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Disasters and Their Effects on Child Development

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ABSTRACT

The special section's papers collectively paint a picture of where disaster and development in children and adolescents research is at. The articles' diversity is impressive; they cover a wide range of crisis circumstances, such as war and the use of child soldiers, terrorism and political unrest, hurricanes and tsunamis, earthquakes and floods, as well as political unrest and climatic change. There are representations of specific calamities that happened in nine different nations. The articles cover a wide range of ages, from very young children through adolescents. In this field of study, longitudinal research and studies that focus on developmental processes are still uncommon. Although a few articles discuss additional levels of analysis, such as biological function and relationships, the majority of the articles concentrate on a behavioral level of function and analysis.

Introduction

Every year, a variety of disasters affect the lives of millions of children. These include armed conflict, genocide, industrial accidents, and terrorism as well as natural disasters including earthquakes, hurricanes, tornadoes, fires, and floods. Since the inception of the study

of risk and resilience in development, scientists have been interested in how disasters affect children. The Buffalo Creek disaster [1], World War II and the Holocaust or a significant fire were just a few of the sporadic studies of disasters that were published on young people over a long period of time [2].

There is more focus on the effects of disaster on children and youth at the beginning of the 21st century due to the rise in international terrorism, concerns about the flu pandemic, an alarming string of natural and man-made disasters around the world, and globalization of media coverage [1]. Despite the inherent challenges of doing study in the aftermath of catastrophic occurrences, disaster research has increased. It seemed important to dedicate a special section of this journal to the impact of catastrophes on child development given the significance of comprehending how various types of disasters may affect development for children and families [3].

Research in a catastrophic situation is not for the weak of heart. From an ethical, intellectual, methodological, and practical standpoint, it is incredibly difficult. Both the investigators and the participants may experience stress and even danger. When conducting research with groups of traumatized survivors, special ethical considerations must be made. For their bravery and perseverance in the face of these challenges, as well as their sensitivity and success in carrying out their work, the authors of these essays deserve praise [4].

By their very nature, disasters present formidable difficulties to researchers. They frequently take place with little warning and cause such widespread destruction that they give rise to a wide range of study questions, from the ethical to the practical. The ability of recently traumatized individuals to give informed consent to research raises substantial questions in the early aftermath of a disaster when survival and fundamental needs take precedence over research. Additionally, conducting study with traumatized individuals near scenes of mass destruction can be hazardous as well as traumatic for the researchers. There may be numerous more risks associated with prolonged violence, both recognized and undiscovered [5].

Highlights of the Special Section's Findings

The conceptual frameworks for the papers in the special area strongly rely on the theory of developmental systems, and many of them place a strong emphasis on the ideas of cumulative risk and resilience [6]. Response to tragedy is frequently influenced by the degree of exposure, referred to as a "dose-response gradient," by prior trauma experiences, or by the circumstances of the healing setting. According to the general risk literature, symptoms or issues are frequently linked to a higher cumulative exposure, measured by severity (intensity) or an accumulating number of traumatic experiences over time [7].

While this is going on, it's possible to notice startling variation in the gamut of behaviors displayed by people who have experienced roughly the same amount of trauma, which raises the possibility that disaster adaptation is influenced by other factors. These include individual variances as well as variations in the context or availability of services. For attempts to more effectively prepare for disaster and recover from it, promoting or protecting factors that foster resilience are especially important [8].

There is some evidence to support the idea that at very high levels of severe or prolonged exposure, the dose-response relation may alter. For instance, findings from a study of former child soldiers in Uganda. Ref. [9] did not indicate a connection between the level of trauma exposure during the abduction and forced service period and the outcomes following the abduction. It is conceivable that exposure levels may be so high in some groups that the relationship between dose and symptoms would disappear since everyone would have passed the point at which exposure would trigger a reaction or overwhelm coping mechanisms [10].

Promoting and Defending Elements

Several research in this area looked at how the adaptive behavior of the young people they were studying varied, frequently within a resilience framework. As was already said, disaster research has been crucial to the development of resilience science [11]. Studies with a resilience focus often analyses both positive and negative patterns of adaptation after disaster and strive to discover the conditions or characteristics that seem to promote or protect effective functioning during the crisis or recovery period after disaster [12]. When risk or adversity is high, protective factors have a stronger impact or take on a different kind of role from those that are protective, which predicts better outcomes at all risk or adversity levels [9].

It is also possible to think of moderating effects in terms of vulnerability rather than resilience when dealing with disasters. This distinction can be controversial because it is frequently difficult to tell whether an action is working to make the situation worse, better, or neither. However, when a group of people exhibit a certain characteristic that appears to make them particularly vulnerable to adversity's negative impacts, such characteristic is often defined as a vulnerability factor that increases risk [13].

Age and Gender Differences

The studies in this special area and the literature on disaster exposure and response in children and adolescents paint a complicated picture of gender and age impacts .The interpretation of both gender and age effects raises a host of methodological and conceptual problems. Young children are typically informed by their parents and teachers, but adolescents frequently self-report their symptoms or well-being. Because women are more likely than men to be the informants for young children, this confounds the respondent's response with the

respondent [14]. Mothers, for instance, may note more symptoms in children than would be apparent to outsiders and may note different symptoms than a child would be able to [15]. Similar to this, it is unclear whether female adolescents who report more symptoms than male adolescents do so because they actually have more symptoms or are just more open about reporting them [10].

Numerous research in this particular section identified age disparities in exposure, experiences during and after disasters, and post-disaster adjustment, albeit the results were not always consistent. In the epidemiological survey conducted by Ref. [16], older children were generally more exposed to lifetime tragedy (this issue). While Ref. [3] did not discover comparable effects in their research of child soldiers from the conflict. Ref. [17] noticed increased trauma and symptoms among the older of the former child soldiers in Uganda.

Method

Descriptive approach was used. As this study was quantitative in nature so researcher used survey approach. Self-developed questionnaire was used for collection of data; all the questionnaires (25 items) was quantified on 5 point likert scale ranging from 1 (Strongly Disagreed) to 5 (Strongly Agreed). See Table 1 for the intrument items.

Table 1. The instrument

Item No	Students Statement
1.	During earthquake I feel depressed
2.	I feel uncertainty during thunderstorm
3.	I feel unhappy during flood
4.	In case of flood I feel very stress
5.	I effected myself during tornado.
6.	In case of drought I feel depressed
7.	During heat wave I cannot perform very well
8.	I with my family feel unsafe during blizzard
9.	I always terrified in volcano
10.	In typhoon I feel unsafe my mind
11.	In case of storm I feel much terrified
12.	In explosion case I feel much worry
13.	Sinkhole affect me
14.	Lightning always terrified to me
15.	Ice storm always depressed my mind
16.	In case of flash flood I feel unsafe
17.	In case of drought I feel unsafe with family
18.	I never rushed in heat wave
19.	I always rushed in case of storm
20.	I cannot got help in case of explosion
21.	I perform not very well during sinkhole
22	I always unsafe during flood
23	During heaviest storm I feel natural things
24	In case of thunderstorm I feel happy
25	In case of heatwave I feel happy

In order to collect the data to reach at certain findings and valid conclusions it was not possible to contact the entire population of the students of all the secondary school in District Karak , so a sample was taken to collect the data. The selection of sample participation was made through simple random sampling. Participants were Boys, Girls, Teachers, Stakeholders (Parents, Community Members, Society persons). The researcher was intending to do the research in quantitative way, through a close ended self-developed questionnaire for emotional maturity and for family structure, built on 5-point Likert scale consisting of feasible number of questions for gathering required data from sampled population.

Result and Discussion

Based on the method, the finding data as Table 2.

Table 2. Comparison based on Gender

Learner Age	Disaster Impact on Boys	Disaster Impact on Girls
0-2	2%	3%
3-20	34%	40%
20-60	20%	22%
60-80	10%	12%
More than 80	8%	10%

Above table shows there are two genders male and females which are prey of disaster areas. After analysis it has been showed that disaster impact level on girls is very high instead of boys. There are two line called x axis which is about disaster impact level and other is Y axis which is related to gender and also with this in figure red area which is high show girls gender effect and blue are show boys effect.

The aim of the current study was to take know disaster impact on development of learner. It was unique about this research is that it presented the nature and population in a new vision and scenario. It is an admitted fact that structure of family development is strongly connected with the development of the children of that family. It is a crystal clear fact that a disaster plays a very crucial role in the mental and physical maturity and growth of children. Previous literature review shows the disaster of different types with relation to the development of the students [18]. Population of this study was selected from the areas where such families or found. Moreover, data was collected from the male and female students. For the collection of data, a reliable tool of questionnaire was used. Normality of data was also checked and maximum level of reliability was ensured [19].

Literature review of the previous studies was against the result of current study. The study was also conducted on the same variables in the Kingdome of Tonga. Regression analysis was run to check the impact of disaster on development. Results show that different families' structures have different impacts on the development of the students. Another study on same

variable were conducted in which gives that academic performance of the students were impacted by their disaster [19]. Demographic variables were also tested. Only gender was taken as demographic variable. T-test was applied on the data collected from genders. It was observed that male and female response the variable significantly and p-value comes 0.000 with positive mean differences. Another study were conducted in mountain area in Baluchistan which show the different higher level impact of disaster like heavy storm on child development [20].

Learners in the process of their development occur throughout the span of life. Each stage must be completed according to the phases of development to get happiness in social life. This is in line with the opinion of [21] who said that developmental tasks arise at a certain period in the life span of the individual, which must be completed in order to be young in completing the next task. If you fail to complete the development phase, you will have difficulty in completing the next tasks. The developmental tasks that must be completed for children aged 6-12 years include; learning physical skills; develop attitudes towards oneself as a developing individual, bond with peers, perform social roles as men and women, learn to master the basic skills of reading, writing, and numeracy, development of concepts needed by children, moral development and development of attitudes towards groups and social institutions [22].

These developmental tasks in the process experience developmental barriers in some children who experience catastrophic impacts. Various research results show that disaster phenomena that occur in parts of the world, have had an impact not only physical damage but also have an impact on post-disaster psychological mental health for all victims. The most vulnerable groups affected by disasters include children [23], this is because children are not psychologically mature in their development.

In general, the impact caused by post-disaster on children provides deep cognitive and psychological effects such as stress, anxiety, depression, trauma, fear, worry, and sadness caused by physical injuries and loss of family members [24]. Children who have lost their parents experience insecurity due to the loss of a protective figure; the child cannot continue school due to the destruction of school buildings, the unfulfilled right to access education and knowledge; being in an uncertain situation also causes uncomfortable feelings that have a bad impact on their emotional development [25].

Ref. [8] revealed that if the events that have been experienced repeat themselves, children will feel lost future, avoidant and numb behaviors, withdraw from social associations, lose interest in pleasant activities, depression where people do not feel happy, do not feel

excited, look down on themselves, feel very bored, individuals feel lost stamina, and have no motivation.

The various impacts caused will affect the tasks of development, where failures in these developmental tasks have consequences in the form of social pressures. According to [26] child developmental tasks are influenced by many factors such as; a backward level of development, no opportunity to learn developmental tasks, no motivation, poor health and the presence of body defects, low level of intelligence and no creativity

Thus, it can be said that the impact of disasters affects various aspects of child development such as; emotional aspects, social aspects, cognitive aspects. Traumatic events of school-age children (6-12 years old) after experiencing a disaster include not wanting to get along with others or actually disturbing friends and the environment, difficulty concentrating, irritability and explosiveness, irritability, easy crying, and being very afraid of objects that are not scary. Ref. [25] suggest cognitive factors also play a role in child stress, where children depend on how they cognitively assess and interpret events

These results were in line with the results obtained by [4], when a study was conducted on disaster and student's academic achievement in one of the Pakistan district Karak. With this another study were conducted in Kpk city where a found large of males and females person effected by disaster situation and there were many bad life results has been found [14]. Through this alternative revision were showed and results demonstrate that Kohat area is effect by disaster and left bad impact on social life of citizens. By this additional study were conducted and results displays in dera city area many peoples has been lost their memory due to disaster conditions during life period which were extremely terrified [7]. With this another study were conducted and results confirmations in UK Kashomla area where disaster had left many brutal results on life [3]. Through this added study were conducted and results shows in china disaster organization many terrified results on peoples of related cities [27]. Another study were conducted and results demonstrations that city of Bashoom in Afghanistan had been effected by different disasters [21].

An additional research work were conducted and results shows that Lodhran is effect by disaster and left bad impact on social life of citizens [28]. By this additional study were conducted and results indications that many much peoples of Baghdad of Iraq effected by disaster and left bad impact on social life of citizens [12]. Through this alternative revision were showed and results demonstrations about effect of disaster on life of students with parents during earthquake in Japan [22]. By this additional study were conducted and results displays many peoples has been effected by the disaster and other situational conditions .With this another study were conducted and results confirmations that many students development has been effected by different disasters in east of Pakistan Quetta [2]. The purposes of this

study are to find out the impact of various disasters on the development of the students. These different families' structures are broken family, educated and uneducated families. Different objectives were kept in view during this study and all the results show that disaster has a very negative impact on the emotional growth and development of children.

The vast array of articles in this special part and the body of literature already in existence on catastrophes and child development offer crucial information for attempts to meet the needs of children and youth in disaster-related contexts as well as for developmental research. Disasters continue to occur all over the world despite the many gaps in the research, therefore it is reasonable to think about the significance of recent discoveries from the special area and earlier work for attempts to aid the numerous young victims of disaster. The results show some consistency, which may provide useful direction for disaster preparedness and resilience building after disasters.

Conclusion

The focus of the special part is on the difficulties, developments, and gaps in the field of disaster and child development research. Massive roadblocks have slowed down progress. These include securing quick funding, especially for researchers who live in disaster-affected locations, as well as the inherent difficulties of conducting research in disaster-affected situations. However, there is also a severe lack of acceptable, standardized, and culturally relevant metrics in many disaster-prone areas, which is indicative of a much larger problem in developmental science. For developed countries compared to emerging regions, and dominant cultural groups compared to minority groups, there are many more research and validated metrics. Building a more comprehensive science of child development across cultures and countries would be very beneficial for study in many fields, and it is essential for research on disasters. Despite the need for data on what may be most useful to whom and when following disaster, longitudinal data are rare, particularly with relation to research with predicate baselines. Building national and international supports and mechanisms for disaster research, including technical assistance and partnerships among groups of developmental scientists, humanitarian service providers, and local authorities or disaster responders, may require more focus.

Conflict of Interest

Authors declare that there is no conflict of interest.

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