Hardiness and Psychological Distress among University Students Studying In Madhya Pradesh

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ABSTRACT

Mental health has become an increasingly important concern in our society with more and more psychological disorders affecting the younger population. Moreover, the prevalence and seriousness of psychological disorder have been found to be on the rise among university students and their level of mental distress has also been found to be higher compared to the general population. Therefore, mental health of the student population deserves our special attention because not only the university students have to deal with the academic demands and heavy workloads associated with pursuing a higher education but they also have to face a wide myriad of personal, academic and social challenges in this critical and often transitional period of one’s life. This co-relational study examines the relationship between hardiness and psychosocial distress among 100 university students studying in Madhya Pradesh. The sample was selected on purposive basis. These dimensions with reference to demographic factors are included for analyses and their relationships with the levels of psychological distress measured by Kessler Psychological Distress Scale (K10) (2003) and hardiness measured by Bartone’s Dispositional Resilience Scale (DRS-15) (1993) are investigated. In addition, possible domicile and gender differences in the pattern of associations are explored. The data were compiled using self-administered questionnaires, and the collected data were processed and interpreted using comparative statistics and correlation analyses. The results indicate that there is a significant negative correlation between hardiness and psychological distress among university students. Furthermore, students belonging to rural areas showed higher levels of psychological distress than urban students In contrast, there is no significant difference in the levels of hardiness as well as in psychological distress between male and female university students.

Keywords: Hardiness, Psychological Distress.

Hardiness: An event may be stressful for someone and for another may not. Some people have resistance against stress and this resistance against stress is known as hardiness. Therefore, the
level of hardiness varies across people. To be described as hardy means to be strong and tolerant of stressful situations. According to the Oxford Dictionary, "Hardiness is the ability to endure difficult conditions". While as "English Collins Dictionary" states Hardiness as "the condition or quality of being hardy, robust or bold".

The construct of hardiness was first introduced by Kobasa (1979), who defined it as a resistance resource in the encounter with stressful situations. Maddi and Kobasa (1984), believe that the foundation of an individual’s ability to successfully cope with stress and remain healthy is personality style, which they termed "Hardiness". Psychologically "hardy" individuals have a different view of themselves and of the world. Moreover, according to Kobasa (1979), Hardiness is defined in terms of more specific dimensions of control, commitment and challenge characteristics that may influence both cognitive appraisal and behavior in response to stressful events. Higher control reflects the belief that persons can exert an influence on their surroundings, such persons feel that they have the power to turn an unfortunate situation into an advantageous one. Higher commitment is defined in terms of an individual's full engagement in activities and strongly committed people have a sense of purpose and self understanding, allowing them to uncover meaning in which they are and value in, such persons seem to perform in cheerful and effortless manner. Highly challenged individuals believe that change rather than stability characterizes life. Such persons anticipate change as affording them an opportunity for further development.

**Psychological Distress:** Many people around the globe experience severe stressors like war, earthquakes, or terrorist acts, and adversities such as poverty and family disruption which in most cases have negative effects on subsequent developmental pathways. However, not all individuals become as heavily affected by stressors as expected and show competence, thriving, and other positive outcomes instead of malfunction and problem behaviors.

**A Brief History of Stress:** Stress, as a concept in modern science, is usually described as having its roots in the middle of the 19th century when Claude Bernard (1813-1878) introduced the term “milieu intérieur” to denote the dynamic internal environment necessary for living organisms (Chrousos & Gold, 1992; Goldstein & Kopin, 2007; Le Moal, 2007). In the beginning of the 20th century, Walter Cannon (1871-1945), in his studies on the sympathetic-adrenal system, coined the term “homeostasis” for the maintenance of physiological variables, as well as the principle of negative feedback for its regulation. Cannon introduced the “fight or flight reaction” as the catecholamine response to a wide variety of harmful stimuli, and demonstrated the role of catecholamines in the control of homeostasis. In the 1930s Hans Selye (1907-1982) studied the pituitary-adrenocortical system and popularized the concept of “stress”, a term he transferred from mechanics to physiology. He defined stress as the non-specific response of the body to any demand placed upon it. And stressors according to Wheaton is “Conditions of threat, demands,
or structural constraints that, by the very fact of their occurrence or existence, call into question the operating integrity of the organism” (Wheaton, 1996).

**OBJECTIVES**

1) To study hardiness and psychological distress in university students studying in M.P.
2) To study the relationship between hardiness and psychological distress in university students studying in M.P.
3) To study the significance of difference in hardiness and psychological distress among university students studying in M.P with reference to their gender, and domicile (rural & urban).

**Hypotheses**

1) There is no significant relationship between hardiness and psychological distress among university students studying in M. P.
2) There is no significance of difference in hardiness among university students with reference to their gender and domicile.
3) There is no significance of difference in psychological distress among university students with reference to their gender and domicile.

**METHODOLOGY**

**Design:**
A structured questionnaire was distributed to a purposively selected sample of 100 university students studying in M.P. The sample was compared with reference to some demographic variables including domicile (rural and urban) and gender. The distribution corresponds to the distribution on campus with 50% females and 50% males. The questionnaire consisted of structured questions. The data collected from the sample was analysed by various statistical techniques such as Mean, SD, Z-test, and Pearson Correlation with the help of SPSS.

The present study is a correlation study which analyzed the data collected in 2015, which provides baseline information at the beginning of the quality reform. Only the data collected from the university students studying in M.P. were included in current study.

**Sample:**
The research consists of 100 university students studying in M.P. (50 males and 50 females), who were selected by purposive sampling.

*Inclusive Criteria:* The university students studying in M.P.

*Exclusive Criteria:* The students of M. P. studying outside of their State.

**Statistical Techniques:**
For achieving the desired objectives, the collected data will be analysed by using the following statistical techniques: Descriptive statistics such as Mean, SD etc. shall be used in order to make raw data tangible. Pearson’s product moment correlation shall be used to measure the
relationship between different variables. t-test shall also be applied to assess the difference between different variables.

**Tool Description:**
The following standard tools shall be administered to gather the information from the participants for the present study:

**Psychological Distress Scale (K10):** The Kessler psychological distress scale is a simple measure of psychological distress. The K10 scale involves 10 questions about emotional states each with a five level response scale. The measure can be used as a brief screen to identify levels of distress. The tool can be given to patients to complete, or alternatively the questions can be read to the patients by the practitioner. Each item is scored from one ‘none of the time’ to five ‘all of the time’. Scores of the 10 items are then summed, yielding a minimum score of 10 and a maximum score of 50. Low scores indicate low levels of psychological distress and high scores indicate high levels of psychological distress.

**The Dispositional Resilience Scale (DRS-15):** Hardiness was measured using the 15-item scale developed by Bartone (1995) consisting of three dimensions including commitment, control and challenge. For this instrument participants respond on a 4-point scale indicating the level at which each of the 15 statements apply to them as follows: 0 (not at all true); 1 (a little true); 2 (quite true); & 3 (completely true). Scores are obtained by reverse coding the appropriate and summing items for each dimension. The overall hardiness score is obtained by summing all 15 items.

**Operation Definitions of the Variables**

**Hardiness:** According to Maddi (1990), “Hardiness refers to a personality trait that indicates the manner in which a person might interpret a critical incident, life stress, or traumatic event”.

In the present study hardiness means the scores obtained by subjects on the Dispositional Resilience Scale (DRS-15) developed by Bartone (1995).

**Psychological Distress:** Psychological distress is an unpleasant subjective state, which takes two major forms, depression and anxiety. Each is represented by mood and malaise. Mood refers to feeling and malaise refers to physical symptoms the person experiences. Depression and anxiety are related forms of distress largely sharing the same social map (Mirowsky & Rose, 2003).

In the present study psychological distress means the scores obtained by subjects on the psychological distress scale developed by Kessler (2003).
RESULTS

Table 1: Shows correlation between hardiness and psychological distress among university students studying in M. P. Correlations

|                      | Hardiness | Psychological |   |   |
|----------------------|-----------|---------------|---|---|
|                      | Pearson Correlation | N |   |   |   |
| Hardiness            | 1         | .535**        | 100| .000 |
| Sig. (2-tailed)      |           |               |   |    |
| Psychological distress| -.535**   | 1             | 100|    |
| Sig. (2-tailed)      | .000      |               |   |    |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.3 shows that the relationship between hardiness and psychological distress among university students studying in M. P. is significant (N = 100, \( p = .000 < .01 \)). There is a negative correlation (\( r = -.535 \)) which is fair and it is highly significant at the .01 level of significance (2-tailed). It can be concluded that the university students studying in M. P. who have higher levels of hardiness are inclined to report lower levels of psychological distress. Hence, our null hypothesis, “there is no significant relationship between hardiness and psychological distress among university students studying in M. P.’’ is rejected.

Table 2: Showing means difference of hardiness and psychological distress between male and female subjects.

| Gender               | N  | Mean  | SD   | t    | Df  | Sig. (2-tailed) |
|----------------------|----|-------|------|------|-----|-----------------|
| Hardiness            | 50 | 43.88 | 4.736| .505 | 98  | .615 NS         |
| Male                 | 50 | 43.32 | 6.258|      |     |                 |
| Female               | 50 | 23.44 | 6.018| .580 | 98  | .563 NS         |
| Psychological distress| 50 | 22.68 | 7.046|      |     |                 |
| Male                 | 50 | 23.44 | 6.018| .580 | 98  | .563 NS         |
| Female               | 50 | 22.68 | 7.046|      |     |                 |

NS = No significant difference.

The results presented in the above table reveal the t-value of the mean scores of hardiness and psychological distress with reference to gender.

There is no significant difference in the levels of hardiness between male and female university students. The mean level of hardiness in the females was 43.32 (SD=6.258), and the mean for
Hardiness and Psychological Distress among University Students Studying In Madhya Pradesh

males was 43.88 (SD = 4.736); t (98) = .505. Hence, the null hypothesis, ‘‘there is no significant difference in hardiness between male and female university students’’ is accepted.

Moreover, no significant difference in psychological distress between male and female sample was found. The mean level of psychological distress in the females was 22.68 (SD = 7.046), and the mean for males was 23.44 (SD = 6.018); t (98) = .580. Thus, our null hypothesis, ‘‘there is no significant difference in psychological distress between male and female university students’’ is accepted.

**Table 3: Showing means difference of hardiness and psychological distress between rural and urban subjects.**

| Domicile               | N  | Mean  | SD   | t    | Df | Sig. (2-tailed) |
|------------------------|----|-------|------|------|----|-----------------|
| Hardiness. Rural       | 37 | 43.03 | 5.014| -.793| 98 | .430:NS         |
| Urban                  | 63 | 43.94 | 5.822|      |    |                 |
| Psychological distress.| 37 | 25.27 | 6.077| 2.673| 98 | .009**          |
| Rural                  | 63 | 21.76 | 6.483|      |    |                 |
| Urban                  |    |       |      |      |    |                 |

** = Significant at 0.01 level of significance.

NS = No significant difference.

The results presented in the above table reveal the t-value of the mean scores of hardiness and psychological distress with reference to domicile (rural and urban).

No significant difference in hardiness between rural and urban sample was found. The mean level of hardiness in the rural university students studying in M.P. was 43.03 (SD = 5.014), and the mean for urban university students was 43.94 (SD = 5.822); t (98) = -.793. Thus, our null hypothesis, ‘‘there is no significant difference in hardiness between rural and urban university students studying in M.P.’’ is accepted.

In contrast, the sample belonging to rural areas have higher levels of psychological distress (N = 37, M = 25.27, SD = 6.077) than sample of urban areas (N = 63, Mean = 21.76, SD = 6.483); (t = 2.673, df = 98, p < .01, two-tailed). Therefore, there is a significant difference in the levels of psychological distress between rural and urban university students studying in M.P. Hence, the null hypothesis, ‘‘there is no significant difference in psychological distress between rural and urban university students studying in M.P.’’ is rejected.

**Discussion**

Hardiness is the ability of an individual to combat stress. In contrast, stress is a negative emotional experience accompanied by predictable biochemical, physiological, cognitive, and behavioural changes that are directed toward altering the stressful event or accommodating to its effects (Baum, A., 1990). The main aim of this study was to assess the level of hardiness and
Hardiness and Psychological Distress among University Students Studying In Madhya Pradesh

psychological distress in university students studying in Madhya Pradesh. The first hypothesis of the study was that there would be no significant relationship between hardiness and psychological distress among university students studying in Madhya Pradesh. To check this relationship correlation analysis was used. The result of present study showed that there is a significant negative correlation between hardiness and psychological distress among university students. So the result does not support the study hypothesis. This result is consistent with those of Kenneth, M. N. (1986); Rhodewalt & Agustsdottir (1984); and Shepperd, J. A. & Kshani, J. H. (1991). There is no single study that produced the opposite results that there is positive relation between hardiness and psychological distress. The reason may be is that variables, hardiness and psychological distress are opposite in nature. So these constructs produced negative results in almost every condition.

First major part of the second hypothesis of the present study was that there would be no significance of difference in hardiness among university students with reference to their gender. To check this difference t-test was used. The result of the present study showed that there is no significant difference in hardiness between male and female university students. So the hypothesis is accepted. This result is similar with other studies such as Rhodewalt & Agustsdottir (1984); Soderstrom, M.; Dolbier, C.; Leiferman, J.; and Mary Steinhardt (2000) and Shepperd, J. A. & Kshani, J. H. (1991). While on the other hand the study conducted by Jagpreet Kaur (2011) produced the opposite results that there is gender difference in hardiness. The results of these studies showed that females possess less hardiness as compared to males. This may be attributed to the differential treatment which is given to the boys and girls in some Indian societies. There is a preference of male children in Indian context. Hence, the preferential treatment and the exposure given to the male children as compared to the female counterparts may be responsible for these results (Verma, R. K. & Ghadially, R., 1985). So these results are different and contradict to the present study. The reason may be that the populations are different. Jaspreet Kaur’s research was on the population of adolescents while the present study was on the population of university students. The students at this stage of development share equal rights and freedom given by their family as well as by their society. Second part of this hypothesis of the present study was that there would be no significant difference in hardiness among university students with reference to their domicile (rural & urban). To check this difference t-test was used. The result of the present study showed that there is no significant difference in hardiness between rural and urban university students. So the hypothesis is accepted. Not a single study was found on hardiness with reference to domicile. As for as the population of present study is concerned, it consists of university students which mean that they are well qualified and have attained higher self-esteem. This may have boosted the belief of the female and rural students that they are not the weaker section.

One major part of the third hypothesis of the study was that there would be no significant difference in psychological distress among university students with reference to their gender. To check this difference t-test was used. The result of the present study showed that there is no
significant difference in psychological distress between male and female university students. So the hypothesis is accepted. This result is similar with other studies such as Robinson, MacCulloch, & Arentsen (2014); Suarez (2004); Jhanjee (2013); Carroll, Toovey & Gempel (2006); Stoeckle, Zolo & Davidson (1964); McGarry (2013) and Hains et al. (2014). While on the other hand the study conducted by Mujeeb & Zubair (2012); Sajeel (2011); Gill, Ahmed, & Irfan (2010) and Jabeen (2012) produced the opposite results that there is gender difference in psychological distress. The results of these studies showed that women experience less resilience as compared to men. One possible explanation is that there is much difference in environmental factors in different countries. Secondly, the level of awareness and ability to cope the traumatic situation is different culturally. Thirdly, the literacy rate also effect the general well being of individual as it was told that education is a social instrument that guide the future and destiny of individuals. Fourthly, the equality of gender is a significant factor. In developed cultures the women are consider equal to men. While on the other hand, in under developing countries the women emancipation is still a dream. Fifthly, in under developing countries the women are considering a passive creature to take part in daily affairs. While in developed countries the women are considering an equal partner in daily life. Last but not least, the ability of resources of rescue is more in developed countries as compared to under developing countries. So these are the reasons that are responsible that why the results are different in different countries. There are may be other reasons that are responsible in this regard. Second part of the third hypothesis of the present study was that there would be no significant difference in psychological distress among university students with reference to their domicile. To check this difference t-test was used. The result of the present study showed that there is no significant difference in psychological distress between rural and urban university students studying in M.P. So the hypothesis is accepted. Not a single study was found on psychological distress with reference to domicile.

**CONCLUSION**

Mental health of the student population deserves our special attention because not only the university students have to deal with the academic demands and heavy workloads associated with pursuing a higher education but they also have to face a wide myriad of personal, academic and social challenges in this critical and often transitional period of one’s life. Society and people develop higher expectations from them as they can contribute what the society needs. The aim of the present work was to study the hardiness and psychological distress among university students. From the analysis of the above data it has been found that there is a fair negative correlation in hardiness and psychological distress as it has been already mentioned in discussion that the reasons may be because these two variables are opposite in nature. Thus, it can be concluded that the university students studying in M. P. who have higher levels of hardiness are inclined to report lower levels of psychological distress and vice versa.

It can also be concluded that at the university level there is no gender difference in the levels of hardiness and psychological distress. Moreover, the university students do not differ in the levels
Hardiness and Psychological Distress among University Students Studying In Madhya Pradesh

of hardiness with respect to their domicile. The students belonging to rural areas do not differ in hardiness with the students of urban areas. In contrast, the rural students have higher levels of psychological distress than those of the students of urban areas.

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