

# Mental Health Disparities among Rural and Urban High School Adolescent Girls: A Comparative Analysis

Shahdeen Tabassum<sup>1\*</sup>, Dr. Syed Md. Bakhteyar Fatmi<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Psychology, Patliputra University, Patna Bihar-800020, Bihar India

<sup>2</sup>Associate Professor, Department of Psychology, Oriental College, Patna City (Bihar), Patliputra University, Patna

\*Corresponding author: Shahdeen Tabassum

---

## ABSTRACT

Mental health disparities between rural and urban populations have been widely documented, yet limited research focuses specifically on high school adolescent girls. This demographic is particularly vulnerable to mental health issues due to the unique challenges they face during this developmental stage. This study aims to compare the mental health status of rural and urban high school adolescent girls. The sample comprised 100 school-going adolescent girls, with 50 from rural areas and 50 from urban areas, aged 13-18 years. Students were selected through purposive sampling from various schools in the rural and urban areas of the Patna district in Bihar. The study employed scales, including a socio-demographic data sheet and the Mental Health Battery (MHB) developed by Dr. Arun Kumar Singh & Alpana Sengupta in 1987. Statistical analysis, including descriptive statistics and inferential tests such as t-tests, was used to assess the differences. Results revealed a statistically significant difference in mental health between the two groups, with urban girls exhibiting better mental health status compared to rural high school adolescent girls.

**Keywords:** Mental Health, Adolescent girls, Rural and Urban area.

---

## INTRODUCTION

Mental health is a crucial aspect of overall well-being and plays a vital role in an individual's ability to function effectively in daily life. Mental health outcomes are influenced by various factors, including social, environmental, cultural, and economic conditions. These factors often vary significantly between rural and urban populations, contributing to distinct challenges and disparities in mental health outcomes. Urban areas typically offer better access to healthcare resources, including specialized mental health services, along with higher socio-economic status and educational opportunities. In contrast, rural areas often suffer from barriers to healthcare access, limited mental health services, and greater social isolation, all of which can exacerbate mental health issues and lead to poorer outcomes (Coombs, N. C. 2022; Stone et al., 2022). The disparities between rural and urban populations are significant, especially since mental health conditions such as anxiety, depression, and stress are among the leading causes of disability globally. A better understanding of how rural and urban environments influence mental health can provide valuable insights into why certain populations may experience better or worse mental health outcomes, thereby guiding the development of targeted interventions and policies (Kuehner, C. 2017)

Urban environments are typically characterized by high population density, better infrastructure, and greater economic opportunities. These factors help facilitate access to healthcare services, including mental health care. Urban areas tend to have a higher concentration of healthcare professionals, mental health specialists, and support services such as counseling centers, all of which are crucial for early intervention and treatment of mental health issues (Shi, 2019). The accessibility of these services is a key determinant of mental health outcomes. Urban populations are often at an advantage due to the availability of these resources, contributing to better overall mental health. In contrast, rural areas face substantial challenges in healthcare provision, particularly mental health care. A shortage of trained mental health professionals, such as psychologists, psychiatrists, and counselors, is one of the primary barriers to effective mental health care in rural areas (Ikwuka, U., 2021)). Additionally, rural areas often have fewer mental health facilities, making it difficult for individuals to access timely and effective treatment. The absence of specialized mental health services can lead to delays in care and inadequate treatment, further complicating mental health conditions. Furthermore, logistical challenges such as transportation, financial constraints, and the lack of local healthcare resources exacerbate the difficulties faced by rural populations in seeking mental health care, thus increasing the burden of untreated mental health issues (Pescosolido et al., 2013).

Socio-economic status (SES) plays a critical role in influencing mental health outcomes. Urban populations typically have access to better employment opportunities, higher income levels, and improved living conditions, all of which collectively contribute to better mental health outcomes. Studies have shown that individuals with higher SES are more likely to report better mental health outcomes due to financial stability and the resources necessary to manage stress and access care when needed (Link & Phelan, 1995). Furthermore, higher levels of education, which are more common in urban areas, can promote greater awareness of mental health issues and enhance coping mechanisms, further supporting positive mental health outcomes. Conversely, rural populations tend to have lower SES, which is associated with higher risks of mental health challenges. Economic hardship, lower educational attainment, and limited access to quality housing and healthcare are common stressors in rural communities, which contribute to increased feelings of anxiety, depression, and social isolation (Gore et al., 2011). Financial insecurity, often more prevalent in rural areas, further prevents individuals from seeking mental health care, as they may lack the necessary resources or health insurance to access specialized services. These socio-economic disparities further underline the challenges faced by rural populations in managing their mental health effectively.

Stigma surrounding mental health issues is more pronounced in rural areas and can significantly hinder individuals' willingness to seek help. Mental health problems in rural settings are often subject to greater social stigma, with individuals fearing judgment or discrimination from their communities (Clement et al., 2015). This stigma can deter individuals from accessing professional help, causing mental health issues to be downplayed, ignored, or suppressed. In rural areas, mental health is often considered a taboo subject, making it difficult for individuals to openly discuss their struggles or seek emotional support from family and peers. The lack of social support and community resources can exacerbate mental health conditions and contribute to feelings of isolation and hopelessness. On the other hand, urban areas tend to have more open attitudes toward mental health. Urban environments benefit from greater mental health awareness through awareness campaigns, community-based programs, and educational initiatives aimed at reducing stigma. These efforts create an environment where individuals are more likely to seek help without fear of judgment. Furthermore, urban areas often have more access to mental health professionals and advocates who work to promote mental health awareness and reduce the stigma associated with seeking help (Biddle et al., 2004).

### METHODOLOGY

**Sample and Sampling Technique** The study included 100 school-going adolescent girls aged 13-18 years, with 50 participants each from rural and urban areas of the Patna district in Bihar. Purposive sampling was employed to ensure the selection of participants from diverse socio-economic and educational backgrounds.

### TOOLS USED

**Socio-Demographic Data Sheet:** This tool captured relevant demographic details, including age, gender, education socio-economic status and background.

**Mental Health Battery (MHB):** Developed by Dr. Arun Kumar Singh and Alpana Sengupta in 1987, this validated tool assesses various dimensions of mental health, including emotional stability, overall adjustment, and social competence (Singh & Sengupta, 1987).

**Procedure:** Informed consent was secured from participants and their guardians. Data collection involved administering the socio-demographic sheet and the MHB in a structured manner within the school premises. Efforts were made to maintain a comfortable and confidential environment for participants.

**Data Analysis:** Data were analyzed using SPSS software. Descriptive statistics summarized the demographic characteristics, while independent t-tests evaluated differences in mental health scores between rural and urban groups.

**Table 1: Socio-Demographic Characteristics of School-Going Adolescent Girls (Rural and Urban)**

Variables	Number	Percentage
<b>Age</b>	13	77
	14	23
<b>Gender</b>	Female	100
<b>Education</b>	8	77
	9	23
<b>SES</b>	Middle	100
<b>Background</b>	Rural	50
	Urban	50

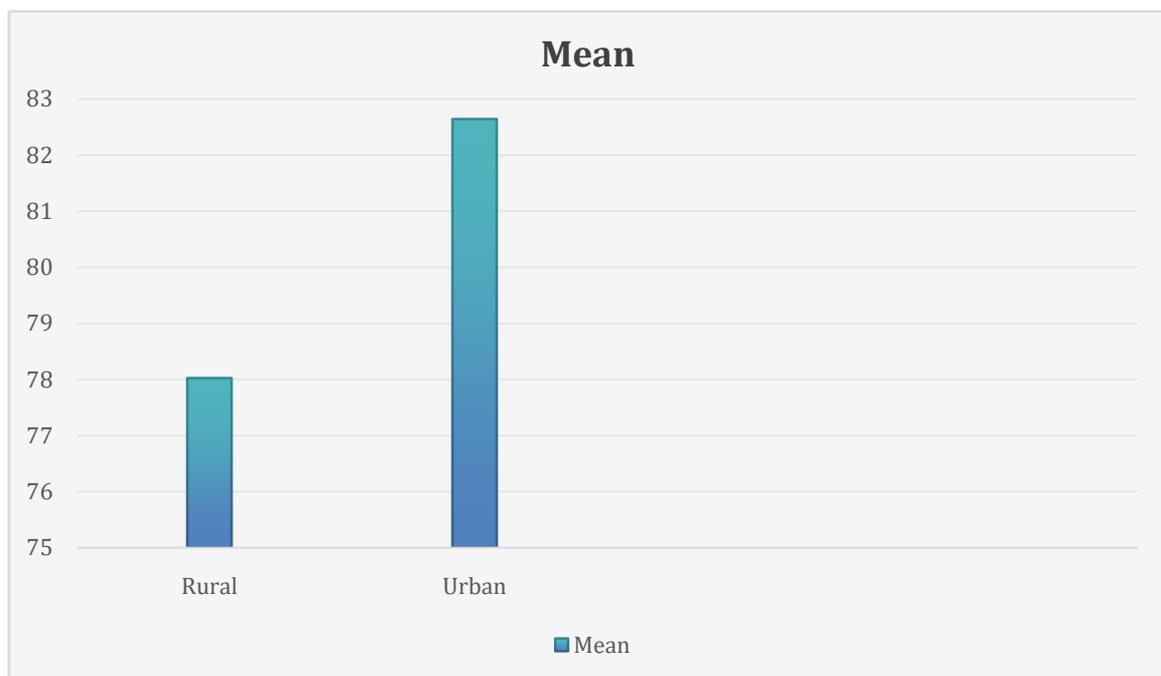
The socio-demographic details of the participants reveal that the majority were 13 years old (77 participants, 77%), while the remaining were 14 years old (23 participants, 23%). All participants were female (100%, 100 participants), and most were in the 8th grade (77 participants, 77%), with the rest in the 9th grade (23 participants, 23%). All participants belonged to the middle socioeconomic class (100%, 100 participants). The sample was evenly divided between rural and urban backgrounds, with 50 participants (50%) from each group.

**Table 2: Comparative Analysis of Mental Health Battery (MHB) Among Rural and Urban School-Going Adolescent Girls**

Variables		Mean	SD	t (df=98)	p
Background	Rural	78.02	9.59	2.932	.005**
	Urban	82.64	5.67		

\*\* Significant at  $p < 0.005$

The table presents the difference in Mental Health Battery (MHB) scores between rural and urban backgrounds. The rural group had a mean score of 78.02 with a standard deviation (SD) of 9.59, while the urban group had a higher mean score of 82.64 with an SD of 5.67. A t-test analysis with 98 degrees of freedom (df) yielded a t-value of 2.932 and a p-value of 0.005, which is significant at the  $p < 0.005$  level. This indicates that individuals from urban backgrounds scored significantly higher on the Mental Health Battery compared to those from rural backgrounds.



**Figure 1: Comparative Analysis of Mental Health Battery (MHB) Among Rural and Urban School-Going Adolescent Girls**

The graphical representation (Figure 1) illustrates the comparison of mental health between rural and urban school-going adolescent girls. It clearly shows that urban girls have higher mental health scores compared to their rural counterparts.

**Interpretation of Results**

The findings reveal a significant difference in mental health outcomes between individuals from rural and urban backgrounds. Participants from urban areas scored higher on the Mental Health Battery, indicating better mental health compared to those from rural areas. Additionally, the scores of urban participants were more consistent, while the rural group showed greater variability.

This difference is statistically significant, suggesting that it is not due to random chance. The higher mental health scores in urban areas could be attributed to better access to mental health services, increased exposure to awareness programs, higher education levels, improved socio-economic conditions, and more readily available coping resources.

In contrast, rural areas may face challenges such as limited healthcare access, lower socio-economic status, and fewer opportunities for mental health education and support, which could negatively impact mental health outcomes.

## DISCUSSION

This study aimed to explore the differences in mental health outcomes between individuals from rural and urban backgrounds using the Mental Health Battery (MHB). The findings revealed a significant difference in mental health scores, with urban individuals showing higher scores compared to their rural counterparts. This result aligns with several studies suggesting that urban areas often provide better access to mental health resources, greater socio-economic stability, and higher educational attainment, all of which positively influence mental health outcomes (Rc, K., 2003). Other researchers have suggested that urban areas typically offer more readily accessible healthcare and mental health services, which can result in better mental health outcomes. Urban environments tend to have a higher concentration of healthcare facilities, mental health professionals, and specialized services, directly linked to improved mental well-being (Lund et al., 2010; Patel et al., 2018). Additionally, urban populations are generally exposed to mental health awareness programs, community initiatives, and enhanced social services, all of which support mental health (Evans-Lacko et al., 2014; Jorm, 2012). She, X., Zhao, D., and Li, M. (2022) noted that rural adolescents in their sample were at higher risk of experiencing troubles due to drinking, loneliness, insomnia, hopelessness, poor social support, lack of parental understanding, injuries, and absenteeism. Interestingly, they found that girls compared to boys had lower risks of excessive drinking, smoking, fighting, injuries, and being bullied.

Chaeroni et al. (2021) found in their research that urban adolescents generally report better mental health than their rural counterparts. This disparity is attributed to better access to healthcare and mental health services in urban areas. Urban youth benefit from higher education levels, better socio-economic conditions, and more mental health awareness programs, all contributing to improved well-being. Conversely, rural adolescents often face limited access to mental health resources, social isolation, and financial stress, negatively impacting their mental health. Additionally, the stronger stigma surrounding mental health in rural areas discourages help-seeking behavior. In contrast, rural areas are often underserved, with fewer healthcare professionals and limited access to psychological services. This disparity creates significant challenges in addressing mental health issues effectively. Research by Caldwell et al. (2004) highlights that rural areas face barriers such as long distances to healthcare facilities, shortages of mental health professionals, and higher levels of poverty and social isolation. The lack of access to timely and appropriate care can exacerbate mental health problems and contribute to the lower mental health scores observed among rural participants in this study. Furthermore, individuals in rural areas may experience delays in seeking care due to these limitations, which can result in the escalation of mental health issues.

The differences observed in mental health scores between urban and rural participants can also be attributed to socio-economic factors. Urban populations generally experience better socio-economic conditions, such as higher income levels, improved educational opportunities, and access to better housing, all of which are positively correlated with mental health (Lund et al., 2010; Patel et al., 2018). Some research reveals that higher socio-economic status enables urban individuals to access a variety of mental health resources, as well as social and environmental factors that enhance overall well-being. Education also plays a significant role in mental health—individuals with higher levels of education tend to possess better coping skills, greater mental health literacy, and improved access to health resources (World Health Organization, 2014). In contrast, rural populations often face lower socio-economic status, which creates financial insecurity and limits access to resources such as healthcare, education, and mental health services. These socio-economic stressors contribute to poorer mental health outcomes in rural populations. Research by Jenkins et al. (2008) and Caldwell et al. (2004) has demonstrated that lower income levels and higher poverty rates in rural areas are associated with various mental health issues, including anxiety, depression, and stress-related disorders. The combination of limited resources and financial instability often results in mental health challenges that are more difficult to address due to a lack of available support structures.

Research suggests that another critical factor influencing mental health outcomes in rural and urban populations is the stigma surrounding mental health issues. Stigma tends to be more prevalent in rural areas, where individuals may fear judgment or social exclusion when seeking help for mental health concerns. Studies indicate that people in rural settings are less likely to seek professional mental health care due to concerns about stigma, lack of confidentiality, and the fear of being socially ostracized (Clement et al., 2015). This fear of social repercussions often prevents individuals from discussing their mental health openly, leading to underreporting and untreated mental health conditions. In contrast, urban areas typically have more accepting attitudes toward mental health and are better equipped with mental health awareness programs and resources. Research suggests that urban environments tend to have higher levels of mental health literacy, which can reduce stigma and encourage individuals to seek care earlier (Jorm, 2012; Gulliver et al., 2010). Urban residents may feel more comfortable discussing mental health issues due to a greater acceptance of psychological health as an important aspect of overall well-being (Evans-Lacko et al., 2014). These differences in awareness and stigma likely contribute to the higher mental health scores observed among urban participants in this study, as they are more likely to access professional help and engage in mental health-promoting activities (Patel et al., 2018).

## CONCLUSION

In conclusion, the study highlights a significant difference in mental health outcomes between individuals from rural and urban backgrounds, with urban participants exhibiting better mental health scores. This difference suggests that access to resources such as healthcare, education, and mental health support plays a crucial role in shaping mental health outcomes. The findings emphasize the need for targeted mental health interventions in rural areas to address these disparities. By improving access to mental health services and resources in rural communities, it may be possible to reduce the gap in mental health outcomes between rural and urban populations.

### Limitations

The study's small sample size, cross-sectional design, and lack of control over socio-economic and healthcare factors limit its generalizability. Self-reported data may also introduce bias. Further research with larger, more diverse samples is needed.

**Conflict of Interests:** The author declared no conflict of interests.

## REFERENCES

- [1]. Biddle, L., Gunnell, D., Sharp, D., & Donovan, J. L. (2004). Factors influencing help seeking in mentally distressed young adults: a cross-sectional survey. *British Journal of General Practice*, 54(501), 248-253.
- [2]. Caldwell, T. M., Jorm, A. F., & Dear, K. B. (2004). Suicide and mental health in rural, remote and metropolitan areas in Australia. *Medical Journal of Australia*, 181, S10-S14.
- [3]. Chaeroni, A., Kusmaedi, N., Ma'mun, A., & Budiana, D. (2021). Physical Fitness and Mental Health in Urban and Rural Areas. *Malaysian Journal of Medicine & Health Sciences*, 17.
- [4]. Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological medicine*, 45(1), 11-27.
- [5]. Coombs, N. C. (2022). An investigation of rural and mental health disparities across five dimensions of healthcare access. University of Montana.
- [6]. Evans-Lacko, S., Courtin, E., Fiorillo, A., Knapp, M., Luciano, M., Park, A. L., & ROAMER Consortium. (2014). The state of the art in European research on reducing social exclusion and stigma related to mental health: a systematic mapping of the literature. *European Psychiatry*, 29(6), 381-389.
- [7]. Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., & Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: a systematic analysis. *The Lancet*, 377(9783), 2093-2102.
- [8]. Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry*, 10, 1-9.
- [9]. Ikwuka, U. (2021). Living with mental illness in a globalised world: Combating stigma and barriers to healthcare. Routledge.
- [10]. Jenkins, R., Meltzer, H., Jones, P., Brugha, T., Bebbington, P., Farrell, M., & Knapp, M. (2008). Mental health: future challenges.
- [11]. Jorm, A. F. (2012). Mental health literacy: empowering the community to take action for better mental health. *American Psychologist*, 67(3), 231-243.
- [12]. Kuehner, C. (2017). Why is depression more common among women than among men?. *The Lancet Psychiatry*, 4(2), 146-158.
- [13]. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 80-94.
- [14]. Lund, C., Breen, A., Flisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., ... & Patel, V. (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science & Medicine*, 71(3), 517-528.
- [15]. Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., ... & Unützer, J. (2018). The Lancet Commission on global mental health and sustainable development. *The lancet*, 392(10157), 1553-1598.
- [16]. Pescosolido, B. A., Medina, T. R., Martin, J. K., & Long, J. S. (2013). The “backbone” of stigma: identifying the global core of public prejudice associated with mental illness. *American Journal of Public Health*, 103(5), 853-860.
- [17]. Rc, K. (2005). Prevalence, severity, and comorbidity of 12 month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*, 62, 617-627.

- [18]. She, X., Zhao, D., & Li, M. (2022). Adolescent mental health disparities in rural Guizhou vs. urban Beijing: A comparative analysis from China. *Global Pediatrics*, 2, 100023
- [19]. Shi, J., Tang, L., Jing, L., Geng, J., Liu, R., Luo, L., & Wang, Z. (2019). Disparities in mental health care utilization among inpatients in various types of health institutions: a cross-sectional study based on EHR data in Shanghai, China. *BMC Public Health*, 19, 1-10.
- [20]. Singh, A. K., & Sengupta, A. (1987). *Mental Health Battery*. Agra: National Psychological Corporation.
- [21]. Stone, G. A., Fernandez, M., & DeSantiago, A. (2022). Rural Latino health and the built environment: a systematic review. *Ethnicity & Health*, 27(1), 1-26.
- [22]. World Health Organization. (2014). *Social determinants of mental health*. World Health Organization.