

Mental Health Outcomes Among Youth: Influence of GAD-7, Lifestyle, and Mental Health Quality in Higher Secondary and University Students

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ABSTRACT

The research paper is based on the ICSSR sponsored Research Project on Vision Viksit Bharat@2047. The study explores the awareness, practices, and quality dimensions of mental health among youth in select states of South India. The objectives include examining the demographic profile of respondents and its association with institutional category, analyzing awareness levels across selected mental health dimensions, and assessing the impact of mental health quality on youth lifestyle. A total of 25,020 respondents formed the sample, with primary data collected through a structured questionnaire and supported by secondary sources such as youth reports, NITI Aayogreports, and relevant research literature. The analysis reveals significant differences between higher secondary and undergraduate students. Intervention preferences varied, with Higher secondary institutions, while undergraduates favored counselling. Disclosure patterns also differed, with higher secondary students sharing concerns mainly with parents and undergraduates turning to friends. Stress experiences were age-sensitive, yet both groups were statistically found mental health as highly important. Chi-square results confirmed strong associations between institutional category and awareness.

The assessment of mental health quality dimensions highlighted independence as the strongest domain, reflecting students' confidence in managing academics, career choices, and hobbies. Self-image was also statistically found positively correlated, whereas emotional well-being and physical-mental wellness showed moderate challenges. Attitudinal health emerged as the weakest dimension, marked by high-risk behaviors and greater variability. Overall, the study concludes that while youth demonstrate strengths in independence and self-image, significant challenges persist in emotional regulation, wellness, and behavioral health. The findings emphasize that enhancing mental health quality of life is the most critical factor for effective interventions, while addressing anxiety and promoting healthier lifestyles are essential for sustaining positive outcomes.

Keywords: GAD-7, MHQL, SDGs, Viksit Bharat, WHO

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1. INTRODUCTION

Mental Health Literacy (MHL) is essential for early detection, intervention, and support of mental health issues, particularly among adolescents transitioning from school to university. In India, youth aged 15–29 years, who represent nearly 40% of the population (Ministry of Youth & Sports, 2022), face increasing stress in a competitive environment, making MHL a critical factor for personal and career success.

Within the vision of Viksit Bharat 2047, youth are central to national progress, and MHL interventions are crucial to addressing rising mental health challenges. This study emphasizes enhancing MHL outcomes within the framework of the National Education Policy (NEP) 2020, while aligning with SDG 3 (good health and well-being), SDG 4 (quality education), and SDG 10 (reducing inequalities) [SDGGoals, India]. The WHO also recommends integrating mental health education into curricula to strengthen psychosocial competence.

The research paper proposes a **comparative analysis of MHL interventions** in higher secondary schools and universities to evaluate their effectiveness and provide insights for policymakers, educators, and practitioners. Institutional management practices are identified as critical in shaping program outcomes, underscoring the need for context-specific strategies to realize the goals of **Viksit Bharat** (ICSI, 2024). Given that mental health services for adolescents remain scarce in many **low- and middle-income countries**, MHL interventions are an urgent priority (Morris et al., 2011). Recent scholarship also highlights the importance of embedding mental health support within education policy to strengthen resilience, especially during crises (Wiedermann et al., 2023).

This **field-based action research** aims to assess how educational settings influence MHL program implementation and outcomes, considering both student and institutional perspectives, to optimize interventions for India's youth.

2. CONCEPTUAL OVERVIEW OF MENTAL HEALTH

Mental health is a state of psychological well-being that enables individuals to manage life's challenges, realize their potential, maintain productivity, and contribute to their communities. Globally, about **970 million people** live with mental disorders, primarily anxiety and depression (WHO, *Comprehensive Mental Health Action Plan 2013–2030*). It is further defined as emotional well-being, adaptive behavior, low anxiety, and the capacity to form positive relationships while managing daily stresses (American Psychological Association, 2021).

In India, the National Mental Health Survey (2016) found that 7.3% of youth (13–17 years) experience depression. WHO estimates suggest that 50% of mental health issues begin by age 14, and 75% by age 24 (Ogorchukwu et al., 2016). Within the framework of SDG 3 (Good Health and Well-Being), Target 3.4 emphasizes reducing suicide mortality and strengthening mental health services (SDG Health India, MOHFW).

Mental Health Literacy (MHL) involves recognizing mental health disorders, understanding professional and self-help strategies, supporting others, and adopting preventive approaches. Higher MHL is linked to improved health-seeking behavior and better mental health management (Ahmad et al., 2022). However, a review of higher secondary and undergraduate curricula in select South Indian states revealed that while subjects such as *Environmental Studies*, *Human Values*, and *Professional Ethics* are taught, no specific MHL interventions are included. This underscores the urgent need for research on both the outcomes and significance of MHL programs in educational contexts.

3. MENTAL HEALTH SCENARIO IN SOUTH INDIA

The research study focuses on Andhra Pradesh, Tamil Nadu, and Karnataka, selected based on statistical evidence and emerging socio-educational trends.

First, suicide data highlights the urgency of mental health interventions. The NCRB (2022) reported that 23.1% of suicide victims were from higher secondary and above, with Tamil Nadu (19,834 cases) and Karnataka (13,606 cases) recording the highest numbers in South India. Student suicides remain a concern, with 13,089 deaths in 2021 (10.21%) and 13,044 in 2022 (9.67%) under the student category (Times of India, 2023). All five southern states reported suicide rates above 16.8%, with Kerala (28.5%) and Telangana (26.3%) at the highest levels (NCRB, 2022).

Educational indicators also shaped the sample frame. Student enrolment data show Tamil Nadu (8,997), Karnataka (5,671), and Andhra Pradesh (3,164) have the largest number of higher secondary institutions (Economic Survey, 2022–23). Similarly, university distribution is significant: Karnataka hosts 88, Tamil Nadu 57, and Andhra Pradesh 44, the highest in South India (UGC, 2023–24). Tamil Nadu also leads with 29 deemed universities, while Karnataka has the highest number of state universities (43) and Andhra Pradesh the most central universities (3) (UGC Report, Dec 2023). Finally, these states rank among the top eight in projected GSDP and per capita income (MoSPI, 2023–24), making youth mental well-being essential to sustaining their economic growth and societal progress.

Table-1.1:SuicidalDeathsamongvariousAgeGroups in India

Sl. No.	AgeGroup	Potential Group	Suicidal deathsin	Suicidal deathsin	Growth Rate	Segment wise deathsin2021	eSegment wise Deathsin2022
			2021	2022			
1.	Below18 years	EarlyAdolescence (BelowGraduateLevel)	10732	10205	-4.91	6.54	5.97
2.	18-30years	Young Adulthood(Graduate& PostGraduateLevel)	56543	59108	4.54	34.47	34.58
3.	30-45years	MiddleAdulthood	52054	54351	4.41	31.73	31.8
4.	45-60years	MiddleAge	30163	31921	5.83	18.40	18.68
5.	Above60 years	OlderAdulthood	14541	15339	5.49	8.86	8.97
	Total		164033	170924		100.00	100.00

Source: NCRB statistics on Accidental Deaths & Suicides in India, 2023

4. SIGNIFICANCE OF MENTAL HEALTH AMONG YOUTH TO ACHIEVE VISION VIKSIT BHARAT@2047

Vision Viksit Bharat@2047 marks India's roadmap to commemorate 100 years of independence by achieving sustainable national development. In the Interim Budget 2024, Finance Minister Nirmala Sitharaman outlined four priority groups to accelerate progress, while Prime Minister Narendra Modi emphasized the pivotal role of youth in driving innovation, self-reliance, and national growth through the *Voice of Youth* initiatives (Ministry of Finance, 2024). Youth are central to this vision, yet rising academic competition, exam pressures, social media influence, and institutional stressors heighten their vulnerability to mental health issues. Mental health, as a driver of productivity and resilience, is critical to achieving the goals of Viksit Bharat@2047 in alignment with the Sustainable Development Goals (SDGs) (UN, 2015).

This research contributes to the national vision through applied, evidence-based outcomes across four domains:

- 1. **Policy Support** Identifying emerging mental health challenges among youth and providing strategic, evidence-based recommendations to policymakers.
- 2. **Emerging Issues** Diagnosing root causes of stress, anxiety, and depression to design actionable interventions for students.
- 3. **Society** Disseminating findings via workshops and seminars for parents, students, educators, and administrators to strengthen awareness and collective action.
- 4. SDGs Alignment Assessing the efficacy of mental health literacy (MHL) interventions in higher secondary schools and universities and proposing new models that empower youth to progress toward SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), and SDG 10 (Reduced Inequalities) (SDG Health India, MoHFW, 2023).

Given that **Yuva Bharat** is prioritized in India's growth agenda, this study is structured to examine ground realities of youth mental health and evaluate the role of MHL interventions in strengthening resilience within educational settings.

5. MENTAL HEALTHANDWELL-BEING ANDSUSTAINABLEDEVELOPMENT GOALS

India's progress on the Sustainable Development Goals (SDGs) reached a score of 63.99/100 in 2023, improving from 62.86 in 2021 and 63.57 in 2022, yet the country ranks 109th among 166 nations (SDG Index, 2023). Despite advancements, India continues to face "major challenges remain" status for SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), and SDG 10 (Reduced Inequalities).

This research on enhancing Mental Health Literacy (MHL) among youth is directly aligned with both the SDGs and the

vision of Viksit Bharat@2047, with key contributions as follows:

- 5. Advancing SDGs MHL supports SDG 3 and SDG 4 by promoting health, well-being, and quality education (WHO, 2013; UN, 2015).
- 6. Targeted Interventions By assessing MHL programs in higher secondary schools and universities across select states, the study addresses critical gaps in youth mental health literacy (Ahmad et al., 2022).
- 7. Equity and Diversity Recognizing diverse educational environments contributes to SDG 10 (Reduced Inequalities) and fosters collaboration under SDG 17 (Partnerships for the Goals).
- 8. Evidence-Based Policy Findings will inform strategies and best practices that integrate mental health into education, aligning with Viksit Bharat's holistic development agenda (ICSI, 2024).
- 9. Youth Empowerment By engaging youth as stakeholders, the research reinforces contributions to SDG 5 (Gender Equality), SDG 11 (Sustainable Cities and Communities), and SDG 12 (Responsible Consumption and Production).

In doing so, the study bridges national priorities with global sustainable development efforts, placing youth mental health at the core of India's developmental vision.

6. REVIEW OF LITERATURE

The reviewed literature covers diverse aspects of youth mental health, focusing on psychological interventions, prevalence, determinants, stigma, literacy, and community perspectives. Research has further explored academic outcomes, digital and innovative approaches, and the specific impact of COVID-19 on youth well-being. Global perspectives highlight priorities such as stress, academic pressures, coping mechanisms, peer support, stigma reduction, gender and socioeconomic factors, as well as broader policy and systemic frameworks. Additional insights emphasize behavioral intentions, psychological resources, and lifestyle influences.

Aggarwal et al. (2020) developed *ATMAN*, a culturally tailored intervention for Indian youth engaging in self-harm, integrating problem-solving, emotional regulation, and social network skills. Similarly, Michelson et al. (2020) piloted low-intensity, counselor-led interventions under the PRIDE program, which proved feasible and potentially cost-effective in schools. Boustani et al. (2020) applied relevance mapping to design stepped-care, school-based interventions, while Rath et al. (2020) implemented the Jharkhand Initiative for Adolescent Health (JIAH), a participatory and community-driven program. Collectively, these studies demonstrate scalable, context-specific approaches to improving youth mental health in India.

Findings from Arikrishnan et al. (2020) revealed that half of the adolescents in rural Puducherry reported positive mental health, influenced largely by maternal education and socioeconomic status. Conversely, Prasad and Ahmad (2020) noted a negative association between stress and mental health among youth in Bihar, with female adolescents being more vulnerable. Perspectives from stakeholders were highlighted by Dhandapani et al. (2020) and Raghavan Dhandapani et al. (2020), who stressed the importance of early detection, inclusive care, and community collaboration. Singh et al. (2020) further emphasized the urgency of integrating mental health services into schools to address rising adolescent suicide rates.

Studies on stigma and awareness reveal concerning patterns. Bose et al. (2020) found that undergraduate students' attitudes toward mental illness were shaped by their beliefs and contact experiences, while Ekanem et al. (2020) documented varying levels of knowledge among health professional students. Reviews by Gaiha et al. (2020) and Mathur&Gaiha (2020) pointed to widespread stigma and misinformation among Indian youth. These studies recommend culturally sensitive awareness campaigns, digital tools, and educational strategies to improve literacy and reduce stigma.

Poulpunitha et al. (2020) stressed the role of supportive environments in promoting female students' growth. Hoover et al. (2020) demonstrated that multi-tiered, school-based mental health systems significantly improved psychosocial and academic outcomes. Together, these studies reinforce the strong link between learning, well-being, and holistic development.

Innovations in digital and creative approaches also show promise. Ponzo et al. (2020) demonstrated the effectiveness of biofeedback tools in reducing anxiety and depression, while Latha et al. (2020) found that social media campaigns were impactful in raising suicide-prevention awareness. Van Lith et al. (2020) noted that online mindfulness-based art therapy and neutral clay tasks reduced stress, with mindfulness-based approaches yielding greater benefits. These findings indicate that digital and creative methods can expand access to mental health care.

The COVID-19 pandemic exacerbated mental health challenges for youth globally. Buizza et al. (2020) observed increases in anxiety, substance use, and sedentary behavior, while Singh et al. (2020) reported high stress and concentration difficulties among Indian students. Liang et al. (2020) found that 40% of Chinese youth experienced psychological distress, and Wathelet et al. (2020) documented severe mental health problems among French students, coupled with low help-seeking behavior. These studies underscore the disproportionate impact of the pandemic on vulnerable groups and the

urgent need for targeted interventions. Cross-cultural studies provide additional insights. Blackdeer et al. (2020) highlighted the benefits of integrating Indigenous and Western approaches for American Indian youth. Colizzi et al. (2020) advocated for multidisciplinary prevention strategies, while McGorry et al. (2022) and Mei et al. (2020) emphasized systemic reforms and integrated primary care. Shalaby et al. (2020) identified peer-support services as promising but in need of structured implementation.

Research from 2021–2022 extended the focus to academic pressures, resilience, digital interventions, stigma reduction, gender and socioeconomic inequities, and chronic illness. Ahmad et al. (2021) found that academic overload was a major stressor, while Syed et al. (2021) and Chaudhary et al. (2021) linked online learning and pandemic disruptions to heightened stress and anxiety. Domhardt et al. (2021), and Zhou et al. (2021) confirmed the effectiveness of digital and telehealth tools, while Ahorsu et al. (2021) and Garady et al. (2021) emphasized the protective role of peer support and accessible community services. Sindhu et al. (2021) examined stigma, highlighting the lack of policy-level interventions despite strong evidence for participatory approaches.

By 2022, research increasingly addressed suicide risk factors, resilience, and school-based interventions. Banandure et al. (2022) analyzed over 10,000 youth records in Karnataka, finding 35% suicidality linked to peer and family influences, anxiety, and relationship problems. Barbayannis et al. (2022), Kapasia et al. (2022), and Khera et al. (2022) connected academic stress to poor mental health, with women and non-binary students particularly affected. Studies by Basu et al. (2022), Singh et al. (2022), and Haritha &Bilquis (2022) emphasized resilience, prosocial behavior, and positive development models, while interventions such as the SAMA project (Hugh-Jones et al., 2022) and Kerala's JEEVANI program (Jai Soorya et al., 2022) showcased effective school- and college-based approaches. Digital interventions (Conley et al., 2022; Piers et al., 2022) further demonstrated potential, though concerns about access and adherence remain.

The 2023 body of literature shifted towards psychological interventions, digital consumption, lifestyle risks, and community-based programs. Aggarwal et al. (2023) evaluated the *ATMAN* intervention, showing significant reductions in self-harm and depression. Deshpande et al. (2023) found mindfulness-based stress reduction programs improved life satisfaction among students, while Munivenkatappa et al. (2023) highlighted the benefits of teacher-oriented literacy programs. Studies also revealed the psychological strain of online learning (Bhakat et al., 2023) and the risks associated with social media and streaming (Gupta et al., 2023; Chandra et al., 2023). Socioeconomic and cultural influences, such as financial insecurity and family dynamics, were highlighted by

(2023) and George et al. (2023), while participatory interventions (Srinivasan et al., 2023; Fernandes et al., 2023) underscored the value of community engagement.

Digital platforms were shown to provide both opportunities and risks—while online peer support forums proved valuable (Sanghvi et al(2024), excessive smartphone use was linked to addictive behaviors and stress (Gupta et al., 2024). Schoolbased interventions such as Mental Health Literacy programs and peer-support initiatives (Raghavan et al., 2024; Zhang et al., 2024) demonstrated effectiveness, while lifestyle and psychosocial factors—including sleep quality, diet, and family dynamics—remained critical determinants (Mahajan et al., 2024). Indigenous and tribal youth were found to require culturally tailored, community-led approaches (George et al., 2024). Emerging innovations, such as AI-based predictive tools (Patel et al., 2024; Sanghvi et al., 2024), showed potential for early detection and resilience-building among youth.

In conclusion, across India and globally, youth mental health is shaped by complex interactions between academic pressures, social inequalities, lifestyle choices, and systemic structures. Interventions spanning psychological therapy, school- and community-based initiatives, digital platforms, and policy reforms have shown promise. The most effective strategies are those that integrate prevention, early detection, literacy, empowerment, and culturally sensitive care, underscoring the need for holistic and participatory approaches to promoting youth mental health.

7. OBJECTIVES

The study analyzes the following objectives.

- 1. To study the demographic profile of Youth respondents and analyze the association between demographic profile and Institute category of respondents.
- 2. To analyze the association between Institute category of respondents and awanress on various select dimensions of Mental Heath.
- 3. To examine the Mental Health Quality dimensions and its impact on Life style of Youth respondents.

8. METHODOLOGY

The study is extracted from a total of 25020 respondents drawn from three select states of South India through Stratified Cluster Sampling method. The selection of state is based on the basis of proportion of number of students in Higher secondary and university based programs. The data is extracted with a help of Questionnaire supported by the secondary sources of data include Youth reports from Ministry of Youth, NITI Aayog reports, literature from articles and

research papers and internet sources.

9. ANALYSIS AND DISCUSSION

The component wise analys is is presented here.

A) Demographic Profile of Sample Respondents

The results indicate that the type of institution is strongly associated with the state. In Karnataka, the distribution is fairly balanced, though undergraduates form a slightly larger share compared to higher secondary students. In Tamil Nadu, the pattern is more distinct, with nearly half of the students enrolled in undergraduate institutions and only a small proportion in higher secondary. In contrast, Andhra Pradesh shows the opposite trend, where higher secondary students constitute the majority. This demonstrates a clear state-wise variation in the level of education pursued.

Gender-wise analysis reveals that female students outnumber male students in both higher secondary and undergraduate institutions. While this pattern holds across categories, the proportion of male students increases slightly at the undergraduate level, suggesting a relative rise in male representation as education progresses.

The age profile shows the most distinct association with type of institution. Students below 18 years are concentrated almost entirely in higher secondary institutions, while undergraduate institutions are dominated by students aged between 18 and 24 years. The 18–20 age group is equally distributed across both categories, but older age groups such as 20–22 and 22–24 are largely represented at the undergraduate level. Interestingly, a small number of students aged 26 and above are still found in higher secondary institutions, which may reflect late schooling or irregular academic progression.

The residence pattern also varies across categories. Most students in both higher secondary and undergraduate levels live in hostels, with the proportion slightly higher in undergraduate institutions. The share of day scholars remains almost the same across the two categories. However, higher secondary institutions report more students staying as paid guests compared to undergraduates, which may be due to parental preferences or institutional arrangements at the school level. Overall, the findings confirm significant associations between institutional category and state, gender, age, and residence type. The variations are especially pronounced across states and age groups, indicating structural and demographic differences between higher secondary and undergraduate populations.

Table-1: Demographic Profile of Youth Respondents

Category of Institution Higher Seconda		Under Graduate	Test of Association	df	p-val
Karnataka	23.70%	29.70%			
Tamil Nadu	12.90%	47.20%	4848.739	2	0.000
Andhra Pradesh	63.40%	23.20%			
Male	35.30%	39.50%	46.550		0.000
Female	64.70%	60.50%	 46.758	1	0.000
<18 yrs	59.80%	8.40%			0.000
18–20	22.60%	23.80%			
20–22	6.00%	35.30%	0741.05		
22–24	4.40%	26.00%	 9741.85	5	
24–26	1.30%	4.50%			
26+	6.00% 2.00%				
Day Scholar	16.10%	15.80%	94.89	3	0.000

Residential	65.60%	69.60%
Paid Guest	5.80%	3.40%
Others	12.50%	11.10%

B) Perception of Youth on Mental Health Awareness

The perception of youth from Higher Secondary institutions and Under Graduates are compared with a view to examine the awareness levels on various dimensions and the association between Youth category and awareness on Mental Health using Chi-square test. The test results are presented in table-2.

The analysis shows clear differences between higher secondary students and undergraduates in their awareness and practices related to mental health. When asked about awareness of interventions, higher secondary students tended to choose "other" options more frequently (54%), while undergraduates largely preferred counselling (64%). Across the total sample, counselling emerged as the most common response, accounting for 42%. A similar trend was observed in institutional health campaigns, where higher secondary leaned toward "other" options, whereas undergraduates again favored counselling.

Patterns of disclosure also varied by group. Higher secondary students preferred to share their concerns with parents (42%), while undergraduates were more inclined to talk to friends (43%). Overall, the responses were fairly balanced, with 37% choosing parents and 35% choosing friends. With regard to feeling overwhelmed, higher secondary students reported experiencing this "always" (36%), while undergraduates more commonly answered "often" (31%). Taken together, the most frequent response in the total group was "sometimes" (42%), indicating varying levels of stress management across age groups.

Despite these differences, both groups strongly recognized the importance of mental health. Nearly two-thirds of all respondents (65%) rated it as "very important." However, coping strategies diverged: higher secondary students frequently stated that they "never" used coping mechanisms (30%), whereas undergraduates were more likely to use them "occasionally" (41%). At the overall level, occasional use was most common (29%).

Wellness activities also reflected different preferences. Higher secondary students gravitated toward dancing and singing (38%), while undergraduates were more engaged in exercise (27%). When combined, the dominant activities were dancing and singing (33%), followed by exercise (22%). On mental health education, both groups strongly supported its inclusion in institutional settings, with more than half of respondents (54%) strongly agreeing; undergraduates expressed comparatively stronger support.

Finally, when asked about improving youth outcomes, both higher secondary and undergraduates overwhelmingly selected "all of the above" as their preferred choice, with nearly two-thirds (63%) agreeing. This consensus suggests that young people recognize the multifaceted nature of mental health promotion and support broad-based approaches.

Table2: Association between Youth's Institution category and awareness on Mental Health

Topic (Main Variable)	Dominant Pattern – Higher Secondary vs Under Graduates (Total %)	χ^2 (df), p		
Awareness of Interventions	HS mostly <i>Other</i> (54%), UG mostly <i>Counselling</i> (64%) (Total: 42% Counselling)	4853.864 (3), p<.001		
Institution Health Campaigns	HS mostly <i>Other</i> (54%), UG mostly <i>Counselling</i> (64%) (Total: 42% Counselling)	1142.888 (1), p<.001		
Who They Share With	HS – Parents (42%), UG – Friends (43%) (Total: 37% Parents, 35% Friends)	1273.192 (5), p<.001		
Feeling Overwhelmed	HS – Always (36%), UG – Often (31%) (Total: 42% Sometimes)	2365.720 (3), p<.001		
Importance of Mental Health	Both groups: Very Important (65% total)	662.515 (3), p<.001		

Coping Strategies	HS – Never (30%), UG – Occasionally (41%) (Total: 29% Occasionally)	2274.384 (3), p<.001
Wellness Activities	HS – Dancing/Singing (38%), UG – Exercise (27%) (Total: 33% Dancing, 22% Exercise)	1217.635 (5), p<.001
Mental Health Education in Institutions	Both agree strongly (54% total); UG more supportive overall	851.713 (4), p<.001
Improving Youth Outcomes	Both groups prefer "All the Above" (63% total)	539.013 (3), p<.001

C) Analysison Mental Health Quality of Youth

To assess the mental health quality of the youth, a likert5 point rating scale is applied. For each dimension, a total of 4 statements are applied and the statement wise means and standard deviations are consolidated to determine the influence of each domain in comparison with overall mean. Dimnesion wise analysis is presented here.

The analysis of mental health quality dimensions highlights variations across domains. The highest mean score was recorded in the area of independence (M = 3.82, SD = 0.89). This suggests that most students feel capable of handling assignments, exercising autonomy in educational or career choices, and pursuing hobbies without over-reliance on others. A positive self-image also emerged, with a mean of 3.51 (SD = 0.88), reflecting generally favorable perceptions of sleep quality, personal energy, physical appearance, and satisfaction from academic recognition.

Emotional well-being showed a moderate mean of 3.42 (SD = 0.95), pointing to some concerns such as sadness, tension, indecisiveness, and attachment to personal belongings. Similarly, the physical and mental wellness dimension recorded a mean of 3.32 (SD = 0.95). This indicates that while students are somewhat engaged in extracurricular activities, they still struggle with restlessness, anger, and exam-related anxiety.

The lowest scores were found in the attitudinal health dimension (M = 2.96, SD = 0.95). This reflects the presence of concerning behaviors such as frequent shouting, anger outbursts, suicidal thoughts, or withdrawal into silence. Compared to other domains, this area appears to be the most vulnerable and requires greater attention.

The results show clear variation across the different domains of mental health quality. The strongest area identified was independence, with the highest mean score (M = 3.82, SD = 0.89, CV = 23.3). This indicates that students generally manage academic work well, display autonomy in their educational and career-related decisions, and are able to pursue hobbies without depending heavily on others. Self-image also showed a relatively strong standing (M = 3.51, SD = 0.88, CV = 25.07), suggesting that many students are fairly satisfied with aspects such as their sleep quality, energy levels, physical appearance, and the recognition they receive for academic achievements.

In contrast, emotional well-being presented moderate levels (M = 3.42, SD = 0.95, CV = 27.78). This reflects the presence of difficulties like sadness, tension, indecisiveness, and emotional attachment to possessions. A similar pattern was observed in physical and mental wellness (M = 3.32, SD = 0.95, CV = 28.61), where issues such as restlessness, anger, examination stress, and limited participation in extracurricular activities were evident.

The most concerning area was attitudinal health, which received the lowest mean score (M = 2.96, SD = 0.95) along with the highest variability (CV = 32.09). This highlights more serious behavioral risks including shouting, anger outbursts, suicidal thoughts, and either aggressive or withdrawn responses. The high coefficient of variation indicates greater inconsistency in how students experience and express these challenges compared to the other domains. Overall, while independence and self-image appear to be relative strengths, emotional regulation, wellness, and especially attitudinal health require targeted attention and support to strengthen students' overall mental health quality.

Table-3: Analysis on Mental health Quality dimensions

Domain / Scale	Overall Mean	SD	CV	Key Aspects (Summary of Items)
Self-Image	3.51	0.88	25.07	Sleep quality, energy, appearance, feeling honoured by academic praise.
Independence	3.82	0.89	23.3	Managing assignments, autonomy in education/career,

				hobbies without dependence.		
Emotions	3.42	0.95	27.78	Sadness, tension, decision confusion, emotional attachment to belongings.		
Physical & Mental Wellness	3.32	0.95	28.61	Sleep/restlessness, anger, exam anxiety, engagement in extracurricular activities.		
Attitudinal Health	2.96	0.95	32.09	Shouting, suicidal thoughts, anger bursts, aggression or silence.		

D) Impact of Mental Health determinants on Balancing Mental Health Interventions

The regression analysis explores the impact of selected determinants—General Anxiety Disorder (GAD), lifestyle of youth, and Mental Health Quality of Life (MHQL)—on balancing mental health interventions. The model summary shows an R value of 0.608, indicating a moderate-to-strong relationship between the predictors and the outcome. The R Square value of 0.370 suggests that about 37% of the variation in balancing mental health interventions is explained by the three predictors together. The standard error of the estimate is 0.769, which reflects a reasonable fit of the model.

The ANOVA results confirm the overall model significance, with an F value of 4893.128 (p < 0.001). This indicates that the predictors collectively have a significant effect on the dependent variable. Examining the coefficients provides more insight into the direction and strength of each predictor's impact. Mental Health Quality of Life has the strongest positive influence (B = 0.926, β = 0.615, p < 0.001). This suggests that better mental health quality directly enhances the balance of mental health interventions. In contrast, both GAD (B = -0.036, β = -0.036, p < 0.001) and lifestyle of youth (B = -0.131, β = -0.102, p < 0.001) exert negative effects. Higher levels of anxiety and unhealthy lifestyle practices reduce the effectiveness of balancing mental health interventions. Overall, the findings emphasize that improving the mental health quality of life plays a pivotal role in strengthening intervention outcomes, whereas addressing anxiety symptoms and promoting healthier lifestyle habits are necessary to mitigate their negative impact.

Table-4: Impact of Mental Health determinants on Balancing Mental Health Interventions

Madal	R	R			1		ilenig Mentai II			
Model					Aajus	Adjusted R ²		Sta	Std. Error of the Estimate	
1	$.608^{a}$ $.37$		370		.370	.370		.76	.769	
a. Predi	ctors: (Constant), M	ental Healt	th Quality o	f Life(l	MHQL),	Life St	tyle of Youth, (Genera	al Anxiety I	Disorder(GAD)
ANOV	Aª									
Model		Sum of S	Squares df			Mean Square		F		Sig.
1	Regression	8674.42	4 3			2891.475		4893.128		.000b
	Residual	14782.5	93 25016		6	.591				
	Total	23457.0	7.017		25019					
Coeffic	ients ^a	-1								1
Model			Unstandardized C		Coeffici	ents	Standardized Coefficients		t	Sig.
			В		Std. Error		Beta			
1	(Constant)		1.341		.030				44.964	.000
	General Anxiety Disorder(GAD)		036		.005		036		-6.854	.000
	Life Style of Youth		131		.006		102		-20.160	.000
	Mental Health Quality of Life(MHQL)		.926		.008		.615		117.116	.000

10. CONCLUSIONS:

The comparison between higher secondary students and undergraduates shows distinct differences in awareness and practices. Higher secondary students were more likely to select "other" options when asked about interventions, while undergraduates largely preferred counselling. Disclosure patterns also differed, with higher secondary students leaning towards parents and undergraduates favoring friends. Stress experiences were also age-sensitive, with higher secondary students reporting being "always" overwhelmed and undergraduates reporting "often." Despite these variations, both groups strongly acknowledged the importance of mental health, with nearly two-thirds rating it as "very important." Coping strategies, wellness activities, and preferred educational practices also diverged, but overall, there was a shared consensus that improving youth outcomes requires a comprehensive, multi-dimensional approach. The chi-square test confirmed significant associations between institutional category and awareness variables, underlining the influence of educational stage on mental health perception.

The analysis of mental health quality dimensions highlights clear domain-wise variations. Independence emerged as the strongest dimension, with students generally demonstrating confidence in managing academic responsibilities, making career-related decisions, and pursuing hobbies independently. Self-image also appeared relatively positive, indicating satisfaction with energy levels, sleep, appearance, and recognition. Emotional well-being and physical-mental wellness showed moderate outcomes, reflecting challenges such as sadness, tension, restlessness, and exam anxiety. The weakest area was attitudinal health, where concerning behaviors like anger outbursts, suicidal thoughts, and aggression or withdrawal were more pronounced. The high variability in this domain indicates that these issues affect students unevenly, suggesting the need for focused interventions.

Overall, the findings suggest that while youth display strengths in independence and self-image, they face significant challenges in emotional regulation, wellness, and especially attitudinal health. The differences between higher secondary and undergraduate students also indicate that awareness and coping practices evolve with age and educational level. The results highlight the need for targeted programs in schools and colleges to promote emotional resilience, strengthen coping strategies, and address high-risk behaviors, while also building on the positive domains of independence and self-image. The findings indicate that enhancing mental health quality of life is the key driver of effective intervention outcomes, while reducing anxiety and encouraging healthier lifestyle habits are essential to minimize negative influences.

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