

Adolescents Exposed To Disasters Are Emotionally Distressed, Which Leads To Learning Difficulties

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ABSTRACT

Exposure to disasters and traumatic experiences is common for children and adolescents. Many adults assume that larger negative experiences, like serious accidents and natural disasters, don't affect kids in the long run, as they may not have been directly affected or won't remember. But we're now learning that this isn't true, at least for some. Trauma experienced or witnessed by young children, even babies, may leave emotional scars that sometimes take years to heal. For that reason, Kerala researchers have begun a survey to learn how the disasters are affecting adolescents' emotions and learning. **Aim:** This study aimed to measure the emotional distress and learning difficulties of disaster-exposed adolescents in Kerala after 3 years of the disaster occurring. **Materials and methods:** This study is quantitative, using the Emotional Distress Scale and Learning Difficulties questionnaire for data collection. Convenient sampling techniques were adopted to select the sample from the population. Statistics like mean, standard deviation, percentage analysis, and Pearson's product moment correlation are used for this study. **Results:** There was a significant positive relationship between emotional distress and learning difficulties. The level of emotional distress and learning difficulties of adolescents shows a higher score, which indicates greater symptom severity. **Conclusion:** Rousseau said that children are born innocent, being neither good nor bad, and the surroundings will create the child. Today's students are tomorrow's future. In a world of rapid change, young people need the right mix of skills to thrive. Access to information is increasing, and memorizing facts is less important today than in the past. Although academic skills remain important, they are not sufficient to foster thoughtful, productive, and engaged citizens. Emotional distress students show a high level of learning difficulties. There was a statistically significant relationship between emotional distress and learning difficulties. But there is no significant association between genders. The management of students should be multidisciplinary, with a special focus on learning difficulties. We should aim to establish proper identification, provide proper emotional stability, and also overcome learning difficulties.

Key words: adolescents, disasters, learning difficulties, and emotional distress

Introduction

Children and adolescents are the future of the nation, and it is imperative to preserve their health and well-being, especially in the face of disasters and epidemics. Researchers have noted that schoolchildren continue to hold onto native ideas about natural phenomena even after they have been instructed on them with each childhood development stage. There are varying domains of impairment in which a child is affected when he or she experiences a natural disaster or a pandemic. Wars, epidemics, and natural disasters spare no children. In countries affected by emergencies, children lost their loved ones and homes. They lose access to safe drinking water, healthcare, and food, and without access to education, they risk losing their futures.

Students affected by disasters face tremendous distress and uncertainty. Children watching the news can also feel anxious and afraid. Between 2014 and 2020, attacks on education in 219 countries were reported. An estimated 35 million children around the world have been forcibly affected by disasters and epidemics.

Children differ from adults based on varied psychological, cognitive, and emotional development factors, making them more vulnerable to the damaging effects of disasters and epidemics. In the aftermath of natural disasters and epidemics, children may be affected by behavioral health conditions such as emotional distress,

PTSD, depression, substance use, anxiety disorder, etc. With a better understanding of risk and protective factors, we can begin to strategize more effectively to come up with a plan for recovery for children after a disaster or epidemic. When planning interventions for disaster-affected communities, it is crucial to consider the unique sensitivities of children and youth, as well as their tendency toward resilience, in tailoring post-disaster response interventions to promote successful recovery and healing for the community and its young survivors.

Background of the Problem

Floods and 2019 coronavirus disease (Covid-19) affected the state of Kerala. Emotional distress is the most common and debilitating psychological disorder among victims of floods and COVID-19. In 2018, during a span of 80 calendar days between June 1st, 2018 and August 19, 2018, the state received the worst natural disaster it had ever witnessed. While Kerala was gradually recovering from the shock of the devastating disaster of 2018, another spell of incessant rains resulted in a catastrophic flood on August 19. Vulnerabilities of the state of Kerala to natural disasters to forward to the Covid-19 outbreak of January 30, 2020. Both of those putting a strain on the mental health of the Kerala population specifically, it is likely to elicit an intense response to fear and to act as a risk factor for the onset of anxiety.

In Kerala, boys and girls under 18 years constitute 9.4 million, over a quarter of Kerala's population. The ferocity of the flood and COVID-19 did not spare the pupils of the state. It impacted the lives of a substantial number of children from 1259 disaster-affected villages spread across 14 districts. The worst-hit were pupils from Alappuzha, Ernakulam, Idukki, Kottayam, Pathanamthitta, Thrissur, and Wayanad.

The emotional well-being of children often depends on the emotional health of adults surrounding them. Several children lost their parents, siblings, grandparents, or other family members. Some of them even witnessed such deaths or had to recover bodies from the debris. These experiences have been traumatic to such pupils.

After the disasters, it has also been traumatic for the pupils; many had developed an intense fear of rain, and children had trouble sleeping. Pupils also lost their textbooks, class notes, other utilities and equipment, uniforms and other clothes, cycles, etc. Estimated that 71,927 school students lost their uniforms and 86,634 students lost their textbooks.

The COVID-19 pandemic has created the largest disruption of education systems in human history, affecting nearly 1.6 billion learners in more than 219 countries. Closure of schools, institutions, and other learning spaces has impacted more than 94% of the world's student population. Lockdown and staying home strategies have been put in place as the needed action to flatten the curve and control the transmission of COVID-19 (Sintema, 2020). Bhutan first declared the closing of schools and institutions during the second week of March 2020 (Kuensel, 2020). As of July 2020, 98.6 percent of learners worldwide were affected by the pandemics. Kerala also crucially affected the pandemic.

Emotional distress

Mental suffering is an emotional response to an experience that arises from the effect or memory of a particular event, occurrence, pattern of events, or condition. Emotional distress can usually be discerned from its symptoms (ex. anxiety, depression, loss of ability to perform tasks, or physical illness). Tornadoes, floods, and other natural disasters create an enormous amount of stress and anxiety for survivors, contributing to mental health problems like depression and post-traumatic stress disorder.

Emotion theory and the cultural concept of the person provide links between social and cognitive processes that contribute to the natural history of emotional distress. However, many current studies of ethnopsychology confound psychology (mechanisms of behavior) and metapsychology (theories of the self). Further advances in understanding the impact of culture on distress depend on the development of psychological and social theory that is neither ethnocentric nor naïve about the wellsprings of action. Three arenas for further study are identified: (1) the handling of the gap between experience and expression; (2) the labeling of deviant behavior and distress as voluntary or accidental; and (3) the interpretation of symptoms as symbols or as meaningless events. Attention to these themes can guide re-thinking the assumptions of Western psychological and social theory.

Theories that focus on the specific relationship between external demands (stressors) and bodily processes (stress) can be grouped in two different categories: approaches to 'systemic stress' based in physiology and psychobiology (among others, Selye 1976) and approaches to 'psychological stress' developed within the field of cognitive psychology (Lazarus 1966, 1991, Lazarus and Folkman 1984, McGrath 1982).

An important goal of stress research is to clarify the processes by which external conditions result in psychological distress (e.g., Burke, 1991; Holmes and Rahe, 1967; Mirowsky and Ross, 1989; Thoits, 1991). In addition to specifying the relationship between stress and distress, mental health scholars have become increasingly interested in predicting specific forms of distress (Aneshensel, 1992; Mirowsky and Ross, 1989).

Sociological social psychologists in general and identity theorists in particular have focused on the relationship between self and social structure to explain how external conditions impact emotional states. Although some theorists have linked identities with psychological distress (Burke, 1991b; 1996; Simon, 1992;

Thomas, 1986; 1991), the impact of identity meanings on stress processes, as well as the ability to predict specific distress outcomes, deserves further attention.

Emotional distress is mental suffering as an emotional response to an experience that arises from the effect or memory of a particular event, occurrence, pattern of events, or condition. Emotional distress can usually be discerned from its symptoms (ex. Anxiety, depression, loss of ability to perform tasks or physical illness) National Child Traumatic Stress Network identified Common warning signs of emotional distress include:

- Eating or sleeping too much or too little
- Pulling away from people and things
- Having low or no energy
- Having unexplained aches and pains, such as constant stomach aches or headaches
- Feeling helpless or hopeless
- Excessive smoking, drinking or using drugs, including prescription medications
- Worrying a lot of the time; feeling guilty but not sure why
- Thinking of hurting or killing yourself or someone else
- Having difficulty readjusting to home or work life

Copying and struggling with life's problems is more of a rule than an exception. At any given time, many people are affected by acute and chronic illness, accidents, disasters of one sort or another, or problems related to crime, delinquency HIV and AIDS, pandemic, drug addiction, alcoholism, marriage divorce, cohabitation, and parenthood present problems of their own and large numbers of people in have serious financial problems with the rising rate of inflation; furthermore, we are presented with problems of unemployment and people having to adjust to their life's challenges. Overall, a large number of people regularly experience stressful events, which often lead to psychological or emotional distress.

The majority of young people navigate their way successfully through adolescence into early adulthood; a significant number experience mental health problems like emotional or psychological stress disorders. Rutter et al. defined psychiatric disorder an emotional disorder in a child or adolescent that has been present for at least 3 months and has caused distress to the child and/or the family and/ or the child's environment (Rutter and Taylor, 2002)

Learning difficulties

Learning difficulties come from the educational aspect of the child having weak academic and academic achievement. This weakness is language learning, reading, writing, and spelling. Behavioral psychologists were interested in studying the field of learning difficulties, and they presented theories that contribute to the provision of appropriate teaching methods for students with learning difficulties. In this study, 'behaviorism learning theory' was adopted to find learning difficulties.

Learning Difficulty is a condition where factors other than learning disabilities or learning differences hinder a learner's capacity to achieve the same academic level as their peers. These factors can include ineffective instruction, absenteeism, socioeconomic status, and inadequate exposure to necessary curricula, as well as family trauma. The above-mentioned external factors can directly affect a learner's potential effectiveness in following studies and achieving academic expectations. Therefore, these circumstances make it difficult for students to achieve the expected academic targets appropriate for their age or years of studying. Students need healthy cognitive, social, and physical development to learn successfully. Neuroscientists are discovering the impact stress from disasters has on both the prefrontal cortex, the area of the brain responsible for self-regulation, and working memory. As a result of neglect and cognitive stimulation, increased cortical thinning occurs, resulting in reduced capacities to think and learn. In contrast, including experiences of being harmed or threat of harm predisposes the brain to develop further systems for early detection of threat and can create hypervigilance (Walls, Higgins & Hunter, 2016)

Learning is not an event; it is a process; it is the continual growth and change in the brain's architecture that results from the many ways we take in information, process it, connect it, catalog it, and use it. Learning can generally be categorized into three domains: cognitive, affective, and psychomotor. Within each domain are multiple levels of learning that progress from more basic surface-level learning to more complex, deeper-level learning. The level of learning experience depends on the nature of the experience, the developmental levels of the participating students, and the duration and intensity of the experience.

The most common difficulties are: We should understand learning difficulties as learning setbacks faced by a child due to changing circumstances, fear, stress, addiction, character disorder, behavioral disorder, or mild mental illness. Emotional distress, Mood Disorders, Injuries, Fear, Poorer verbal ability, Poorer test performance, Higher rate of discipline referrals, Excessive absences, Inability to successfully complete a grade, Lower academic engagement, Higher Suspension, and dropout rates, Changing circumstances, Stress, Addiction, Character disorder, Behavioral disorder.

STATEMENT OF THE PROBLEM

To study the emotional distress and learning difficulties experienced by the adolescent population after the exposure of the disaster.

OBJECTIVES OF THE STUDY

1. To find the level of Emotional Distress of the Adolescent population after the exposure of disaster.
2. To find the level of Learning Difficulties of the Adolescent population after the exposure of disaster.
3. To find the Relationship between Emotional Distress and Learning Difficulties of the Adolescent population after the exposure of disaster.

HYPOTHESIS

1. There will be a significant relationship between Emotional distress and Learning difficulties of the adolescent population after the exposure to disaster.

METHODOLOGY

A survey method of research was employed for the study. This method was concerned with surveying and describing the emotional distress and learning difficulties of the adolescent population after the exposure to disaster.

SAMPLE

The sample of the study consisted of 450 adolescents in Kerala. Convenient Sampling techniques were adopted to select the sample from the population

VARIABLES

Emotional distress and Learning difficulties are the variables of the study

TOOLS USED

To fulfill the objectives of the present study, the investigator needed tools to measure emotional distress and learning difficulties. For the purpose of the present study, the investigator constructed and validated the emotional distress scale and learning difficulties scale herself because she could not find an appropriate tool for measuring the variables, so it became imperative to construct the tool for the study.

1. Emotional distress scale
2. Learning difficulties scale

STATISTICAL METHODS APPLIED

Statistics like mean, standard deviation, percentage analysis, t-test, and Pearson's product moment correlation are used for this study.

RESULTS AND DISCUSSIONS

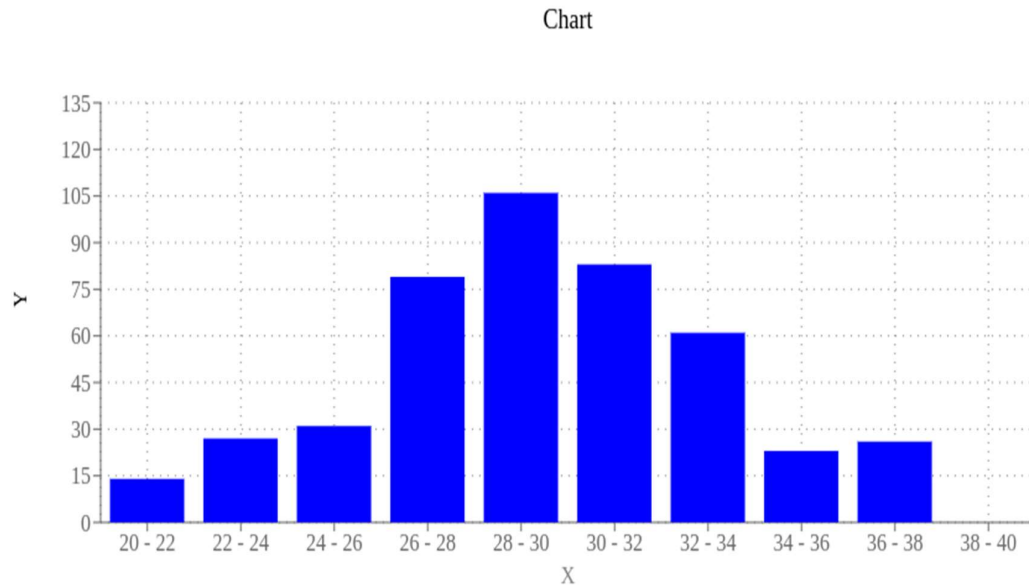
The data were consolidated and applied for statistical treatment. The result of the descriptive statistics of emotional distress and learning difficulties of the adolescent population after the exposure of the disaster. The details are given in the following:

Table.1

Descriptive statistics of total emotional distress scores of adolescents exposed to disaster for the sample (N = 450)

Variable	Mean	Median	Mode	SD	Skewness	Kurtosis
Emotional Distress	28.73	29	30	3.80	-0.0050	-0.5056

The table shows that the mean score of emotional distress for the whole sample is 28.73, the median is 29, and the mode is 30. The standard deviation is 3.80, skewness is -0.0050, and kurtosis is -0.5056. There is a weak negative skewness, indicating that the data is approximately symmetric, with a slight skew to the left. The distribution is platykurtic. It has a low negative kurtosis, indicating that it is relatively flat and has fewer outliers than a normal distribution.



The extent of emotional distress of disaster-exposed adolescents was found by the scale classifying the severity in five classes: normal (0-10), mild (11-20), moderate (21-30), severe (31-40), and extreme (41-50) based on their scores on the emotional distress scale . The frequency of different categories of responses of disaster-exposed adolescents

Table.2

Sl.No.	Level	N	Percentage
1.	Normal (0-10)	0	0
2.	Mild (11-20)	0	0
3.	Moderate (21-30)	336	74.67
4.	Severe (31-40)	114	25.33
5.	Extreme (41-50)	0	0
Total		450	100

The table shows that out of the 450 disaster-exposed adolescents, 74.67% have moderate levels of emotional distress, and 25. % of disaster-exposed adolescents have severe levels of emotional distress. In level one normal, level two mild, and level five extreme, there are no victims.

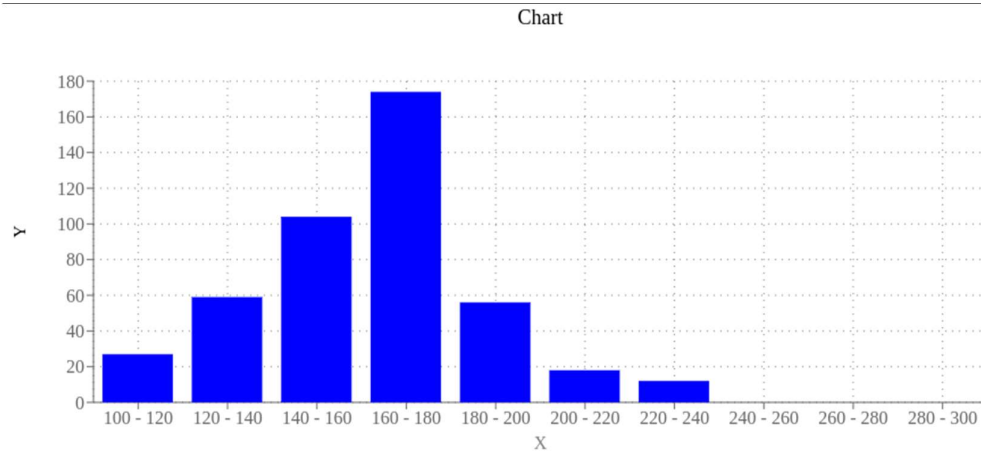
Extent of Learning difficulties present in adolescents after disaster

To get a general idea about the learning difficulties among disaster-exposed adolescents , a preliminary analysis was carried out by estimating the basic statistics of the whole sample. The statistical constants were estimated separately for its components. Extent of Learning Difficulties in adolescents can be presented In order to study the extent of learning difficulties of disaster-exposed adolescents, the investigator administered a learning difficulties scale to the sample of (450). The maximum score that can be obtained by a respondent is 275, and the minimum score is 0. The Descriptive statistics like mean, median, mode, standard deviation, skewness, and kurtosis of total scores of learning difficulties of disaster-exposed adolescents for the total sample of (N = 450) calculated and presented in table

Table:3

Descriptive statistics of total learning difficulties scores of adolescents exposed to disaster for the sample (N = 450)

Variable	Mean	Median	Mode	SD	Skewness	Kurtosis
Learning Difficulties	160.80	162	170	24.87	0.010	-0.117



The extent of learning difficulties of disaster-exposed adolescents was found out by classifying them into five groups, namely Very Low (0-55), Low (56-110), Average (111-165), High (166-220), and Very High (221-275) based on their scores in the learning difficulties questionnaire. The frequency of different categories of responses of disaster-exposed adolescents for each item in the learning difficulties questionnaire

The frequencies and percentages of disaster-exposed adolescents with respect to the extent of learning difficulties for the total sample 450 is given in table

Table.4

Sl.No.	Level	N	Percentage
1.	Very Low(0-55)	0	0
2.	Low (56-110)	9	2
3.	Average (111-165)	241	53.56
4.	High (166-220)	196	43.56
5.	Very high (221-275)	4	0.88
	Total	450	100

The table shows that out of the 450 disaster-exposed adolescents, there are no participants in level one with a very low (0–55) learning difficulty. At level two, there are 2% of participants who have low levels (55–110) of learning difficulties. In the third level, 53.56% of disaster-exposed adolescents showed average levels (111–165) of learning difficulties. In the fourth level, 43.56 percent of disaster-exposed adolescents have high levels (166–220) of learning difficulties. In the fifth level, 0.8% of disaster-exposed adolescents have very high (221–275) learning difficulties.

Analysing the relationship between Emotional distress and Learning difficulties of the adolescent population after the exposure of disaster.

The third objective was to find out the relationship between Emotional distress and Learning difficulties of the adolescent population after the exposure of disaster. For this, the investigator analyzed the collected data using the statistical technique Karl Pearson's coefficient of correlation, and the analysed data is given in **Table 3**.

Table 3

Relationship between Emotional distress and Learning difficulties of the adolescent population after the exposure of disaster.

Variables	N	Correlation (r)	p-value
Emotional distress	450	0.741	0.01
Learning difficulties			

Table 3 shows that there exists a positive correlation ($r = 0.741$) between Emotional distress and Learning difficulties of adolescents exposed to disaster. Emotional distress of adolescents exposed to disaster tends to be high when there is a high level of Learning difficulties in adolescents exposed to disaster. The strength of this relationship is quite high. Suggestion that the variables are closely related in a linear manner.

FINDINGS

The present study, focusing on the relationship between Emotional distress and Learning difficulties of disaster-exposed adolescents, found that there exists a significant positive correlation between emotional distress and Learning difficulties. The above-mentioned results are The outcomes will create new avenues for advancing the educational field. Because an entire generation has lived in terror due to ongoing tragedy. When a person experiences emotional pain due to fear and develops learning difficulties, he is failing as a mentally strong person. We can save the next generation if we take this seriously and take preventative action.

TENABILITY OF HYPOTHESIS

Hypothesis of the study is:

There will be a significant relationship between Emotional distress and Learning difficulties of disaster-exposed adolescents. Findings reveal a correlation coefficient of 0.741 and a p-value of 0.01, which indicates a significant positive correlation between Emotional distress and Learning difficulties at the 0.01 level of significance. Hence the hypothesis is substantiated.

DISCUSSION

The findings of the study indicate a high positive correlation between Emotional distress and Learning difficulties in disaster-exposed adolescents. Another major finding is that out of the total sample ($n = 450$), 336 (74.67%) have moderate, and 114 (25.33%) persons have severe levels of Emotional distress. Also, 241 (53.56%) persons have average, 196 (43.56%) persons have high, and 4 (0.88%) persons have very high level of learning difficulties.

The effects of emotional distress and learning difficulties on adolescents' wellbeing can be profound and long-lasting. Here are a few negative consequences:

Short-term consequences:

Depression and anxiety: A higher chance of getting depression and anxiety disorders. Sleep disturbances: insomnia or trouble falling asleep. Substance abuse: a higher chance of developing an addiction or substance use disorder. Social withdrawal: steering clear of connections and social contacts. Poor academic performance: a decline in motivation and academic achievement. Physical symptoms: somatic issues such as headaches and stomachaches. Impulsive actions: taking part in careless or impetuous actions.

Long-term consequences:

Mental health disorders: A higher chance of acquiring long-term mental health issues, such as bipolar illness or PTSD. Suicidal thoughts and actions: A higher chance of having suicidal thoughts and attempts. Relationship difficulties: having trouble establishing and sustaining wholesome relationships. Educational and career setbacks: Effect on prospects for further education and career advancement. Physical health issues: A higher chance of developing long-term conditions like diabetes and heart disease. Low self-esteem: constantly having a bad opinion of oneself and doubting oneself. Dependency on unhealthy coping mechanisms: using substances, for example, as a coping mechanism.

IMPLICATIONS

Adolescents' lives can be significantly and profoundly impacted by emotional turmoil and learning challenges. Mental health conditions, including anxiety and depression, as well as suicidal thoughts and actions, can result from emotional hardship. It can also lead to poor academic performance, relationship issues, social isolation, and an elevated risk of physical health issues. Conversely, learning disabilities can result in poor academic performance, fewer job options, lower earning potential, and a higher chance of social marginalization.

Together, emotional distress and learning challenges can worsen mental health issues, raise the likelihood of academic failure and school dropout, restrict chances in life, strain relationships, and lower general well-being. Persistent mental health problems, ongoing stress and worry, a decline in life satisfaction, a barrier to job progression, damaged relationships, and an elevated risk of physical health concerns are some of the long-term effects.

At the societal level, these problems may result in higher healthcare expenses, financial pressure, decreased productivity, elevated rates of crime and drug usage, and overburdened social services. Individualized education plans, mental health services, accommodations, social support, family therapy, early detection and intervention, and cooperation with medical specialists are all crucial to reducing these consequences.

Increased funding for mental health services, better access to education and support, less stigma associated with mental health, greater awareness and education for parents and teachers, policy reforms for inclusive education, more support for vulnerable populations, and research and evaluation of successful interventions are just a few of the systemic and policy changes that are required. By tackling these problems, we can provide them the tools and assistance they need to get over emotional turmoil and academic challenges, guaranteeing a better future for everybody.

CONCLUSION

Adolescents who have experienced a disaster are especially susceptible to emotional discomfort and learning challenges, which can have detrimental long-term implications on their general well-being, academic performance, and mental health. In order to lessen the negative effects of disaster exposure and to foster resilience, academic success, and healthy development, it is imperative that these adolescents receive prompt and customized interventions, such as mental health services, social support, and individualized education plans."

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