

Coping Strategies For Trauma-Induced Psychological Stress Among Chronic Disease Patients At Adrar State Hospital

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Abstract

This research aims to investigate coping strategies employed by chronic disease patients at Adrar State Hospital who have experienced traumatic events. Specifically, the study examines differences in coping strategies based on gender and type of chronic disease (diabetes, hypertension, or disability resulting from a traffic accident). To achieve this objective, the researcher administered the Coping Inventory for Stressful Situations (CISS) to a sample of 56 chronic disease patients undergoing treatment at Adrar State Hospital. The study found the following results:

- No statistically significant differences were found in coping strategies based on gender among chronic disease patients at Adrar State Hospital.
- Statistically significant differences were found in coping strategies based on the type of chronic disease (diabetes, hypertension, or disability resulting from a traffic accident) among the sample.

These findings can be attributed to the implications of chronic disease and the unique psychological stressors associated with each condition.

Keywords: Emotional exhaustion, problem, avoidance, chronic disease, trauma.

Introduction:

Individuals suffering from chronic diseases often experience stressful situations or problems that they are unable to confront positively, leading to psychological distress. However, the effective use of coping strategies can help reduce this stress and mitigate the negative psychological consequences of trauma.

Kotsimis and colleagues have suggested that the experience of stress and trauma is not the decisive factor in developing psychological disorders, but rather how individuals cope with these events. Moreover, coping involves the use of various strategies and approaches, which may either be effective and lead to adaptive coping or ineffective and result in maladaptive coping.

Problem Statement :

Based on the concept of coping strategies, which suggests that individuals do not simply rely on defense mechanisms but rather actively try to adapt to a situation by confronting it, avoiding it, or enduring it, the following research question was formulated:

Are there differences in coping strategies based on gender and the type of chronic disease leading to trauma (diabetes, hypertension, or disability resulting from a traffic accident) among individuals suffering from chronic disease-induced trauma at Adrar State Hospital?

Hypotheses :

1. There are statistically significant differences in coping strategies based on gender among individuals suffering from chronic disease-induced trauma at Adrar State Hospital.
2. There are statistically significant differences in coping strategies based on the type of chronic disease leading to trauma (diabetes, hypertension, or disability resulting from a traffic accident) at Adrar State Hospital.

This study aims to explore these hypotheses by presenting key definitions and classifications of coping strategies, as well as identifying the main determinants and factors that influence the use of these strategies.

Coping Strategies :

The term "**coping strategies**" originates from contemporary theories of stress and Lazarus' (1968) cognitive appraisal theory of emotions. According to this theory, a stressful event does not have an objective existence; rather, coping strategies involve the flexible organization of available resources to deal with environmental challenges. These strategies can be directed toward the self or the environment. They may involve addressing the source of the threat in the environment or making changes to oneself to cope with the environment, as these strategies aim to gain control over threatening situations. (Thamer & Al-Masaeid, 2014: 294)

Krohn (1978) defines these strategies as the behavioral and cognitive efforts aimed at controlling or reducing internal and external demands created by stressful situations. (Thamer & Al-Masaeid, 2014: 294)

Rutter (1981) defines coping strategies as the attempts individuals make to alleviate psychological stress and develop new, effective ways to deal with life situations. (Ahmad Al-Shakhanbah, 2010: 35)

Rudolf Moos (1982) defines coping strategies as the methods individuals consciously use to deal with sources of stress. (Ben Ammour Djamila, 2010: 32)

Lazarus and Folkman (1984) define coping strategies as a set of cognitive and behavioral efforts directed at managing, reducing, or accepting internal or external demands that threaten or exceed an individual's resources. (Lazarus & Folkman, 1984: 129)

Classifications of coping strategies:

Selye's Classification (1946):

➤ Hans Selye posits that stress is a state in which the body's equilibrium is threatened, and it lacks the capacity for an immediate response to danger. For Selye, it is not the event itself but rather the individual's coping mechanisms that determine the impact of stress. (thevenet, 2011: 83)

➤ Hans Selye is credited with enriching the scientific discourse on stress, defining it as situations that impose adaptive demands on the organism that exceed its capacity. These stressors can be either physical or psychological. Selye proposed a model for understanding the body's response to stress, which he termed the 'general adaptation syndrome'. (Thaer & Abu Shaira, 2015: 128)

Lazarus and Folkman's Classification (1984):

➤ Lazarus and Folkman emphasize cognitive appraisal as the primary factor influencing the impact of life events on an individual's health and well-being. (Maarouf, 2007:56).

They distinguish between two main coping strategies:

Problem-focused coping: This strategy involves efforts to directly address the source of the stressor. It includes behavioral and cognitive activities aimed at eliminating or reducing the threat. The goal is to manage the situation or mobilize personal resources for better confrontation. (Hadda, 2016:90).

02. Emotion-focused coping:

This strategy involves efforts to manage the emotional distress associated with the stressor. It includes attempts to regulate or reduce negative emotions. (Jemmet et al., 1996).

Overview of the Methodology

In this section, the researcher discusses the methodology employed to address the research topic, including the research design, objectives, time frame, geographic scope, measurement instrument, psychometric properties, data collection procedures, and statistical analysis.

I. Objectives of the Pilot Study:

1. To familiarize the study sample with the measurement scales and ensure a clear understanding of the concepts.
2. To verify that the study sample will not encounter difficulties in completing the scales.
3. To confirm the psychometric properties of the measurement instruments (validity and reliability of the scales used).
4. To ensure that the proposed hypotheses are operational and measurable.

II. Time and Place of the Study: The study was conducted from January 28, 2018, to February 26, 2017, at the Adrar State Hospital.

III. Characteristics of the Study Sample: The study sample consisted of 56 individuals (32 males and 24 females) aged between 23 and 54 years. They were randomly selected from the Adrar State Hospital.

Research Instrument: The Coping Inventory for Stressful Situations (CISS) was used. The CISS is a personality test that plays a key role in assessing physical, psychological, and emotional balance when faced with frustrating events or situations.

❖ **Use of the CISS:** The CISS was standardized in France on a large, diverse population. Since the CISS is a self-report measure, it should not be administered to non-volunteers or those unable to provide honest answers. To ensure honest responses, strict confidentiality should be maintained.

❖ **Qualifications of the Administrators:** Administrators should be knowledgeable about the limitations of psychometric interpretation and have a solid understanding of the theoretical research underlying coping measurement, such as the work of Endler and Parker (1990), Folkman and Lazarus (1985, 1988), and Lazarus and Folkman (1987).

Interpretation and presentation of results should be entrusted to a psychologist with solid training in psychological assessment. Before administering the CISS, administrators should familiarize themselves with the information provided in the manual regarding theoretical foundations, standardization, psychometric properties, and limitations of the instrument.

❖ **Administration of the CISS:** The CISS is a self-administered paper-and-pencil test consisting of 48 items divided into three subscales:

- ✓ 16 items for the problem-focused coping subscale.
- ✓ 16 items for the emotion-focused coping subscale.
- ✓ 16 items for the avoidance coping subscale.

❖ **Scoring Procedure:** Responses are scored on a 5-point Likert scale. Data is entered and analyzed using SPSS software.

Statistical Methods

The researcher employed two main types of statistical methods in this study:

Descriptive Statistics: This includes the following techniques:

- ✓ Frequencies
- ✓ Percentages
- ✓ Means and standard deviations

Inferential Statistics: The researcher used the following techniques in this category:

- ✓ T-test
- ✓ Chi-square test
- ✓ Pairwise comparison test
- ✓ Median split

SPSS (Statistical Package for Social Sciences) version 20.0 was used for data analysis.

Testing the First Hypothesis

The first hypothesis states that there is a statistically significant difference in coping strategies based on gender among patients with chronic disease shock at the Adrar State Hospital.

To test the validity of this hypothesis, a t-test was employed, as shown in the following table:

Table 1:Significance of Differences in Coping Strategies by Gender among Patients with Chronic Disease Shock

Variable	Males (n=32)		Females (n=24)		t-value	Degrees of Freedom	Significance
	Mean	Standard Deviation	Mean	Standard Deviation			
Problem	59.86	9.49	53.84	11.35	-0.31	55	Not significant
Emotion	52.33	13.04	49.76	11.46	-1.29	55	Not significant
Avoidance	46.66	11.82	43.62	8.26	-1.44	55	Not significant
Total Coping	139.83	20.82	159.33	15.37	-1.82	55	Not significant

The results derived from the preceding table indicate that there were no statistically significant differences in coping strategies based on gender across all dimensions of the scale and the overall scale. This is because all calculated t-values were smaller than the tabulated t-value at 55 degrees of freedom, indicating statistical insignificance at the 0.05 level of significance.

Therefore, it can be concluded that there are no statistically significant differences in coping strategies based on gender among individuals experiencing chronic disease-related trauma at the Adrar State Hospital.

2. Results of the Second Hypothesis:

The second hypothesis posits that there are statistically significant differences in coping strategies based on the type of chronic disease leading to trauma (diabetes, hypertension, or disability resulting from a traffic accident) at the Adrar State Hospital.

To test this hypothesis, a t-test was employed, as shown in the following table:

Table 2 presents the significance of differences in coping strategies based on the type of chronic disease-related trauma (diabetes, hypertension, or disability resulting from a traffic accident) at the Adrar State Hospital.

Variables	Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	T-value	Significance Level
Problem	Between Groups	1570.95	2	267.33	3.69	Significant at 0.001
	Within Groups	6493.28	53	79.95		
	Total	3064.24	56			
Anger	Between Groups	891.86	2	142.11	2.65	Significant at 0.005
	Within Groups	903.00	53	59.34		
	Total	1194.86	56			
Avoidance	Between Groups	1176.42	2	129.03	2.79	Significant at 0.001
	Within Groups	842.96	53	39.35		
	Total	1019.39	56			
Coping Strategies	Between Groups	2416.14	2	872.58	4.46	Significant at 0.001
	Within Groups	5184.76	53	110.21		
	Total	14600.91	56			

The table indicates statistically significant differences in coping strategies based on the type of chronic disease, both in the overall scale and its three dimensions. The level of significance was found to be 0.001 for the emotional distress dimension, 0.005 for the personal inadequacy dimension, and 0.001 for the numbness dimension. Moreover, the overall scale also exhibited a significant level of 0.001.

Based on these findings, we will now discuss the results of the hypotheses.

Discussion of the First Hypothesis: The hypothesis posits that there are statistically significant differences in coping strategies based on gender among individuals experiencing trauma resulting from chronic disease. The results from the table show that there were no statistically significant differences in coping strategies based on gender in any dimension of the scale or the overall scale. All calculated t-values were smaller than the table t-value at 55 degrees of freedom, indicating no statistical significance at the 0.05 level.

Therefore, there are no statistically significant differences in coping strategies based on gender among individuals experiencing trauma resulting from chronic disease. This finding can be attributed to the similar stressors experienced by both male and female trauma survivors, leading to the adoption of similar coping mechanisms.

This result contradicts the researcher's expectations, especially considering the role of socialization, which encourages males to adopt assertive, independent, and active behaviors, while females are often encouraged to be warm, sensitive, and cooperative. However, the findings suggest that trauma overrides these gender-based socialization differences.

This study aligns with the findings of Tabbi Siham (2005), who also found no differences between males and females in coping strategies used to address post-traumatic stress in burn victims (Tabbi Siham, 2005:188). However, it contradicts studies by Asch and Crutchfield, who found that males are more likely to use problem-solving strategies compared to females and that females are more likely to succumb to group pressure. These contrasting findings reflect cultural differences in gender roles, with the belief that men are more competent and superior to women in cognitive tasks, particularly problem-solving (Hacen Ali Hacen 1998:177).

Discussion of the Second Hypothesis: The table clearly shows statistically significant differences in coping strategies across all categories, both in the overall scale and its three dimensions. The level of significance was 0.001 for the problem-solving dimension, 0.05 for the emotional distress dimension, and 0.001 for the avoidance dimension. Moreover, the overall scale also exhibited a significant level of 0.001.

To determine the direction of differences between specializations and compare them, Scheffé's test was used, as shown in the following table:

Table 3 shows the differences between means using Scheffé's test:

Chronic Disease	Sample Siz	The Mean of Coping Strategy Score
Diabetes	24	12.33
Hypertension	19	13.54
Disability (TrafficAccident)	13	18.21

The table reveals a clear hierarchy in mean scores, with the 'Disability resulting from a traffic accident' group exhibiting the highest average (18.21), followed by the 'Hypertension' group (13.54), and lastly, the 'Diabetes' group (12.33).

These findings can be attributed to the unique characteristics and associated symptoms of each condition. The 'Disability resulting from a traffic accident' group, ranking highest, can be explained by the participants' reported experiences of significant life disruptions caused by their disabilities. Many expressed feelings of failure and a

perceived inability to overcome challenges, often linking their setbacks directly to their disabilities, especially those with mobility impairments.

The 'Hypertension' group, with a slightly lower mean, can be attributed to a sense of resignation, despite acknowledging the seriousness of their condition. Many participants indicated that while they continued with their daily routines, they often attributed their hypertension to aging and accepted it as a normal part of the aging process, leading to a potentially lower perceived stress and thus, a lower coping score.

Conversely, the 'Diabetes' group, with the lowest mean, reported higher levels of coping. Participants often described diabetes as a common condition that could be managed through lifestyle changes such as medication, diet, and exercise. Some even expressed a sense of preparedness for the diagnosis, citing a family history of diabetes and observing other family members successfully managing the condition.

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