AN ASSOCIATION BETWEEN PSYCHOLOGICAL HARDINESS, COPING MECHANISMS AND PERCEIVED STRESS AMONG EMPLOYEES IN AUTOMOBILE INDUSTRY, CHENNAI.

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Abstract

Background: Stress is an unavoidable part of life in the modern era, and it can negatively affect one's psychological and physical health. Working men and women who are employed full-time experience daily stress, which has been linked to absenteeism, decreased productivity, and turnover. However, it has been hypothesized that psychological fortitude and the successful use of coping mechanisms could lessen the harmful effects of stressors. According to this study, there is a connection between working-age people' hardiness, coping mechanisms, and perceived stress.

Methodology: To understand the relationship between psychological hardiness, perceived stress, and coping mechanisms among employees, the study used a qualitative and exploratory methodology. For this study, the Hardiness Scale, Ways of Coping Questionnaire, and Perceived Stress Scale were sent to 100 working individuals, 50 males and 50 females, respectively. The consent form and the demographic data questionnaire were also emailed to the participants along with these tools. These tools and forms were submitted online, and the responses were automatically recorded.

Results: The relationship between perceived stress and psychological hardiness was found to be negative. The relationship between perceived stress and coping mechanisms was shown to be unfavorable. The predictor variables Hardiness and Coping Strategies showed a significant positive connection.

Conclusion: Coping strategies were unable to predict how stressed-out working individuals felt. This might be the case since coping mechanisms are often inefficient and only serve to help people relax and revitalize. Hardiness and coping strategies showed a high positive association, which is consistent with earlier findings.

Keywords: Employees, Coping mechanisms, Perceived Stress.

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1. Introduction

Concept of Psychological Hardiness

A concept called psychological hardiness was created to define an internal resource [1] or a collection of personality traits [2] linked to good health and peak performance under stressful circumstances. A personality attribute known as "hardiness" is made up of the basic dispositions of "commitment," "control," and "challenge," which work together to provide a person with psychological resources to deal with stressful situations. The inclination to believe and act as though one can affect the events in one's life and control or effectively manage those circumstances is known as the control disposition. Hardy people experience and hold the belief that they are influential rather than feeling helpless when facing the blessings and curses of life. People that are psychologically resilient frequently have an internal locus of control [3]. The inclination to be actively involved and totally immersed in one's life and social environment was described as the commitment disposition. The idea and acceptance that change is normal and presents possibilities for personal progress, rather than as a danger to their security, was described as the challenge disposition. It is thought that hardiness develops early in childhood and is largely consistent over time [4]. Hardiness, according to Salvatore Maddi, is a set of attitudes and abilities that gives people the fortitude and tools to turn challenging situations into learning opportunities. How well a person adapts to and interacts with others in their social environment, including their workplace, is influenced by their psychological hardiness, which comprises of commitment, control, and challenge [6]. Because they choose to deal with stress, hardy people are more able to handle it. These people also have a propensity to view stress as adding to the excitement of their lives. For instance, the resilient person views a conference meeting with a superior as a chance to convince the superior rather than as a threat to their job [7].

Understanding of coping mechanisms

A person under a lot of stress always employs some method because it is understood that no human can remain in a constant state of tension. 'Coping Strategies' [8] is the name given to these tactics. The coping mechanisms are deliberate actions meant to reduce or get rid of symptoms. Coping has been described by Folkman and Lazarus as the dynamic cognitive and behavioural responses to manage particular internal or external demands that are deemed to be stressful or beyond the capacity of the individual [9]. The cognitive and behavioural attempts people make to handle events that are seen potentially damaging or

stressful are known as coping [10]. The term "coping" can relate to either strategies or results, according to Fleishman [11].Coping as a tactic refers to the various techniques people use to deal with their unique situations, whereas coping as a result refers to the results of the individual's selected tactic. The coping process consists of a number of steps. First, assessments of the pain or loss caused by the stressor [12] are considered to be crucial coping factors. Second, the coping mechanisms chosen are determined by an assessment of the stressor's degree of controllability. The individual's assessment of the results of their coping attempts and expectations for future success in coping with the stressor make up a third component.

When confronted with any challenging scenario, people adopt two different sorts of coping methods, according to Lazarus and Folkman [9]. The two categories of coping mechanisms are: Emotionally focused coping and problem-focused coping. In problem-focused coping, the person takes control of or makes changes to the issue that is upsetting them. Emotional-Focused Coping focuses on controlling emotional reactions to the issue. When there is no way to stop the dangerous or dangerously threatening circumstance, a person uses emotional focused means of coping.

Idea of Stress

An individual's response to an upsetting environmental event is referred to as stress. Individuals' physical, psychological, and behavioural abnormalities are the outcome of an adaptive reaction to an external circumstance. Stress develops when people feel they are unable to appropriately handle the responsibilities placed upon them or when they are unable to handle dangers to their health [13]. To describe how our bodies react to stress, the "fight or flight" response, a well-known stress response, was initially described. The sympathetic nerve system of our body produces endocrine hormones like adrenaline and cortisol in reaction to a stressful situation, heightening our response to a perceived threat or challenge [14]. This response is known as the "fight or flight" response. The body reacts by raising its heart rate and blood pressure as well as its level of awareness and skeletal muscle tension [15]. Mason has outlined three definitions of stress, including an internal state of the organism that is occasionally referred to as strain, an outside event or stressor, and an experience that results from an interaction between a person and their environment [16].

Stress Theories

According to the sociological theory of stress, an individual's place in the social structure interacts with numerous stressors to expose them to them, which in turn results in stress outcomes [17]. It

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examines the issues with social roles that frequently persist in a person's relationships, experiences, and welfare, leading to role strain. The idea also accounts for the converging impacts of large life events and minor inconveniences that represent substantial and occasionally stressful life experiences. In order to adequately study and identify the stressors that lead to long-lasting strains, the theory suggests looking at stressful events as a whole, in connection with different groups of stressors in the organisation of lives and structure of experience [18]. According to the transactional model of stress and coping (TMS), different people have varied experiences with the same stressor.

Workplace Stress
People at work are under a great deal of stress in this fast-paced society. Occupational stress has a number of detrimental repercussions, including reduced performance and effectiveness, decreased productivity, health issues, absenteeism, turnover, use of alcohol and drugs, and intentional damaging behaviours, such as stealing and spreading rumours [20].

Occupational Stress Models
To comprehend occupational stress, several models have been created, including the Demand-Control Model [22] and the Person-Environment Fit Model [21]. According to the person-environment fit model, two factors—environmental demands and a person's actual or perceived ability—determine stress. When environmental pressures are too great for an individual's capacity, stress results. When there are discrepancies between job requirements and an employee's capacity to satisfy those expectations, the emotion that conflict-prone people experience is a significant source of stress. Task conflicts, such as confusing tasks assigned by employers to employees, can also cause stress. Stress was also exacerbated by task ambiguity when employees received insufficient job training. Conflicts like these could make employees unhappy at work and have a negative impact on their productivity. The effort-reward imbalance model is a third theoretical idea suggested to examine the negative health effects of stressful experiences at work, in addition to the person-environment fit model and the demand-control model. This model focuses on reciprocity of transaction in the workplace, where high-cost/low-gain situations are seen to be particularly stressful [23]. The idea is that psychological toughness and good coping mechanisms could lessen the harmful effects of stressors. According to this study, there is a connection between working-age people' hardiness, coping mechanisms, and perceived stress.

2.   Methodology

Participants
The population for this study consisted of full-time employed working people. Data for the study was gathered from 100 employees working Automobile Industry, 50 of whom were male and 50 of whom were female, who lived in the cities of Chennai. The participants have to be between the ages of 25 and 35.

Research Approach
The exploratory, quantitative research design aims to investigate the connection between psychological toughness, coping mechanisms, and perceived stress. Standardised questionnaires with a likert scale were utilised for this study.

Instrumentation
Data for this research study was gathered utilising a collection of standardised instruments that were simple to administer and score.
1. The Hardiness Scale - A 12-item questionnaire that evaluates three aspects of hardiness—commitment, control, and challenge. A 4-point Likert scale is used for scoring, with 0 denoting extreme disagreement, 1 mild disagreement, 2 mild agreement, and 3 strong agreement. The sum of the control, commitment, and challenge scores is determined, and this number is added to arrive at the overall hardiness score. A total score between 0 and 9 suggests a moderately hardy personality, whereas a score of 0 or below shows low hardiness [24]. A total score between 10 and 18 indicates a hardy personality.

2. The Questionnaire on Ways of Coping (Revised) - It is a 66-item questionnaire with 8 subscales that cover a wide range of thoughts and behaviours people employ to handle either internal or external pressures from certain stressful situations. A 4-point Likert scale is used to determine the results. The options are 0 (does not apply) or not utilised, 1 (used somewhat), 2 (used quite a bit), and 3 (used significantly). The eight subscales are as follows: confrontation, separation, and self-control. Seeking out social support, Accepting blame or responsibility, Running away, Making plans and overcoming problems, and Positive reappraisal[25].
3. Perceived Stress Scale – It is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which events in one's life are appraised as stressful. The items are designed to know how unpredictable, uncontrollable and overloaded respondents find their lives. The scale includes 10 items. The questions in the scale ask about feelings and

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thoughts in the last month. Scoring is done on a 5 point likert scale. The response range from 0-4, with 0= never 1= almost never, 2= sometimes, 3= fairly often and 4= very often[26].

3.   Results

A non-experimental, exploratory study was done to ascertain the association between working individuals' perceived stress, coping mechanisms, and hardiness.

100 working individuals participated, 50 of whom were men and 50 of whom were women. The findings' conclusions are outlined below. The mean and standard deviation are included in Table 1's descriptive statistics. Perceived stress results showed a mean of 18.44 and a standard deviation of 7.84. Hardiness's mean was 4.55 and its standard deviation was 5.41.The coping techniques data showed a mean of 75.62 and a standard deviation of 11.66.

Table 1 shows the mean and standard deviation for the outcome variable (perceived stress) and the predictor factors (hardiness and coping strategies).

	Mean	Std. Deviation
Perceived Stress	8.44	7.847
Hardiness	4.55	5.419
Coping Strategies	75.62	11.667

Table 2 shows the Pearson Product Moment Correlation coefficient for each pair of variables. There is a bad correlation between psychological toughness and perceived stress (R= 0.82, P > 0.05). This shows that Psychological Hardiness is useful for forecasting the level of stress that working individuals feel. Additionally, there is a positive correlation between coping strategies and perceived stress (R = 0.53, P > 0.05). This illustrates that trying to predict how much stress working people will suffer through coping techniques is possible. Additionally, it is clear that the predictors of Hardiness and Coping Strategies have a substantial positive correlation (R = 0.62, P 0.05).

Table 2 – Descriptive statistics for Regression Analysis

Perceived Stress			Hardiness	Coping
Pearson Correlation	Perceived stress	1.000	0.827	0.532
	Hardiness	0.827	1.000	0.621
	Coping Strategies	0.532	0.621	1.000
Significance (1-tailed)	Perceived stress		0.0001	0.0001
	Hardiness	0.0001		0.0001
	Coping Strategies	0.0001	0.0001	

4.   Discussion

Understanding the connections between Psychological Hardiness, Coping Mechanisms, and Perceived Stress among employees was the goal of the research project. The conclusions were based on 100 working individuals' responses, 50 of whom were men and 50 of whom were women.
The current study's findings proven the idea. Psychological Hardiness and Coping Strategies, the two predictors, were effective in predicting perceived stress among employees. One reason could be that employees who are socially connected at work, motivated, and who are competitive in nature may be affected by stress in their lives, perceive their level of stress as being affected by their workplace culture and environment, respective of how high or low their

level of hardiness they have.
Another possibility is that employees who are married and experiencing extreme work-related stress as well as family stress and are unable to maintain a work-life balance will benefit from having a high level of hardiness. Therefore, while having strong Commitment, Control, and Challenge Hardiness dispositions, they were able to cope up their life's stresses by changing them into eustress. As a result, Psychological Hardiness and Perceived Stress had a positive connection.
Furthermore, the perception of stress among employees was predicted by coping mechanisms. This might be the case since coping mechanisms are often efficient and serve to help people relax and satisfied in handling stress. Hardiness and coping strategies showed a high positive association, which is consistent with earlier

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findings. Employees in the workforce who exhibit high levels of resiliency use adaptive coping techniques include confrontative coping, seeking social support, positive reappraisal, and deliberate issue resolution. They frequently combine problem- and emotion-focused coping strategies. Low-hardiness individuals scored highly on escape-avoidance and distance more frequently.

5.   References

Florian V, Mikulincer M, Taubman O. Does hardiness contribute to mental health during a stressful real-life situation? The roles of appraisal and coping. J Personal Soc Psychol 1995;68(4):687-95.

Pollock SE. The hardiness characteristic: A motivating factor in adaptation. Adv Nurs Sci 1989;11(2):53-62.

Woodard CR. Hardiness and the Concept of Courage. Consult Psychol J Pract Res 2004;56(3):173-85.

Low J. The concept of hardiness: A brief but critical commentary. J Adv Nurs 1996;24(3):588-90.

Maddi SR. Comments on trends in hardiness research and theorizing. Consult Psychol J Pract Res1999;51(2):67-71.

Lambert VA, Lambert CE, Yamase H. Psychological hardiness, workplace stress and related stress reduction strategies. Nurs Health Sci 2003;5(2):181-4.

Judkins S, Reid B, Furlow L. Hardiness training among nurse managers: Building a healthy workplace. J Cont Educ Nurs 2006;37(5):202-7.

Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. J Personal Soc Psychol 1989;56(2):267-83.

Lazarus RS. Coping theory and research: past, present, and future. Psychosom Med 1993;55(3):234-47.

McElfatrick S, Carson J, Annett J, Cooper C, Holloway F, Kuipers E. Assessing coping skills in mental health nurses: Is an occupation specific measure better than a generic coping skills scale? Personal Individ Diff 2000;28(5):965-76.

Fleishman JA, Sherbourne CD, Crystal S, Collins RL, Marshall GN, Kelly M, Bozzette SA, Shapiro MF, Hays RD. Coping, Conflictual Social Interactions, Social Support, and Mood Among HIV-Infected Persons. Am J Commun Psychol 2000;28(4):421-53.

Folkman S. Stress: appraisal and coping. Springer New York; 2013.

Greenberg JS. Comprehensive stress management. McGraw-Hill Higher Education,; 2011.

French JR, Caplan RD, Van Harrison R. The mechanisms of job stress and strain. Chichester [Sussex]; New York: J. Wiley; 1982.

Schaufeli WB, Maslach CE, Marek TE. Professional Burnout: recent developments in theory and research. Taylor & Francis; 1993.

Mason JW. A historical view of the stress field. J Hum Stress 1975;1(2):22-36.

Aneshensel CS. Social stress: Theory and research. Ann Rev Sociology 1992;18(1):15-38.

Turner RJ, Wheaton B, Lloyd DA. The epidemiology of social stress. Amer Sociolog Rev 1995;1:104-25.

Hankin BL, Abramson LY. Development of gender differences in depression: An elaborated cognitive vulnerability–transactional stress theory. Psychol Bull 2001;127(6):773-96.

Jex SM. Stress and job performance: Theory, research, and implications for managerial practice. SagePublications Ltd; 1998.

Quick JC, Murphy LR, Hurrell Jr JJ. Stress & well-being at work: Assessments and interventions foroccupational mental health. American psychological association; 1992.

Payne R, Firth-Cozens J. Stress in health professionals. John Wiley & Sons; 1987.

Quick JC, Tetrick LE. Handbook of occupational health psychology. American Psychological Association;2003.

Kobasa SC, Maddi SR, Kahn S. Hardiness and health: a prospective study. J Personal Soc Psychol1982;42(1):168-72.

Folkman S, Lazarus RS. Manual for the ways of coping questionnaire. Consulting Psychologists Press; 1988.

Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. J Health Soc Behav 1983;1:385-96.

Wellbrock KD. Stress, hardiness, social support network orientation, and trauma-related symptoms in police officers. Dissertation Abstracts International: Section B. 2000;61.

Bosma H, Peter R, Siegrist J, Marmot M. Two alternative job stress models and the risk of coronary heart disease. Am J Pub Health 1998;88(1):68-74.

Williams PG, Wiebe DJ, Smith TW. Coping processes as mediators of the relationship between hardiness and health. J Behav Med 1992;15(3):237-55.