The Effect of Anxiety and Hardy Personality on Insomnia during Covid-19 (unlock) phase 3

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Abstract:

The general purpose of the study was to investigate the effect of anxiety and hardy personality on insomnia during the COVID - 19 unlock phase three. The data was collected from 133 samples who were either working from home or going to the office. It was collected digitally / online. The questionnaire used to collect the data were Dispositional Resilience Scale (DRS-15 Version 3), Beck Anxiety Inventory (BAI), Insomnia Severity Index (ISI). The study reflected that insomnia is positively correlated with both anxiety and hardy personality and a moderate effect can be seen of anxiety on insomnia.

Key words: Anxiety, Insomnia, Hardy personality

Introduction

Sleep plays a very important role in an individual's health and wellbeing. During the present situation disturbance in the sleep pattern is very prominent. There have been several signs that sleep patterns have an effect on our ability to perform well. The International Classification of Sleep Disorders-2nd edition (ICSD-2) defines insomnia as a difficulty in beginning/maintaining sleep which is accompanied by fatigue, irritability, lack of motivation/energy and not being able to concentrate on various tasks. It affects the performance and mood of an individual. According to various researches a disturbed sleep pattern is linked with depression and anxiety, persistent insomnia can lead towards major anxiety disorders (Ford DE, Kamerow DB; 1989), (Gillin JC;1998). Whereas anxiety is an umbrella term for the feeling of fear, nervousness, apprehensiveness, or worry that helps us to perform under various circumstances but it does become problematic when it happens regularly and persists overtime. It becomes a hurdle on the way to our goals and daily functioning. Many researches have reflected that anxiety affects our mood and sleeping pattern that has a very high relation with other psychiatric conditions (Kessler et al., 2005).The other variable of the study: hardiness is a set of skills or attributes that gives one courage/ motivation to enhance his/ her performance under stressful circumstances (Maddi, 2004;2007). People who score high on this trait tend to interpret stressful situations or painful situations in a normal acceptable way they understand that it is part of life that they have to deal with. There are three factors associated with hardiness that are

i) high sense of commitment both with life and work

ii) feeling of control. It states the belief that you can choose and influence the events that are happening around.

iii)openness to change and the challenges around trying new opportunities (Kobasa, 1979)

Hardiness is linked to both the heath factors and performance of an individual under any stressful situation. It develops early in life and is mostly stable throughout life. It involves how one interprets and acts towards

stressful circumstances (i.e., willingness to stay engaged, influence on outcomes, and attitude toward the need to change), it has been theorized as an expression of existential courage (Maddi, 2004). Individuals high in hardiness are believed to be resilient while dealing with stressful situations when they could be environmental stressors or personal stressors and tend to remain healthy and perform well despite high stress/ anxiety levels (Bartone, 1989; Bartone, 1999; Bartone, 2000). There are various findings that reflect that level of hardiness is one of the protective factors between stress and symptoms of insomnia. It reflects that people who are high on hardiness exercise less stress in life and have better coping mechanisms, level of coping which future effects their anxiety level and various stress further they have a better physical and mental health (funk, 1992). The other factors of hardiness are learned cognitive, behavioural and interpersonal skills, that enhance facing stress as a challenge, an opportunity to grow. Hardiness protects us from the undesirable effects that stress brings along.

This study focuses upon understanding the relationship among these variables. The intent of the study is to see whether there is a significant relationship between the three variables and how hardiness and anxiety independently have an effect on insomnia. affects both anxiety and insomnia and how anxiety leads towards the symptoms of insomnia. Hence, the following hypothesis are formulated for the present study:

i) Hardiness and Anxiety will be negatively correlated

ii) Insomnia and Anxiety will be positively correlated

iii)Hardiness and Insomnia will be negatively correlated

iv) There is a significant relationship between Hardiness and Insomnia

v) There is a significant relationship between Anxiety and Insomnia

METHOD

Sample

The data was collected from 133 samples, working in different organisations. The age bracket was 25 to 40. The data was collected from females and males and the basic qualification criteria was graduation.

Measure

Dispositional Resilience Scale DRS-15 (Version 3):

The scale is designed by Paul Bartone. It is used to measure hardiness and its three subcomponents: commitment, control, and challenge (Bartone et al., 1989). The shortened DRS consists of 15 statements about life in general (5 items per subcomponent). For each item there are four options. Six items are reverse-coded. The total hardiness score ranges from 0 to 45. The internal reliability of the scale is .80 and 3-week test-retest reliability of .78 (Bartone, 2007).

Beck Anxiety Inventory (BAI)

The scale is designed by Aron T. beck. It is a self-report measure of anxiety with 21 statements. It reflects common symptoms of anxiety for every symptom 4 options are given that range from (0-3). The internal consistency of the test is 0.92 (Cronbach's) and test-retest reliability (one week) for BAI = 0.75 (Beck, Epstein, Brown, & Steer, 1988).

Insomnia Severity Index (ISI)

The scale is designed by Charles Morin, PhD, et al. It consists of 7 statements for each there are 5 options (0-4). The internal consistency of the test is (Cronbach) 0.90. The translated form of ISI from English to Hindi by Vivekananda Lahan and Ravi Gupta was used in the present study.

Procedure

A brief introduction was given about the study to the participants and their volunteer agreement was ensured. Participants were also assured about the confidentiality of the test results. Each participant was contacted. The instructions were made clear to the participant. To undergo the process of the study, the data were collected from 133 employees from 25 to 40 years of age, both males, females. There was no time limit for the completion of the questionnaire. An online form was made which was circulated. The participants were told that there is no fixed time limit and no answers are right or wrong. The individual had to choose the most appropriate option which suited them. The data was analysed using SPSS.

FINDINGS

TABLE 1:INTERCORRELATION MATRIX OF INSOMNIA , ANXIETY AND HARDY PERSONALITY(OVERALL AND AREA WISE) IN YOUNG WORKING ADULTS(N=133)

Variables	Insomnia	Anxiety	Hardy Personality			
			X1	X2	X3	X4
Insomnia	1	0.589**	-0.577**	-0.50.	-0.76.	-0.371**
Anxiety		1	-0.609**	-0.113	-0.193*	-0.473**
Hardy Personality X1 X2 X3 X4			1	0.2377** 1	0.19 0.173* 1	0.733** 0.624** 0.685** 1

X1-Commitment, X2-Control, X3-Challenge, X4-Overall hardiness

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows the intercorrelation of three variables - insomnia, anxiety and hardy personality of young working adults. The correlation of the overall score and the dimensions of hardy personality are also calculated. There is a moderate correlation between anxiety and insomnia and a negative correlation between insomnia and hardy personality.

TABLE 2.1:MODEL SUMMARY OF LINEAR REGRESSION IN YOUNG WORKING ADULTS

DEPENDENT VARIABLE : INSOMNIA
INDEPENDENT VARIABLE :HARDY PERSONALITY (OVERALL AND ITS DIMENSIONS)

Model	R	R Square	Adjusted R square	Std. error of the estimate	df1	df2	F	Sig.
1	0.34	0.092	0.085	6.937	1	123	12.483	0.01

Table 2.1 depicts the regression of Hardy Personality on Insomnia in young working adults. The R square shows a 9% variability of prediction. On the basis of results, the regression equation is- Insomnia = 55.121- 29.332 log10hardiness

TABLE 2.2:MODEL SUMMARY OF LINEAR REGRESSION IN YOUNG WORKING ADULTS

DEPENDENT VARIABLE : INSOMNIA
INDEPENDENT VARIABLE :ANXIETY

Model	R	R Square	Adjusted R square	Std. error of the estimate	df1	df2	F	Sig.
1	0.552	0.304	0.298	5.676	1	123	50.331	0.000

Table 2.2 depicts the regression of Anxiety on Insomnia in young working adults. The R square shows a 30% variability of prediction. On the basis of results, the regression equation is- Insomnia= 1.203 + 11.242 log10anxiety

DISCUSSION

The objective of the present study was to see the effect of anxiety and hardy personality on Insomnia. The sample of the study is 133 working young adults who are either working from home or going to the office. The data is collected using online methods with the use of three standardised tests namely Dispositional Resilience Scale (DRS-15) to measure a hardy personality, Beck Anxiety Inventory to measure anxiety and Insomnia Severity Index (Hindi Version) to measure the sleeping patterns of the participants. It is analysed using Pearson's coefficient of correlation and linear regression with the help of Statistical Package for Social Sciences (SPSS).

The first hypothesis states that there will be a negative correlation between Hardiness and Anxiety. The coefficient of correlation has been computed in Table 1. There is a moderate negative correlation between Anxiety and commitment. (-0.609) significant at 0.01 level. There is a weak negative correlation between anxiety and challenge (-0.193) significant at a 0.05 level. Furthermore, anxiety is moderately correlated with the overall hardiness score(-0.473) significant at 0.01 level. Hence the first hypothesis has been accepted as there is a negative correlation between hardiness and anxiety.

The second hypothesis states that insomnia and anxiety will be positively correlated. Based on the correlation matrix in table 1, there is a moderate relationship between insomnia and anxiety (0.589) significant at 0.01 level. The hypothesis has been accepted as there is a significant relationship between insomnia and anxiety.

The third hypothesis states that hardiness and insomnia will be negatively correlated. As shown in the correlation matrix in table 1, there is a moderate correlation between insomnia and commitment (-0.577) significant at 0.01 level and a moderate correlation between overall hardiness and insomnia (-0.371) significant at 0.01 level. Hence, the third hypothesis is also satisfied.

The fourth hypothesis states that there will be a significant relationship between hardiness and insomnia. To verify the hypothesis, linear regression was calculated. Based on the regression model described in table 2.1, hardiness has a 9% variability of insomnia. It shows a low variability yet a significant relationship ($p<0.01$) between the two variables. Hence, the fourth hypothesis is also satisfied.

The fifth hypothesis states that there is a significant relationship between anxiety and insomnia. To verify the hypothesis, linear regression was calculated and the results are described in table 2.2, anxiety has a 30% variability of insomnia. The log function was calculated for both anxiety and hardiness in the regression model and outliers were also removed to depict a clear linear relationship. There is a moderate variability shown and the relationship is significant at 0.01 level. Hence, the fifth hypothesis is also satisfied.

CONCLUSION

The objective of the present study is to find the effect of hardy personality and anxiety on insomnia during COVID 19 unlock phase 3. The findings indicate that the anxiety has a moderate effect on insomnia. There is a negative correlation between hardiness and insomnia. Researches ensure that hardiness plays a role in insomnia but as per the present study it shows a very low variability.

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