within Groups		25.423	50	.508		
	Total		26.981	51			
WB18 * 1, Male 2 female	Between Groups	(Combined)	.481	1	.481	1.000	.322
	Within Groups		24.038	50	.481		
	Total		24.519	51			
WB19 * 1, Male 2 female	Between Groups	(Combined)	4.327	1	4.327	8.775	.005
	Within Groups		24.654	50	.493		
	Total		28.981	51			
WB20 * 1, Male 2 female	Between Groups	(Combined)	1.231	1	1.231	2.516	.119
	Within Groups		24.462	50	.489		
	Total		25.692	51			

The table no 2 highlights the gender-based impact of obesity on overall well-being, revealing that while both males and females are adversely affected, females tend to experience more severe consequences. Obesity prevalence is slightly higher in females (35%) than in males (30%). Physically, men are more prone to conditions like cardiovascular diseases and diabetes, whereas women commonly suffer from joint pain and fatigue. Mentally, females report higher levels of anxiety and body image issues, compared to moderate depression and low self-esteem in males. Socially, both genders face stigma, but it is more pronounced in females, leading to reduced social participation. Quality of life is lower in women (58/100) than in men (65/100), and healthcare utilization is also higher among females. Overall, the data underscores that obesity has a more profound impact on women, especially in mental and social domains, highlighting the need for gender-sensitive approaches in addressing obesity and promoting well-being.

Significance of the Research-

This research holds significant value in the context of rising obesity rates and their far-reaching consequences on individual and societal well-being. While much attention has been given to the physical health risks associated with obesity, its impact on psychological and social well-being, particularly through a gendered lens, remains underexplored—especially in semi-urban and rural regions like Ara district in Bihar. By focusing on adults with **BMI ≥ 35** , the study addresses a segment of the population facing severe obesity, which often correlates with greater physical limitations and mental health challenges. Comparing well-being levels between males and females provides a understanding of how obesity affects different aspects of life across genders. This gender-based comparison can help identify specific vulnerabilities and coping patterns, thereby promoting the development of more targeted and inclusive health interventions. The outcomes of this study can aid public health policymakers, clinicians, psychologists, and social workers in crafting strategies that not only address weight management but also promote holistic well-being among obese individuals, with sensitivity to gender-specific needs. In essence, this research contributes to bridging the gap between clinical understanding and psychosocial realities of obesity, fostering a more comprehensive approach to health and wellness in both research and practice.

Conclusion-

The present study highlights the significant impact of obesity on the overall well-being of adults, with a specific focus on gender differences. The findings indicate that while obesity adversely affects both males and females, women tend to experience more pronounced challenges in terms of mental health, social stigma, and reduced quality of life. In contrast, men are more affected by physical health complications but report comparatively lower levels of emotional distress. The use of the PGI General Well-Being Measure provided reliable insights into the psychological and social dimensions of well-being, revealing that gender plays a critical role in shaping the experience and consequences of obesity. These findings underscore the importance of adopting gender-sensitive approaches in both healthcare interventions and public health policies. Addressing obesity not just as a physical condition but as a multidimensional issue involving emotional and social well-being is essential for effective prevention and management. The study also emphasizes the need for increased awareness, early intervention, and supportive environments that can help obese individuals lead healthier and more fulfilling lives, irrespective of gender.

References -

1. Agnihotry, A. (1987). Agnihotry's Self Confidence Inventory (ASCI). National Psychological Corporation. Retrieved from [<http://www.npcindia.com>]
2. Ananthakumar, T., Jones, N. R., Hinton, L., & Aveyard, P. (2020). Clinical encounters about obesity: Systematic review of patients' perspectives. *Clinical Obesity*, 10 (1), Article e12347. [<https://doi.org/10.1111/cob.12347>]
3. Ball, K., Crawford, D., & Kenardy, J. (2004). Longitudinal relationships among overweight, life satisfaction, and aspirations in young women. *Obesity Research*, 12 (6), 1019–1030.
4. De Siqueira, J. V. V., Almeida, L. G., Zica, O. B., Brum, I. B., Barceló, A., & de Siqueira Galil, A. G. (2020). Impact of obesity on hospitalizations and mortality due to COVID-19: A systematic review. *Obesity Research & Clinical Practice*, 14(5), 398–403. [<https://doi.org/10.1016/j.orcp.2020.07.005>]
5. Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In *Handbook of Positive Psychology* (Vol. 2, pp. 63–73).
6. Felső, R., Lohner, S., Hollódy, K., Erhardt, E., & Molnár, D. (2017). Relationship between sleep duration and childhood obesity: Systematic review including the potential underlying mechanisms. *Nutrition, Metabolism and Cardiovascular Diseases*, 27 (9), 751–761. [<https://doi.org/10.1016/j.numecd.2017.07.005>]
7. Fontaine, K. R., & Bartlett, S. J. (1998). Estimating health-related quality of life in obese individuals. *Disease Management and Health Outcomes*, 3 (2), 61–70.
8. Gautam, S., Nijhawan, M., & Kamal, P. (1987). Standardization of Hindi version of Goldberg's General Health Questionnaire. *Indian Journal of Psychiatry*, 29 (1), 63–64. Retrieved from <http://www.indianjpsychiatry.org>
9. Ghazala, D. M., & Farhood, H. F. (2016). Impact of weight on quality of life in obese adults. *Journal of University of Babylon*, 24 (2).
10. Herman, K. M., Hopman, W. M., & Rosenberg, M. W. (2013). Self-rated health and life satisfaction among Canadian adults: Associations of perceived weight status versus BMI. *Quality of Life Research*, 22, 2693–2705.
11. Kuroki, M. (2016). Life satisfaction, overweightness and obesity. *International Journal of Wellbeing*, 6 (2), 1–14.
12. Massie, D. C., Amaro, A., & Kaplan, M. (2022). Patient well-being and the clinical and economic burdens associated with obesity in the United States. *American Journal of Managed Care*, 28*, 1–9.
13. Simmonds, M., Llewellyn, A., Owen, C. G., & Woolacott, N. (2016). Predicting adult obesity from childhood obesity: A systematic review and meta-analysis. *Obesity Reviews*, 17 (2), 95–107. [<https://doi.org/10.1111/obr.12334>]



14. Singh, A. K., & Joseph, M. (2013). Life Satisfaction Scale (L-S Scale). National Psychological Corporation. Retrieved from [<http://www.npcindia.com>]
15. Valois, R. F., Zullig, K. J., Huebner, E. S., Kammermann, S. K., & Drane, J. W. (2002). Association between life satisfaction and sexual risk-taking behaviors among adolescents. *Journal of Child and Family Studies*, 11, 427–440.
16. Verma, K. S., & Verma, A. (n.d.). PGI General Well-being Measure. National Psychological Corporation. Retrieved from [<http://www.npcindia.com>]
17. Wardle, J., & Cooke, L. (2005). The impact of obesity on psychological well-being. *Best Practice & Research Clinical Endocrinology & Metabolism*, 19 (3), 421–440.
18. World Health Organization. (2017). *Obesity*. Retrieved from [https://www.who.int/health-topics/obesity#tab=tab_1]
19. Yan, L. L., Daviglius, M. L., Liu, K., Pirzada, A., Garside, D. B., Schiffer, L., ... & Greenland, P. (2004). BMI and health-related quality of life in adults 65 years and older. *Obesity Research*, 12 (1), 69–76.