

ACADEMIC ACHIEVEMENT AMONG UPPER PRIMARY SCHOOL STUDENTS IN RELATION TO THEIR MENTAL PRESSURE AFTER KEDARNATH DISASTER

Shankar Singh¹ & Prof. Rama Maikhuri²

¹*Junior Research Fellow, Department of Education, Birla Campus Srinagar HNB Garhwal University*

²*Professor, Department of Education, Birla Campus Srinagar HNB Garhwal University*

Abstract

Uttarakhand is a hill state and it is providing a large amount of natural resources to country but Uttarakhand's human capital faces so many problems for their survival. Last few decades climate change and disasters made a big change on attitude of people of Uttarakhand. Kedarnath disaster, June 2013 changed the destiny of humans of Kedar valley. After flood, thousands of people lost their life and many people struggle for their survival in Kedar valley. Present paper deals with the academic achievement among upper primary school students in relation to their mental pressure after Kedarnath disaster with special reference to Rudrapur district. Descriptive survey method used for the present study and 120 students selected randomly from disaster affected upper primary schools from Rudrapur district. Data was collected through self constructed mental pressure questionnaire and report cards of students. Results indicated that after disaster student's mental pressure influenced their academic achievement. After disaster students' gained low grades in their school subjects than previous year. It was also found that totally disaster affected school's students feel more mental pressure than partially affected schools.

Keywords: kedarnath disaster, academic achievement, mental pressure, disaster, upper primary school.



[Scholarly Research Journal's](http://www.srjis.com) is licensed Based on a work at www.srjis.com

INTRODUCTION

Uttarakhand is a hill state and it is providing a large amount of natural resources to country but Uttarakhand's human capital faces so many problems for their survival. The climate, vegetation and peoples life style of different with its location. The geography of Uttarakhand is so much different and it is based on their development, cultural, societies- structure and educational developments. In such a situation, due to geographical variation and advanced human civilization, Uttarakhand has struggled since its existence. The present human development model has failed in front of the nature. Normally disaster is a serious disruption over a short time a society involving widespread human and environment loss and bad impacts on human society and its natural resources. Natural disasters can have a life altering

impact on the individual person, families and society but its effect on our community, societies, city-villages, state level and many times can impact an whole country level. Every persons equally effect that time when earth surface suffering disaster. Globally, Disaster is increasing in frequency and intensity; they are often unforeseen, serious, cause threats and may bring injury and death in worst cases (Stanley & Williams 2000). A heavy disaster struck on 16/17 June 2013 in Uttrakahnd. The districts of Bageshwar, chamoli. Uttrkashi, Pithoragarh and Rudrapryag were the mostly affected. The worst impact of the disaster of June 2013 on human settlement and natural resources damage in the kedarnath valley (gaurikund and kedarnath). 4200 villages were affected; 11,091 livestock were lost and 2,513 houses completely damaged more than 76,000 tourist and 1,00,000 local residents were struggled for his life. The villages of kedarnath, a tourist and religious pilgrimage site situated just below the lake was completely damaged and washed away, villages of rambara, gaurikund and sonprayang were also washed away with floods. In that time disaster threaten the lives , the rights and the needs of millions of children in this valley. In Rudraprayag there are 594 primary, 117 upper primary and 54 high school and 48 higher secondary schools. The kedarnath flash flood of 16-17 June 2013 was one of the most severe disasters the district had ever experienced. 11 primary and 4 upper primary schools were completely damaged and schools infrastructure had been distorted. 07primary and 04upper primary school were partially damaged. At the secondary education level 2 inter colleges were completely damaged and 41 inter colleges partial losses and 12 private schools were also reported to be damaged. Children were that's school struggling in that conditions. Children are more vulnerable because of their unique life style, different psychological and different– different developmental steps and their attitude children age has more affected their natural environment. And in this time they were directly affected by disaster. each time a disaster occurs, masses of school children are victimized and many of them never return. In 1988 spitak Earthquake (Armenia) killed more than 17,000 students while in school, which was 2/3 of total earthquake fatality. 971 students and 31 teachers were killed by Bhuj earthquake 2001 in India, in 2008 more than 10,000 children were killed during the Sichuwna Earthquake in China. Disasters may sometimes result in missed school and delayed academic progress, missed social opportunities and increased exposure to various life stresses such as illness (peek 2008). Children's age has affected their vulnerability and shapes their ability to cope and survive during a disaster. The effect of disasters can affect children's future

development Potential Emergency management officials and disaster planners recognize that for the first 72 hours after an earthquake or other disaster strikes, individuals and families should be prepared for self – sufficiency because services and supplies can be disrupted and emergency assistance might not be immediately available (Russell et al. 1995, Basolo et al. 2009. Impact on education 1,280 school closed/damaged/affected the Disaster, 155 schools closed at least for 1-9 weeks, 4,50,000 students affected , 40,000 textbooks lost , increased drop –out and repetition (MoYES Combodia food 2013).

OBJECTIVES

- (1).To study the effect of mental pressure on academic achievement of affected upper primary level students.
- (2).To study the effect of mental pressure on academic achievement of totally affected upper primary level students.
- (3).To study the effect of mental pressure on academic achievement of marginally affected upper primary level students.

HYPOTHESES

- (1).There exists significant effect mental pressure on academic achievement of upper primary level students.
- (2).There exists significant effect mental pressure on academic achievement of totally effected upper primary level students.
- (3).There exists significant effect mental pressure on academic achievement of marginally effected upper primary level students.

METHODOLOGY - Descriptive survey method was used in the study. Quantitative approaches were used.

Population - kedarnath disaster affected upper primary school students of Agshtaymuni Block.

Sample - The study made use of a representative sample of 120 students of kedarnath disaster affected upper primary school of Agshtaymuni block Rudrprayag districts in Uttarakhand.

Tools - A self developed questionnaire was made administered the related Disaster conditions and disaster affected environment made mental pressure of students and collect their academic score cards.

RESULTS AND DISCUSSIONS

1. Effect of mental pressure on academic achievement

			Correlation		
	Mean	Std. Deviation	N	r	Sig. (2-tailed)
AE	59.63	7.150	120	.677	.000
MP	54.86	9.277			

AE= ACADEMIC ACIEVMENT

MP= MENTAL PRESSURE

Academic achievement was significantly correlated with mental pressure, $r=.67$, $P=.000$, hence it can be concluded that there is a significant relationship between mental pressure and academic achievement. After Kedarnath Disaster, secondary school students of Kedar Vally feel mental pressure and this pressure affected their achievement in school subjects.

Regression

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677 ^a	.458	.453	5.287

a. Predictors: (Constant), MP

b. Dependent Variable: AE

The value of R^2 was .458, which tells us that mental pressure can account for 45.3% of the variation in academic achievement. It means that 54.7% academic achievement was explained by other kinds of variables than the mental pressure after Kedarnath disaster.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2785.365	1	2785.365	99.643	.000 ^b
	Residual	3298.501	118	27.953		
	Total	6083.867	119			

a. Dependent Variable: AE

b. Predictors: (Constant), MP

The F value was (99.643) and it was significant at $P<.001$. this result tell us that there is 0.1% chance that an F ratio this large would happen if the null hypothesis were true. Therefore we can concluded that our regression model results in significantly better prediction of academic achievement on the basis of mental pressure.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.023	2.906		10.674	.000
	MP	.522	.052	.677	9.982	.000

a. Dependent Variable: AE

The t value of mental pressure was (9.98) and it was significant at $P < .001$. the beta coefficient (.677) explain the contribution of mental pressure on academic achievement. This beta value showed a significant contribution of mental pressure on academic achievement among secondary school students. Hence it can be concluded the mental pressure makes a significant contribution on academic achievement.

(2) Effect of mental pressure on academic achievement (totally effected schools)

Correlation

	Mean	Std. Deviation	N	R	Sig. (2-tailed)
AE(TEF)	60.88	7.891	60	.638	.000
MP(TEF)	55.23	9.910			

AE= ACADEMIC ACIEVMENT

MP= MENTAL PRESSURE

Academic achievement was significantly correlated with mental pressure, $r = .63$, $P = .000$, in totally disaster affected schools, hence it can be concluded that there is a significant relationship between mental pressure and academic achievement in totally effected secondary schools by kedarnath disaster. After Kedarnath Disaster, totally disaster affected secondary school students of Kedar Vally feel mental pressure and this pressure affected their achievement in school subjects.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638 ^a	.406	.396	6.132

a. Predictors: (Constant), MP(TEF)

b. Dependent Variable: AE(TEF)

The value of R^2 was .406, which tells us that mental pressure can account for 40.6% of the variation in academic achievement. It means that 39.4% academic achievement was explained by other kinds of variables than the mental pressure of totally disaster affected secondary schools after Kedarnath disaster.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1493.288	1	1493.288	39.713	.000 ^b
	Residual	2180.895	58	37.602		
	Total	3674.183	59			

a. Dependent Variable: AE(TEF)

b. Predictors: (Constant), MP(TEF)

The F value was (39.713) and it was significant at $P < .001$. this result tell us that there is 0.1% chance that an F ratio this large would happen if the null hypothesis were true. Therefore we can concluded that our regression model results in significantly better prediction of academic achievement on the basis of mental pressure in totally disaster affected schools.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.845	4.519		7.268	.000
	MP(TEF)	.508	.081	.638	6.302	.000

a. Dependent Variable: AE(TEF)

The t value of mental pressure was (6.302) and it was significant at $P < .001$. the beta coefficient (.638) explain the contribution of mental pressure on academic achievement in totally disaster affected schools. This beta value showed a significant contribution of mental pressure on academic achievement among totally disaster affected secondary school students. Hence it can be concluded the mental pressure makes a significant contribution on academic achievement in totally disaster affected schools.

(3) Effect of mental pressure on academic achievement (marginally effected schools)

Correlation

	Mean	Std. Deviation	N	R	Sig. (2-tailed)
AE(MEF)	58.38	6.137	60	.747	.000
MP(MEF)	54.48	8.664	60		

AE= ACADEMIC ACIEVMENT

MP= MENTAL PRESSURE

Academic achievement was significantly correlated with mental pressure, $r = .74$, $P = .000$, in marginally disaster affected schools, hence it can be concluded that there is a significant relationship between mental pressure and academic achievement in marginally effected secondary schools by kedarnath disaster. After Kedarnath Disaster, marginally disaster

affected secondary school students of Kedar Vally feel mental pressure and this pressure affected their achievement in school subjects.

Regression

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.747 ^a	.558	.550		4.116

a. Predictors: (Constant), MP(MEF)

b. Dependent Variable: AE(MEF)

The value of R^2 was .558, which tells us that mental pressure can account for 55.8% of the variation in academic achievement. It means that 44.2% academic achievement was explained by other kinds of variables than the mental pressure of marginally disaster affected secondary schools after Kedarnath disaster.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1239.359	1	1239.359	73.139	.000 ^b
	Residual	982.824	58	16.945		
	Total	2222.183	59			

a. Dependent Variable: AE(MEF)

b. Predictors: (Constant), MP(MEF)

The F value was (73.139) and it was significant at $P < .001$. this result tell us that there is 0.1% chance that an F ratio this large would happen if the null hypothesis were true. Therefore we can concluded that our regression model results in significantly better prediction of academic achievement on the basis of mental pressure in marginally disaster affected schools.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	29.562	3.412		8.665	.000
	MP(MEF)	.529	.062	.747	8.552	.000

a. Dependent Variable: AE(MEF)

The t value of mental pressure was (8.552) and it was significant at $P < .001$. the beta coefficient (.747) explain the contribution of mental pressure on academic achievement in marginally disaster affected schools. This beta value showed a significant contribution of mental pressure on academic achievement among marginally disaster affected secondary school students. Hence it can be concluded the mental pressure makes a significant contribution on academic achievement in marginally disaster affected schools.

CONCLUSION

In present scenario most of the school environment is effect student academic achievements. A good and healthy school environment always increase students academic achievements and other side if disaster distorted friendly, healthy and leaning environment in disaster effected schools. So students have to mental pressure. Disaster effect also large scale a society and student who had not been uncovered to the disaster directly but their experiences such as the loss of schools buildings, play grounds, friends, neighbours, communication groups of society, brothers and sisters, parents and the daily life disturb long period with the society environments, school environments and around with see many people survived there life. These all things also directly affected students teaching learning process. After Kedarnath Disaster, secondary school students of KedarVally feel mental pressure and this pressure effected their achievement in school subjects. Totally disaster affected secondary school students of KedarVally feel mental pressure and this pressure affected their achievement in school subjects. After Kedarnath Disaster, marginally disaster affected secondary school students of KedarVally feel mental pressure and this pressure effected their achievement in school subjects.

References

- E. E. Maccoby and J. A. Martin, "Socialization in the context of the family: parent-child interaction," in *Handbook of Child Psychology, Socialization, Personality and Social Development*, P. H. Mussen and E. M. Hetherington, Eds., vol. 4, pp. 1–101, John Wiley & Sons, New York, NY, USA, 4th edition, 1983. View at Google Scholar
- J. R. Harris, "Where is the child's environment? A group socialization theory of development," *Psychological Review*, vol. 102, no. 3, pp. 458–489, 1995. View at Google Scholar
- COSTANZA, R., FARLEY, J. *Ecological Economics of Coastal Disasters: introduction to the special issue. Ecological Economics*, v. 63, n. 3, p. 249-253, 2007.
- Rouhban B. *Knowledge Management and education for Disaster Reduction*. France: UNESCO; 2010.
- AERTS, J., BOTZEN, W. *Flood-resilient waterfront development in New York City: Bridging flood insurance, building codes, and flood zoning. Ann. N.Y. Acad. Sci.*, v.1227, p.1-80, 2011.
- DAVIS, C., KEILIS-BOROK, V., KOSSOBOKOV, V., SOLOVIEV, A. *Advance prediction of March 11, 2011 Great East Japan Earthquake: a missed opportunity for disaster preparedness. International Journal of Disaster Risk Reduction*, v. 1, n. 1, p. 17-32, 2012
- EBEKE, C., COMBES, J.L. *Do Remittances Dampen the Effect of Natural Disasters on Output Growth Volatility in Developing Countries Applied Economics*, v. 45, n. 16, p. 2241-2254, 2013.
- DATAR, A, LIU, J, LINNEMAYR, A, STECHER, C. *The impact of natural disasters on child health and investments in rural India. Social Science & Medicine*, v. 76, p. 83-91, 2013.

Websites:

UttaraKhand - National Disaster Management Authority

www.ndma.gov.in/uttarakhand-sdma-office.html

Uttarakhand floods 2013: What led to Kedarnath disaster - DailyO

<https://www.dailyo.in/politics/rage-of-the...uttarakhand...disaster.../11239.html>

uttarakhand disaster uttarakhand disaster - NIDM

nidm.gov.in/PDF/pubs/ukd-p1.

DMMC Uttarakhand - Uk.gov.in

dmcc.uk.gov.in/

Disaster -Wikipedia

gbpihedennis.nic.in/PDFs/Disaster Data/Disaster Data.

<https://en.wikipedia.org/wiki/Disaste>

Social Impacts of Disaster - FEMA Training - FEMA.gov

[https://training.fema.gov/.../chapter%206%20%20hazard%20vulnerability%20and%](https://training.fema.gov/.../chapter%206%20%20hazard%20vulnerability%20and%20).

www.scielo.br/scielo.php?pid=S1414-753X2013000300004&script=sci...tlng.