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MAPPING MENTAL HEALTH LITERACY ACROSS VARIED PROFESSIONS AND ITS FAR-REACHING IMPLICATIONS

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SUMMARY

Background

Mental health is regarded as the core component of a person's health. India has a burden of 2442 disability-adjusted life years per 100,000 population imputable to mental health disorders, according to the WHO. The age-standardized suicide rate is 21.1 per 100,000 population. The estimated economic cost of mental disorders from 2012 to 2030 is computed to be USD 1.03 trillion. In addition, the disease burden is projected to increase by 35% over the current level, and the objective is to reduce the disability-adjusted life years from 3298 to 811 by 2040. The current study explored the mental health perceptions of different age groups, marital status, and occupation. Besides that, the discoveries of this study aim to develop plans for promoting awareness among people, taking affirmative measures to ward off mental illness, utilizing available resources to those who need them, and encouraging total well-being among all individuals and increased productivity.

Research Methodology

This research study, which is both exploratory and quantitative, was conducted to understand the mental health literacy scores of individuals from diverse professions in Mumbai A survey method was applied to gather information from 515 participants, and a convenient and a random sampling technique was employed. For the survey method, the MHLS questionnaire [7] was administered. The problems taken into account in the study were viz social phobia, Personality disorder, Drug dependence, Bipolar disorder, Agoraphobia, and generalized anxiety disorders

Results

The study indicates that the mental health literacy score differs statistically among various stakeholders, and similarly, there is a variation in the literacy score across different gender groups.

Conclusion

In conclusion, mental health awareness among diverse professions is a multifaceted issue that requires a holistic and proactive approach. Furthermore, the recommendations provided in the study can serve as a proactive step to promote the mental well-being of every individual and, in turn, contribute to the development of their holistic aspect. Further, it will also help to lessen the burden of mental illness and achieve reduced levels of disability-adjusted life years from 3298 to 811 by 2040.

Key words: *mental health awareness, mental well-being, holistic development, g20 sustainable development.*

INTRODUCTION

Mental health is considered an essential part of a person's overall health, encompassing the mental well-being, anticipation of mental disorders, treatment, and rehabilitation. The WHO considers health to be "a position of mental, physical, and social well-being, and not merely the absence of disease or infirmity." To enhance health overall, improving mental health is also essential, particularly since mental disorders have a very high burden of disease [15]. Mental health is a dynamic condition of well-being where the person knows their potential, can deal with everyday pressures of life, works effectively, and can contribute to the society. How we human beings perceive and think about mental illnesses influences not j ust our reaction and interaction with a person who might be suffering from one, but also how we contemplate and deal with our personal feelings [2].

It has a burden of 2442 disability-adjusted life years for every 1,00,000-population attributable to mental illness, says WHO. The suicide age-adjusted rate is 21.1 per 100,000. The economic cost of mental illness between the years 2012 and 2030 is expected to be as high as USD 1.03 trillion [18]. Furthermore, the burden of the disease is likely to rise by 35% from the current level, and the goal is to reduce the disability-adjusted life years from 3298 to 811 by 2040 [15].

According to the statistical data, it is found that one in every five individuals has mental health disorder symptoms or illnesses. About 50% of the mental health illnesses continue from the age of 14 and gradually develop by the age of 24. Further, 970 million individuals are those who struggle with mental disorders across the world. Furthermore, 14.3% of the deaths in the world (8 million), every year are due to mental illness. In India, 60 to 70 million individuals are the one who suffers from severe mental disorders [3][18] Mental Wellness. Retrieved from https://www.who.int/india/health-topics/mental-health

Several factors influence a person's mental health, including their ability to manage emotions, thoughts, and behaviors in social interactions, as well as biological, genetic, and other environmental, societal, economic, and political factors [6]. The present study intended to understand individuals' perceptions of mental health across diverse age groups, marital statuses, and professions. Additionally, the findings of this research study aim to develop strategies to increase awareness among the people, take proactive measures to prevent mental illness, assemble available resources for those who need them, and ensure the overall well-being of all individuals, ultimately promoting productivity.

LITERATURE REVIEW

Mental wellness is a crucial aspect of overall well-being and is influenced by numerous factors, including emotional support, financial stability, engagement, and resilience [3]. This literature review integrates and synthesizes the provided research findings to explore the current understanding of mental wellness and highlight potential future research directions. Studies have highlighted the importance of emotional support in improving the mental health and well-being [12] [16]. The work of [17] highlighted the emotional labor of content moderators and explored avenues for improving support to enhance their psychological well-being. Furthermore, the study by [9] indicated that alleged teacher emotional support facilitated academic resilience and involvement in high school students. According to the study, there are some gender variations in how people perceive their mental health [11] for example, men were shown to have significantly more authoritarian attitudes than women since they scored higher on the authoritarianism component. The results of this study help us understand how Indian youth perceive mental illness and show how poorly informed young people are about mental health. The findings indicate a starting point in understanding and awareness of concerns related to mental health, but a long path still needs to be explored. As per one of the studies, most children and adolescents begin experiencing mental health problems in their secondary school life, from emotional well-being, drug abuse, and unsafe sex, to academic pressures that can generate amounts of stress and adversely affect their mental well-being. The key themes that were identified were bullying, exam-related issues, academic-related anxiety, and family-related issues.

The research by [8] employed a scientific, ethical and data-driven method to evaluate the effect of the COVID-19 pandemic on mental well-being of high school students. Different statistical tests indicated deterioration in the mental well-being of students undertaking online education. Additionally, the American Psychological Association (APA) specifies that almost 81% of Gen Z Teens (13–17 years) report more severe stress because of COVID-19 related to education. Several articles suggest that this breakdown is due to social isolation, the absence of a social framework in terms of friends or clubs, and problems at home. Analysis further revealed that physical exercise has a positive outcome on mental health [13]. This study provides the instruments used in the surveys and offers insightful deductions for most communities can apply to improve children's mental health. Investigated the longitudinal effects of COVID-19-related stressors on the mental well-being and health of young adults [4]. This study highlighted sustained surveillance of mental well-being concerning ever-present stressors, recommending intervention to prevent long-term consequences on mental health. The COVID-19 pandemic ushered in enhanced mental health distress globally, manifesting as stress, depressing and worried symptoms [1][5][10].

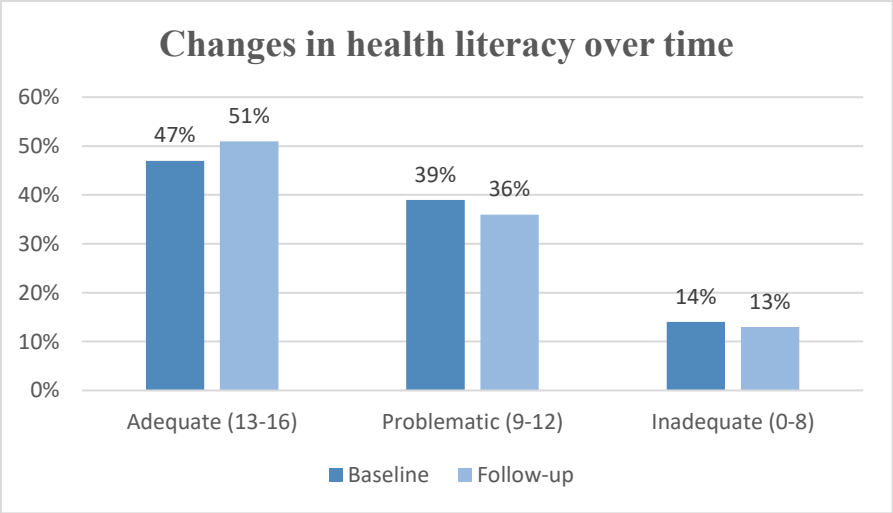


Figure 1. Changes in health literacy over time

Source: Koch, Schillmoller & Nienhaus (2022)

RESEARCH METHODOLOGY

Research Type – This study, which is both exploratory and quantitative, was conducted to understand the mental health literacy scores of individuals from various professions in Mumbai.

Sampling Method – convenience and random sampling techniques were used. For the survey method, the MHLS [7] questionnaire was used. The questionnaire consists of 35 items to gain information regarding the mental health of the respondents. The initial 15 questions were scored on a scale of 1-4, where questions 10th, 12th, and 15th are reversed scores. Questions from 16th to 35th are scored on a scale of 1-5, whereas questions from 20th to 28th are scored in reverse. The total score of mental wellness is calculated by adding all the items. The maximum score for mental health awareness is 160, and the least score is 35. The issues considered in the research were viz. social phobia, Personality disorder, Drug dependence, Bipolar disorder, Agoraphobia, and generalized anxiety disorders.

- **Sample Size** - The survey method was utilised to gather data from 515 respondents from Mumbai.

- **Research Objectives**

Research objectives of the study aim to understand the mental health awareness score of individuals from varied professions. The research objectives for this study are as under:

  - To study the mental health awareness level of each of the sample's students.

  - To understand the impact of gender on the mental health awareness score.

- **Research Hypothesis**

- **Hypothesis 1:** Mental health literacy rate among different genders

Null Hypothesis (H0): u1 = u2

Alternate Hypothesis (H1): u1 ≠ u2

- **Hypothesis 2:** Mental health literacy rate among various stakeholders

H0: There is no variance between the groups and equality between means.

H1: There is a variance between the groups and equality between means.

- **Hypothesis 3:** Correlation between Recognition of Mental Health Disorder and Mental Health education status

H0: No association between recognition of mental health disorder and mental health education status.

H1: Significant association between recognition of mental health disorder and mental health education status.

- **Hypothesis 4:** Relationship between Attitudes which Encourage recognition and Appropriate Help-Seeking and Mental Health Literacy Rate

H0: No relationship between attitudes which encourage recognition and help-seeking and mental health education status.

H1: Significant linear relationship between attitudes which encourage recognition and help-seeking and mental health education status.

- **Hypothesis 5:** Relationship between knowledge of self-treatment and mental health education

status.

H0: There is no linear connection between knowledge of self-treatment and mental health education status.

H1: There is significant linear connection between knowledge of self-treatment and mental health education status.

- **Significance of Study**

The study's recommendations can serve as a proactive step towards achieving mental well-being for every individual and contributing to their holistic development. Further, it will also help to lessen the burden of mental illness and attain decreased levels of disability-adjusted life years from 3298 to 811 by 2040.

DATA ANALYSIS AND INTERPRETATION

Table 1. Marital Status

Marital Status	Freq	%	Valid %	Cumulative %
End one's marriage	3	0.583	0.583	0.583
Married	83	16.117	16.117	16.699
Separated	4	0.777	0.777	17.476
Single	425	82.524	82.524	100.000
Missing	0	0.000		
Total	515	100.000		

Table 1 data analysis indicates that a majority of the respondents are unmarried, at 83%, followed by married respondents (16%), and the least are divorced. Data analysis of Table 2 indicates that 53% of the respondents were male and 47% were female.

Hypothesis 1: Mental health literacy rate among different genders

H0: u1 = u2

H1: u1 ≠ u2

Table 2. Gender - Frequencies

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	240	46.602	46.602	46.602
Male	275	53.398	53.398	100.000
Missing	0	0.000		
Total	515	100.000		

Table 3. T-Test

	W	df	p
Score	27866.50		0.002
Mann-Whitney U test.			

Interpretation: The dependent variable is the Mental Health Literacy Score (MHLS), and the independent variable is Gender. The statistical analysis of Table 3 shows that the p-value is less than 0.05, so we rejected the null hypothesis. Thus, it is validated that the population means are not equal.

Hypothesis 2: Mental health education status among various stakeholders

H0: There is no variance between the groups and equality between means.

H1: There is a variance between the groups and equality between means.

Table 4. Descriptive - Score

Background	N	Mean	SD	SE	Coefficient of variation
Doctor (Medical Professional)	55	110.636	15.293	2.062	0.138
Graduation student	101	107.851	12.521	1.246	0.116
Homemaker	35	106.486	16.080	2.718	0.151
Paramedical Professional	24	109.417	13.561	2.768	0.124
Postgraduate student	129	113.101	15.558	1.370	0.138
School student (8th, 9th & 10th)	71	99.732	8.721	1.035	0.087
Working Professional	100	113.330	16.144	1.614	0.142

Table 5. ANOVA - Score

Cases	Sum of Squares	df	Mean Square	F	p
Background	10570.539	6	1761.756	8.652	< .001
Residuals	103435.791	508	203.614		

Note. **Type III Sum of Squares**

Interpretation: Analysis of Table 5 shows that the p-value is less than 0.001, which indicates a statistically significant difference between individuals from diverse backgrounds.

Table 6. Post Hoc Contrasts - Background

		$\bar{x}$	SE	t	ptukey
Doctor (Medical Professional)	Graduation student	2.785	2.391	1.165	0.907
	Homemaker	4.151	3.085	1.345	0.830
	Paramedical Professional	1.220	3.491	0.349	1.000
	Postgraduate student	-2.464	2.298	-1.072	0.936
	School student (8th, 9th & 10th)	10.904	2.563	4.254	**< .001**
	Working Professional	-2.694	2.395	-1.124	0.920
Graduation student	Homemaker	1.366	2.799	0.488	0.999
	Paramedical Professional	-1.565	3.240	-0.483	0.999
	Postgraduate student	-5.249	1.896	-2.769	0.084
	School student (8th, 9th & 10th)	8.119	2.210	3.674	**0.005**
	Working Professional	-5.479	2.013	-2.722	0.095
Homemaker	Paramedical Professional	-2.931	3.782	-0.775	0.987
	Postgraduate student	-6.615	2.720	-2.432	0.187
	School student (8th, 9th & 10th)	6.753	2.947	2.292	0.250
	Working Professional	-6.844	2.802	-2.442	0.183

Paramedical Professional	Postgraduate student	-3.684	3.172	-1.161	0.908	
	School student (8th, 9th & 10th)	9.684	3.369	2.874	0.064	
	Working Professional	-3.913	3.243	-1.207	0.892	
Postgraduate student	School student (8th, 9th & 10th)	13.368	2.109	6.340	**< .001**	
	Working Professional	-0.229	1.901	-0.121	1.000	
School student (8th, 9th & 10th)	Working Professional	-13.598	2.214	-6.140	**< .001**	
P-value attuned for comparing a family of 7						

Furthermore, post hoc analysis is conducted to identify exactly which group differs from one another. Table 6 presents the output of the Post Hoc test, which indicates an insignificant p-value for the mental awareness score of doctors and respondents from other professions. The p-values of 0.907, 0.830, 1.00, 0.936, and 0.920 for graduate students, homemakers, paramedical professionals, postgraduate students, and working professionals, respectively, indicate that there is no significant difference between the mental awareness scores of doctors and other groups, excluding school students. Similarly, for all the other groups, there exists a difference between graduate students' mental awareness scores and the score of school students (since p-value<0.05) as the p-value is 0.005; postgraduate students and school students' mental awareness score (p-value<0.001); and school student mental awareness score with working professional's mental awareness score (p-value<0.001).

Hypothesis 3: Correlation between Recognition of Mental Health Disorder and Mental Health education status

H0: No correlation between recognition of mental health disorder and mental education status

H1: Significant correlation between recognising mental health disorder & mental education status

Table 7. Pearson's Correlations

Variable		**Recognition of Mental Health Disorder**	**Score**
1. Recognition of Mental Health Disorder	Pearson's r	—	
	p-value	—	
2. Score	Pearson's r	0.587	—
	p-value	< .001	—

Interpretation: The analysis of Table 7 reveals a strong and positive correlation between recognition of mental health disorders and mental health literacy rates, which is statistically significant (r = .587, n = 515, p = .005).

Hypothesis 4: Relationship between attitudes which encourage recognition and help-seeking and mental health literacy rate

H0: No linear connection between attitudes which encourage recognition and help-seeking and the mental health education status.

H1: Significant linear connection between attitudes which encourage recognition and help-seeking and mental health education status.

Table 8. Model Summary – Mental Health Literacy Score

Model	R	R^2	Adjusted R^2	RMSE	Durbin-Watson Autocorrelation	Durbin-Watson Statistic	p
H_0	0.000	0.000	0.000	14.893	0.987	9.999×10^{-4}	< .001
H_1	0.911	0.829	0.829	6.162	0.319	1.346	< .001

Interpretation: To validate this hypothesis, the mental health literacy score was taken as the dependent variable, and attitudes which encourage recognition and help-seeking were considered independent variables. The output from Table 8 indicates that the correlation between the two variables is 0.911, which represents a strong association between them. Furthermore, the total variation among the variables is represented by an R^2 value of 0.829, indicating that only 82.9% of the variance in total mental health literacy scores is attributed to attitudes which promote recognition and help-seeking. Furthermore, the Durbin-Watson check validates the test, as the value is 1.346.

Table 9. ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H_1	Regression	94527.331	1	94527.331	2489.477	< .001
	Residual	19478.999	513	37.971		
	Total	114006.330	514			
The intercept model is omitted, as no evocative data can be shown.						

Interpretation: The ANOVA result from the table 9 explains the Regression model and the Residuals. The F-value is statistically significant as $p<0.001$. Thus, the model indicates that the attitudes which inspire recognition and help-seeking are strong predictors of the respondent's mental health literacy score, as evidenced by $F(1,513) = 2489.477$, $p < 0.001$.

Table 10. Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
H_0	(Intercept)	109.388	0.656		166.683	< .001
H_1	(Intercept)	41.479	1.388		29.887	< .001
	Attitudes which Promote Recognition and Appropriate Help-Seeking	1.256	0.025	0.911	49.895	< .001

Interpretation: The output from Table 10 indicates that the attitudes promoting recognition and self-treatment help-seeking statistically significantly support the model, with a p-value of less than .001.

Hypothesis 5: Relationship between knowledge of self-treatment and mental health education status

H0: No linear connection between knowledge of self-treatment and mental health education status.

H1: Significant linear connection between knowledge of self-treatment and mental health education status.

Table 11. Model Summary – Mental Health Literacy Score

					Durbin-Watson		
Model	R	R^2	Adjusted R^2	RMSE	Autocorrelation	Statistic	p
H_0	0.000	0.000	0.000	14.893	0.987	9.999×10-4	< .001
H_1	0.265	0.070	0.069	14.373	0.925	0.128	< .001

Interpretation: To validate this hypothesis, the mental health literacy score was the dependent variable, and the respondents' knowledge of self-treatment was considered as the independent variable. The output from Table 11 explains that the association between the two variables is 0.265, indicating a

weaker correlation between them. Furthermore, the total variation among the variables is represented by the R^2 value of 0.070, which means that only 7% of the total variance in scores is due to respondents' knowledge of self-treatment. Furthermore, the Durbin-Watson test confirms the validity of the test, with a value of 0.128.

Table 12. ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H_1	Regression	8034.412	1	8034.412	38.894	< .001
	Residual	105971.918	513	206.573		
	Total	114006.330	514			
The intercept model is omitted, as no meaningful data can be shown.						

Interpretation: ANOVA result from Table 12 explains the Regression model and the Residuals. The F-value is statistically significant as $p<0.001$. Therefore, the model demonstrates that the respondents' knowledge of self-treatment is a significant interpreter in the respondent's mental health literacy score as $F(1,513) = 38.894$, $p<0.001$.

Table 13: Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
H_0	(Intercept)	109.388	0.656		166.683	< .001
H_1	(Intercept)	87.322	3.594		24.293	< .001
	Self-Treatment Knowledge.	4.232	0.679	0.265	6.236	< .001

Interpretation: The output from Table 13 indicates that the respondent's knowledge of self-treatment contributes statistically significantly to the model, as the p-value is less than 0.001.

RECOMMENDATION AND CONCLUSION

Mental health wellness is one of the critical factors in the holistic development of individuals and is required for any progressing nation. Since India is one of the nations with the highest young population, it is vigorous for the country to cut the burden of mental illness for its sustainable development. The research study found the mental health awareness level of individuals from diverse fields. Some of the recommendations to reduce mental disorders can include the following:

Fostering mindfulness training for mental health – mindfulness training will attempt to reduce the risk and promote well-being in adolescents.

Integration technology – the Chabot can be deployed to effectively offer helping hands to individuals who require assistance at early stages and can refer them to medical assistance if the disorder is evaluated as being in the medium to severe stages.

Raising awareness – the individual suffering or having the risk of experiencing mental disorders must be aware of the fact that it is normal to experience mental illness, and they must be ready to seek assistance as needed.

Available assistance to all – resources like psychiatrists, frontline workers, counselors, medical help, and evidence must be available to all individuals in need and deprived of any discrimination. It is also advisable to have a toll-free number for a therapist where individuals can speak freely, establish a committee of therapists and psychiatrists for immediate help, and have a firm system in place for maintaining the privacy of individuals and obtaining consent before any interventions.

Thus, mental health awareness among diverse professions is a multifaceted issue that requires a holistic and proactive approach. By offering the above-mentioned proactive initiatives, we can strive towards creating supportive environments where mental health is prioritized and valued. Furthermore, the study's recommendations can serve as a proactive step towards achieving mental well-being for each individual, ultimately facilitating their holistic development. Further, it will also help to lessen the load of mental illness and achieve a decreased level of disability-adjusted life years from 3298 to 811 by 2040.

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