



# Anger expression as a predictor of mental health among school students of Kashmir valley

## Abstract

**Background:** Anger expression refers to the manner in which an individual expressed her/his emotional experience of anger (which may include anger-in, anger-out, or anger-constant). Anger-out is the tendency to express one's anger outwardly as negative manner which may involve the use of aggressive actions. Anger-in refers to the extent to which individuals suppress anger when they are experiencing negative emotions, whereas constant means that there is no change. **Aim:** The aim of the present research was to study the interaction of anger expression and mental health among school students of Kashmir valley. **Method:** One hundred and twenty school students with equal number of males and females were selected from different districts of Kashmir valley. The Anger Expression (Ax) scale and the Youth Self-Report (YSR) inventory were the tools for data collection. **Results:** Group comparisons between male and female students were not significant on the measures of anger expression (i.e. anger-in, anger-out, and anger-constant) and mental health (i.e. internal, external, and neither internal nor external). Anger-in and anger-out were significantly correlated with the mental health dimensions of internal, external, and neither internalising nor externalising). Whereas, the relation between anger control with external and neither internal nor external dimensions of mental health was negative; but, it was statistically insignificant. Multiple regression analyses yielded anger-out as a significant predictor of mental health ( $F=12.24$ ;  $p<0.001$ ). Twenty four per cent variance ( $R^2$  change=0.24; beta value=0.44) in mental health was explained due to anger-out ( $t$ -value=5.29;  $p<0.001$ ). The results are discussed in the context of history of violence in Kashmir.

**Keywords:** Emotions. Internal-External Control. Violence.

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**Received:** 7 December 2017

**Revised:** 3 March 2018

**Accepted:** 4 March 2018

**Epub:** 26 July 2018

## INTRODUCTION

The historical journey of Kashmir is marked by various ups and downs, which include the Indo-Pak wars of 1947, 1965, 1971, and 1999 (Kargil war). Violence has resulted in thousands of deaths and has led to the displacement of Kashmiri 'pandiths' from the valley. The displaced pandiths who continue to live in temporary refugee camps in Jammu, Delhi, and some other states of India, are still unable to safely return to their homeland. Compared to before the outbreak of armed conflict, the number of psychiatric cases during and after the conflict increased dramatically. Records from the lone government psychiatric hospital situated in the Srinagar city indicated that an average of ten to 20 patients were registered per day in the outpatient department in the 1980s. This increased to an average of 200 patients per day.[1] The current breed of Kashmiri children were born and grew up in an atmosphere surrounded by political conflict and have witnessed armed forces, curfew, protests, and killings. Kashmir has witnessed multiple conflicts leading to increase in various psychiatric disorders.[2] Among these psychiatric disorders, posttraumatic stress disorder (PTSD) is most reported from Kashmir valley. The prevalence of PTSD varies from 7.8% in non-conflict area to 15.8% in conflict areas.[3]

Anger can be defined as an emotional reaction to a perceived internal or external provocation. Anger is an emotion related to one's psychological interpretation of having been offended, wronged or denied and a tendency to react through retaliation. Anger is inherently social and incapable of being divided into exclusively individual or exclusively social components. Anger can produce positive or negative outcomes, yet no matter what the outcomes, they all occur within a social context. Eisenberg and Delaney[4] argue that anger is a result of a person's personal appreciations and frustrations; they have reported that there are three causes of anger: frustration situations, situations in which an individual's efficiency and security are under threat, and when the person's behaviours do not match his/her expectations.

Spielberger *et al.*[5] suggested that the tendency to express one's anger in an outwardly negative manner represented an outward directed style known as anger-out. Anger-out may involve the use of aggressive actions (e.g. assaultive behaviour, destruction of property, or making offensive gestures) and/or aggressive verbal behaviour (e.g. insults, offensive/inappropriate language or shouting). Individuals displaying the anger-out style may choose targets for hostile or aggressive behaviour if they are seen as even remotely related to the cause of their anger

or merely by proximity when the outburst occurs. The concept of anger-in refers to the extent to which individuals suppress anger when they are experiencing this negative emotion. High levels of anger suppression have led to the angry feelings being suppressed and replaced with guilt, anxiety, and depression as the person blames him/herself for the problem surrounding the anger-provoking situation. Smits and Kuppens[6] reported that anger has been thought to be related to both the behavioural activation and behavioural inhibition systems, but data from young adults suggest that it is most strongly linked to behavioural activation. They also reported that among college students, tendencies toward expressing anger outwardly have been found to be positively associated with the behavioural activation system, whereas anger expressed inwardly has been found to be associated with the behavioural inhibition system. Consistent with this observation, studies by Brent and Mann[7] and Swahn *et al.*[8] reported physical fighting and impulsive aggression presumably related to the outward expression of anger, have been implicated as important correlates of suicidal behaviours among young people. In Kashmir, the prolonged exposure to stress and the insecure situation have affected the mental health. Therefore, substantial need for psychological and psychiatric support can only be addressed through a strong community-based mental health system. For this purpose, one has to focus on how children or school going children are affected by continued violence in Kashmir. Therefore, in this context the present study aims to investigate how male and female school student's anger expression acts as a predictor of mental health exposed to violence in Kashmir.

## METHOD

### Sample

The sample consisted of 120 students selected from different English medium schools, both private and government located in different regions of Kashmir. Students from different districts like Anantag, Srinagar, Ganderbal, and Baramullaha were taken for the study.

### Measures

The following measures were used for data collection:

#### **Youth Self-Report (YSR)**

The Youth Self-Report (YSR) is derived from Child Behavior Check List, known as CBCL and is designed by Achenbach[9] for adolescents between 12 to 18 years. It has nine subscale symptoms, i.e. withdraw, somatic complains, anxiety and depression, social problems, thought problems, attention problems, aggressive behaviour, and delinquent behaviour. These subscales are further divided into internal, external, and neither internal nor external. It is a well-known psychopathological instrument designed to obtain adolescent reports of their competencies and behavioural/emotional problems. The 84 items are scored from zero ('not true') to five ('very true or often true'). The Cronbach's alpha reliability was found as of 0.76.

#### **Anger Expression (Ax) Scale**

The Anger Expression (Ax) scale is developed by Spielberger *et al.*[10] In this scale, three dimensions of anger are measured, namely anger-in, anger-out, and anger-control.

Anger-in refers to how often angry feelings are experienced but not expressed whereas, anger-out refers to the extent that an individual engages in aggressive behaviour when motivated by angry feelings. Anger-control may be defined as a tendency of not becoming angry or managing anger more sourcefully. Ax scale is comprised of 20 items and yield four different scores. Cronbach's alpha was found as 0.81.

### Procedure

Principals of all respective schools were approached and objectives of conducting the present study were explained in detail to them. A formal permission to conduct the study in their respective schools was taken. In total, ten schools were taken and purposive sampling technique was used. Students were properly explained the objectives of the study, and then the questionnaire of anger expression and mental health were administered. The respondents were given ample time to respond to the queries and whenever need was felt, the researcher explained their queries. Statements in the questionnaires were explained in advance to the respondents to avoid any confusion.

### Statistical analysis

Both descriptive and inferential statistics were used. Mean and SDs were calculated on the measures of mental health and anger expression. Group differences between male and female were analysed by independent group t-test on various dimensions of anger expression and mental health. Pearson's product moment method of correlation was applied to study the relation between mental health and on the dimensions of anger expression. Multiple regression analysis was also performed to study the predictors of mental health and the variance contributed by various dimensions of anger expression in male and female school students. Analyses were done using 21.0 versions of Statistical Package of Social Sciences (SPSS).

## RESULTS

In Table 1, the mean, SD, SeM, and t-value of male and female students on the dimension of mental health are reported. Results showed that mean score of female students was higher than male students on internal health dimension but mean score of male students was found higher than female students on the dimension of external health. Table 1 also shows that there is no significant difference between all three dimensions of mental health. Cohen's d-value was found in the range of 0.15 to 0.33.

In Table 2, the mean, SD, SeM, and t-value of male and female students on the dimension of anger expression are reported. Results showed that mean score of female students was higher than male students on anger-in dimension but on the dimension of anger-out, mean score of male students was found higher than female students. Mean score of anger-control was found higher in female students but there is no significant difference between all three dimensions of anger expression. Cohen's d-value was found in the range of 0.07 to 0.22.

In Table 3, the results of correlation between the measures of anger expression and dimensions of mental health are reported.

This table shows anger-in to be significantly and positively correlated with anger-out, external health, and neither internal nor external health ( $p < 0.05$  in each case), and with anger-control and internal health ( $p < 0.01$  in each case). Anger-out was found to be significantly and positively correlated with internal health ( $p < 0.05$ ), and with external health and neither internal nor external health ( $p < 0.01$  in each case).

In Table, 4 multiple regression analysis findings show anger-out as a significant predictor of mental health ( $F=12.24$ ;  $p < 0.001$ ). Twenty four per cent variance ( $R^2$  change=0.24; Beta value=0.44) in mental health was explained due to anger-out ( $t$ -value=5.29;  $p < 0.001$ ). The variables which were excluded from the model are the other dimensions of anger expression, such as anger-in and anger-control.

## DISCUSSION

This study was designed to see whether anger expression act as a predictor of mental health among Kashmiri school students. Group comparisons between male and female

students were not significant on the measures of anger expression (i.e. anger-in, anger-out, and anger-constant) and mental health (i.e. internal, external, and neither internal nor external). Results showed that anger-in significantly and positively correlated with anger-out, external health and with anger-control, internal health. Anger-out was found significantly and positively correlated with internal health and with external health. Similar finding is also reported by Arslan[11] in reporting an investigation of anger and anger expression in terms of coping with stress and interpersonal problem-solving. Finding from multiple regression analysis shows anger-out as a significant predictor of mental health. This finding is inconsistent with that of Kopper and Epperson[12] who studied a sample of 445 female and 260 male college students. The correlational and hierarchical regression analyses indicated that the anger composites were strong predictors of the mental health variables. Whereas gender did not uniquely contribute to the prediction of any of the mental health variables, nor did it moderate the relationships of these variables with other predictors.

**Table 1:** Mean, SD, SeM, t-value, and Cohen's d-value of male and female students on the dimensions of mental health (df=118)

Dimensions of mental health	Male (N=60)			Female (N=60)			t-value	Cohen's d-value
	Mean	SD	SeM	Mean	SD	SeM		
Internal health	16.80	6.08	0.78	17.93	6.51	0.84	0.98	0.17
External health	8.60	4.10	0.53	7.41	3.47	0.44	1.70	0.33
Neither internal nor external	15.33	5.40	0.69	14.50	5.21	0.67	0.85	0.15

**Table 2:** Mean, SD, SeM, t-value, and Cohen's d-value of male and female students on the dimensions of anger expression (df=118)

Dimensions of anger expression	Male (N=60)			Female (N=60)			t-value	Cohen's d-value
	Mean	SD	SeM	Mean	SD	SeM		
Anger-in	17.13	3.54	0.45	17.97	3.97	0.51	1.21	0.22
Anger-out	16.73	3.86	0.49	16.42	4.16	0.53	0.43	0.07
Anger-control	9.73	2.04	0.26	10.13	2.16	0.28	1.04	0.19

**Table 3:** Pearson's correlation between dimensions of anger expression and dimensions of mental health (N=120)

	Anger-out	Anger-control	Internal health	External health	Neither internal nor external
Anger-in	0.21*	0.25**	0.38**	0.22*	0.22*
Anger-out	1	-0.03	0.21*	0.27**	0.47**
Anger-control		1	0.13	-0.04	-0.02
Internal health			1	0.59**	0.38**
External health				1	0.46**

\* $p < 0.05$ , \*\* $p < 0.01$

**Table 4:** Summary of multiple regression analysis for the dimensions of anger expression and mental health

Predictor variables	Beta value	t-value	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F-value (df=3/116)
Anger-in	0.14	1.62	0.49	0.24	0.22	12.24
Anger-out	0.44	5.29				( $p < 0.001$ )
Anger-control	0.04	-0.53				

## Implication

The present study has provided meaningful information in the area of mental health and anger expression. School is an important place to learn; so, it needs to place mental health professionals in schools. And will also make the concerned professionals, authorities, and caregivers more aware and alert. It will help professionals and policy makers in devising mental health programmes for school children at collective and individual levels.

## Limitations and suggestions

Every piece of research has its limitations and results cannot be generalised to a large section of the society. Hence, some important limitations of the study are given below:

- 1) Selection of the participants was restricted to a limited number of districts and for generalisation of results a large sample can be taken.
- 2) Although standardised tools were used, but a qualitative analysis would have provided a more in-depth analysis of the variables under study.
- 3) A longitudinal study would help in understanding the emergence and extent of mental health problems in development context.
- 4) Interventions need to include families, peer group, as there are myriad of factors related to mental health problems and anger expression.

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Hassan M, Khan W, Bhat B. Anger expression as a predictor of mental health among school students of Kashmir valley. Open J Psychiatry Allied Sci. 2018 Jul 26. [Epub ahead of print]

Source of support: Nil. Declaration of interest: None.