

MENTAL HEALTH, SELF-ESTEEM, LIFE SATISFACTION AMONG ETHIOPIAN POPULATION DURING COVID-19 PANDEMIC: A SURVEY BASED STUDY

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Abstract

BACKGROUND

Many people are at risk of developing mental health problems due to the current pandemic. However, little has been explored about the magnitude of the risk to psychological factors to gender and their location and designation in the context of the current pandemic. Hence, the purpose of this study was to investigate the psychological impact on the Ethiopian population.

METHODS

An online survey using google form with 310 Ethiopian respondents was conducted. The adopted questionnaire covers the participant's sociodemographic information, and three different questionnaires (mental health inventory, self-esteem, and life satisfaction) used to collect data. The data were not distributed normally. The Mann-Whitney U-test was applied to find differences between different categories of mental health, self-esteem, and life satisfaction.

RESULTS

The results indicate that urban males have higher mental health and self-esteem compared to females, and little difference in mental health appeared between students, academics, government employees, private employees, and business people. Females belonging to the rural area have higher life satisfaction than males. A significant difference in self-esteem and life satisfaction was found between participants belonging to different designations.

CONCLUSION

The results of all these psychological factors provide a comprehensive picture of Ethiopian peoples during the current pandemic. In such stressful situations, the concerned government, hospitals, educational institutions, organizations and individuals need to consider psychological intervention and take necessary action. In addition to educate and prepare individuals for the various mental health issues that they may face during the pandemic period.

KEYWORDS: *Pandemic, COVID-19, Mental Health, Self-Esteem, Life Satisfaction.*

Introduction:

There has been a recent modification in psychology from the center of attention to challenges and contradictions to a more holistic perspective, including positive factors. The scope of psychology is limited only to the negative aspects of mental health. The recent pandemic has devastating effects globally, as its emergence and spread causes confusion, anxiety, and fear in public. Pandemic makes a challenging situation even more difficult. Many peoples are at risk of developing mental health problems

as an effect of the pandemic, nearly half of unaffected communities suffer from the mental disorders associated with unpredictable outbreaks that occurred in the world (1). Studies have shown that mental health problems can occur in healthcare workers and survivors during pandemic (2). Mental health services address the crisis through online, outpatient, and inpatient mental health services for all the communities in need (3). The World Health Organization (WHO) recognizes that the essential role of mental health in achieving overall health and mental health has been incorporated into population health strategies by various jurisdictions (4). There is some evidence that mental health problems may be caused by a negative psychological trait, such as low self-esteem (5).

Low self-esteem is not recognized as a mental health issue, but self-esteem and mental health are closely related. Self-esteem is observed as a considerably stable part of the personality, but it can fluctuate dependent on disappointments or contemporary achievements (6). Rosenberg stated that self-esteem, as a person owns, believes about him, which might be positive or negative, good or bad, right or wrong (7). Campbell suggests that individuals with low self-esteem rated themselves less exceptional, less confident, less quick, and with less temporal stability than did individuals with higher self-esteem (8). Low self-esteem contributes to depression, and depression made self-esteem worse. A more heightened sense of self-esteem has been identified as one of the personal characteristics that contribute to resilient psychological outcomes (9). In contrast, low self-esteem might be a risk factor that contributes to adverse psychological consequences (10). Self-esteem may act as an indicator of how to face and manage psychological challenges, which may further affect mental health and life satisfaction.

Life satisfaction is measured as a central construct concerning other emotional, social, and behavioral constructs, and one of the variables that may have an impact on life satisfaction is self-esteem (11). Self-esteem reflects an individual's perceptions and assessments of himself, while life-satisfaction includes an individual's evaluation of his life including various areas of life such as school, family, and friends as well as self (12). Research by Frisch indicates that life-satisfaction for an individual experiences the degree to which positive emotions dominate negative emotions (13). Life satisfaction is a subjective measure of general wellbeing that depends on people's perceptions of their contentment or happiness with their life as a whole (14).

A set of social, behavioral, and developmental characteristics associated with self-esteem has been identified in the literature (8). Positive life satisfaction is another good indicator of positive physical and mental health outcomes and is associated with optimal performance (15). One study indicated the association between positive youth self-rated mental health status and higher quality of life, as measured by satisfaction with self, family, friends, school environment, and overall life satisfaction (16).

Despite these essential pieces of evidence, to our knowledge, few studies have been conducted in Ethiopia on psychological parameters such as mental health, self-esteem, and life-satisfaction in the general population with the comparison in gender, location, and their designation. Therefore, the primary purpose of this study is to investigate how mental health, self-esteem, and life satisfaction may influence different types of participants living in Ethiopia. This study also identifies the relative contribution of mental health to self-esteem and life satisfaction.

Methodology

This design of this study was cross-sectional, and the observation was performed in Ethiopia. Snowball sampling technique was used to collect data in this study. Three hundred and ten participants took part in

this study. There were 174 male and 136 female, 131 participants from rural areas, 179 from the urban area, and 55 students, 70 academicians, 60 government employees, 70 private employees, and 55 businesspersons. The age ranges from 25 to 57 years. Three tools were used to collect data as (1) The Mental Health Inventory (MHI) is a widely accepted measure of general emotional functioning developed by Veit and Ware (1983) for Rand health insurance experiment. It covers a wide range of negative and positive emotions. MHI provides an assessment for several domains of mental health, including anxiety, depression, behavioural control, positive affect, and general distress. The inventory consists of 18 items. The MHI is a structured, self-report questionnaire that a participant can generally complete within five minutes. The MHI has a Cronbach's alpha of .93. MHI has been studied extensively in large populations and comes with considerable evidence of its validity. Field testing of MHI showed good convergent and discriminant validity (17). (2) Rosenberg developed the Self-Esteem Scale in 1965. The scale consists of a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be one-dimensional. All items are answered using a 4-point Likert scale ranging from Strongly Agree to Strongly Disagree. Higher scores of all 10 indicate higher self-esteem (18). (3) Life satisfaction was measured with the Satisfaction with Life Scale (SWLS). It was developed by researchers Diener, Emmons, Larsen, and Griffin in 1985. The scale assesses the individual's cognitive judgment of their satisfaction with their life. The SWLS is a brief and simple questionnaire consisting of only five statements. Participants who complete the questionnaire were asked to judge how they feel about each of the statements using a scoring system with a scale of 7, where one represents 'strongly disagree' with the statement, and 7 'strongly agree' with the statement. When developing the scale, Diener et al. (1985) tested it extensively and reported that it had good psychometric properties, as well as a high test-retest coefficient (19).

The study was conducted as an online mode through Google forms. The questionnaires were uploaded to Google forms, and a link to the Google form was sent via WhatsApp, email, and other social media means to communicate with the participants. Participants are encouraged to circulate the survey link to as many people as possible. Upon receiving and clicking the link, participants directed towards the information about the study and informed consent. After providing their consent, they were required to fill in demographic details. After submitting their demographic information, a set of questions appeared one after another related to mental health, self-esteem, and life satisfaction, which the participants have to answer. The data collection was started from June to August. Demographic information included age, gender, occupation, education, area of residence, and ethnicity. Participants who have access to internet facilities can participate in this study.

Statistical analysis was performed by using IBM SPSS for Windows, version 22 (IBM Corp. USA). Descriptive analyses of demographic characteristics were performed. During the statistical analysis, we found that the data were not distributed normally. A Mann-Whitney U test was applied to find differences between different categories for mental health, self-esteem, and life satisfaction. A significant level has been set at 0.05 levels.

Results

Descriptive statistics of the mental health, self-esteem, and life satisfaction for different categories of gender,

		Frequency	Percentage	Gender		Location		Designations				
				Male	Female	Rural	Urban	Students	Academicians	Gov. Employ	Pri. Employ	Businesspersons
Mental Health	Worst	5	1.6	4	1	0	5	0	0	0	5	0
	Bad	155	50.0	67	88	77	78	30	35	35	30	25
	Good	105	33.9	68	37	42	6	25	15	20	30	15
	Better	35	11.3	27	8	9	26	0	20	5	5	5
	Excellent	10	3.2	8	2	3	7	0	0	0	0	10
	Total	310	100	174	136	131	179	55	70	60	70	55
Self Esteem	Low	10	3.2	0	174	7	3	5	3	2	0	0
	High	300	96.8	10	126	124	176	50	67	58	70	55
	Total	310	100	174	136	131	179	55	70	60	70	55
Life Satisfaction	Extremely Dissatisfied	5	1.6	0	5	3	2	0	2	2	1	0
	Dissatisfied	15	4.8	13	2	3	12	5	5	0	5	0
	Slightly Dissatisfied	35	11.3	22	13	17	18	10	5	5	10	5
	Neutral	15	4.8	13	2	2	13	5	0	0	5	5
	Slightly Satisfied	80	25.8	37	43	34	46	20	23	8	14	15
	Satisfied	130	41.9	68	62	49	81	15	35	35	20	25
	Extremely Satisfied	30	9.7	21	9	23	7	0	0	10	15	5
	Total	310	100	174	136	131	179	55	70	60	70	55

location and designation variables

The independent-samples Mann-Whitney U test in between the male and female participants

	Gender	Mean Rank	Mann-Whitney U	Standardized Test Statistic	Standard Error	Sig. (2-sises test)
Mental Health	Male	174.06	8,602.00	-4.128	782.44	.000*
	Female	131.75				
Self Esteem	Male	156.22	11,707.00	-.161	778.62	.872
	Female	154.58				

Life Satisfaction	Male	151.03	12,609.50	.997	779.960	.319
	Female	161.22				

Asymptotic significances are displayed. *The significance level is .05.

Table -2 showed that the independent sample Mann-Whitney U test was applied for mental health, self-esteem, and life satisfaction within male and female participants. The result indicated that there is a significant difference ($p < .000$) between male and female participants for mental health. Whereas insignificant differences are shown for self-esteem ($p > .872$) and life satisfaction ($p > .319$) between male and female participants.

The independent-samples Mann-Whitney U test in between the rural and urban participants

	Location	Mean Rank	Mann-Whitney U	Standardized Test Statistic	Standard Error	Sig. (2-sides test)
Mental Health	Rural	147.01	12,837.00	1.428	778.88	.153
	Urban	161.72				
Self Esteem	Rural	157.90	11,409.50	-.406	775.08	.684
	Urban	153.74				
Life Satisfaction	Rural	161.51	10,937.00	-1.014	776.41	.310
	Urban	151.10				

Asymptotic significances are displayed. *The significance level is .05.

Table -3 showed that the independent sample Mann-Whitney U test was applied for mental health, self-esteem, and life satisfaction within rural and urban participants. The result indicated that there are no significant differences between rural and urban participants for mental health, self-esteem, and life satisfaction with $p > .153$, $.684$, and $.310$, respectively.

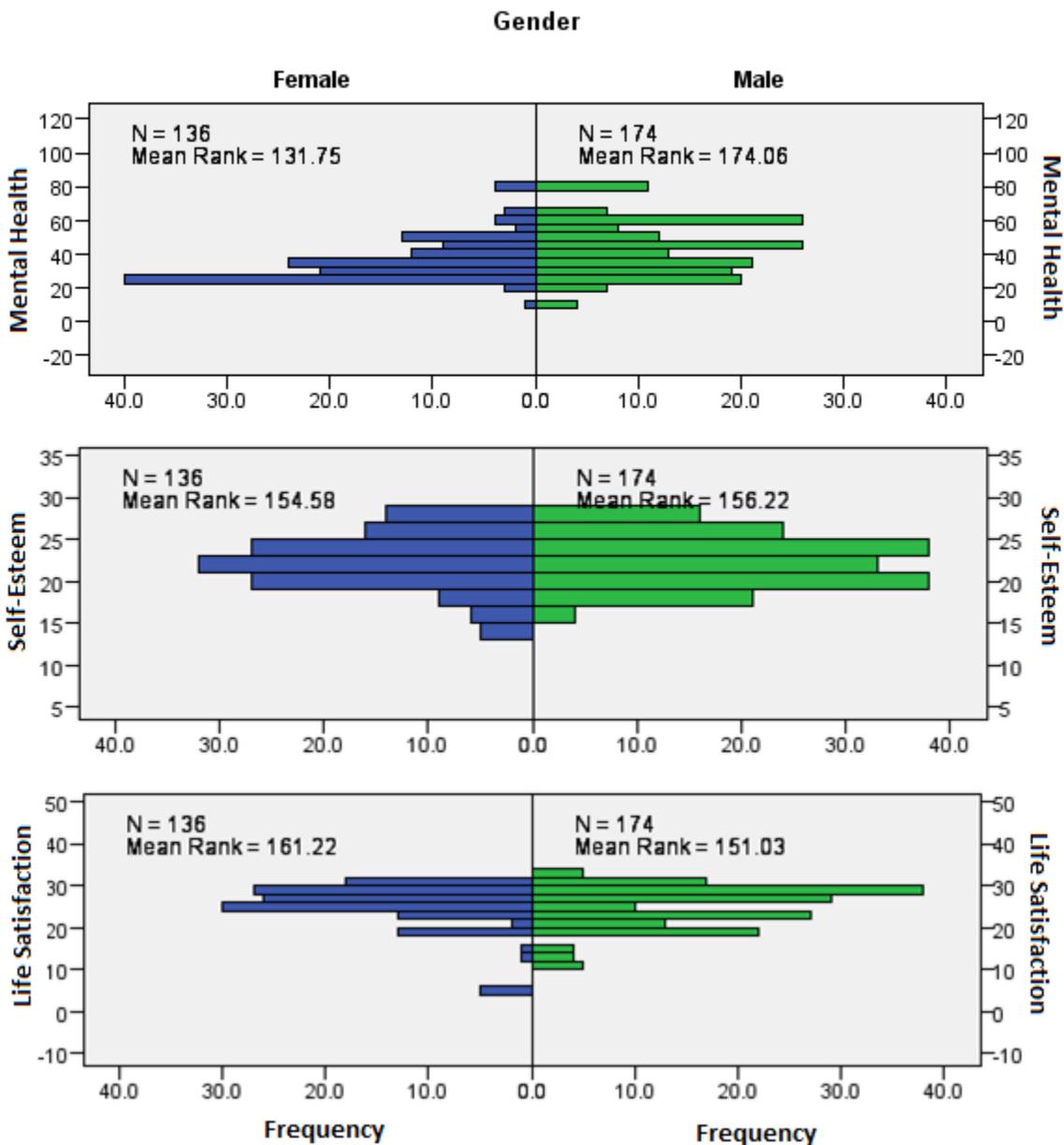
The independent-samples Kruskal-Wallis test in amongst students, academician, government employees, private employees, and business people types participants

	Total N	Test Statistic	Sig. (2-sides test)
Mental Health	310	5.825	.213
Self Esteem	310	17.879	.001*
Life Satisfaction	310	29.557	.000*

Asymptotic significances are displayed. The significance level is .05.

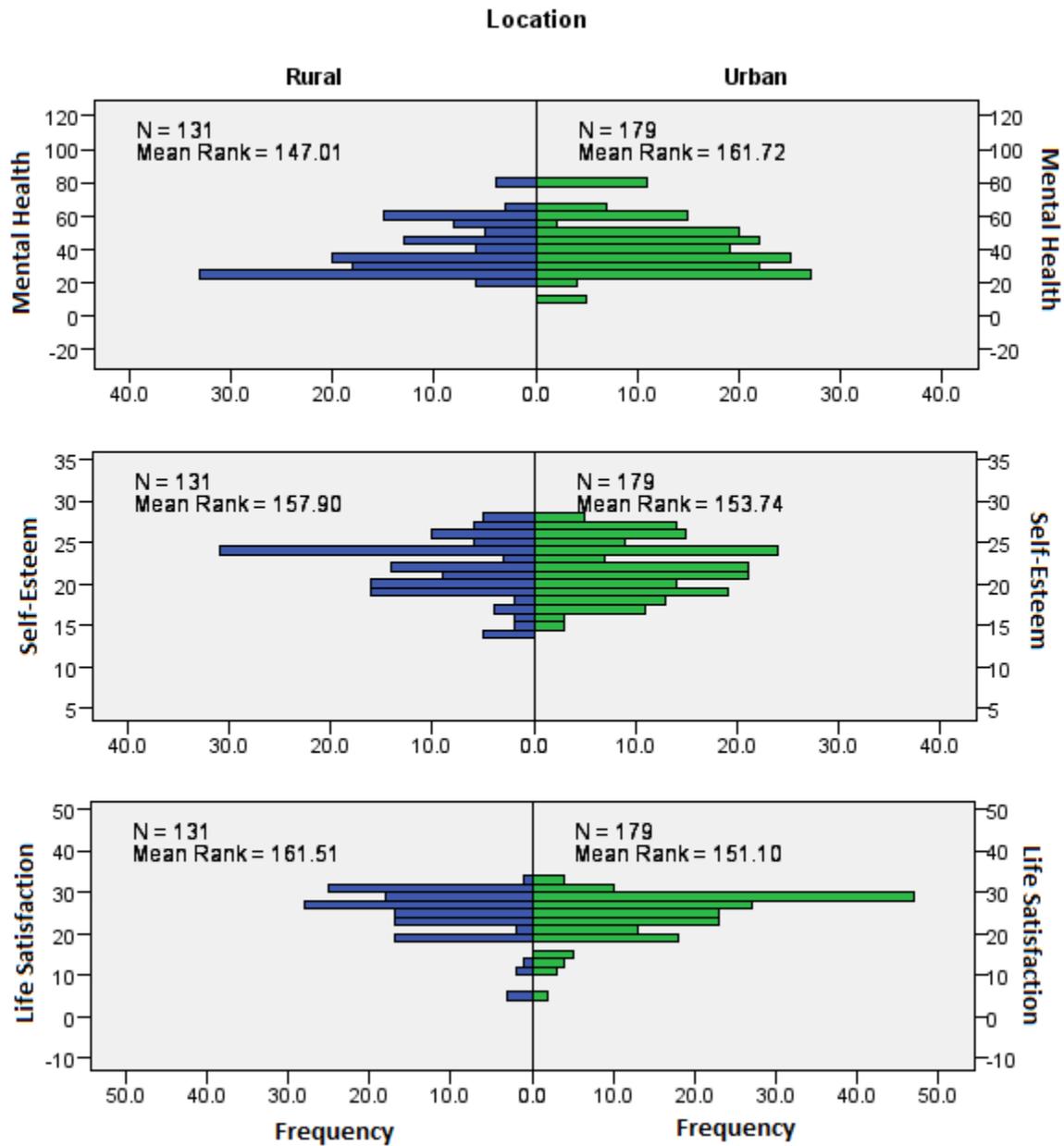
The Table-4 showed that the Kruskal-Wallis test was applied in among students, academicians, government employees, private employees, and business people participants. The test statistic was adjusted for ties. The findings indicated that there are significant differences between various types of participants for self-esteem and life satisfaction as .001 and .000, respectively. Whereas, the insignificant mean rank difference has been shown for the mental health in between students, academicians, government employees, private employees, and business people participants.

Graphical representation of mean rank order for mental health, self-esteem, and life satisfaction between male and female participants



The graph showed that there are 136 female and 174 male. The mental health's mean rank for female (131.75) is lesser than male (174.06). Self-esteem's mean position is higher in male (156.22) than female (154.58). For life satisfaction, female (161.22) have higher mean rank than male (151.03).

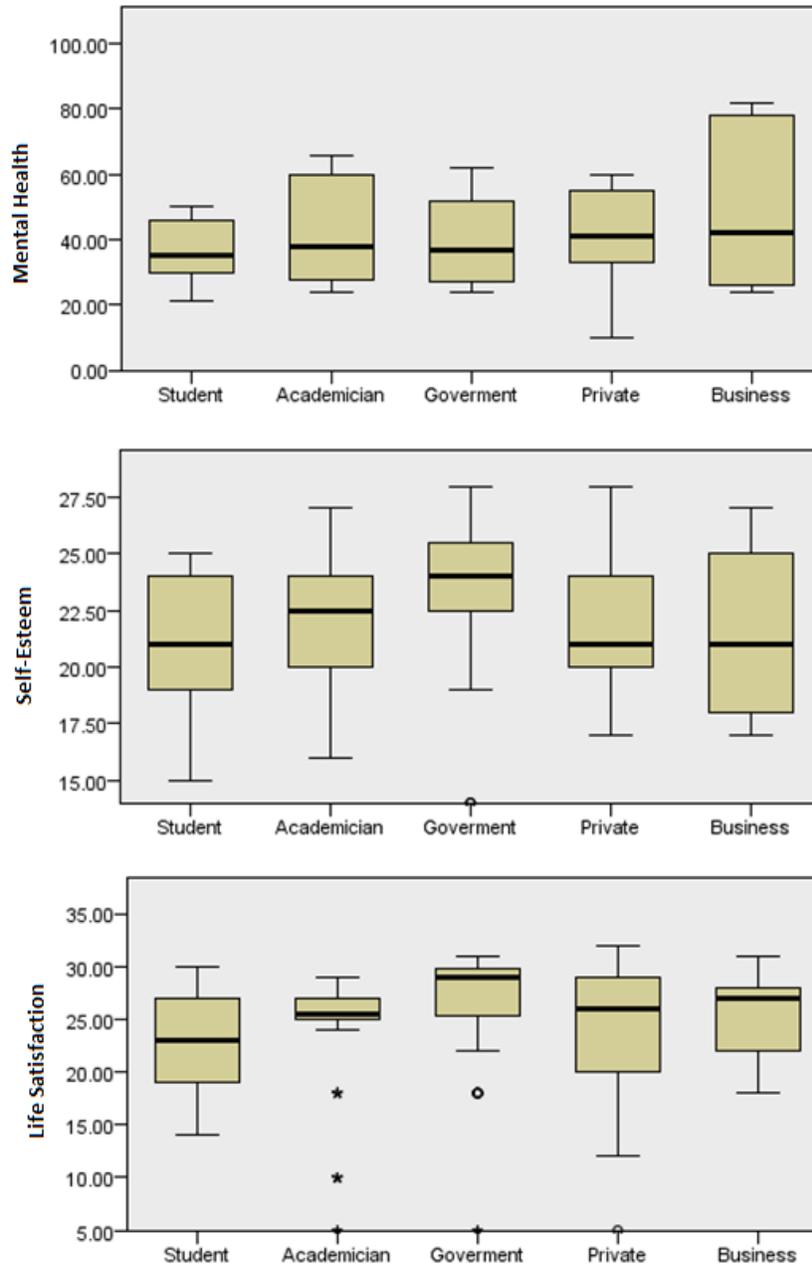
Graphical representation of mean rank order for mental health, self-esteem, and life satisfaction between rural and urban participants



The graph showed that there are 131 participants belong from rural areas and 179 from urban areas. The mental health's mean rank for urban (161.72) is higher than rural (147.01) areas participants. Self-esteem's

mean position is higher in rural (157.90) than urban (153.74) areas participants. For life satisfaction, rural (161.22) areas participants have higher mean rank than urban (151.10) areas participants.

Graphical representation of mean rank order for mental health, self-esteem, and life satisfaction between students, academicians, government employees, private employees, and business people participants



DISCUSSION

Measuring the effect of psychological factors on males and females is of utmost importance. This study sought to provide a preliminary indication of the differences between males and females for mental health. The research indicates that the mental health of males' participants is higher than females. The mental health for urban participants is higher than in rural areas participants. At the same time, the insignificant difference has been shown for the mental health in between students, academicians, government employees, private employees, and businesspeople participants. It is known that the prevalence of mood or anxiety disorder is higher in females than males. Problems resulting from the pandemic, many public health strategies such as diminishing social contact, isolating people affected or at-risk, lack of communication with family and friends, because the feeling of loneliness and this increases mental health problems (20). In addition to the changes associated with physical health, low uncertainty, and predictability, revealing transmission risk, and mortality due to the pandemic have caused changes in mental health (21). Studies showed that the state of threat and alertness against the pandemic had elicited negative emotions such as anxiety, acute stress, depression, social disgust, and life dissatisfaction (22). Finding from the study are consistent with the prior investigation, such as a survey in Canada revealed that female participants reported a low level of mental health during the pandemic compared to male participants on all measures. Nearly 25% of female participants reported poor mental health during the pandemic, compared with 21.2% of male participants (23). Bener and Ghuloum found in their study that media is the most common source of information affecting mental health (24). During that time, the media perform its part in creating a social phobia from the pandemic, and more news covered is by the media that is unlikely to offer particularly interesting stories lines or controversial headlines. This is also one of the causes of poor mental health. Such types of media roles cannot consider broadcasting such negative factors to discuss in the public domain even though they are highly prevalent. Xiang et al. reported that the experience of the ongoing pandemic raises stress and a timely understanding of mental health is essential for the public as well as government health agencies (25). A previous study confirms that the vast and high level of psychological and social consequences of the pandemic outbreaks on individuals, public, and international communities (26).

Self-esteem appears to be associated with emotional stress. An analysis of the psychological tool for health care providers during an outbreak noted that psychological distress could persist for up to three years after the outbreak. The study indicates that the self-esteem of male participants is higher than females. The self-esteem of urban participants is higher than that of rural participants. The results also revealed significant differences between different types of participants for self-esteem. Our findings are consistent with the previous findings with Magee and Upenieks reporting that males strongly agree with positive statements in survey assessment with female's self-esteem (27). Previous research on Western population showed that there was a significant difference in self-esteem across countries, with men reporting higher levels of self-esteem compared to women (28). A study showed that male traits were positively associated with self-esteem for both men and women, while the link between female traits and self-esteem was much weaker and less consistent (29). Self-esteem is widely recognized as a central aspect of psychological functioning during adolescence. Boys seem to score higher than girls on self-esteem during adolescence (30). A robust finding to emerging from the literature is a significant difference between gender, with males tend to report higher levels of self-esteem compared to females.

Another important finding of this study is that the life satisfaction of females participants is higher than that of males. Participants in rural areas participants have higher life satisfaction than participants in urban areas. Significant differences were existing amongst various types of participants. The pandemic affects all walks of life. Evidence of life satisfaction is now available from many studies. There is a moderate relationship between self-esteem and life satisfaction. Our findings are in line with Huo and Kong findings that the relationship between self-esteem and life satisfaction tends to be weaker in males than in females (31). Zang et al. reported that life satisfaction results are more accurate; the severity of the pandemic in one province negatively predicted people's life satisfaction. Life satisfaction was negatively associated with the most affected site. The severity of the pandemic had a negative relationship with life satisfaction but only for people with existing medical conditions and levels of exercise (32). There is evidence to suggest that certain variables influence differently on male and female life satisfaction (33). A study by Graham and Chattopadhyay revealed that gender differences in life satisfaction depend on age, income, education, marital status, and national levels of development. They found that women generally reported higher levels of life satisfaction than men, and also that the gender gap in life satisfaction (in favour of women) was more significant in rich countries, and an older, more educated, and married couples (34). Inglehart found that women reported higher life satisfaction than men in the younger age groups (18-24, 25-34, and 35-44), while men reported greater life satisfaction in older groups (above 45 years old) (35).

The limitations of the study are that assessment of mental health, self-esteem, and life satisfaction are based on the participants self-report. There is a high degree of heterogeneity among the target population. The other limitation of the study is cross-sectional and may not reflect the long-term symptoms of these psychological parameters on participants; Thus, the results of this study cannot be generalized.

Conclusion

Evaluation of all these psychological parameters provides a comprehensive picture of the peoples who live in Society. In such stressful situations, the concerned government, hospitals, educational institutions, organizations, and even individuals need to consider psychological intervention and take necessary action. In addition to educating individuals and preparing them for various mental health issues that they may face during the period.

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