

State-Trait Resilience and Mental Health Outcomes among Adults: Comparative Study of Pakistan and Kingdom of Saudi Arabia

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Abstract

Background: Resilience is ability to cope with and recover from stressful situations in life. Prior research in Pakistan has been focused on resilience among disaster victims. The current research has taken resilience from a broader spectrum and investigated its role in mental health outcomes from a cross-cultural perspective.

Objectives: To examine the role of state- trait resilience in predicting well-being, depression, anxiety and stress among adults living in Pakistan and Kingdom of Saudi Arabia (KSA).

Subjects and Methods: Adults living in Pakistan and KSA participated in this descriptive comparative research. State-Trait Resilience Inventory, Short Warwick Edinburg Mental Well-being Scale and Depression Anxiety Stress Scale were used in both populations.

Results: A total of 226 from both countries participated in the study. Linear regression analysis confirmed the role of trait, state and overall resilience in the prediction of well-being in both countries and across both cultures. Trait, state and overall resilience had direct effect on depression, anxiety and stress. Moreover, adults from Pakistan exhibited more resilience and well-being as compared to their counterparts from KSA. Pakistani adults also exhibited low level of psychiatric symptoms as compared to adults from KSA.

Conclusion: Trait, state and overall resilience had a direct effect on well-being and psychological problems with salient cross-cultural differences in the level of these variables.

Policy message: As compared to Pakistani adults, low resilience and well-being whereas heighten level of psychiatric symptoms are seen in KSA patients which requires attention of mental health professionals in KSA.

Key words: Resilience, state resilience, trait resilience, well-being, depression, anxiety, stress, adults.

Introduction

Resilience is an ability to recover from trauma and cope with stressors. Resilience is considered the most important protective factors for mental health and emotional well-being. It can also be effectively used to design prevention programs and treatment interventions for countering stress and stressors.¹ Resilience predicts high psychological well-being² and people with high resilience have low anxiety, stress and depression.³

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Adolescents having symptoms of depression or other emotional or behavioral problems have lower resilience.⁴ Resilience is a process comprising of healthy and positive adaptation mechanism in adverse scenarios.⁵ Resilience makes valuable contribution in enhancing health and well-being.⁶ Resilience can also be utilized as an effective intervention for the treatment of stress and related pathologies.⁷ Resilience takes two forms which can be either present since childhood or current dominant states that help individuals face stressors. The preceding is labeled as trait resilience and the exceeding is labeled as state resilience.⁸ Previous research confirms the importance of trait and state resilience for school and college students.⁹ One step ahead of it, the present study has focused on resilience of university students from cross-cultural perspective. The present study has examined the effect of both trait resilience and state resilience on mental health outcomes among adults from two collectivist cultures including Pakistan and KSA. Besides this, the study intends to find out cross-cultural differences on all variables.

The resilience capacity depends on activating self-regulation or the “letting go response” to switch off

the stress response generated by the mind's cognitive appraisals.¹⁰ Hiew illustrates that resilient people in the face of adversity remained healthy and refreshed if they demonstrated letting go of stressful responses.¹¹ Resilience can be restored by switching out from stress provoking thoughts and overwhelming traumatic memories. Resilience programs attempted to restore emotional balance and recovery.^{12,13} The inherent resilience is characterized by calmness and emotional maturity and above all by enthusiasm. Friedman described "self-healing people" as having an inherent resilience characterized by emotional equilibrium which stems from a combination of appropriate inbuilt activities within the individual's psyche.¹⁴ The present study anticipated that state resilience, trait resilience and overall resilience are likely to positively predict well-being among students from Pakistan and KSA. The study also anticipated that state resilience, trait resilience and overall resilience are likely to negatively predict depression, anxiety and stress among adults.

Subjects and Methods

This was a comparative study in which purposive sampling of adults (n = 226) from two universities of Islamic Republic of Pakistan (n = 113, 50%) and Kingdom of Saudi Arabia (n = 113, 50%) was collected. Universities from Pakistan included University of Sargodha and Quaid-i-Azam University Islamabad whereas universities from KSA included Princess Iffat University and King Saud University. Principal Investigator has residence in both

countries, therefore single questionnaire was applied to the nationals of both countries through the same Principal Investigator.

Three self-reporting measures were used for data collection i.e. a) The State Trait Resilience Inventory consisting of 18 items measured state and trait resilience among adults,⁸ b) Short Warwick Edinburg Mental Well-being Scale consisting of 7 items measured well-being among adults and¹⁵ c) Depression Anxiety Stress Scale measured psychological problems among adults.¹⁶ These scales are used in the indigenous context and have been reported as reliable and valid instruments to measure resilience, well-being, depression, anxiety and stress respectively.¹⁷⁻¹⁹

Universities were approached to seek permission for data collection from. Study was introduced to the students of the universities and written informed consent was taken from the participants. As the principal investigator lives in Pakistan and in KSA and knows Arabic language well, therefore he himself and other Pakistani students residing and studying in KSA collected the data from both universities situated in KSA. The principal investigator also collected data from Pakistani universities though the help of colleagues/students who were studying here. The completed questionnaire was collected and scores were calculated for the study variables and subjected to statistical analysis for testing the hypothesis.

Table 1: Properties and pearson correlation among study variables.

Variables	M	SD	Range	Skewness	1	2	3	4	5	6	7
Total (n = 226)											
1. Well-Being	24.04	4.40	12-35	.06	(.70)	-.43***	-.42***	-.41***	.48***	.51***	.54***
2. Depression	8.29	4.76	0-19	-.06		(.81)	.84***	.77***	-.26***	-.26***	-.28***
3. Anxiety	8.63	4.71	0-19	.04			(.82)	.82***	-.28***	-.25***	-.29***
4. Stress	9.66	4.57	0-19	-.03				(.79)	-.23**	-.22**	-.24***
5. State resilience	57.86	7.56	24-75	-1.24					(.81)	.69***	.90***
6. Trait resilience	69.15	8.93	36-88	-.61						(.84)	.93***
7. Resilience	127.01	15.15	67-162	-.80							(.89)
Pakistan (n = 113)											
1. Well-Being	25.67	3.95	15-35	-.04	(.70)	-.35***	-.28**	-.29**	.47***	.41***	.48***
2. Depression	5.70	3.90	0-19	.43		(.74)	.68***	.57***	-.11	-.07	-.09
3. Anxiety	5.90	3.71	0-17	.42			(.70)	.67***	-.13	-.05	-.08
4. Stress	7.26	3.81	0-18	.28				(.78)	-.06	-.10	-.08
5. State resilience	59.83	5.74	31-71	-1.24					(.70)	.66***	.89***
6. Trait resilience	72.10	7.04	36-86	-1.34						(.79)	.93***
7. Resilience	131.91	11.66	73-162	-1.69							(.85)
KSA (n = 113)											
1. Well-Being	22.41	4.24	12-34	.31	(.79)	-.24**	-.26**	-.26**	.41***	.46***	.48***
2. Depression	10.90	4.10	0-18	-.73		(.74)	.83***	.77***	-.16	-.13	-.16
3. Anxiety	11.39	3.97	2-19	-.48			(.77)	.80***	-.19*	-.10	-.16
4. Stress	12.06	3.97	2-19	-.50				(.75)	-.15	-.03	-.10
5. State resilience	55.90	8.61	24-75	-.96					(.84)	.66***	.90***
6. Trait resilience	66.21	9.65	43-88	-.03						(.84)	.92***
7. Resilience	122.11	16.63	73-162	-.18							(.90)

Note: Alpha reliability values are indicated in diagonal; *p< .05. **p< .01. ***p< .001

As study examined the effect of resilience and its two dimensions including state and trait resilience on the prediction of mental health outcomes including well-being, depression, anxiety and stress in two countries with different cultures. therefore, linear regression analysis was applied to test the hypotheses. Finally, independent sample *t*-test examined the cross-cultural differences on variables among adults from Pakistan and KSA.

The research is conducted by following the principals of ethics by American Psychological Association. There is no physical or psychological harm for participants. Informed consent was taken from the participants and the identities of the individual participants are kept confidential.

Results

Table-1 shows reliability coefficients for all variables. Reliability coefficients of all scales are greater than 0.70 showing satisfactory internal consistency. Correlations between resilience and outcome variables are in theoretically consistent directions.

Table-2 indicate regression analysis of predictor variable i.e. resilience on well-being in Pakistan and KSA and overall participants. Resilience was positively associated with the well-being in both Pakistani and KSA subjects ($p < 0.001$). There was a direct and significant effect of state resilience on well-being in both Pakistani and KSA subjects ($p < 0.001$). Trait resilience also had a direct and significant effect on well-being in subjects of both countries ($p < 0.001$).

Table-3 shows regression analysis of the effect of resilience on depression, anxiety and stress. There was significant negative effect of trait resilience on depression, anxiety and stress ($p < 0.001$).

Table-4 shows mean, standard deviation and *t*-values for Pakistan and KSA subjects for state resilience, trait resilience, well-being, depression, anxiety and stress. Pakistani adults scored significantly higher on state resilience, trait resilience and well-being than their

counterparts from KSA while adults from KSA scored significantly higher on depression, anxiety and stress than adults from Pakistan.

Discussion

The present study focused on a recent construct of positive psychology i.e. resilience and its role in predicting mental health outcomes including well-being, depression, anxiety and stress from a cross-cultural perspective. Resilience is human potential to find ways for effectively coping with and efficiently recovering from crisis and stressful situations.²⁰ Giving concentration to enhance students resilience can be used as a mean to promote well-being.²¹ Many reports also show that resilience is correlated with well-being.^{2,18,22} Resilience also negatively predicts depression, anxiety and stress i.e. higher level of resilience is linked with the lower level of depression, anxiety and stress.³ Existing research shows that adolescents who suffer from depressive symptoms or other emotional or behavioral problems have low resilience.⁴ Furthermore, dimensions of resilience also have negative relationship with stress and depressive symptoms.²³

The present findings also revealed that Pakistani adults were more resilient as compared to Saudi adults. Similarly, Pakistani adult students exhibited better well-being, less depression, anxiety and stress as compared to adults from KSA. Existing research on cross-cultural differences between Pakistan and other cultures has reported mixed findings. Participants from both cultures were adult university students. In a similar comparative study, adult students from KSA were reported to have higher levels of neuroticism as compared to Pakistani adult students.²⁴ In another study comparing Pakistani employees with Qatar on mental health related variables like well-being and depression, reported that participants from Qatar exhibited better well-being and lower levels of depression than their counterparts from Pakistan.²⁵

Table 2: Linear regression analysis with resilience and well-being.

Variables	Pakistan (n = 113)			KSA (n = 113)			Total (N= 226)		
	β	ΔR^2	F(model)	β	ΔR^2	F(model)	β	ΔR^2	F(model)
Resilience	.48***	.23	33.49***	.48***	.22	33.35***	.54***	.29	91.65***
State resilience	.47***	.22	31.59***	.41***	.16	22.95***	.48***	.23	67.83***
Trait resilience	.46***	.20	29.65***	.41***	.16	22.89***	.51***	.25	77.09***

*** $p < .001$

Table 3: Linear regression analysis with resilience and psychological problems.

Variables	Depression			Anxiety			Stress		
	B	ΔR^2	F(model)	β	ΔR^2	F(model)	B	ΔR^2	F(model)
Resilience	-.29***	.077	19.81***	-.30***	.079	20.34***	-.30***	.079	20.34***
State resilience	-.26***	.063	16.01***	-.28***	.079	19.02***	-.28***	.079	19.02***
Trait resilience	-.27***	.066	16.92***	-.25***	.060	15.27***	-.25***	.060	15.27***

*** $p < .001$

Table 4: Comparison of adults from Pakistan and KSA on study variables.

Variables	Pakistan (n = 113)		KSA (n = 113)		t (224)	p	CI 95%		Cohen's d
	M	SD	M	SD			LL	UL	
Resilience	131.92	11.66	122.11	16.63	5.13	.000	6.04	13.57	.68
State resilience	59.83	5.74	55.90	8.61	4.03	.000	2.01	5.84	.54
Trait resilience	72.10	7.04	66.21	9.65	5.23	.000	3.66	8.09	.70
Well-Being	25.67	3.95	22.41	4.24	5.98	.000	2.18	4.33	.79
Depression	5.70	3.90	10.90	4.10	9.78	.000	-6.24	-4.15	-1.30
Anxiety	5.90	3.71	11.39	3.97	10.68	.000	-6.46	-4.45	-1.42
Stress	7.26	3.81	12.06	3.97	9.27	.000	-5.82	-3.78	-1.23

The study has some limitations like the response bias, as a self-reported data was collected using varying scales and therefore it is hard to ensure that the response of the subjects were not affected by social desirability. The study had little control over confounding variables like language. The first language of the citizens of KSA and Pakistan is Arabic and Urdu respectively. However, the instruments used in both cultures were documented in English thus language related barriers cannot be underestimated. Overall the study has important role in understanding the importance for resilience for ensuring mental health among adult students across different countries and cultures.

Conflict of interest: None declared.

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