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# Moderating Role of Coping Strategies in Relation to Resilience and Conversion Disorder among Patients

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## **Abstract**

Study aimed to find out moderating role of coping strategies (active avoidance, problem focused, positive and denial) in relation between resilience and conversion disorder among patients. Quantitative cross-sectional study was held at psychiatry unit Saidu Sharif Hospital of Swat District from March 2017 to Feb 2018. Resilience Scale, Brief COPE Scale and Conversion Disorder Symptom Checklist were used to select purposive sample of 200 patients with M = 23.98: SD = 8.07. Results revealed resilience had non-significant negative correlation with active avoidance coping, significant negative correlation with denial coping and conversion disorder. Resilience was significantly positively correlated with problem focused coping and positive coping. Multiple hierarchical regression analysis revealed both problem focused and positive coping act as significant moderators in relationship between resilience and conversion disorder. Findings provide therapeutic implications for treatment of conversion disorder patients by suggesting robust role of problem focused and positive coping strategies in stress management.

**Keywords:** Coping Strategies, Resilience, Conversion Disorder, Swat KPK, Quantitative, Relationship.



#### Introduction

Conversion disorder is the bodily response to mental, physical or psychological trauma. In the past conversion disorder was considered as hysteria, it is a psychological stress expressed in the form of physical symptoms (Cadman, 2018).

People who reside in mountain zone, low socioeconomic status, minor level of schooling, low intelligence, marriage at premature age, intolerant house hold cruelty and family history also contribute in conversion disorder. Lack of basic facilities in rural setting, inadequate social support health services, psychiatric illnesses like depression are common in these areas, leads to stressful situation and conversion disorder suddenly occurs after the consistent stressful situations (Reilly et al., 2007).

Diagnostic and Statistical Manual of Mental Disorder fifth edition (DSM5) diagnosis of conversion disorder includes presence of one or more than one signs of impaired motor functioning, results of clinical evidence show disparity among the known neurological, medical conditions, signs that indicate considerable suffering in social, occupational and other areas that directly indicate medical checkup (Ali et al., 2015). Etiology of conversion disorder includes psychoanalytic factors, learning factors, biological factors and environmental stressors (Kronenberger & Dunn, 2005).

Psychoanalytic description states stress, unconscious motivations, including sexuality, hostility or dependence led to manifestation of such symptoms. The goal of behavioral approaches is to safeguard that the patient gives up symptoms than from maintaining. The socio-cultural theory states in some societies direct expression of strong feelings is forbidden, this may incline individuals to the revelation of conversion disorder (Owens et al., 2006). According to contemporary views, socio-familial, cultural, and external pressures are some other reasons of conversion disorder (Kronenberger & Dunn, 2005).

Resilience is a human capacity to adapt quickly and positively to worrying condition and successfully come back to a positive state (Shrivastavas & Desousa, 2016). According to Rutter (2006) the more defensive strategies present, an individual will have high resilience. Social support, adaptive health practices, adaptive coping, and optimism are effective strategies to be applied in stressful situations as suggested by three-part model of psychological resilience (environment, physical behaviors, and cognitions) (Terte et al., 2014).

Coping, as described by Folkman and Lazarus, is any behavioral or cognitive attempt to manage stressful demands in one's life that are seen to be beyond one's capacity. Coping strengthens resilience. While a high amount of resilience acts defensively, a low level of resilience makes one more vulnerable to the pathological effects of unfavorable environmental events (Jeste & Palmer, 2009).

Coping mechanism refers to logical and behavioral energies used by human beings to handle environmental difficulties (Frydenberg, 2008). Carver (1997) recognized four types of coping strategies which include active avoidance coping, problem focused coping, positive coping and denial coping. Active avoidance coping corresponds to the use of substances. Individual engage himself in various actions that help to divert the stressor. Problem-focused coping comprises preparation; thinking about best to tackle the problem and what actions to take. Handling distressed emotions and positive reframing involve positive coping. An individual might turn to religious or spiritual coping as well as denial strategy when facing stress.

The individual adopts two different strategies according to the cooperative model of coping. First intellectual assessment which refers to the degree and the way the condition relates to the individual. Dealing with the problem refers to second method which is accountable for handling life challenges and to reduce the outer and inner stress (Mitrousi et al., 2013).

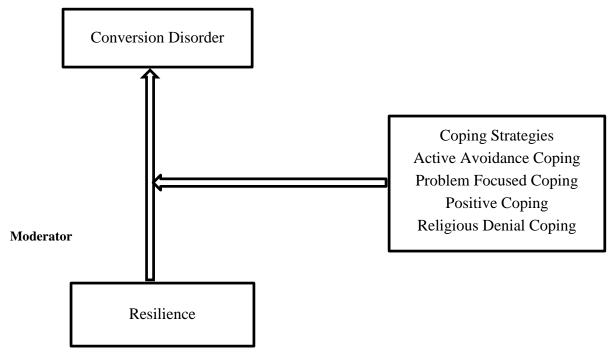
According to the study of Thompson et al. (2018) resilience is positively correlated with most of active coping strategies and negatively correlated with most of avoidant coping strategies. According to studies done in Pakistan, conversion disorder accounts for 12.4% of inpatient psychiatric unit admissions, making it one of the most common psychiatric diagnoses (Farooq, 2007). According to a different survey, it is the fifth most prevalent mental illness in Pakistan (Nizami et al., 2005).

The current study set out to examine the moderating function of coping mechanisms in the association between patients' conversion condition and resilience. The association between conversion disorder, coping strategies, and resilience will be better understood via research, as well the important role that coping strategies can play in enhancing the relationship between conversion disorder and resilience.

Conversion disorder is prevalent in hilly areas of Pakistan, especially in swat KP. Every 10<sup>th</sup> individual is suffering from this disorder. Recently no research work has been done on this disorder in Swat KP therefore these variables were studied in present research. Coping strategies along with resilience might play a vital role in enhancing mental health of patients with conversion disorder. Current study will provide aid to the therapist to control conversion disorder through improving resilience and coping strategies.

## **Conceptual Model of the Current Study**

The hypothesized conceptual framework of the current study is given below:



*Note.* Coping strategies [Active Avoidance Coping, Problem Focused Coping, Positive Coping and Religious Denial Coping (moderator) play a moderating role between the relationship of resilience (independent variable) and conversion disorder (dependent variable).

## **Objectives**

To investigate the moderating role of coping strategies (active avoidance coping, problem focused coping, positive coping and denial coping) in relationship between resilience and conversion disorder among patients.

## **Hypotheses**

- 1. Resilience will positively correlate with problem focused and positive coping strategies where as negatively correlate with active avoidance, denial coping strategies and conversion disorder among patients.
- 2. Active avoidance coping and denial coping will positively correlate with conversion disorder whereas problem focused coping and positive coping will negatively correlate with conversion disorder.
- **3.** Subscales of coping strategies will act as a moderator in relationship between resilience and conversion disorder.

## Methodology

## **Operational Definition of Variables**

#### Resilience

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress or bouncing back from difficult experiences (APA, 2015). It is operationalized as the scores obtained on 14-Item resilience scale. High scores on this scale indicate high resilience and low scores indicate low resilience.

## **Coping Strategies**

Coping strategies involve thoughtful actions to be taken during stress provoking situation to master, tolerate and reduce their sufferings (Scott, 2019). It is operationalized as the scores obtained on brief cope scale.

## **Conversion disorder**

Ballmaier and Schmidt (2015) defined Conversion disorder, as a functional neurological symptom disorder, as a psychiatric illness in which symptoms and signs affecting voluntary motor or sensory function cannot be explained by a neurological or general medical condition. It is operationalized as the scores of individuals on symptoms checklist of conversion disorder developed by Imran in 2017.

## **Research Design**

Study employed quantitative correlation research design.

## Sample

A purposive sample of 200 patients (Male = 99, female =101) with conversion disorder was inducted by using Conversion Symptoms Checklist for screening the sample from patient reporting in OPD of Psychiatry ward of Central Hospital Saidu Sharif Swat. Age of the patients ranged from 12 to 52 (M = 23.98; SD = 8.07).

## **Inclusion Criteria**

Patients fulfilling the diagnostic criteria of conversion disorder checklist.

## **Exclusion Criteria**

The study also eliminated participants with severe medical conditions such as HIV/AIDS and cancer, substance-related disorders, psychiatric co-morbidity with conversion disorder as a secondary diagnosis, and co-morbid organic ailments.

#### **Instruments**

To achieve the mentioned objectives of the study, three questionnaires were used, 14 Item Resilience Scale (Wagnild & Young, 1993), Brief Cope Scale (Carver, 1997) and Symptom Checklist of Conversion Disorder (Imran, 2017).

#### 14-Item Resilience Scale

The 14-Item Resilience Scale was developed by Wagnild and Young (1993). It consists of 14 items. It has seven response categories.14-item Resilience Scale has psychometric properties with a good level of internal consistency (Cronbach's alpha = 0.88), and an adequate concurrent validity. Current reliability of this scale is .89.

## **Brief COPE Scale.**

Brief COPE Scale was developed by Carver (1997). It is comprised of 28 items. It has four response categories. This scale comprises of four subscales: active avoidance coping (items 1, 4, 6, 9, 11, 13, 16, 19, 21, 26), problem-focused coping (2, 5, 7, 10, 14, 23, 25), positive coping (items: 12, 15, 17, 18, 20, 24, 28) and religious/denial coping (items: 3, 8, 22, 27). The Cronbach's alpha reliability of brief cope scale was .77 where as in the present research it had .81 reliabilities.

## **Symptom Checklist of Conversion Disorder (SCCD)**

Symptom Checklist of Conversion disorder (SCCD) developed by Imran (2017) was used in the present study. It consists of 12 items and two response categories in the form of yes/no. Current reliability of this scale is .6.

## **Translation of Scale**

Brief Cope Scale was translated into Urdu language. The present study applied the technique of oblique translation scale. A researcher and four bilingual experts were involved in the translation process of Urdu scale.

## **Ethical Approval**

Approval from the IRB committee of Hazara University was taken. As per ethical concerns of research prior approval was also taken from the psychiatry unit Central Hospital Saidu Sharif swat for data collection. In order to translate Brief cope scale into Urdu prior permission was taken from the author.

## **Procedure**

Sample of conversion disorder patients were taken from central hospital of Saidu Sharif Swat. After taking informed consent form Urdu versions of 14- item resilience scale, brief cope scale and conversion disorder checklist were distributed along with demographic sheet to the sample of patients (N=200). The respondents were asked to mark the relevant option within questionnaire and make certain to give accurate responses on every item of each scale. No incentives were offered to participants.

## **Analyses and Interpretation**

In order to access objectives of the present study and to examine hypotheses appropriate statistical analyses were done by using SPSS version 22.

#### **Results**

**Table 1:** Correlation Coefficient of Subscales of Coping Strategies and 14-Item Resilience Scale (N-200)

			(,	N=200)				
Scales	1	2	3	4	5	6	M	SD
1. RS-14	-	05	.36**	.32**	.62**	31**	45.75	12.73
2. AACS	-	-	.03	.04	.02	.17*	23.99	5.93
3. PFCS	-	-	-	.68**	03	41**	15.36	4.18
4. PCS	-	-	-	-	03	39**	15.19	4.17
5. DCS	-	-	-	-	-	.26*	9.17	2.65
6.SCCD	-	-	-	-	-	-	17.90	2.42

*Note.* RS-14= resilience scale; AACS = active avoidance coping strategies; PFCS = problem focused coping strategies; PCS = positive coping strategies; DCS = denial coping strategies; SCCD = symptom checklist conversion disorder.

The results of table 1 showed that RS-14 had non-significant negative correlation with active avoidance coping, significant negative with denial coping, conversion disorder and significant positive correlation with problem focused coping, positive coping strategies also; there was significant positive correlation between problem focused and positive coping strategies. Further active avoidance and denial coping had significant positive correlation with conversion disorder however problem focused, and positive coping had significant negative correlation with conversion disorder.

**Table 2:** Hierarchical Multiple Regression Analysis Predicting Conversion Disorder from Resilience and Problem Focused Coping (N = 200)

Predictor		$\Delta R^2$	В	
Step I		.02		
_	Resilience		15*	
Step II		.08		
•	Resilience		07	
	Problem Focused Coping		35***	
Step III	1 0	.03		
1	Resilience		63**	
	Problem Focused Coping		29	
	R*PFC		-1.1*	
Total R <sup>2</sup>		12.6		

<sup>\*\*\*</sup>*p* < .001.

Results of table 3 revealed statistically significant relationship between R and CD  $\{\beta = -.15^*, t = -2.11, p = .04\}$  where the former explained about 2.2% variance in the later  $\{\Delta R^2 = .02, \Delta F (1, 199) = 4.47, P = .04\}$ . In the second step PFC also predicted CD  $\{\beta = -.35^{***}, t = -4.10, p = .04\}$ .

<sup>\*\*</sup> p < 0.01, \*p < .05.

.001} and explained an additional variance of 7.7% in it  $\{\Delta R^2 = .07, \Delta F (2, 199) = 10.82, P = .001\}$ . Finally, in the third step the interaction term for R\*PFC significantly predicted conversion disorder  $\{\beta = -1.10^*, t = -2.46, p = .02\}$  and also explained an additional variance of 2.7% in it  $\{\Delta R^2 = .03, \Delta F (3, 199) = 9.41, P = .001\}$ . As a whole 12.6% change occurred in conversion disorder.

**Table 3:** Hierarchical Multiple Regression Analysis Predicting Conversion Disorder from Resilience and Positive Coping (N = 200)

Predictor		$\Delta R^2$	$\beta$	
Step I		.01		
	Resilience		12	
Step II		.09		
•	Resilience		06	
	Positive Coping		34***	
Step III	1 0	.03		
	Resilience		64**	
	Positive Coping		29	
	R*PC		-1.1**	
Total R <sup>2</sup>		13		

<sup>\*\*\*</sup>*p* < .001.

Results of table 4 revealed non-significant relationship between R and CD  $\{\beta = -.12, t = -1.15, p = .10\}$  where the former explained about 1% variance in the later  $\{\Delta R^2 = .01, \Delta F (1, 199) = 2.71, P = .10\}$ . In the second step PC significantly predicted CD  $\{\beta = -.34***, t = -4.32, p = .001\}$  and explained an additional variance of 8.5% in it  $\{\Delta R^2 = .09, \Delta F (2, 199) = 10.79, P = .001\}$ . Finally, in the third step the interaction term for R\*PC significantly predicted conversion disorder  $\{\beta = -1.08**, t = -2.65, p = .01\}$  and also explained an additional variance of 3.1% in it. Overall, 13% change was brought in conversion disorder.

## **Discussion**

Findings of the present study showed resilience had significant negative relationship with denial coping and conversion disorder as shown in table 1. Active avoidance coping strategies were found to be negatively associated with resilience and were thought to cause psychopathology (Polkki et al., 2005). Research found that the patients with conversion disorder were more stressed, emotionally weak and had low resilience (Krishnakumar et al., 2006). Resilience had significant positive correlation with problem focused and positive coping strategies. Results give support to first hypothesis of study. Literature review also strengthens our findings. MacLeod et al. (2016) suggested that adaptive coping styles have strong association with high resilience.

Active avoidance coping strategy and denial coping strategy played non-significant moderating role in the relationship between resilience and conversion disorder among patients. In a study it was concluded that active avoidance coping, and denial coping increases psychological problems (Vollrath et al., 2003). Emotion-focused coping strategies were found to be negatively associated with resilience and were thought to cause psychopathology (Polkki et al., 2005).

Statistically significant moderating role of problem focused coping strategy in relation between resilience and conversion disorder was revealed as shown in table 2. These findings confirm third hypothesis of the present study. Present findings can be attributed to the etiology of conversion disorder in which psychological distress and lack of problem-focused coping are considered to play a foremost role in the development of low resilience and conversion disorder. Positive

association between problem-focused coping strategies and resilience was found and both play significant role in reducing psychopathology (Agaibi & Wilson, 2005).

Analysis of table 3 revealed positive coping as statistically significant moderator in relationship between resilience and conversion disorder among patients. Results provide support to third hypothesis of the current study. Literature review revealed that a person with high level of resilience tends to use active coping such as positive coping strategy rather than avoidance coping to manage stressful conditions (Kawata et al., 2015).

## **Conclusion**

Present study concludes strong relationship of resilience and coping in relation to mental wellbeing. Problem-focused and positive coping strategies along with resilience are accountable for overcoming stressful symptoms that might lead to psychological problems. Positive coping strategies play direct role in reducing conversion disorder through moderating role of problem focused and positive coping strategies in relation between resilience and conversion disorder. Study suggests appropriate intervention strategies to be applied in counseling patients with conversion disorder by enhancing resilience and adaptive coping skills among them.

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