

## Research Article

# A Study of Mental Health during COVID - 19 Pandemic among Teaching & Non-Teaching University Employees

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**Abstract:** In the present COVID – 19 pandemic most of the people not only in India but throughout the world are afraid especially those who are feeders of their family, hence, the present study is aimed at studying the extent of mental health among teaching and non-teaching employees working in Veer Kunwar Singh University (VKSU), Ara during COVID – 19 outbreaks. As it is generally observed that teaching and non-teaching staffs differs to each other in respect of their personal and institutional values, other related opportunities and problems, therefore, the present investigation is planned to make a comparative study of mental health among teaching and non-teaching employees working in VKSU, Ara, Bihar. The sample of the present investigation consisted of one hundred ten (N = 110) employees comprising teaching (n=55) and non-teaching (n=55) which were randomly selected from different departments of VKSU and its constituent colleges located at in and around Ara. A standardized mental health inventory was administered individually on the sample by contacting on mobile and social media during COVID outbreaks. This inventory also consists of 56 items covering 6 dimensions such as self- evolution, perception of reality, integration of personality, autonomy and stability, growth oriented attitude and environmental mastery. In this inventory high score indicates good mental health. Results revealed significant difference between means of two groups of teaching and non-teaching employees as t value was found statistically significant at .01 level of confidence although, teaching employees has been found to have better mental health as compared to non-teaching employees during COVID – 19 pandemic. Finally, such discrepancy of results has been discussed in detail by giving probable reasons.

**Keywords:** Mental Health, COVID – 19, Teaching and Non-Teaching, University Employees.

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## INTRODUCTION

Mental health is prerequisite for all conducive human behaviour. Therefore, the studies on mental health are always required before making any effort for healthy body – mind relation. It is, indeed, true that healthy mind or mental health is the hallmark of adjustment in life endeavor.

In the present pandemic of COVID – 19, it is necessary to study mental health because poor mental health is likely to generate fear, anxiety, and stress especially as a consequence of COVID – 19 pandemic, whereas, sound mental health provide energy to cope or fight with negative environmental circumstances.

It is important to mention that in the present COVID -19 outbreaks no body is free from stress which causes many psychological problems especially pertaining to mental health. Mental health is a psychological state of well-being, characterized by

continuing personal growth, a sense of purpose in life, self-acceptance, and positive relations with others. Some people define mental health as the absence of mental illness, but many psychologists consider this definition too narrow. Mental health can also refer to a field of study encompassing both mental health and mental illness.

These days a large number of distinct dimensions of mental health have been identified by psychologists and other behavioral scientists. These include self-acceptance, or self-esteem, characterized by a positive evaluation of oneself and one's past experiences; personal growth reflected in one's sense of continued psychological growth and development; a sense that one's life has purpose and meaning; positive relations with others; environmental mastery, the capacity to manage effectively in the surrounding world; and autonomy, a sense of self-determination and the ability to control one's own life. Self-acceptance, relations with others, environmental mastery, and

autonomy usually improve as a person ages and gains life experience. Though, many people find that their personal growth and sense of purpose in life begin to decline in midlife.

Some psychologists viewed mental health as the ability to maintain a balance between positive and negative emotions, such as happiness and sadness. In this view, a person who displays emotional extremes in either direction is less well-adjusted. Other psychologists emphasize the role of one's environment in influencing well-being. This perspective sees mental health reflected in a person's overall happiness with various domains of life, such as social relationships, work, and community.

Surgeon General's report focused for the first time on mental health rather than physical health. In that report, mental health was defined as "a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and to cope with adversity" (U.S. Public Health Service, 1999, p. 4). In 2004, the World Health Organization's historic first report on mental health promotion defined mental health as: a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. (World Health Organization, 2004, p. 12) In contrast, mental disorder (synonymous with *mental illness*) is a persistent deviation from normal functioning that is sufficient to cause emotional suffering and role impairment, diminishing individuals' capacities to execute their responsibilities as a parent, spouse, or employee (WHO, 2003). Although it sounds serious, and its name equates it with physical illness, mental illness was not considered a priority by the medical and public health community until the last decade of the twentieth century. Health is an essential aspect of human life. It is well-recognized truth from the time immemorial that possessing good health is pre-requisite for every human being for all-round growth and development. The word "Mental" means "of the mind". It describes our thoughts, feelings and understanding of ourselves and the world around us. The word "health" generally describes the working order of our body and mind. So, that when we talk about mental health we refer it to the working order of an individual's mind.

Mental health, however, is a contested and still much debated concept, with no universally accepted definition (Herron et.al, 2000; Friedli, 2004). In fact, it has been argued that there can be no universally accepted definition (Herron et.al, 2000; Friedli, 2004; Warr, 1987) due to the fact that mental health is multi-dimensional and value-laden. A wide range of meanings and definitions exist amongst individuals, reflecting, for example, differences in terms of age, sex, socio-cultural

contexts, experiences, and lack of common language. Additionally, interpretations are dynamic and mental health is often used interchangeably with, emotional, psychological and subjective well-being. Thus, no definition is ideal or without problems and mental health is more complex and subjective than any definition in this regard. It is recognized that focusing on achieving a consensus on definitions of an abstract concept like mental health may not be the most beneficial use of efforts or necessary (Herron et.al, 2000; Friedli, 2004; McDonald, (1999). However, the way mental health is defined and conceptualized will affect how it is measured.

Mental health is defined as a state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to her or his community. The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community" (WHO, 2005). Boehm (1955) says that the condition and level of mental health should be socially acceptable. According to Charandas (1986) mental health is the adjustment of human being to the world and to each other with maximum of effectiveness and happiness. It is an important aspect of one's total health. From perspectives of the discipline of positive psychology mental health may include an individual's ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience.

One of the distinguished scholars, viz., Weare (2004) is of the personal opinion that mental health is getting its deeper concern with some important positive characteristics of the individual such as: resilience and an inner sense of coherence; the ability to make relationships, to attach to others and to love the ability to think clearly including emotional matters; the ability to manage the emotions successfully and appropriately; the ability to be sensitive to one's own and other's emotions; and the capacity to have an accurate self concept and high self-esteem.

The term mental health has been classified into two different broader categories known as positive and negative mental health. Mental health from the positive angle refers to behavior, attitudes and feeling that respect an individual's level of personal effectiveness, success and satisfaction. Argyris (1951) suggested that persons with positive mental health should have the ability to understand the realities which exists both externally and internally when he/she strives to be aware of their oneself. Buck (1972) found that employees who reported working under pressure indicated decreased mental health. Emmons (1992) viewed that mentally healthy persons are able to fulfill

their social roles successfully. They enjoy peace of mind, happiness, self-confidence and others' companionship. Negative mental health covers a wide variety of deep feelings including sorrow, disappointment, anger and empathy etc. O'Neil and others (1985) found that stress in the work environment has a negative impact on the physical and mental health of working women. Rastogi and Kavita (2001) found a significant negative relationship between occupational stress and mental health. Nagaratnamma (1999) says that employees of different organizations differ with regards to their mental health. According to Johns *et al.*, (1989) mental health is a condition which is characteristics of the average person who meets the demands of life on the basis of his own capacities and limitations.

Mental health impairments popularly known as mental illness refer to all diagnosable mental disorders. Mental disorders are health conditions that are characterized by alterations in thinking, mood or behavior (or some combinations thereof) associated with distress and/or impaired functioning (Goyal, 1997).

An analysis of fifteen major studies conducted over last forty years on the prevalence of mental disorders in India by Ganguli (2000) suggested that 73 persons have mental disorders in a population of 1000 persons. Sharma and Singh (2001) revealed that in the state of Goa the prevalence of mental disorder was 60%, more among males as compare to females and likewise it was found much higher among Christians as compared to Hindus; but it was found very much similar in urban and rural areas. Recently, Zilli and Ali (2009) have conducted a study on mental health among players and non-players. The findings of the study revealed significant difference between players and non-players on mental health dimensions. Similarly, Zilli *et al.* (2009) concluded that female youth scored higher on mental health dimensions as compared to their male counterparts.

Mental health is the launch pad of thinking, communication skills, learning, emotional growth, resilience and self-esteem. It is how people look at themselves, their lives and the other people in their lives; evaluate their challenges and problems; and explores choices. This includes handling stress, relating to other people and making decisions. Sanadnarj *et al.*, (1988) investigates the relationship between physical health and mental health among 260 male and 252 females' higher secondary school students in Tamil Nadu. They studied 10 physical health variables and 6 mental health variables. Among the 60 correlations computed between physical health and mental health variables, 57 correlations were significant at 0.01 level and the remaining three were significant at the 0.05 level. It was found that those who enjoy good physical health are most likely to have better mental health as

compare to those who are suffering from poor mental health. Recently, various studies on mental health during COVID – 19 pandemic conducted by Wang, *et al.* (2020); Sahu P. (2020); and Shigemura J. *et al.* (2020), as they viewed that the current COVID – 19 outbreak has prompted most countries, hence, social distancing measures as a way to control the spread of the virus. However, the current pandemic has already shown significant psychological symptoms related to anxiety, stress and depression. Moreover, the development of new guidelines for counseling, psychological interventions online or those designed for specific groups such as health workers or older adults be identified for giving necessary measures in this situation (Bao *et al.*, 2020; Xiang *et al.*, 2020; Yang *et al.*, 2020).

### **Objectives of the present study**

Mental health is generally described as the state in the interrelationship of the individual and his environment in which the personality is relatively stable and the environmental stressors are within its absorption capacity. It is important to mention here that mental health of the teaching and non-teaching employees working in the same institution is a condition in which they are effective in their work, take pride and satisfaction in the activities they pursue, manifest cheerfulness in the performance of their duties and are humanely considerate of their pupils and other colleagues but in the present time of COVID – 19 pandemic, they are all afraid. Thus, the present piece of research endeavor is of utmost value.

Having scanned the review of literature on the study of mental health it has been observed that none of the psychological studies are available on the problem chosen by present investigator in the times of COVID – 19 with regard to teaching and non-teaching employees with particular reference to Veer Kunwar Singh University, Ara, India, hence, the present study is of immense value which will fill the void of knowledge in the field of psychology. Therefore, the present investigation was planned to study mental health during COVID – 19 among teaching and non-teaching employees with particular reference to Veer Kunwar Singh University, Ara, India.

### **Hypotheses**

**In the light of the objectives the following hypotheses were formulated:**

1. Teaching employees would have better mental health as compare to non-teaching employees on over all mental health inventory in the times of COVID – 19 pandemic.
2. Teaching employees working in V. K. S. University and its constituent colleges would have better mental health as compare to no-teaching employees on positive self-evaluation, a dimension of mental health.

3. Teaching employees would have better mental health as compare to non-teaching employees on perception of reality – a dimension of mental health.
4. Teaching employees working in V. K. S. University would have better mental health as compare to non-teaching employees on “integration of personality” dimension of mental health.
5. Teaching employees would have better mental health as compare to non-teaching employees on autonomy, a dimension of mental health.
6. V. K. S. University teaching employees would have better mental health as compare to their non-teaching employees on group-oriented attitude, a dimension of mental health.
7. Teachers working in V. K. S. University would have better mental health as compare to their non-teaching staff on environmental mastery, a dimension of mental health.

## METHODOLOGY

**Sample:** Total sample of the present study consisted of (N=110) employees, comprising teaching (n=55) and non-teaching (n=55) which were randomly selected from different departments of V. K. S. University and its constituent colleges located at Ara – a well known town of Bihar. The subjects’ age were ranged 35 to 61 years.

**Tools used:** The following measures were used in the present piece of research work.

1. **Mental Health Inventory:** For measuring mental health of the school teachers a standardized mental health inventory developed by Jagdish and Srivastava (2003) was used. Inventory consisted of 56 items, including 24 negative and 32 positive and

having a lowest score of 56 and highest score of 224. Since the neutral point is at 140, scores below 140 indicate poor mental health while scores above 140 reflect good mental health. Each item of the inventory was rated on 4 point rating scale ranging from always to never with a score of 1 to 4. Inventory comprises of six dimensions such as, Positive self-evaluation (PSE), Perception of reality (PR), Integration of personality (IP), Autonomy (Autonomy), Group-oriented attitudes (GOA), and Environmental Mastery (EM).

2. **Biographical Information Blank (BIB):** Biographical Information Blank (BIB) was also prepared by the present investigator and used for analyzing the obtained results. Information included in it was like age, income, job tenure, number of depends, total working experience, qualifications, etc.

## Procedure

These two materials were online in printed form and were sent to respondents through mail ID and WhatsApp to each teaching and non-teaching employees who were working in different departments of V. K. S. University and its constituent colleges located at Ara by giving assurance that information provided by them will be kept strictly confidential.

Having collected the scores on the items of the questionnaire, responses were scored according to the procedure and the individual scores were obtained. Finally obtained data were tabulated for giving statistical treatment for obtaining the results and presented in the tables and the results obtained were discussed by testing the formulated hypotheses.

## RESULTS AND DISCUSSION

**Table 1.** Showing Comparative Difference between the group of Teaching and Non-Teaching Employees Working in V. K. S. University, Ara on Their Perceived Reactions on Mental Health during COVID – 19 Pandemic

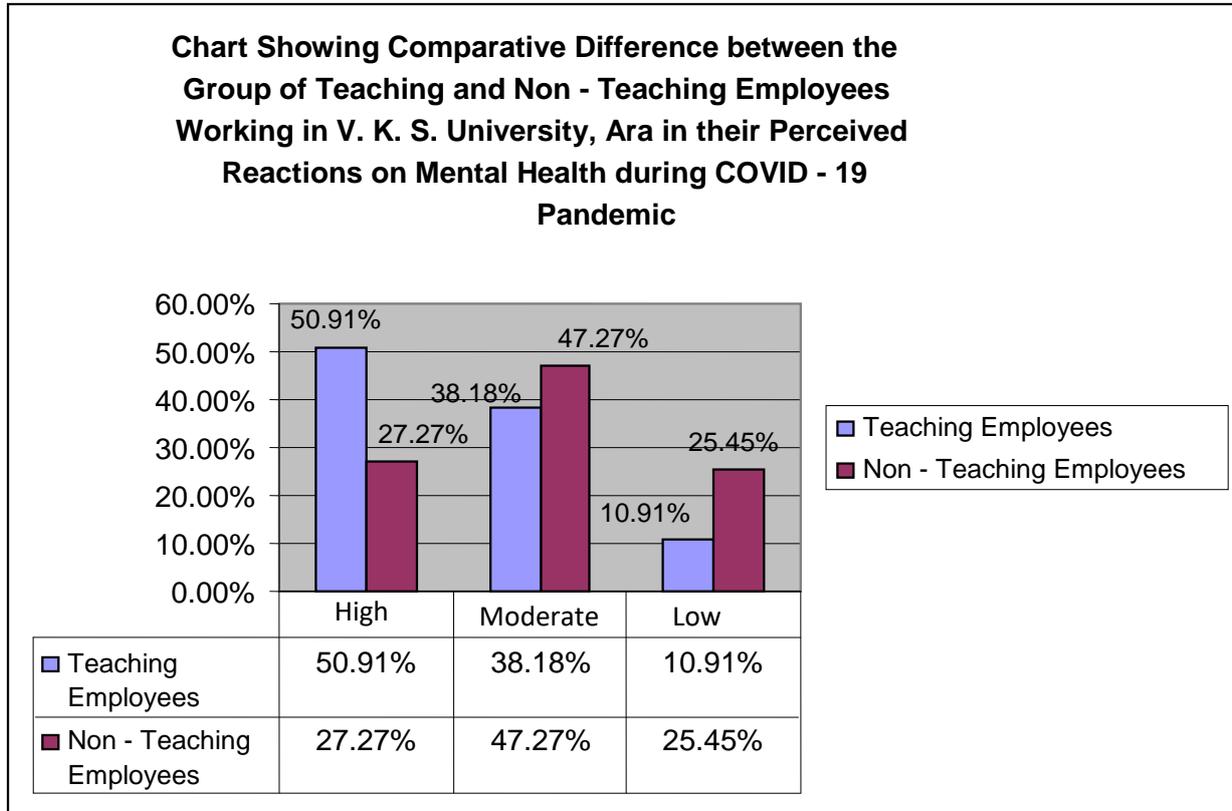
Levels	Group of Teaching Employees (n=55)		Group of Non-Teaching Employees (n=55)	
	n	Percentage	n	Percentage
High	28	50.91 %	15	27.27 %
Moderate	21	38.18 %	26	47.27 %
Low	06	10.91 %	14	25.45 %

As the obtained result presented in Table- 1 also reveals the clear cut picture regarding the levels of perceived reactions of teaching and non-teaching employees working in Patna University, Patna on the degree of mental health. As it could be seen from the table-1, 50.9% teaching employees working in V. K. S. University, Ara had shown higher degree of mental health than non-teaching employees working in the same university i.e. 27.27%. It is also evident from the table, 38.18 % teaching from the same university have been found possessing moderate level of mental health

than non-teaching employees i.e. 47.27 % which is comparatively higher in percentage, whereas, 10.91 % teaching employees of V. K. S. University had low degree of mental health which is comparatively lesser than their non-teaching counterpart i.e. 25.45 %. It is important to mention here that teaching group has been found to have better mental health during COVID – 19 pandemic in comparison to non – teaching employees working in V. K. S. University as they have been scored above 140 of total score which reflects good mental health. On the other hand, non – teaching group didn’t

score 140 & above 140 which reflects poor mental health as per norms of the scale. These obtained results can also be observed from the mean values obtained by

the teaching and non – teaching employees working in Veer Kunwar University, Ara. The presented results can also be observed by the following diagram:



**Table 2.** showing mean, SD and t-values between the group of teaching and non-teaching employees working in V. K. S. University, Ara on overall mental health scores and dimensions-wise

Dimensions	Group	Mean	SD	t-value	P*
Overall mental health	Teaching	155.6	13.12	8.26	< .01
	Non-Teaching	136.1	11.31		
Positive self-evaluation	Teaching	30.6	2.87	5.10	< .01
	Non-Teaching	28.1	2.23		
Perception of reality	Teaching	22.2	1.87	14.00	< .01
	Non-Teaching	17.3	1.74		
Integration of personality	Teaching	32.3	5.17	4.71	< .01
	Non-Teaching	28.2	3.78		
Autonomy	Teaching	17.7	1.65	36.00	< .01
	Non-Teaching	14.1	1.68		
Group oriented attitude	Teaching	27.4	3.28	3.33	< .01
	Non-Teaching	25.2	3.68		
Environmental mastery	Teaching	25.4	2.77	4.68	< .01
	Non-Teaching	23.2	2.27		

In continuation of the obtained results presented in Table- 2 clearly indicates that in the case of teaching group the mean and SD was found to be 155.6 and 13.12 while in the case of non-teaching group the Mean and SD was found to be 136.1 and 11.31 respectively, which has been found statistically significant at 0.01 level as t – value is found 8.26. Thus, the result proves the present underlying major hypothesis of our present piece of research work that “teaching employees working in Veer Kunwar Singh

University, Ara will have better mental health as compare to non-teaching group on overall mental health dimensions”, stands accepted.

Table 2 clearly indicated that in the case of teaching group on different dimensions of mental health the means values has been found high than their non-teaching counterparts, hence, all the dimensions of mental health, viz., positive self evaluation, perception of reality, integration of personality, autonomy, group-

oriented attitude and environmental mastery has been found statistically highly significant as their  $t$  – values are 5.10; 14.00; 4.71; 36.00; 3.33; and 4.08 respectively. By obtaining such type of results hypotheses formulated revealed the fact that all formulated hypotheses also stand accepted especially from where the present research endeavor has been carried out during the COVID – 19 pandemic.

In this case positive self-evaluation of employees clearly indicates that teachers use to assess themselves more positively as compare to non-teaching group, since they realize their potentialities in a better way, have good confidence level and self-confidence among themselves as compared to their non-teaching employees.

It is quite clear from the above mentioned findings that teachers, during the novel corona virus, are more realistic, farsighted and sharp in decision taking in their different matter of the organization as compare to non-teaching employees especially on the perception of reality – an important dimension of. Mental health. Moreover, in case of integration of personality – a dimension of mental health significant of difference has also been found as the Mean, SD and  $t$  – values presented in table 2 which clearly indicates that teachers group possess highly well-behaved, delightful, incorporated and value-oriented personality; therefore, they got better mental health as compared to non-teaching employees.

As the obtained result presented in table 2 also clearly indicated that during COVID – 19 pandemic teaching group are getting better autonomy and job-related freedom, therefore, they got better mental health as compared to non-teaching employees working in V. K. S. University, Ara as their  $t$ - 36.00 has been found highly significant at 0.01 level of confidence on the dimension of mental health i.e. autonomy. Similarly, group oriented attitude and environmental mastery – dimensions of mental health has also been found significant statistically at .01 level of confidence.

It is also quit clear from the results cited above in the table-2 that the teachers working in V. K. S. University, Ara are getting more group-oriented attitude, sense of oneness and generosity because of their environmental brought-up/ mastery provided by the organization as compared to non-teaching employees in the same institution, hence, they got better mental health as compared to their counterparts because of their positive personality.

The result obtained and presented in table No. 2 on total dimension of mental health clearly highlight the facts that teachers are getting comparatively more sound mental health as compared to non-teaching due to high conducive organizational climate, more autonomy and moreover much authoritative power invested to

them along with lower level working stressful situations. A number of studies conducted by Buck (1972), O’Neil and others (1985), Nagaratnamma (1999), Ahmad (2013) and recently during COVID -19 outbreak by Bao, et al (2020), Wang *et al.*, (2020) and Sahu (2020) extend their whole heartedly support to present findings in this regard.

## CONCLUSION

In the light of the results obtained in the times of COVID – 19 and its discussion the important conclusions are summed up below:

1. Significance of difference has been found between teaching and non-teaching employees in the times of COVID – 19 pandemic, although, teaching group have shown sound mental health in comparison to non – teaching employees as they have been found to have poor mental health due to COVID – 19 stresses.
2. Significance of differences have been found between teaching and non-teaching employees on all dimensions of mental health, namely, Positive self-evaluation (PSE), Perception of reality (PR), Integration of personality (IP), Autonomy (Autonomy), Group-oriented attitudes (GOA), and Environmental Mastery (EM).
3. Teaching employees working in V. K. S. University, Ara were comparatively more prone to higher degree of perceived mental health than their non-teaching counterpart.
4. Observations have revealed the fact that there is a need to pay much more attention to the necessities of non-teaching employees especially during the period of novel COVID – 19 outbreaks. It is because of the fact that sound mental health is the need of the hour in the times of pandemic to fight with the COVID - 19 and also in all walks of life to make congenial environment, hence, psychological counseling is necessary to cope with the present pandemic stresses. Moreover, it is worth mentioning that present study can be used as a helping tool for the improvement of mental health especially of non – teaching employees working in universities. However, the sample of this study is given up inadequate but it may have its own value far-reaching implications in its wider point of views.

## REFERENCES

1. Ahmad, A.(2013).Mental Health among Private and Government School Teachers up to 10<sup>th</sup> Standards.*Mental Health: Risk and Resources*, Edited by Deepti Hooda& Nov Rattan Sharma. Global Vision Publishing House, New Delhi
2. Argyris, C. (1951). Integration of the Individual and organization, New York: John Wiley.
3. Bao Y., et al (2020) Novel COVID -19 Epidemic: Address Mental Health Care to Empower Society.

- Lancet. 395; e37 – e38. DOI: 10.1016/S0140-6736(20)30309 – 3
4. Boehm, W.W. (1995). The role of psychiatric social work in mental health. In A.M. Rose (Ed.), *Mental Health and Mental Disorder*. New York: Norton.
  5. Buck, V.E. (1972). *Working under pressure*. London: Staples Press.
  6. Charandas, Nimai (1986). Mental health and the community. *Indian Journal of Community Guidance and Service*, 3(2), 25-27.
  7. Emmons, R.A. (1992). Abstract vs. Concrete goals: Personal striving level, physical illness and psychological well-being. *Journal of Personality and Social Psychology*, 62, 292-300.
  8. Friedli, L. (2004). Mental health improvement 'concepts and definitions': Briefing paper for the National Advisory Group. 2004. Edinburgh, Scottish Executive.
  9. Ganguli, H.C. (2000). Epidemiological findings on prevalence of mental disorders in India. *Indian Journal of Psychiatry*, 42(1): 14-20.
  10. Goyal, S. (1997). Stressful life events of middle aged Indian Women. *Journal of Community Guidance and Research*, 14, 1, 39-46.
  11. Herron, S. & Trent D.R. (2000). Mental health: A secondary concept to mental health illness. *International Journal of Mental Health Promotion*, 2, 29-38.
  12. Jagdish&Srivastava, A. K. (2003). Third Handbook of Psychological and Social Instruments edited by D. M. Pestonjee, Vol. 1. Concept Publishing Co. New Delhi, 2003.
  13. Johns, E.B., Sutton, W., & Webster, L.E. (1989). *Health of Effective Living*, New York: McGraw Hill Book Co.
  14. MacDonald, G. (1999). Problems, possibilities, people power and passion: What mental health promotion is and what it is not: a response to the inaugural issue. *International Journal of Mental Health Promotion*, 1, 37-43.
  15. Nagaratnamma, B. (1999). Organizational employees and their mental health status, *Journal of Community Guidance and Research*, 16(2), 101-109.
  16. O'Neil, Collen, P., & Neichner, A. (1985). Working women: A Study of relationship between stress coping and health. *Journal of Psychosomatic Obstetrics and Gynecology*, 4(2), 105-116.
  17. Rastogi, R., & Kavita K. (2001). A study of occupational stress and mental health among married working women. *Journal of Community Guidance and Research*, 18(2), 189-196.
  18. Sahu, P. (2020). Closure of Universities due to Coronavirus Disease 2019 (COVID – 19); Impact on Education and Mental Health of Students and Academic Staff. *Cureus*. 12;e7541. DOI: 10.7759/cureus.7541.
  19. Sanadnarj, S. H., Mohanan, A., & Mukundan, R. (1988). Certain variables of physical and mental health: A correlational analysis. *Journal of Psychological research*, 42, 122-129.
  20. Sharma, S. & Singh, M.M. (2001). Prevalence of mental disorders: An epidemiological study in Goa. *Indian Journal of Psychiatry*, 43(2).
  21. Shigemura J. C. et al (2020). Public Responses to the Novel 2019 coronavirus (COVID – 19) in Japan: Mental Health Consequences and Target Populations. *Psychiatry Clin. Neurosci.* 74, 281-282. DOI: 10.11/pcn.12988.
  22. U.S. Public Health Service. (1999). *Mental Health: A report of the Surgeon General*. Rockville,
  23. Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International journal of environmental research and public health*, 17(5), 1729. DOI: 10.3390/ijerph17051729.
  24. Warr P. (1987). A study of psychological well-being. *British Journal of Psychology*, 69, 111-21.
  25. Weare, K. (2004). *Developing the Emotionally Literate School*. London: Sage.
  26. World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence, practice (Summary report)*. Geneva: Author.
  27. World Health Organization. (2005). *Promoting Mental Health: Concepts, Emerging evidence, Practice: A report of the World Health Organization*, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. World Health Organization. Geneva.
  28. World Health Organization (WHO). (2003). *Investing in Mental Health (Geneva: WHO, 2003)*.
  29. Xiang, Y. T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T., & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7(3), 228-229. DOI: 10.1016/S2215-0366(20)30046-8.
  30. Yang, Y., Li, W., Zhang, Q., Zhang, L., Cheung, T., & Xiang, Y. T. (2020). Mental health services for older adults in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e19. DOI: 10.1016/S2215 – 0366(20)30079-1.
  31. Zilli A.S., & Ali. A (2009). Mental health among players and non-players. *Indian Journal of Human Relations*, 35, 8-13.
  32. Zilli, A.S., Zeenat, Z., & Charli (2009). Mental health among Male and Female Youths, paper presented at a National Conference on Revamping Mental Health Programmes, T.D.College, Jaunpur, February, 23-24.