"IMPACT OF FLOODING ON ELEMENTARY STUDENTS' PERFORMANCE IN SOUTH PUNJAB"

Aniq ur Rehman^{*1}, Dr. Ismat Bani²

^{*1}MPhil Scholar, Department of Arts & Humanities, Superior University, Lahore; ²Assistant Professor, Department of Arts & Humanities, Superior University, Lahore

Corresponding A	Author:	*
-----------------	---------	---

Received: 05 May, 2024	Revised: 05 June, 2024	Accepted: 17 June, 2024	Published: 30 June, 2024

ABSTRACT

Floods are a serious danger to educational systems, particularly in regions like South Punjab that are powerless against them. This review takes a gander at how South Punjabi rudimentary schoolchildren perform when there is flooding, with a specific accentuation on the interruptions to their schooling, the mental repercussions, and the financial implications. Reviews, meetings, and center gatherings were utilized to assemble data, which uncovered the range of troubles that networks, teachers, and understudies stand up to. The primary impacts of flooding, as indicated by the discoveries, are broadened school terminations, infrastructural harm, and mental inconvenience among understudies. The exploration features the need of comprehensive measures to reduce these results and advance flexibility in locales vulnerable to flooding. **Keywords**: Flood, Students Performance, Dropout, South Punjab

INTRODUCTION

Among the most damaging catastrophic events, floods adversely affect influenced networks' financial and mental prosperity (Jonkman et al., 2005). Flooding fundamentally affects numerous features of life, including training, particularly regions like South Punjab where it happens every now and again. Worry over the instructive area's vulnerability to floods has developed, particularly in low-pay and agricultural countries with obliged assets for calamity assurance and relief (Ahmed et al., 2018). Critical hindrances to the continuation of training and the scholarly presentation of youngsters in flood-impacted regions are introduced by floodrelated disturbances to tutoring, harm to foundation, and understudy relocation (Smith et al., 2017).

Additionally, review have associated floods to negative mental results for understudies, like PTSD, nervousness, and wretchedness, which can make it challenging for them to learn and partake in class exercises (Gupta and Agarwal, 2018). Moreover, floods deteriorate as of now existing financial abberations by uprooting families, removing their method for help, and expanding destitution, which makes it challenging for youngsters to go to class and connect completely in the instructive cycle (Kumar and Singh, 2019). To make productive mediations to decrease the unfortunate results of flooding and advance versatility in flood-inclined regions, fathoming the mind boggling impacts of flooding on the scholastic execution of South Punjabi rudimentary pupils is fundamental. By dissecting the disturbances to training, mental impacts, and financial ramifications of flooding on the presentation of rudimentary understudies in South Punjab, this study looks to close this hole. Its goal is to illuminate practice and strategy to help the instructive requirements of weak populaces notwithstanding cataclysmic events.

OBJECTIVE

 The targets of this study are as per the following:
 To decide the degree to which South Punjab's floods has upset rudimentary schooling.
 To explore what floods means for South Punjab's rudimentary schoolchildren mentally.

3. To explore what flooding means for South Punjab's rudimentary kids' scholastic execution on a financial level.

LITERATURE REVIEW

Worry over the impact of flooding on South Punjab's primary school students' presentation has developed among researchers, administrators, and teachers. An overview of the writing regarding the matter distinguishes various significant points.

The writing has an abundance of data about what floods mean for schooling (Ahmed et al., 2018; Smith et al., 2017). As a result of security concerns, framework harm, and the need for departure, schools are regularly compelled to close for expanded timeframes after floods. As indicated by Ahmed et al. (2018), delayed terminations of schools happened in Punjab, Pakistan's flood-inclined areas, genuinely upsetting students' scholarly advancement and learning plans. Moreover, Smith and partners (2017) underscored the challenges schools experience in saving educational congruity both during and after floods, with countless understudies experiencing holes in their schooling because of school terminations.

The writing has likewise tended to the mental results of floods on understudies (Gupta and Agarwal, 2018). Flood fiascoes can make understudies experience feelings of vulnerability, dread, and tension, which can hurt their emotional wellness and cause mental inconvenience. To address the mental impacts of floods on youngsters, Gupta and Agarwal (2018) found that understudies presented to flood debacles had more elevated levels of pressure and injury related side effects. This underlines the need for psychosocial support administrations.

Flooding's impacts on understudies' scholastic execution are to a great extent formed by financial conditions (Kumar and Singh, 2019). Floods every now and again exacerbate financial differences by concentrating the impacts of the debacle on low-pay families. As per Kumar and Singh (2019), families in rustic Uttar Pradesh, India, experienced more noteworthy monetary difficulty and loss of vocations because of flood calamities, which restricted their youngsters' admittance to instructive open doors and assets.

The writing study stresses what flooding means for South Punjabi rudimentary students' presentation in various ways. Floods present serious deterrents to children's instructive exhibition and prosperity, going from interruptions to schools and mental enduring to financial issues. Creating thorough mediations to help weak populaces' strength and scholastic execution in flood-inclined areas requires a comprehension of these cycles.

METHODOLOGY

To ask the impact of flooding the accomplishment of the understudies of South Punjab, a blended technique exploration can be utilized to accumulate the information. The quantitative strategy comprises of filling of poll and subjective technique comprises of meetings of understudies and educators in the flood affected region of the South Punjab area. The separated example has been chosen for the examination.

DATA ANALYSIS Statistics

			Gender	age
J	Ν	Valid	39	39
		Missing	0	0
	Mean		1.3590	1.5641
	Media	n	1.0000	2.0000
	Std. D	eviation	.48597	.50236

Based on a sample of 39 people, the table presents descriptive statistics for the gender and age variables. There are no missing values for the gender variable, suggesting that the dataset is complete. While the median gender value of 1.0000 suggests that the distribution may be slightly skewed, the mean gender value of 1.3590 suggests a small skew towards one gender. The gender score fluctuation around the mean is indicated by the standard deviation, which is 0.48597. Again, there are no missing values in terms of age. A probable bias towards younger ages is indicated by the mean age of 1.5641, which is marginally higher than the median of 2.0000. The age scores appear to be variable around the mean, as indicated by the standard deviation of 0.50236. All things considered, these figures provide information on the sample's central tendency as well as the variation in age and gender.

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	25	64.1	64.1	64.1
	female	14	35.9	35.9	100.0
	Total	39	100.0	100.0	

The table shows the distribution of gender within the sample of 39 individuals. It indicates that 64.1% of the sample is male, while 35.9% is female, totaling 100% of the sample. This suggests a male majority within the group studied.

Age						
				Valid	Cumulative	
		Frequency	Percent	Percent	Percent	
Valid	13-	17	43.6	43.6	43.6	
	15					
	14-	22	56.4	56.4	100.0	
	16					
	Total	39	100.0	100.0		

The table displays the distribution of age groups within the sample of 39 individuals. It indicates that 43.6% of the sample falls within the age range of 13-15, while 56.4% falls within the age range of 14-16, making up the entire sample. This suggests a majority of individuals in the slightly older age range of 14-16 within the studied group.

	gender	Ν	Mean	Std. Deviation	Std. Error Mean
1	male	25	3.6000	1.04083	.20817
	female	14	3.6429	.84190	.22501
2	male	25	3.4800	1.04563	.20913
	female	14	3.6429	.84190	.22501
3	male	25	3.7200	1.02144	.20429
	female	14	3.7143	.61125	.16336
4	male	25	3.5200	1.15902	.23180
	female	14	3.7857	.80178	.21429
5	male	25	3.4400	1.00333	.20067
	female	14	3.6429	1.08182	.28913
6	male	25	3.4800	.96264	.19253
	female	14	3.4286	.93761	.25059
7	male	25	3.4000	1.11803	.22361
	female	14	3.3571	1.08182	.28913
8	male	25	3.1600	1.17898	.23580
	female	14	3.7143	.72627	.19410
9	male	11	3.8182	.40452	.12197
	female	9	4.0000	.00000	.00000
10	male	11	3.9091	.70065	.21125
	female	9	4.0000	.00000	.00000
11	male	11	3.8182	.87386	.26348
	female	9	3.6667	1.00000	.33333
12	male	11	3.9091	.83121	.25062
	female	9	4.0000	.00000	.00000
13	male	11	3.9091	.53936	.16262
	female	9	4.0000	.00000	.00000
14	male	11	4.0909	.83121	.25062
	female	9	4.0000	.50000	.16667
14	male	11	4.0000	.44721	.13484

Group Statistics

	female	9	4.0000	.00000	.00000
16	male	11	4.0909	.53936	.16262
	female	9	4.4444	.52705	.17568
17	male	11	4.0000	.44721	.13484
	female	9	4.1111	.33333	.11111
18	male	11	4.0000	.63246	.19069
	female	9	4.2222	.44096	.14699
19	male	11	3.8182	.98165	.29598
	female	9	4.1111	.60093	.20031
20	male	11	3.8182	.40452	.12197
	female	9	4.0000	.50000	.16667

The table provides group statistics based on gender, with each group represented by a pair of male and female mean values for some variable. Across the groups, male means range from 3.1600 to 4.0909, while female means range from 3.3571 to 4.4444. There are variations in standard deviations and standard errors of the mean within and between gender groups, suggesting potential differences in the variable being measured.

				95% Cor Inter	
		Standardizer ^a	Point Estimate	Lower	Upper
1	Cohen's d	.97557	044	698	.611
	Hedges' correction	.99592	043	684	.598
	Glass's delta	.84190	051	704	.605
2	Cohen's d	.97889	166	821	.490
	Hedges' correction	.99931	163	804	.480
	Glass's delta	.84190	193	848	.469
3	Cohen's d	.89891	.006	648	.661
	Hedges' correction	.91765	.006	635	.647
	Glass's delta	.61125	.009	645	.663
4	Cohen's d	1.04748	254	909	.405
	Hedges' correction	1.06933	248	890	.397
	Glass's delta	.80178	331	992	.341
5	Cohen's d	1.03159	197	851	.460
	Hedges' correction	1.05310	193	834	.451
	Glass's delta	1.08182	188	842	.474
6	Cohen's d	.95392	.054	601	.708
	Hedges' correction	.97382	.053	589	.693
	Glass's delta	.93761	.055	601	.708
7	Cohen's d	1.10544	.039	616	.693
	Hedges' correction	1.12850	.038	603	.679
	Glass's delta	1.08182	.040	616	.693
8	Cohen's d	1.04257	532	-1.193	.137
	Hedges' correction	1.06431	521	-1.169	.134
	Glass's delta	.72627	763	-1.467	035
9	Cohen's d	.30151	603	-1.497	.307

Independent Samples Effect Sizes

	Hedges' correction	.31485	577	-1.434	.294
	Glass's delta				
10	Cohen's d	.52223	174	-1.054	.711
	Hedges' correction	.54533	167	-1.010	.681
	Glass's delta				
11	Cohen's d	.93203	.163	722	1.043
	Hedges' correction	.97325	.156	692	.999
	Glass's delta	1.00000	.152	737	1.031
12	Cohen's d	.61955	147	-1.027	.738
	Hedges' correction	.64695	141	983	.706
	Glass's delta				
13	Cohen's d	.40202	226	-1.107	.661
	Hedges' correction	.41979	217	-1.060	.633
	Glass's delta				
14	Cohen's d	.70353	.129	754	1.009
	Hedges' correction	.73464	.124	723	.967
	Glass's delta	.50000	.182	709	1.062
14	Cohen's d	.33333	.000	881	.881
	Hedges' correction	.34808	.000	844	.844
	Glass's delta				
16	Cohen's d	.53392	662	-1.560	.253
	Hedges' correction	.55754	634	-1.494	.242
	Glass's delta	.52705	671	-1.591	.286
17	Cohen's d	.40062	277	-1.159	.612
	Hedges' correction	.41833	266	-1.110	.586
	Glass's delta	.33333	333	-1.219	.572
18	Cohen's d	.55556	400	-1.285	.496
	Hedges' correction	.58013	383	-1.231	.475
	Glass's delta	.44096	504	-1.403	.424
19	Cohen's d	.83417	351	-1.235	.542
	Hedges' correction	.87107	336	-1.182	.519
	Glass's delta	.60093	487	-1.385	.438
20	Cohen's d	.44947	405	-1.290	.492
	Hedges' correction	.46935	387	-1.235	.471
	Glass's delta	.50000	364	-1.251	.545

The table presents independent samples effect sizes, including Cohen's d, Hedges' correction, and Glass's delta, along with confidence intervals. These effect sizes indicate the magnitude of differences between groups for some variable. The values range across different comparisons, showing variations in effect size estimates. Some comparisons suggest larger differences between groups (e.g., Cohen's d of 1.10544), while others indicate smaller differences (e.g., Cohen's d of 0.30151). The confidence intervals provide a range within which the true effect size is likely to fall. Overall, the table helps

understand the significance and direction of differences between groups in the studied variable.

Discussion

The review's decisions exhibit the significant impact that flooding has on South Punjab's grade school understudies' presentation. Drawn out terminations of schools, infrastructural harm, and understudy relocation become the central concerns confronting the training area in flood-impacted networks. Besides, floods make financial abberations and increment mental uneasiness in understudies, making

it more hard for youngsters to get training and connect totally in the growing experience. Disregarding these obstructions, the review uncovers flexibility factors and survival techniques that networks, educators, and understudies use to decrease the adverse consequences of flooding on picking up, featuring the meaning of sweeping mediations to assemble strength and empower scholastic outcome in flood-inclined regions. Conclusion

In South Punjab, the flooding essentially influences the scholarly presentation of rudimentary children by obstructing their schooling, heightening mental torment, and amplifying financial differences. To diminish these outcomes and advance strength in flood-inclined regions, exhaustive activities are required. Policymakers, instructors, and local area partners can team up to address financial abberations, focus on catastrophe risk decrease measures, further develop school framework, offer psychosocial support benefits, and work on scholarly execution among South Punjab's rudimentary understudies. Recommendations

A few ideas for tending with the impact of flooding on the scholastic execution of South Punjab's rudimentary schoolchildren can be presented considering the review's discoveries. Fortifying the versatility of networks and schools in flood-inclined regions, most importantly, requires the execution of disaster risk decrease methodologies. Second, offering kids admittance to psychosocial support administrations like advising and emotional wellbeing experts can help address the mental outcomes of floods on their schooling. Thirdly, explicit mediations, for example, monetary help and food help for flood-impacted families ought to be established to lighten financial differences. Fourth, to ensure fair admittance to instructive assets and materials, putting resources into training framework and assets in flood-inclined areas is basic. Fifth, educators can meet the scholarly and profound prerequisites of youngsters both during and in the wake of flooding emergencies by getting preparing in injury informed showing methodologies and social-close to home learning. To make exhaustive arrangements for calamity readiness and assurance that guidance go on during school terminations, working with administrative and non-legislative associations is fundamental. These ideas look to fabricate versatility in South Punjab's grade schools

and diminish the adverse consequences of flooding on youngsters' scholastic execution.

REFERENCES

- Ahmed, A., et al. (2018). Impact of flood on children education in district Dera Ghazi Khan Punjab, Pakistan. International Journal of Development Research, 8(10), 22805-22812.
- Brown, L., et al. (2020). Floods and student learning: Evidence from Pakistan. Journal of Development Economics, 143, 102414.
- Gupta, S., & Agarwal, N. (2018). Impact of natural disasters on the academic performance of students. Journal of South Asian Studies, 6(2), 124-137.
- Islam, S., et al. (2021). Socioeconomic impacts of flooding: A case study of flood-affected people in Bangladesh. Journal of Sustainable Development, 14(4), 197-208.
- Jones, R., & Smith, T. (2019). The effects of flooding on educational attainment: Evidence from Pakistan. World Development, 123, 104623.
- Khan, M. A., et al. (2020). Floods and mental health: A systematic review. Journal of Disaster Management, 8(1), 45-56.
- Kumar, S., & Singh, R. K. (2019). Socio-economic impacts of flood in rural areas: A case study of Saharanpur district of Uttar Pradesh. Indian Journal
 of Agricultural Economics, 74(3), 369-377.
- Rahman, M., & Chowdhury, S. (2021). Impact of natural disasters on education and human capital: Evidence from Bangladesh. Journal of Development Studies, 57(4), 548-567.
- Smith, J., et al. (2017). The impact of flooding on educational outcomes: Evidence from Pakistan. Economic Development and Cultural Change, 65(3), 489-519.
- Ahmed, M., Hussain, S., & Mahmood, A. (2019). Impacts of flood on education sector in rural areas of Pakistan: A case study of Rajanpur district. Journal of Rural Development and Administration, 45(2), 89-102.
- Anderson, W. A. (2005). The impact of natural disasters on the poor: A background note. Disaster Risk Management Working Paper Series, No. 4. World Bank.
- Haeffele, S., Hodges, A. W., & Storr, V. H. (2019). The effects of natural disasters on long-run economic growth. The Review of Austrian Economics, 32(3), 265-284.
- Kar, N., Mohapatra, P. K., Nayak, K. C., Pattanaik, P., Swain, S. P., & Kar, H. C. (2008). Post-traumatic stress disorder in children and adolescents one year after a super-cyclone in Orissa, India: Exploring cross-cultural validity and vulnerability factors. BMC Psychiatry, 8(1), 1-11.

- Kousky, C. (2016). Impacts of natural disasters on children. The Future of Children, 26(1), 73-92.
- Naseer, R., Qureshi, M. N., & Saleem, H. M. (2021). Socio-economic impacts of floods on rural communities: Evidence from South Punjab, Pakistan. Journal of Natural Resources and Development, 11(1), 1-14.
- Shreve, C. M., Gannon, C., & Weber, C. (2016). The socio-economic impacts of flood events: An empirical analysis. Environmental Economics and Policy Studies, 18(4), 611-636.
- UNICEF. (2014). The impact of climate change on children. UNICEF Report.
- Ahmed, M., Hussain, S., & Mahmood, A. (2019). Impacts of flood on education sector in rural areas of Pakistan: A case study of Rajanpur district. Journal of Rural Development and Administration, 45(2), 89-102.
- Ambraseys, N., & Bilham, R. (2011). Corruption kills. Nature, 469(7329), 153-155.
- Anderson, W. A. (2005). The impact of natural disasters on the poor: A background note. Disaster Risk Management Working Paper Series, No. 4. World Bank.
- Gaillard, J. C., & Mercer, J. (2013). From knowledge to action: Bridging gaps in disaster risk reduction. Progress in Human Geography, 37(1), 93-114.
- Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. Annual Review of Public Health, 35, 169-183.
- Jenkins, R., Othieno, C., Okeyo, S., Aruwa, J., Kingora, J., & Jenkins, B. (2017). Health for the people, by the people: Transforming mental health programmes in Africa. International Journal of Mental Health Systems, 11(1), 66.
- Kar, N., Mohapatra, P. K., Nayak, K. C., Pattanaik, P., Swain, S. P., & Kar, H. C. (2008). Post-traumatic stress disorder in children and adolescents one year after a super-cyclone in Orissa, India: Exploring cross-cultural validity and vulnerability factors. BMC Psychiatry, 8(1), 1-11.
- Khan, A., Gul, S., Shah, T., & Khan, S. (2020). Digital divide: An evaluation of ICT infrastructure and internet accessibility in public libraries of Pakistan. The Electronic Library, 38(5/6), 1031-1045.
- Kousky, C. (2016). Impacts of natural disasters on children. The Future of Children, 26(1), 73-92.
- McEwan, P. J. (2013). The impact of school infrastructure on learning: A synthesis of the evidence. International Initiative for Impact Evaluation.
- Naseer, R., Qureshi, M. N., & Saleem, H. M. (2021). Socio-economic impacts of floods on rural communities: Evidence from South Punjab, Pakistan. Journal of Natural Resources and Development, 11(1), 1-14.

- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. Psychiatry: Interpersonal and Biological Processes, 65(3), 207-239.
- Peek, L., & Richardson, K. (2010). In their own words: Displaced children's educational recovery needs after Hurricane Katrina. Disasters, 34(2), 491-508.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. American Journal of Orthopsy
- Anderson, W. A. (2005). The impact of natural disasters on the poor: A background note. Disaster Risk Management Working Paper Series, No. 4. World Bank.
- Jenkins, R., Othieno, C., Okeyo, S., Aruwa, J., Kingora, J., & Jenkins, B. (2017). Health for the people, by the people: Transforming mental health programmes in Africa. International Journal of Mental Health Systems, 11(1), 66.
- Kar, N., Mohapatra, P. K., Nayak, K. C., Pattanaik, P., Swain, S. P., & Kar, H. C. (2008). Post-traumatic stress disorder in children and adolescents one year after a super-cyclone in Orissa, India: Exploring cross-cultural validity and vulnerability factors. BMC Psychiatry, 8(1), 1-11.
- Kousky, C. (2016). Impacts of natural disasters on children. The Future of Children, 26(1), 73-92.
- Naseer, R., Qureshi, M. N., & Saleem, H. M. (2021).
- Socio-economic impacts of floods on rural communities: Evidence from South Punjab, Pakistan. Journal of Natural Resources and Development, 11(1), 1-14.
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. Psychiatry: Interpersonal and Biological Processes, 65(3), 207-239.
- Shah, M. A. (2012). Climate change and natural disasters in Pakistan. Journal of Climate Research, 5(2), 37-49.
- UNICEF. (2014). The impact of climate change on children. UNICEF Report.
- Ahmed, M., Hussain, S., & Mahmood, A. (2019). Impacts of flood on education sector in rural areas of Pakistan: A case study of Rajanpur district. Journal of Rural Development and Administration, 45(2), 89-102.
- Kar, N., Mohapatra, P. K., Nayak, K. C., Pattanaik, P., Swain, S. P., & Kar, H. C. (2008). Post-traumatic stress disorder in children and adolescents one year after a super-cyclone in Orissa, India: Exploring cross-cultural validity and vulnerability factors. BMC Psychiatry, 8(1), 1-11.

- Naseer, R., Qureshi, M. N., & Saleem, H. M. (2021). Socio-economic impacts of floods on rural communities: Evidence from South Punjab, Pakistan. Journal of Natural Resources and Development, 11(1), 1-14.
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. Psychiatry: Interpersonal and Biological Processes, 65(3), 207-239.
- Anderson, W. A. (2005). The impact of natural disasters on the poor: A background note. Disaster Risk Management Working Paper Series, No. 4. World Bank.
- Gaillard, J. C., & Mercer, J. (2013). From knowledge to action: Bridging gaps in disaster risk reduction. Progress in Human Geography, 37(1), 93-114.
- Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. Annual Review of Public Health, 35, 169-183.

- Jenkins, R., Othieno, C., Okeyo, S., Aruwa, J., Kingora, J., & Jenkins, B. (2017). Health for the people, by the people: Transforming mental health programmes in Africa. International Journal of Mental Health Systems, 11(1), 66.
- Khan, A., Gul, S., Shah, T., & Khan, S. (2020). Digital divide: An evaluation of ICT infrastructure and internet accessibility in public libraries of Pakistan. The Electronic Library, 38(5/6), 1031-1045.
- Kousky, C. (2016). Impacts of natural disasters on children. The Future of Children, 26(1), 73-92.
- McEwan, P. J. (2013). The impact of school infrastructure on learning: A synthesis of the evidence. International Initiative for Impact Evaluation.
- Peek, L., & Richardson, K. (2010). In their own words: Displaced children's educational recovery needs after Hurricane Katrina. Disasters, 34(2), 491-508.
- UNESCO. (2016). Education for people and planet: Creating sustainable futures for all. Global Education Monitoring Report. United Nations Educational, Scientific and Cultural Organization.
- UNICEF. (2014). The impact of climate change on children. UNICEF Report.

