

## Factors Contributing to Children's Resiliency towards Disaster

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### Abstract

Annually, millions of people (including children) across the world face minor to severe impact from natural or human-induced disasters. Diverse models have been conceptualized and adopted at global scale to increase resiliency of children from disasters focusing on preparedness, response and recover. As children spend most of their lives at school or at home, this paper discusses on factors contributing towards improving or degrading resiliency of children from disasters. Giving low priority to institutional resilience, this paper highlights the behavioral aspects of children which becomes their strength on demonstrating appropriate practices to mitigate disaster risks on self at school, home and community. While doing so, attributes from Ajzen's Theory of Planned Behavior has been linked with the components of resilience to explain the causative factors. Adopting desk review, this paper describes behavioral attributes of children and emphasizes on need of having multi-dimensional framework to enhance resiliency of children.

*Keywords:* children, resilience, disaster, behavior, school, factor

### Introduction

Human-induced or nature induced, disasters remain the unavoidable component of human lives as they can occur anytime, anywhere and at any conditions. World Health Organization (WHO, 2002) defined disaster as the events that disrupt the natural or normal conditions and causes an impact on a diverse aspect of the community. Sinha & Srivastava (2015) compiled probable reasons behind the occurrences of disasters in the form of residence in disaster-prone areas, global warming, density and pattern of human settlement, technological advancement, infrastructure development works, etc. Centuries back, occurrences of disasters used to be dominated by nature induced. However, with industrialization and infrastructure development at an increasing level of disrupting natural phenomena, occurrences of human-induced disasters are rapidly increasing each passing year.

Across the globe, occurrences of disasters have been causing impacts in the form of loss of human lives, injuries, damage to infrastructures, agricultural products and eruption of health issues to millions of populations in an annual manner (Baas et al., 2008). Even with technological advancement and the evolution of advanced management approaches, the effect of disasters is not slowing down. This scenario has become worse in the last 50 years or so. In the case of Nepal only, over 27 thousand incidences of disasters were reported causing over forty thousand human death and eighty thousand human injuries from 1971 to 2017 (Adhikari & Adhikary, 2019).

Principally, disaster does not look at the gender, age and ethnicity, thus all population are under risk. However, research kept children under the most vulnerable group to be affected by disasters based on their capacity or ability to respond to disaster risks (Lopez et al., 2012; Peek et al., 2018). Annually, over millions of children across the globe get affected by natural or human-induced disaster (Adiyoso & Kanegae, 2012). Literatures discussed over the impact of disaster on children based on Sri Lankan Tsunami (Catani et al., 2010), Chinese Earthquake (Zeng and Silverstein, 2011), Gorkha Earthquake (Ray, 2017) & Sichuan Earthquake (Zhou et al., 2019). In Gorkha earthquake 2015 only, over three million children were directly or indirectly affected. Meanwhile, the number of affected children through annually occurring disasters such as flood and landslides is close to 50000. As disasters cause damage to infrastructures, a considerable number of children are forced to stay at temporary shelters and remain out of school for short-term to long-term (Seballos et al., 2011).

As the nature and occurrence of such incidences are near to unpredictable, each individual, families and communities across the world are living with a certain level of risks and vulnerability. However, the level of risks and vulnerability differs based on their availability and accessibility of physical assets, financial assets, institutional assets, and social assets (Vatsa, 2004). A wider range of literature argued, higher the accessibility to assets, lower the vulnerability to disaster risks. Upon analyzing from diverse dimensions, children among all age groups are identified as the most vulnerable group from disaster risk perspective (Lawler, 2011; Mudavanhu et al., 2015; Peek, 2008; UNICEF, 2009). Vulnerability and associated risks is further intensified depending on the ability of children to prepare themselves for potential disasters, respond and recover after disaster occurrences. Combinedly, the aspect of preparedness, respond and recover has been elaborated as the concept of disaster resilience. Even within the children age group, each individual has their own tendency to remain resilient towards disaster risks and demonstrate resilient behavior during crisis scenario (Altevogt, 2014; Benson & Bugge, 2007; Mitchell et al., 2008; Mudavanhu et al., 2015). Emotional aspects, socio-economic aspects, psychological aspects, accessibility to & availability of resources, prior exposure to incidents and physical aspects has been recognized as the key components that differentiate the ability of individuals on their resilient capacity (Buckle, 2006; Parsons et al., 2016; Zobel, 2020). However, those components are either overlapped or discussed separately by multiple literatures. Looking at the increased disaster risks, it has been the utmost need to compile scattered components and elaborate on their contribution (positive or negative influence) towards resiliency of children towards disaster risks. Having the detailed analysis of potential contributing factors can widen the scope for future researcher to prioritize the contributing factors; and policy makers and planners to plan and execute strategies accordingly.

### **Models of Disaster Management Practices**

Technically, the occurrence of disasters cannot be predicted. However, their immediate or long terms risks could be reduced with identification of associated risks, level of vulnerability and with the implementation of appropriate measures. With the century-long history of disaster

incidences across the world, the discourse and dialogues on approaches to reduce and manage disaster risks started since 1962. Historically, diverse approaches have been planned and adopted to reduce or mitigate disaster risks. With an establishment of the United Nations Disaster Relief Office (UNDRO) in 1971, the discourse of disaster management became globalized with an introduction of several short terms and long-term actions at country-level or global level. Yokohama Strategy and Plan of Action for Safer World developed during World Conference on Natural Disaster Reduction (WCDR, 1994) highlighted the areas of knowledge and understanding on disaster reduction and the plan of actions to incorporate them into country-level plans and policies (United Nation [UN], 1995). With the learning from International Decade of Natural Disaster Reduction (IDNDR), Hyogo Framework for Action 2005-2015 started the discourse of resilience which was only limited to disaster reduction or disaster management (UN, 2005). It was the very first time, where knowledge, innovation and education were highlighted as a priority for action to improve the knowledge, understanding and practices on safety and resilience at all level including education institutions.

With the evolution of information, communication and technologies, the concepts of disaster-resilient models have been conceptualized and framed into disaster risk management cycle which incorporates the measures to be adopted thinking about the possible disaster to during and post-disaster period. Pre-disaster approaches were strategized under the concept of Disaster Preparedness. Whereas the approaches to adopt during the occurrence of disasters were strategized under the concept of Disaster Risk Reduction (DRR) and the post-disaster scenario was strategized as Disaster Recovery.

Since the coining of disaster-resilient model, its framework has been discussed differently by different scholars and professionals. McGreavy (2015) linked resiliency with the ability of the subject to cope on all form of circumstance and reiterated the concept of bounce back through collective action and solidarity. Stewart et al. (2007) talked about a three-dimensional framework for resilience in the form of a) resilience as a state, b) resilience as a condition and c) resilience as a practice. Marcucci (2014) talked about four key areas to make any sector resilient as physical resilience, prevention measures, mitigation approaches and preparedness measures. McGreavy (2015) strengthened the concept of resilience emphasizing the ability to cope, resist, adapt and bounce back to original form as earliest as possible. Dwiningrum (2017) talked about resistance, recovery, and creativity as three major dimensions of disaster resilience. Regardless of model, it has been unanimously agreed, disaster-resilient models should be at the forefront to ensure the resiliency of all components of society including families, communities and institutions. Depending on the availability of resources (knowledge, skill, and finance), varying approaches have been tested and adopted across the globe to ensure the safety of children and adult from non-predictable events. Thus, the common goal of all the approaches is to strengthen the resiliency of society against disasters.

### **Significance of the Disaster Resilient System**

With the evolution of teaching-learning mechanism, the education culture has shifted from open place modality to classroom modality. As of the 21<sup>st</sup> century, millions of children across the globe goes to school to get an education. Repeatedly, it has been evident, children are the one to get affected the most due to the occurrence of unprecedented events either at school or at home (Turnbull et al., 2013). Whenever any incident occurs, schools as an institution are the first to get partially or entirely affected. In Nepali setting, this was felt during the 2015 earthquake when over 35000 classrooms were damaged impacting over one million children (Ministry of Education [MoE], 2018). Likewise, 2017 flood-affected over 400 schools and over 100 thousand children. Also considering the fact, incidences of disasters on any scale can have a prolonged effect on children, literature argued of having disaster-resilient schools to protect the fundamental rights of children and ensure their safety from any unwanted events (Estevao et al., 2018; Luetz, 2020; Muisyo, 2019; Putera, 2018).

Based on the definition of disaster resilience as per Intergovernmental Panel for Climate Change (Field et al., 2012), an individual or an institution should build their ability to predict, absorb, accommodate and recover from any unwanted incidents without causing much of an adverse impact. The concept of School-Disaster Risk Reduction (SDRR) has been widely discussed and adopted the model to ensure the safety of children at schools and minimize the effect of disaster events on children. Meanwhile, the concept of Child-Centered Disaster Risk Reduction (CCDRR) model has been adopted to protect children at home or schools from any probable disaster risks. Also, another equally significant aspect as mutually argued by different kinds of literature, if equipped, children can play the role of a change agent at their respective homes and community level.

Disaster resilience at schools does have significance at the multifold level. Literature and theories entail about the children being found as individuals with quick learning ability. Furthermore, children can effectively become the messenger to transfer learnt knowledge and skills among peers and family members (Masten et al., 2018). Overall, schools play a vital role in increasing knowledge of children towards any specific topic. The same children become the key individuals to build the resilience of their school, home, and community. Thus, the concept of the disaster-resilient system is taken with considerable advantages over other disaster management approaches.

### **Significance of Children's Resiliency towards Disaster**

Children are the most vulnerable among all from possible disaster risks. However, the level of vulnerability varied with diverse characteristics as age, level of dependency, social status, physical and mental health to name the few. As the impact could be for life-long as well, building children's resiliency has become the utmost task in the current world (Hagan 2005; Kar 2009). Among individuals of different age group, various theories have been evolved considering children as the agent of change at the household level, community and at institutions not only for present context but also for future sense. Conducive factors towards adopting effective communication and decision-making among children is on the rise since the early 2000s. The

relationship between environmental factor and level of resiliency among children has been widely discussed among literatures. With positive environment, children not only enhance their self-resiliency but also make peers, family members and community members resilient. Positive environment includes opportunity to participate in capacity building events, availability of resources, child-friendly environment inside or outside of school premises and trust from elders and seniors. Child-centered disaster-resilient approaches or school-based disaster management approaches are assumed to create positive and enabling environment for children.

Characteristics such as adult support, communication ability, knowledge level and ability to reflect learning and innovate practices as the key components which enabled children to adopt resilient practices as well as influence others to follow the same (Boyden, 2003). Peek (2008) emphasized on children's knowledge, creativity and energy to prepare themselves from disaster risks which get capitalized during disaster occurrence in the form of response and management strategies. Anderson (2005) argued on the positive impact of children to create a protective environment at home or community. Hegan (2005) broadened the discourse of children's resiliency with an inclusion of psychological and behavioral aspect which further linked with children's attitude towards adopting resilient practices. Mitchell et al. (2008) highlighted the significance of children's resilience capacity to persuade families and communities to adopt resilient strategies. Adiyoso & Kanegae (2012) linked children's ability to acquire (learning aspect) and transfer knowledge (communication aspect) with resiliency scenario of self as well as surrounding. Muttarak & Lutz (2014) focused on cognitive skills, socio-economic status and learning ability to elaborate on resiliency of children towards disaster risks. Dicky et al. (2015) added level of understanding and knowledge regarding resilient measures as key component. Ashraf & Azad (2015) and Cutter (2017) highlighted the social norms and practices as influencing part on resiliency of children towards disaster risks and associated vulnerabilities. Muzenda-Mudavanhu (2016) emphasized on children's willingness to learn and adopt innovative approaches to keep themselves resilient. Kruger et al. (2018) iterated, positive learning environment, knowledge and skill about resilient practices and accessibility to resources are more likely to enhance resiliency among children.

To examine the children's resiliency toward disaster risk and associated vulnerabilities, wider number of research work has been carried out since the start of 21<sup>st</sup> century. Though children's capacity is dependent on multiple components, majority of the research work has been focused towards highlighting individual component in linking children's ability to create resilient environment. It has created the scope for researcher to carry out further study on investigating and prioritizing the contributing factor towards enhancing resiliency of children towards disaster risks.

Understanding the existing research gap and underlying opportunities associated with level of children's resiliency towards disaster risks and associated vulnerabilities, this paper intends to review and highlight potential factors which aid in either enhancing or reducing their ability to equip self, family, community and institutions for preparing and managing disaster risks.

### **Theoretical Connection**

Adoption of measures for any sector varies from individual to individual. Conceptually, literatures argued on wider range of factors that cause the difference between individual. Theoretically, Theory of Planned Behavior as conceptualized by Ajzen (1991) has been utilized in wider areas on describing the influencing factors behind application of certain behavior or practices. Contributing factors ranging from socio-economic and demographic characteristics to social norms, personal experiences, education level, beliefs, willingness, intention and attitude influences individual to adopt certain behavior or practices. As highlighted in previous chapter, several component such as social aspects, economic status, education level, psychological and emotional aspects and accessibility to information and resources are among the list of key components that could influence children towards adopting disaster resilient practices. Ajzen (2006) emphasized on role of background factors such as age, gender, ethnicity, socio-economic status, education, personality, mood, emotion, general attitudes and values, intelligence, group-level participation, past experiences, exposure to information, social support, and coping skills to describe behavioral pattern among individual. Vinnell (2020) supported the use of Theory of Planned Behavior to link opportunity to participate and engage in capacity building events with behavioral aspects (practice level) on disaster resilient practices.

Identifying the relationship between risk anticipation and adoption of disaster resilient practices, Bourque et al. (2013) concluded increased risk perception does not guarantee adoption of appropriate measures. However, prior experiences, knowledge level and accessibility to information does play positive role on demonstration of positive behavior towards adopting disaster resilient practice. Najafi (2016) explained the relationship between knowledge and skill with individual motivation towards adopting disaster resilient practices stating individual receiving greater encouragement and opportunities tend to adopt appropriate practices. Hoss (2018) explained the positive relationship between social surrounding on adopting emergency management practices (component of disaster resilient system). Maduz et al. (2019) examined the role of cognitive, affective and behavioral attitude towards adoption of appropriate risk communication methods stating socio-cognitive factor does play direct role.

### **Methodology**

This paper is developed adopting desk study approach. It took over a three-month period from October-December 2020 to search the articles that could provide the result on research question "what could be the possible contributing factors that push or pull the resiliency of children from disasters?". Understanding the objective of the paper, over 50 articles published and uploaded at globally recognized sites from 1990-2020 were intensively reviewed. The search process was mostly done at google scholar, research gate and academia. It incorporated all type of documents ranging from reports from development agencies, peer-reviewed articles and preprint articles uploaded by the author as open sources for reading and reference purpose. The review process was mostly emphasized on areas such as disaster and its impact, disaster

management modalities and their overview, the role of children in disaster management and factors affecting resiliency of children followed up with the theory of planned behavior.

### **Discussion**

With the turn of the 21<sup>st</sup> century, the discourse of disaster management has shifted towards disaster resilient model and adult-centric model has shifted towards child-centred models. At the same time, having child-centred disaster-resilient models does not assure an effective engagement of children in the disaster-resilient model. Regardless of the models and strategies, each child possess distinct characteristics that vary the level of affect from disaster and their level of resiliency toward disaster risks (Schonfeld & Demaria, 2015). With an intensive review of published works of literature, the following areas have been identified as contributing areas for an effective engagement of children at the implementation of disaster-resilient models.

#### **Psychological and Emotional Factors**

Disaster can cause short term as well as long terms effect on psychological and emotional aspects of children (Schonfeld & Demaria, 2015). Children possess learning and sharing characteristics where they can learn and reflect their learning without thinking much about the other side. Regardless of the past incidents or issues, children usually move ahead keeping past incident aside. Among people from the different aged group, children show the characteristics of caring for others, showing affections and supporting others in the needy scenario. This characteristic makes children the better option to apply the learnt knowledge and skills during a crisis scenario (Mohammadinia et al., 2018). Children shows the characteristics of listening to adult and learning from them thus, Schonfeld & Demaria (2015) reinstated the need of adult to express positive emotions and attitudes toward children to enhance resiliency of children. Exposure to disaster risks, varying level of support from adults and distinct individual characteristics complexify in understanding psychological aspect of children. Thus, literatures strongly argues for the need of dealing with children tactfully with care, emotions and affection to enhance their resiliency (Madrid et al., 2006; Mohammadinia et al., 2018; Scholfeld & Demaria, 2015).

#### **Cognitive and Mental Health Factors**

Among individual of different age group, children are considered to be the one to show more curiosity, show eagerness to learn, raise concerns and use their intellectual capacity with broadness and openness to resolving any issues they get tangled (Madrid et al., 2006; Mohammadinia et al., 2018). If they tend to know about the type of disasters and their impact, concerns raised by children could help an adult to produce innovative solutions. School is the proper place where children could interact with teachers and peers and fulfil their curiosity (Dwiningrum, 2017). The cognitive learning gained from school could be adopted at home as well as the community that enhances resiliency. However, there has been the notion, an adult has more knowledge, experience and resources compared to children (Madrid, 2011). This thinking always ignores the learning ability and innovativeness that could be created through a child's

curiosity. Regarding an improvement of resiliency towards disaster, it all depends on adults (teachers and administrative persons) behaviour and belief towards children. If children are provided with an opportunity to enhance their knowledge and skills through engagement in extracurricular activities related with disaster management approaches, children can utilize their learning attitude and memory skills to make it as lifelong learning, influence peers and families to adopt the same to keep them prepared from disaster risks (Appleby-Arnold et al., 2018; Madrid et al., 2006). Mastern and Motti-Stefanidi (2020) and Speier (2000) argue that children from adolescent age group show more advanced cognitive functioning comparing to children with lower age which becomes a significant aspect in terms of their learning. Regardless of the age, children receiving adequate knowledge and skills on disaster resilient practices can play the catalyst of creating a resilient environment at school or home.

### **Physical Factor**

Physical aspects play a significant role especially during the period of disasters. Usually, children with better physical strength are assumed to be responding to disaster risks applying available tools and techniques. It ranges from searching for equipment to running towards a safe place (Madrid et al., 2006). As disaster-resilient practices are more about practical approaches where children need to continuously engage at the physical level, children with better physical strength usually come forward and participate in demonstrations and extracurricular activities (Strauss et al., 2001; Strong et al., 2005). Such children get maximum opportunity to take part and improve their knowledge and skills about disaster-resilient practices (Dwiningrum, 2017). Though inclusive approaches have been developed and been brought forward to the discussion in recent times, it is yet to be get aggressively applied at the school level or community level citing technical and resource constraints. As argued by Strauss et al., (2001) & Singh et al., (2012), physical attributes of children is directly associated with health aspects, social factors, cognitive factors, self-esteem and anxiety, thus level of engagement of children at physical activities is significant enough to contribute towards resiliency of children.

### **Social Factor**

The social aspect is among the key factor that determines the resiliency status of children (Arshad et. al. 2020; Mudavanhu, et al. 2015). It has always been the case; children can easily get hooked up with other individuals (Madrid et al., 2006). Interpersonal skills and the networking ability among children are close to none and is far ahead than adult (Grotberg, 2001). This has been further simplified by the fact, children do not look at the output or result from the network. Being in a network such as a child club or eco-clubs which usually are established at school as well as community level, children can interact with each other, discuss on several issues and work out on possible solutions. Madrid et al. (2006) & Mohammadinia (2018) added the scenario, where children contributed to increasing resiliency of school and students through sharing of learnt knowledge and disaster risk management skills. Works of literature discussed utilizing the networking skills of children at the optimum level through operationalization of such clubs and groups which will ultimately enable children to organize child-centered activities and in a way enhance their skills, better equip themselves and provide innovative ideas to school

heads to make school and children resilient from disaster risks (Mudavanhu et al., 2015).

Usually, children from the upper class (grade 8 and above) tend to have better social networking skills and actively engage in network-level activities. Mastern & Motti-Stefanidi (2020) stated, older children tend to have wider human and social capital comparing to young children. Such children are the one to participate in decision making events as well.

Children tend to influence decision-makers upon provided with an opportunity to engage in decision making meetings (Dyregrov et al., 2018). Children can express their opinions, concerns and shared their needs to increase their resiliency upon provided with an opportunity to participate in decision making and taking events (UNICEF, 2013). Usually, adult decides what's better for children with perception, children cannot effectively decide for themselves. Emphasizing the behavioural, emotional, and psychological aspects of children, multiple works of literature have already rejected the particular concept of ignoring individuals from the decision-making process. Including children in planning, level helps the management team to think strategically and plan accordingly utilizing the strength of children to plan disaster-resilient approaches at schools (Dwiningrum, 2017). Maduz (2019) narrated the argument of engagement of children at planning level saying, individual or groups who get an opportunity to engage in practical aspects are more likely to be well prepared and apply during the time of crisis.

### **Behavioural Factor**

The aspect of performing the assigned task is comparatively better among children comparing to adult. Mohammadinia (2018) explained the positive impact of disciplined behaviour possessed among children to create a resilient scenario. Behaviour skills are not only limited to being polite and disciplined but also is linked to communication skills which is the key to coordinate with peers and adult to convey the information and messages relevant to increase their resiliency. Behavioural aspects are also associated with other factors such as psychological and social (Madrid et al., 2006). Children with negative behaviour tend to get away from social networks and groups whereas children with friendly nature easily get along with other children in different groups. Thus, to ensure the children get protected, it is also important to know how they are performing, communicating and behaving with peers and adults at school, home and at the community.

Prior experience on any incidence has a lot to play while creating a resilient environment (Schonfeld & Demaria, 2015). During the period of disaster, children may show varied emotions that could easily get into their head for a long period. If anything, cause fear to children, they tend to show diverse behaviours to either get away from issues or resolve them (Grotberg, 2001). The behavioural pattern among children with prior experiences to disaster always helps adult to plan and adopt a disaster-resilient system at schools.

### **Cultural Factor**

Grotenberg (2001) explained about the difference in resilience level among children from the diverse cultural background. Even at the same community or in the same classroom, different children from different familial background possess different characteristics based on how their families respond to their needs, show care and support to resolve any issues. Some families could

be stricter while some could be friendly (McDermott et al., 2010). Some culture provides children with complete freedom while some make boundaries with finite rules and restrictions. These types of environment also somehow guide or dictate children's psychology and behaviour at schools or community (Dwiningrum, 2017). Children from a family with more care and loving nature tend to show characteristics of learning and applying innovating approaches which could be easily linked with applying resilient practices as well.

### **Economic Factor**

Economic aspect has always been the contributing factors among individuals. The economic aspect signifies the children to have the capacity to prepare or equip themselves from probable disaster risks during the crisis scenario. Children with better economic status are always likely to equip with resources required to return to the normal setting (Ablah et al., 2009; Kar, 2009). It was evident in Nepali context, children with better economic background usually can access educational materials shortly after getting damaged by disasters. Furthermore, children with better economic background tend to be in networks and organizations where they could interact with peers, learn knowledge and tools, and adopt in their daily lives to protect themselves from any risk (Grotenberg, 2001; Masten & Motti-Stefanidi, 2020). The opportunity of engaging in extra activities for children from the weak economic background is limited thus causing the disparity in knowledge and skill level. This also somehow effect on the level of resiliency status of children towards disaster risks.

### **Environmental Factors**

Mohammadinia (2018) included environmental and ecological factors among the core contributing factors towards having resilient children. While doing so, the article emphasized the accessibility to infrastructures such as public transport, safer roads and buildings. Children shows the varying nature of vulnerability towards disaster depending on biological and environmental differences (Aptekar & Boore, 1990; McDermott et al., 2010). While discussing about environmental factors, literatures also incorporated environment that children faced at schools or at home (Aptekar & Boore, 1990; Baker et al., 2020; Mohammadinia, 2018). Children receiving a positive and friendly environment tends to demonstrate similar behaviour with peers and get engaged at networks, groups and have active participation at extracurricular activities (Aptekar & Boore, 1990; Baker et al., 2020). McDermott et al. (2010) explains the positive relationship between resiliency of children with family environment stating children shows resilient capacity among families with child friendly and supportive environment at home.

### **Access to Information**

An application status of any tools and technologies is related to the level of information provided to children. In this regard, children can only apply those technologies of which they are previously informed. Provision of information includes type and severity of risks associated with disaster types, about available resources and technical know-how. Maduz (2019) briefly elaborated about the need for developing risk information sources which are understandable for children with varied demographics (age and language). Mudavanhu, et al. (2015) & Twigg

(2009) included information management and sharing as the component of resilience to reduce vulnerability and manage disaster risks.

### **Prior Experience**

The literature identified a direct relationship between the prior experience of facing any type of disaster and the resiliency of children. Children facing disaster at an early age tend to develop greater resilience comparing to children without prior experience (Arshad et al., 2020; Kar, 2009). The occurrence of disaster may impact the psychology and other behavioural aspects of children. Children develop the ability to cope with such stressful situation and transform those during other similar circumstances as well (Mudavanhu, et al., 2015). Furthermore, children experiencing disaster develops positive experience and already have some knowledge about supportive resources at school or community level (Currie, 2007; Hagan, 2005).

### **Conclusion**

Based on the ability to anticipate, prepare, respond and recover from disaster risks, children are considered as the most vulnerable group. Historically, millions of children across the world have been directly or indirectly affected by disasters regardless of their type i.e., human-induced or nature induced. Meanwhile, children are also the group which can learn, share the learnings to other adult and children as well as implement in needy scenario based on their knowledge and skills without thinking much. Understanding the psychological, emotional and transformational nature of children, disaster management modalities have intensively initiated including children in different management strategies and frameworks namely child-centred DRR and school-DRR. As children spend their majority of time at schools and get an opportunity to interact with adult and children and learn from them, diverse approaches have been focused towards making school resilient towards disaster. Those approaches strengthened the ability of children and ensure their safety at home, schools, and communities.

Having said so, providing an opportunity to participate in capacity building events and increase knowledge and skills of children won't be sufficient enough to improve the resiliency of children in disasters. Diverse dimensions ranging from socio-economic factor to behavioural and psychological aspects has been the key part in terms of improving the resilience of children in disasters. Though contributing factors are elaborated differently, they are closely interrelated and interlinked. As of now, the focus has been more towards enhancing skills, ability and competency of children so that they could replicate learning to prepare for disaster risks, respond to protect from disaster and recover from disaster period. As there are diverse areas that could contribute towards improving or degrading the resilience aspects of children, all should be explored and a multidimensional resilience framework is to be developed to enhance the resiliency of children and make the system resilient. The notion should go beyond structural resilience in the coming period and include emotional, psychological, mental, social, behavioural and other relevant contributing factors as a whole. Research work focusing on contributing factors for enhancing resilience of children from disaster are dispersed thus required intensive research work to develop and recommend model for elaborating potential influencing

components and prioritizing them. This paper reviewed and compiled components that are significant towards enhancing or reducing resiliency of children. Throughout the discussion section, works of literature have been cited and arguments have been made to echo children as a catalyst of change in increasing resiliency of peers and adults at school, home and at the community. This research paved the way for further research work to elaborate on varied components that could act as a pull or push factor for enhancing the resiliency of children from disasters.

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