

Domestic Migration Stress and Delayed PTSD Among Displaced Persons: Moderating Role of Health Protective Factors

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Abstract

Objective: The study intended to investigate the moderating role of protective factors between domestic migration stress and delayed PTSD among displaced persons.

Study type settings & duration: This cross sectional study was conducted on internal displaced persons at Khyber Agency and Gilgit-Baltistan from January 2018 to January 2019.

Methodology: The convenient sampling technique was used. Five instruments including Domestic Migration Stress Questionnaire, Resilience Scale, Sense of Coherence Scale, Post Traumatic Growth Inventory and PTSD Checklist were used for data collection from 200 displaced persons from Khyber Agency and Gilgit-Baltistan, Pakistan and completed in one year.

Results: The results of the present research supported the moderating role of protective factors in the relationship between domestic migration stress and delayed PTSD among displaced persons.

Conclusion: The present research can assist in summarizing various kinds of psychological therapies and counseling strategies for displaced person which help improving their health and well being.

Key words: Domestic migration stress, sense of coherence, resilience, post traumatic growth, delayed PTSD.

Introduction

Internal displaced persons (IDPs) are group of those individuals who have to move away from their usual residency or birth places by forcefully in order to avoid the consequences of armed/war conflicts, hostility, violations of human rights, natural and man-made disasters, but they are not interested to cross an international state border.¹ Research on migrants, internally displaced persons and their children have found that if their parents accompany them, they will deal best with the distressing incidents accompanying their journey. Soldiers' reports indicate that they all suffer from shame and

witness multiple aggressive distressing experiences. Research has identified factors which contribute to their resilience, including their acceptance by the societies they return to. For children who are vulnerable to war, there are personal and social factors of adaptation, including emotional control, discipline and social care. Discrimination, constitutional rights violations, inequity, war conflicts, natural and man-made disasters and environmental changes all these factors can lead to migration to some other place. The surroundings and environments can provide relative driver that will persuade peoples to go away from their residencies due to uneven environments and their place remain no longer possible and pleasing for them to live.² There are potential benefits of migration including increased opportunities, and a new and better life, but there is also some drawback that could be very stressful.³⁻⁵ Feeling of anxious for family and friends visit, homesick and missing family environment are responses to these stressors.⁶ The peoples stress related experience like, poor health, unavailability of medical services, abusing, deficiency of foodstuff and abnormal death or loss of beloved one, all these exposures are significantly associates with posttraumatic stress disorder

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(PTSD).^{7,8} Persistent and delayed PTSD (D.PTSD), low level of pleasure with life and destruction in overall mental health performance are long-lasting outcomes faced by displaced persons.⁹ The existence of delayed expression of PTSD has recommended by recent potential literature. For instance, a study recognized a division of U.S. armed mediators of Somalia who approved least symptoms of PTSD at first; however later on they showed considerable symptoms of PTSD.⁸

Stressful and traumatic conditions often result in heart problems, nervousness, hopelessness and PTSD, however more advanced literature is focused on the suggestion that trauma and crisis can actually beneficial for individuals, who suffer.⁷ In this regard, there are number of moderating factors available in literature and by adapting those factors one can improve their health and well being. Most popular among them is resilience in positive psychology; as research results showed that it aided people against disabling conditions by its positive effects in directing their lives.¹⁰ There are enough psychosocial features available in the existing literature including insight of organizational power, social identification, belongingness intellect, sense of certainty and protection in everyday life, personal self-respect and hopefulness concerning the future, which may be involved to enhance the resilience and improvement chances of displaced persons.^{11,12}

Antonovsky argued that the experience of well-being constitutes a Sense of Coherence (SOC) - the feeling that life is comprehensible, manageable and meaningful.¹³ He also assumed that generally, those persons whom have high level of SOC are expected to experience least trauma and anxiety, and he also believes that these persons can easily cope out with crisis. Sense of coherence is significantly correlated with social support and also is negatively correlated with impressive life events like persons trauma and stress.¹⁴ The occurrence of positive alteration that happens as a result of struggles with tremendously awkward life disaster and adverse events is known as Post Traumatic Growth (PTG).¹⁵ Tedeschi and Calhoun tried to clear the concept that we should view PTG not from the crisis, but we should view it within the persons through the course of their efforts with the crisis and after the trauma adjustment struggle.¹⁵

Schematic representation of the moderating role of protective factors in the relationship between DMS and Delayed PTSD among displaced persons (Figure-1)¹⁵.

Therefore the main objective of the study was to investigate the impact of domestic migration stress and delayed PTSD among displaced persons

and the role of moderating factors upon person's life in our local settings.

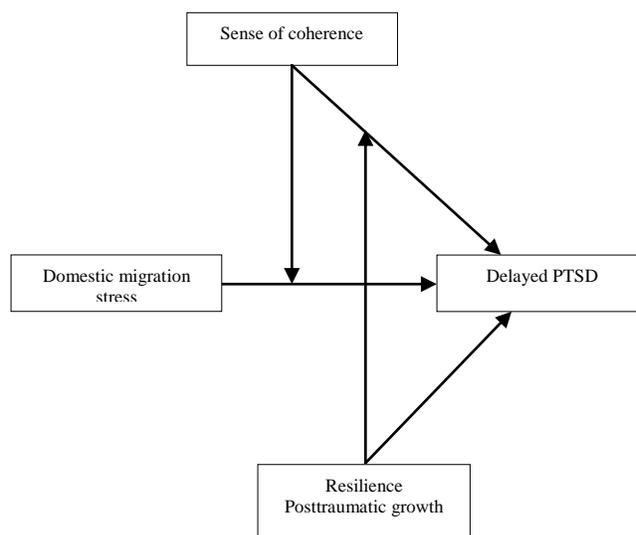


Figure 1: Conceptual framework.

Methodology

In the present study, it was hypothesized that domestic migration stress is likely to positively predict delayed PTSD among displaced persons, protective factors (resilience, SOC, post traumatic growth) are likely to negatively predict delayed PTSD among displaced person, SOC is likely to moderate the relationship between domestic migration stress and delayed PTSD among displaced persons, resilience is likely to moderate the relationship between SOC and delayed PTSD among displaced person and post traumatic growth is likely to moderate the relationship between SOC and Delayed PTSD among displaced persons.

In the present study Internally Displaced Persons ($N = 200$) with age ranged from 35 to 49 years ($M = 35.62$, $SD = 10.25$) were selected from Khyber Agency and Gilgit-Baltistan. Both male and female participants were in equal counterparts. Educational level of respondents was intermediate to masters. Both types of IDPs from these disasters were taken into consideration in the present study. Minimum duration between displacement and interview was one month and respondents were living in camps. IDPs were categorized as survivors of Natural Disaster ($n=100$, 50%) from Attabad Lake and survivors of Man-made Disaster ($n = 100$, 50%) due to military operations from Khayber Agency. IDPs were identified and approached for data collection with the help of the local key informants of those areas.

Domestic Migration Stress Questionnaire (DMSQ) was used to measure the stresses related to migration among displaced persons. The scale is comprised of 16 items and four sub-constructs. The scale is based on five point Likert-type response rate which is ranged from 1 = never to 5 = always. Low and high scores were considering low and high level of stress of migrants. The minimum scores were 16 and maximum scores were 80.¹⁶

Sense of Coherence Scale (SOC3) was used to measure the global orientation and personality characteristics of displaced persons. The scale is comprised of three items and measuring two dimensions. SOC3 is a three point likert-type scale ranged from 0 = no and 2 = yes usually. Low and high scores were considering low and high coherence characteristic of displaced person. The minimum scores were 0 and maximum scores were 6.¹⁷

Brief Resilience Scale (BRS) was used to measure the resilience as a protective factor among displaced persons. BRS is comprised of 6 items including three items (1, 3, 5) were positively worded and three items (2, 4, 6) were negatively worded. The scale is based on five point response format ranged from 1 = strongly disagree to 5 = strongly agree. Low and high scores were considering low and high resilience. The minimum scores were 6 and maximum scores were 30.¹⁸

Post Traumatic Growth Scale (PTG) was used to measure positive growth and benefit findings among displaced persons after displacement. PTG scale is comprised of 21 items which measures five factors. Items were scored on 6 point rating scale with 0 = did not experience to 5 = experience at very great degree. Low and high scores were suggesting low and high frequency of PTG in displaced persons. The minimum scores on PTG were 0 and maximum scores were 125.¹⁹

The PTSD checklist was used to measure the delayed expression among migrants. It is comprised of 20 items. The PTSD checklist is a five point likert-type response rate with range from 0 = not at all to 4 = extremely. Low and high scores on PTSD checklist considering low and high rate of delayed expression among displaced persons. The minimum scores are 0 and maximum scores are 80. The alpha reliability of PTSD checklist was found to be .70.²⁰

In the present study, authority letter was taken from department of psychology, University of Lahore, Sargodha. At the first step local key formants were identified due to language issues in Khayber Agency and Gilgit Baltistan. Researcher provides all necessary instructions to key informants about the questionnaires. The researcher collected

data through key informants and instruments were distributed and collected through key informants. Participants were contacted through key informants and they were given information regarding the purpose of the study by taking informed consent by trained key informants in the form of signed agreement. They were also given guidelines through key informants to complete the scales. Instruments were translated, validated and pilot tested for self-administration. The Instruments are were complex for self-administration however all the participants were literate and they can understand all the questions in instruments. Instruments were translated, validated and pilot tested for self-administration. Before to start the collection of data, the participants were make sure regarding their confidentiality and privacy. Overall, the response was encouraging and positive. The response rate was 57%, because 350 copies of questionnaire were distributed in participants and 200 were returned back.

SPSS (Version 23) was used to perform multiple statistical analyses. Psychometrics properties and correlation coefficient was computed for all scales. Regression analysis was applied to determine the moderating role of protective factors. Independent sample *t*-Test was conducted to verify the mean differences among displaced persons.

The ethical clearance was taken from Institutional Review Board of Advance Studies and Research, University of Lahore, Lahore.

Results

Table-1 shows that alpha coefficients among displaced persons have greater than .50, which indicate that all scales are reliable to use for analysis. The values of skewness and kurtosis are less than +1 and -1 for all variables among displaced persons which shows normally distribution of data. Correlations were theoretically consistent.

Table-2 shows moderating effect of protective factors between domestic migration stress, sense of coherence and delayed PTSD. In the first model results revealed that sense of coherence significantly moderated the relationship domestic migration stress and delayed PTSD, in second model resilience significantly moderated the relationship sense of coherence and delayed PTSD, and in third model post traumatic growth significantly moderated the relationship sense of coherence and delayed PTSD. The model is based on moderating effect of protective factors and all three protective factors played a moderating role among domestic migration stress, sense of coherence, resilience and delayed PTSD.

Table 1: Psychometric properties and pearson correlation of study variables among survivors of natural, man-made and overall disasters.

Variables	Survivors of Natural disaster (n = 100)					Survivors of Man-made disaster (n = 100)					Survivors Overall disaster (N = 200)				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1. Domestic MS	(.94)	-	-.28**	-	.94**	(.94)	-	-.36**	-.44**	.95**	(.94)	-	-.32**	-.42**	.95**
2. Sense of coherence		.32**		.408**			.38**		.67**			.36**		.69**	
3. Resilience			.81**		-.32**			.77**		-.38**			.79**		-.36**
4. Post traumatic growth				.84**					.83**					.83**	
5. Delayed PTSD					-.39**					-.45**					-.42**
M	27.41	8.19	15.20	51.46	31.75	22.53	8.42	15.27	52.34	26.60	24.98	8.30	15.24	51.90	29.18
SD	12.07	1.34	2.75	8.99	14.86	12.85	1.54	2.93	9.92	15.33	12.67	1.44	2.84	9.45	15.28
Potential range	16-80	0-6	6-30	0-126	0-80	16-80	0-6	6-30	0-126	0-80	16-80	0-6	6-30	0-126	0-80
Actual range	1-48	4-11	9-22	39-83	2-58	0-48	4-12	9-24	36-83	2-57	0-48	4-12	9-24	36-84	2-58
Skewness	-.27	.03	-.38	.83	-.15	.19	.11	.60	1.10	.19	-.05	.11	.49	.99	.01
Kurtosis	-.91	-.03	-.35	.96	-.96	-1.07	-.05	.00	1.46	-1.02	-1.09	.00	-.16	1.29	-1.05

Note. Reliability coefficients are reported in diagonal, 1 to 5 numbering indicates sequence of correlation
 *p <.05. **p <.01. ***p <.001.

Table 2: Hierarchical regression showing moderating effect of protective factors between domestic migration stress, sense of coherence and delayed PTSD.

Predictors	Outcome: Delayed PTSD Model 2			Outcome: Delayed PTSD Model 2			Outcome: Delayed PTSD Model 2				
	Model 1 B	B	95%CI LL, UL	Model 1 B	B	95%CI LL, UL	Model 1 B	B	95%CI LL, UL		
Constant	8.53***	.02	[-.03, .07]	Constant	2.69***	.18**	[.06, .31]	Constant	6.18***	.08	[-.05, .20]
Domestic migration stress (DMS)	.94***	.94***	[-.05, .05]	SOC	-.19*	-.25**	[-.42, -.08]	SOC	-.10	-.13*	[-.28, .01]
Sense of coherence (SOC)	-.01	.01	[.89, .98]	Resilience	-.18*	-.08	[-.25, .10]	Post traumatic growth (PTG)	-.34***	-.25**	[-.41, -.09]
DMS x SOC		.05*	[.03, .01]	SOC x resilience		-.23***	[-.33, -.13]	SOC x PTG		-.12*	[-.22, -.01]
R ²	.893	.895		R ²	.126	.184		R ²	.172	.185	
F	1237.02***	824.19***		F	21.322***	22.263***		F	30.797***	22.387***	
ΔR ²		.002		ΔR ²		.059		ΔR ²		.013	
ΔF		6.52*		ΔF		22.24***		ΔF		4.78*	

*p <.05. **p <.01. ***p <.001.

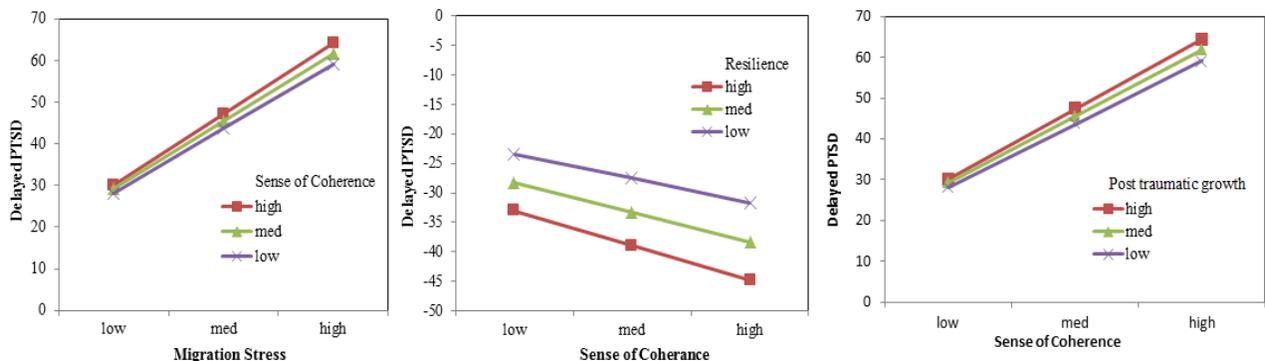


Figure 2: Mod-Graph depicts moderating effect of protective factors in the domestic migration stress and delayed onset PTSD in displaced persons of Pakistan

Table-2 also shows moderating effect of protective factors between domestic migration stress and delayed PTSD among the survivors of natural, man-made and overall disasters. Results shows that sense of coherence significantly moderated between domestic migration stress and delayed PTSD. Findings also indicate that resilience with and post traumatic growth with significantly moderated between sense of coherence and delayed PTSD (see Mod-Graph in Figure-2).

Figure-3 shows mean difference among survivors of disasters on domestic migration stress, sense of coherence, resilience, post traumatic growth and delayed PTSD. Differences on DMS and delayed PTSD were statistically significant.

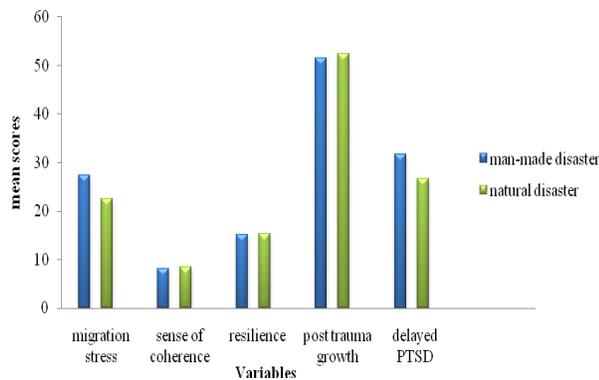


Figure 3: Means differences among survivors of natural and man-made disaster on variables.

Discussion

The present research has focused on the effects of domestic migration stress and protective factors on the prediction of delayed PTSD among internally displaced person. The first hypothesis “domestic migration stress is likely to positively predict delayed PTSD whereas protective factors is likely to negatively predict delayed PTSD among displaced persons” was indicated by data in present research. Previous research on the migrant account that persistent and delayed PTSD, low level of pleasure with life and destruction in overall mental health performance are long-lasting outcomes of disasters among displaced persons.⁹ The current findings are in the line with the previous research work. Previous literature suggest that protective factors are correlated with productive outcomes in the consequences of adversities, surrounding aspect of individuals’ social affiliations and adverse situations.²¹ The second hypothesis was supported by the data in the present study. The Findings of the present study indicate that sense of coherence significantly moderated between DMS and delayed PTSD.

Previous studies also provide basis that SOC plays a role as a moderator of life tensions and stresses.^{4,22} The third hypothesis was also supported by data in the present study. Findings of the present research showed that resilience and post traumatic growth significantly moderated between SOC and delayed PTSD. The findings of study are in line with previous studies which have found the correlation between mental problems and resilience such as; among the victims of terrorist assault, an opposite relationship was found between mental and psychological problems and resilience.²⁰

The Findings of the present study showed that post traumatic growth significantly moderated between SOC and delayed PTSD. Helgeson et al. carry out a meta-systematic review of 87 researches, this review ultimately verify that benefit finding and growth development was linked to lesser depression and advanced health.²² As the results of present study found that the survivors of man-made disaster scored high on DMS and delayed PTSD as compared to the survivors of natural disaster was in line with existing literature that long lasting severe psychological effects are results of man-made disaster like terrorism etc.²³

The findings of the study indicates that domestic migration stress has significantly predicts delayed PTSD among displaced persons. It is also concluded that protective factors considerably moderate the relationship between DMS and delayed PTSD. The findings of the present research shows that survivors of man-made disaster have much affected as compare to the survivors of natural disasters. Hence, the implications of the present research may provide information as a baseline for planning or formulating methods and resources for reminding prominent levels of protective factors and therefore, improved psychological well-being.

The study has some limitations. In the current study data was collected through self-report questionnaires that may cause single course biasness therefore in future research it is suggested that the entire phenomenon should be investigated through other resources to get more comprehensive findings. Secondly, the study was based on quantitative method in which data from participants were collected through structure questionnaires. It is also suggested that in future research both qualitative and quantitative aspects of the phenomenon of displaced persons should be investigated to get more personal perspectives of the participants.

Conflict of interest: None declared.

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