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Original article

Childhood Trauma and Clinical Correlates of Dissociative Disorders among Adolescents: An Exploratory Study

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Abstract

Introduction: Though a substantial number of studies indicate the nexus between childhood trauma, PTSD, and dissociative disorders among adolescents, Indian literature is mostly silent. As reported incidents of child abuse are alarming in India, it was important to explore further on the subject.

Objective: To explore the relationship between childhood trauma and other clinical correlates like anxiety, PTSD and behavioural problems in adolescents diagnosed with dissociative disorder.

Method: 50 adolescents aged 13-18 years with a medical diagnosis of dissociative disorder were included. A convenient sampling technique was used to recruit the patients from a child guidance clinic of a tertiary care hospital. Child Dissociative Checklist (CDC), Children's Impact of Events Scale (CRIES -13), Screen for Child Anxiety Related Disorders (SCARD), and Youth self-Report (YSR from Child Behaviour Checklist) were administered.

Results: The sample consisted of 62% females and 38% males. A significant relationship was found between dissociation and anxiety, panic disorder and separation anxiety disorder. CDC had a positive correlation with internalisation, externalisation and behaviour problems. Regression analysis showed that behavioural problems and PTSD (CRIES-13) as two significant predictors of anxiety. Although there was no significant difference between

adolescents with childhood trauma and without it, still the presence of trauma emerged as a significant predictor of dissociative disorders.

Conclusion: The findings indicated that dissociation had a significant association with childhood trauma, behaviour problems, anxiety and post-traumatic stress. Thus, culturally appropriate trauma-focused interventions for the treatment of mental illnesses and the underlying trauma should be designed for addressing dissociative disorders in this age group.

Keywords: Dissociation, Trauma, Adolescents, PTSD, Behaviour Problem

Introduction

Dissociation is defined as a disruption of the normal integration between memories, immediate sensations, control of bodily movements and identity. Dissociation means disassociating one's own feelings and thoughts from consciousness. It is a state where a person may feel detached from oneself and his/her surroundings as if he is disconnected from his own body and the world around him looks unreal to him. This dissociative experience can last for a brief period of time or up to hours/days. Briere [1] described dissociation as "a defensive reaction which occurs as a coping mechanism and creates disruptions in feelings, thoughts behaviour and memories of an individual. Dissociation normally occurs as a response to a traumatic event or in the face of a stressful situation where a person finds difficult to cope with. It is assumed to be pathological in nature because of its negative impact on the psychological well-being of individuals.

Dissociation in children and adolescents is not uncommon. It can result from alterations in normal- integrative functions of the psyche which gets reflected in terms of altered identity, memory, and consciousness. But it has also been manifested in disturbances of sensation and motor functions. It is well known that psychological stress/Trauma can lead to both physical and psychiatric symptoms. If an individual is exposed to multiple traumatic events during childhood, he is likely to adapt dissociation as a self-regulatory mechanism that will affect the

mental and behavioural functioning of these children. Excessive activation of the dissociation becomes a pathological organiser of emotions and feelings and may lead to severe psychopathology [2,3].

Dissociation as a defensive reaction in children who faced severe and repeated traumatic events was also discussed by Coons [4]. Traumatised children, when face with memories of the traumatic event, may experience so much pain and anxiety that they become overwhelmed and psychologically disturbed. In these situations, when they cannot physically withdraw from the situation, they try to dis-associate themselves from those traumatic memories through various defensive functions. The lack of coping skills among young children will make them more prone to dissociation in the face of traumatic situations and supporting the view that trauma is often linked to pathological dissociation [5].

In India, a significant number of children and adolescents are exposed to traumatic life events in an early age. A traumatic event not only threatens the physical integrity of self but also destroy the psychological mechanism of Children and adolescents during the developmental years. In order to cope, they use various defensive functions to avoid thoughts and memories of a traumatic event or to gain control over the event. As a result, they will report various somatic complaints, impairment in memory, motor difficulties, regression and conversion.

Culture will also have the greatest influence on the clinical presentation. In Indian culture, the dissociation is quite prevalent from ancient times and was initially considered as "Bhoot Bhadha" (possession), but now it has been accepted as a mental disorder that occurs as a reaction to psychological stress, strain or trauma. In India, dissociative trance, possession, sensory and motor difficulties are commonly found in clinical settings among children and adolescents. Most of the studies have supported female preponderance [6-8] and younger age [7], and change in nature of symptoms with increasing age [9].

Although there is an increasing global agreement on the association of childhood trauma and dissociative disorder [10-13], clinical and research interest in dissociation has increased over the last two decades. Persons who are having a history of traumatic experiences or continuous trauma in their life may be more vulnerable to a variety of dissociative states and may present somatic, depressive anxiety symptoms, and PTSD symptoms [14,15,16]. Research in India is limited to very few descriptive and review studies. Further, the relationship between childhood trauma and psychiatric morbidities has not been studied in the Indian context to the best of our knowledge. Thus, the present research explores the relationship between childhood trauma and various other psychological correlations like Anxiety, PTSD, and Behavioural problems associated with traumatic experiences in adolescents diagnosed with dissociative disorder.

Methods

Participants

The present study is a cross-sectional study, and a convenient sampling technique was used for the recruitment of patients. Over the period March 2016 to April 2017, we enrolled 50 adolescents (both males and females) referred for psychological evaluation from a psychiatry child guidance clinic of a tertiary care hospital, according to these criteria: (1) age between 13-18 years, (2) a medical diagnosis of dissociative disorders using ICD-10 diagnostic criteria, (3) absence of mental retardation, (4) absence of severe psychiatric disorders such as psychotic disorders, bipolar disorders, and disorders of psychological development, and (5) written informed consent provided by the parents or the legally accepted relatives. The study has been approved by the institutional ethics committee of vide No. IEC-216/01.04.2016.

Measures

A semi-structured interview schedule was used to obtain the demographic data, details on personal history, nature of traumatic events, clinical symptoms and co-morbidities if any existed. Both adolescents and their family members were interviewed by a child psychologist

with substantial expertise to gather detailed information about the possibility of any adverse psychological event (stressor) or trauma in the past and its apparent consequences for the child. We considered it as a "trauma" experience of sexual abuse, physical abuse, witnessing domestic violence, bullying at school, the sudden death of loved ones, witnessing a suicide in the family, alcoholism in father, emotional neglect and terminal medical illness. These experiences were screened as per adolescents' own viewpoints without the assistance of caregivers/parents. The parents confirmed whether the incidents happened before the onset of dissociative symptoms or not. All three cases of sexual abuse incorporated in the study were already reported by the parents and family members. After the clinical evaluation, all participants were administered the following psychometric instruments. (Tests and self-report scales).

Child Dissociative Checklist –CDC [17] - records observation of a parent/ family member about a child's present behaviour and in the last 12 months on a 20-item list. The test can quantify dissociative behaviour as a single score and provides cut-off scores that categorise children/adolescents into low and high dissociation groups. The Child Dissociative Checklist (CDC) is having a test-retest reliability coefficient of rho = .69 in a sample of normal and sexually abused girls. It has good discriminant validity among four test samples, including normal control girls, sexually abused girls, boys and girls with dissociative disorder NOS and boys and girls with multiple personality disorder.

Children's Impact of Events Scale (CRIES)-13 [18] - measures the impact of adverse events in a child's life. CRIES-13 is used to understand the Post-traumatic stress disorder (PTSD) phenomenon of re-experiencing the traumatic event, arousal and avoidance of that event. It consists of 13 items, and the response is recorded on a four-point scale. The test is having three subscales of Intrusion, Avoidance and arousal. Reliability coefficients in terms of internal consistency range from .75 to .87 for the total CRIES-13, and the cut off score is 30 above, which a score is assumed to be significant.

Screen for Child Anxiety related Emotional Disorder (SCARED) [19] - is a widely used measure to assess childhood anxiety and is a parent and self-report questionnaire (41 items). It is used to screen for childhood anxiety disorders, including generalised anxiety disorder, separation anxiety disorder, panic disorder and social phobia. The SCARED is having moderate to high internal consistency (alpha=0.43-0.89), moderate parent-child correlation (r=0.49-0.59) and good discriminant validity (between anxiety and non-anxiety disorders).

The Child Behaviour Checklist-Youth Self Report (YSR) [20]- Was given by Achenbach for school-age children and is having three instruments for assessing emotional and/or behavioural problems: Child Behaviour Checklist (CBCL), completed by parents, Youth Self-Report (YSR), completed by adolescents and teachers. YSR contains 112 problem items which are scored using a three-point Likert scale (0=absent, 1= occurs sometimes, 2=occurs often). It is recommended for use only with children 11 years and older. It yields scores on eight empirically derived syndrome scales: anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behaviour and aggressive behaviour. Test-Retest reliability shows a correlation of 0.95 for the 112 specific problem items and .67-.83 for the DSM-oriented scales. The internal consistency and Content validity of this measure has been strongly supported by research.

Statistical Analysis

The Kolmogorov-Smirnov test was used for confirming the normal distribution of all the non-categorical variables. Descriptive statistics in terms of means and standard deviation (SD) and percentages are used for Continuous and categorical variables. Pearson correlation coefficient was used to find the association between traumatic experiences and dissociation, PTSD, behaviour problems and anxiety disorders. Stepwise regression analysis was conducted to determine whether behavioural issues, anxiety, and PTSD symptoms are the significant

contributors/ predictors of dissociation or each other. The statistical analysis was conducted using SPSS software Version 21, and the level of significance was set at less than 0.05 level.

Results

Demographic profile

The sample consisted of 62% females and 38% males. The mean age of the participants was 14.50 (SD=2.573), and the mean age of onset of the dissociative disorder was 13.40 (SD=2.673). The majority of the patients (76%) belonged to middle-class SES, followed by lower SES (14%) and upper class (10%). Out of the total sample, 54% of patients belonged to urban areas, and 94% reported having good family support (Table-1).

Table-1: Demographic Characteristics of the patients (N=50)

Variable	**Frequency (%)**
Gender	
Female	31 (62)
Male	19 (38)
Socio-economic Status	
Middle	38 (76)
Lower	7 (14)
Upper	5 (10)
Family Background	
Urban	27 (54)
Rural	23 (46)
Support	
Family Support	47 (94)
No Family Support	3 (6)
Mean Age of Participants	Mean=14.50 (SD=2.573)

Clinical Profile

The past history of experiencing any type of trauma in their life was reported by 62% of patients, whether it was bullying in school (20%), domestic violence (18%), medical illness (14%), sexual abuse (6%), loss of loved ones (2%), and physical abuse (2%). Apart from this, only 12% of patients reported having a family history of psychiatric illness. The cross-tab analysis showed that out of all those who are having a h/o of trauma, 46% were high on anxiety,

32% were high on PTSD symptoms, 22% had behavioural problems, and 14% had dissociation. While 68% (N=34) of adolescents were above the cut-off scores of the anxiety scale, 44% (N=22) had qualified for having PTSD, 30% (N=15) had significant behavioural problems, and 22% (N=11) had significant dissociation currently (Table-2).

Table-2 Clinical Profile of the Patients (N=50)

Variables	**Frequency (%)**
Past H/O Traumatic Stress	31 (62)
Traumatic Stress	
No Trauma Evident	19 (38)
Bullying at School	10 (20)
Domestic Violence	9 (18)
Medical Illness	7 (14)
Sexual Abuse	3 (6)
Physical Abuse	1 (2)
Sudden loss of loved ones	1 (2)
Neglect	0
Clinical Profile>cut off score	
CRIES-13 (PTSD)	22 (44)
Clinical Profile>cut off score	
Anxiety scale (SCARED)	36 (72)
Separation Anxiety	30 (60)
Panic Disorder	26 (52)
School Avoidance	22 (44)
Generalised Anxiety Disorder	21 (42)
Anxiety	12 (24)
YSR Profile>cut off score	
Behavioural Problems	14 (28)
Internalisation	13 (26)
Externalisation	7 (14)
Clinical Scales of YSR	
Attention-concentration difficulties	46 (92)
Withdrawn Behaviour	10 (20)
Somatic Complaints	10 (20)
Depression	8 (16)
Social Problems	7 (14)
Thought Disturbance	7 (14)
Aggression	6 (12)
Family History of Psychiatric illness- Present	6 (12)
Age of onset of Dissociation	Mean=13.40 (SD=2.673)

Findings showed that 72% of the total sample reported having any form of anxiety disorder on SCARED. Out of these, 60% had separation disorder, 52% had panic disorder, 44% of them were found to be high on school avoidance, 42% had GAD, and 24% reported social anxiety. On CRIES (Children's Impact of Events Scale) 44% of adolescents had a significant PTSD score. Findings on YSR showed that 26% of them were high on Internalisation and 14% had a high score on externalisation. Overall, 28% of the total sample had a significant score on behaviour problems (Table-2).

Outcome Measures

Table-3 showed that anxiety had significant associations with dissociative disorders (r=.361**, p=<_.010) and PTSD (r= .470**, p=<_.001), which indicated that all those patients who were high on anxiety also had a high score on PTSD and dissociation. A significant correlation was found between dissociation and panic (r= .447**, p=<.001), GAD (r=.537**, p=<.000) and separation anxiety disorder (r= .282*, p=<_.047) which indicated that children diagnosed with dissociation also experienced panic attacks, generalised anxiety and separation anxiety and PTSD. An increase in dissociation scores on CDC also significantly increased scores on internalization (r=.429**p=<.002), externalization (r=.579**p=<.00), and total score of behaviour problems (r=.528**p=<.00) such as withdrawn behaviour (r=.378**p=<.007), thought disturbance (r=.463**p=<.002), attention difficulties (r=.391**p=<.005), rule breaking behaviour (r=.561**p=<.00) aggression (r=.480**p=<.00) and others (r=.279**p=<.049). The subscales of Youth self-report inventory were significant predictors of dissociative disorders.

Table-3 Pearson Correlations between CDC and YSR, SCARED, and CRIES and CRIES with SCARED

YSR		**CDC**		**CRIES. 234, .10**
		SCARED Anxiety		**CRIES with SCARED**
Depression	.212, .140	Anxiety	.361**, .010	Anxiety.470**, .001
Withdrawn	.378**, .007	Panic	.447**, .001	Panic.489**, .000
Somatic	.216, .132	GAD	.242, .090	GAD.537**, .000
Thought	.436**, .002	Separation	.282*, .047	Separation.342*, .015
Attention	.391**, .005	Social	.275, .053	Social .068. .638
Rule breaking	.561**. .000	School	-.103, .475	School.194, .178
Aggression	.480**, .000			
Others	.279*, .049			
Internalization	.429**, .002			
Externalization	.579**, .000			
Behaviour Problems	.528**, .000			

**. Correlation is significant at the .01 level, *significant at the 0.05 level (2-tailed)

Table-4 presented the findings of stepwise regression analysis on anxiety as a dependent variable and all relevant demographic (e.g. age, age of onset of illness, duration of illness, education, socio-income status) and outcome variables as independent variables. Findings revealed that behaviour problems and PTSD (CRIES) were two significant predictors of anxiety with a r^2 value of .409. The beta coefficients were .452, p=.000 and .342, p=.005, respectively. This indicated that around 40% of the anxiety could be explained due to the presence of behavioural issues and PTSD symptoms and as behaviour problems and PTSD symptoms increase, the anxiety also worsened significantly.

Table-4: Regression Analysis on Anxiety

Model	**R**	**R Square**	**Unstandardised Coefficient**		**Standardised Coefficient**		**Sig.**
			Beta	**Std. Error**	**Beta**	**t**	
(Constant)			-9.420	8.527		-.1.105	.275
Behaviour Problems	.549	.301	.575	.149	.452	3.863	**.000**
CRIES Total	.639	.409	.436	.149	.342	2.928	**.005**
Dependent Variable: Anxiety on SCARED							

Table-5 presented the findings of stepwise regression analysis on PTSD as a dependent variable and all other demographic (e.g. age, age of onset of illness, duration of illness, education, socio-economic status) and outcome variables as independent variables. Moreover, this revealed that generalised anxiety, social anxiety, and panic attacks were the significant predictors of post-traumatic stress disorder. Beta coefficients revealed that generalised anxiety and panic attacks contributed positively to elevating PTSD scores.

Table-5 Regression Analysis on PTSD

	R	**R Square**	**Unstandardised Coefficient**		**Standardised Coefficient**		
Model			**Beta**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)			2.946	2.990		.985	.330
Generalized Anxiety	.537	.289	.1.484	.336	.537	4.413	**.000**
Social Behavioural problems	.632	.399	-1.422	.484	-.421	-2.935	**.005**
Panic attack	.678	.459	.574	.253	.303	2.269	**.028**
Dependent Variable: PTSD on CRIES							

Table-6 presented the findings of stepwise regression analysis on child dissociative checklist as a dependent variable and all other demographic (e.g. age, age of onset of illness, duration of illness, education, socio-income status, childhood trauma, family history of psychiatric illness, social support received) and outcome variables as independent variables. And this revealed that externalised behavioural problems, school avoidance, panic or somatic symptoms, rule-breaking behaviour, social support, history of childhood trauma, attention problems emerged as significant predictors of dissociative disorders. Beta coefficients revealed that while externalised behavioural problems contributed 50% variance, trauma contributed 20% variance in elevating CDC scores. However, there were no significant male-female differences on any outcome variables.

Table-6: Regression Analysis on CDC

Model	R	R Square	Unstandardised Coefficient		Standardised Coefficient		
			Beta	Std. Error	Beta	T	Sig.
(Constant)			-3.313	2.400		-1.381	.174
a. Predictors: (Constant), Externalization T	.579[a]	.335	.210	.043	.579	4.917	**.000**
b. Predictors: (Constant), ExternalizationT, SchoolT	.623[b]	.389	-.553	.273	-.237	-2.029	**.048**
c. Predictors: (Constant), Externalization T, School T, Panic T	.687[c]	.472	.240	.089	.335	2.693	**.010**
d. Predictors: (Constant), Externalization T, School T, Panic T, Rule T	.736[d]	.542	.402	.153	.391	2.622	**.012**
e. Predictors: (Constant), School T, Panic T, Rule T	.726[e]	.528	.532	.107	.518	4.990	**.000**
f. Predictors: (Constant), School T, Panic T, Rule T, Support	.762[f]	.580	4.141	1.744	.238	2.375	**.022**
g. Predictors: (Constant), School T, Panic T, Rule T, Support, Trauma	.787[g]	.620	.441	.205	.203	2.148	**.037**
h. Predictors: (Constant), School T, Panic T, Rule T, Support, Trauma, Attention T	.810[h]	.657	.341	.159	.239	2.142	**.038**
Dependent Variable: Dissociation on CDC							

Discussion

The present study attempted to assess the relationship between childhood trauma, anxiety, PTSD and behavioural problems among adolescents diagnosed with dissociative disorder. For this purpose, an exploratory study was done on dissociative adolescents. The clinical sample had a majority of female cases in an age group of 13-18 years and reported experiencing some form of trauma in childhood, whether it's Sexual Abuse, domestic violence, bullying at school, loss of loved ones and medical illness. The age of onset of traumatisation was found in early adolescence, and a high percentage of the history of trauma in the sample was in line with the previous findings supporting the fact that dissociation is highly prevalent among adolescents, specifically among girls, who have experienced any kind of emotional trauma in their past.[21]

A positive relationship between age and anxiety disorders was found, which means that the anxiety symptoms were evident more among middle and late adolescents.

The descriptive findings show that the anxiety was quite high among these adolescents as the majority of them reported anxiety symptoms on SCARED. Separation anxiety was reported by more than half of the sample of adolescents, followed by Panic and somatic symptoms, School avoidance, GAD and social problems. Similar researches also suggest that children exposed to traumatic incidents are more prone to developing post-traumatic stress disorder [12]. Traumatised children have a possibility of developing somatic complaints, low mood/ depression, poor interpersonal functioning, cognitive disturbance and dissociative symptoms [13]. In the present study, Attention-concentration was poor among the majority of the cases. Apart from these other clinical symptoms like withdrawn behaviour and somatic complaints, social problems and thought disturbance, aggression and depression were also found among a significant number of adolescents. The findings are also supported by the study done by Dixit et al. [22], who got similar findings and suggested that traumatic events and their consequences can cause cognitive dysfunctions along with somatic complaints about Children who have experienced trauma and thus affect their functioning.

We also examined the history of traumatic experiences reported in the sample. Around one-third of the patients did not report any apparent exposure to traumatic experiences in their past life. Although, those who reportedly did not mention a high number of traumatic experiences as the majority of them reported 1 or 2 (few) traumata. The most frequent traumatic experiences occurring in the sample were bullying at school and witnessing domestic violence, while the less frequent were sexual and physical abuse.

Findings show a significant association between anxiety, CRIES and CDC, which means that anxiety and dissociative disorders are closely related. Further, PTSD and anxiety disorders were also found to be significantly associated, which shows that all those children who were

high on anxiety also had a high probability of developing PTSD. Children who were having PTSD symptoms were also found to have symptoms of panic, anxiety and separation anxiety. Further dissociation was also found to be positively correlated with Internalisation, Externalisation and Behaviour problems. These children were having a significant association with withdrawn behaviour, social problems, thought disturbance, attention difficulties, rule-breaking behaviour and aggression.

Looking at the data retrospectively also provides us with important information. It was found that there is a close association between trauma experienced at an early age and the tendencies to dissociate. In the present study, the mean age of onset was in early adolescence. So it can be inferred from the findings that children who experienced trauma in their early life or their early childhood are more likely to dissociate than those who experienced the trauma in their later life. Further, it also depends on their nature and severity of trauma. If the trauma was severe enough and continued over a longer period of time, then the children will have more severe consequences in the form of PTSD and personality disorders.

Regression analysis shows that behaviour problems among adolescents and traumatic life events are the two significant predictors of anxiety, which means that the presence of traumatic events resulting in PTSD and behavioural problems contributed positively towards more dissociative problems. In the present study, both behavioural problems and trauma history were significantly related to dissociation. Adolescents with behavioural issues like aggression, disobedience, poor attention manifested poor social relationship and withdrawn behaviour. Traumatic events have features outside the range of normal experience, and it leads to a set of physical, mental and behavioural responses. Sometimes when fighting is not possible, the child will use avoidant and maladaptive coping mechanisms that are dissociation. The intensity of the dissociation may vary with the severity and duration of the traumatic event. This shows that the trauma itself may be a contributing factor for adopting an escape mechanism like

dissociation where the self can be protected by dis-associating one's thoughts from the painful memories and suppressing them into unconsciousness. However, in the long term, this mechanism can further disrupt and impair a person's life and functioning.

Our findings get support from other studies [23], who similarly found that there is a very strong link between trauma and dissociative disorders, and the relationship is important in both directions. Apart from this, dissociation and PTSD are also closely related and frequently occur together, and sometimes dissociative disorders to be a subtype or subset of PTSD [24].

Mann-Whitney U test was computed to find out the gender differences between trauma, anxiety, CIEST, CDC and behaviour problems. Findings reveal that no significant gender difference was found in anxiety, CIEST, CDC, and behavioural problems. So, both male and females are equally at risk of developing anxiety, PTSD and behaviour problems as a consequence of traumatic experiences.

In literature, many studies have tried to find a correspondence between the type of trauma, symptomatology and consequences with similar and sometimes apparently contradictory results. One of the contradictory findings suggests that young children are prone to different types of traumatic events and therefore, the severity, length of exposure and the age of the child are the predictors, rather than the nature of the trauma [25-28].

Literature has also documented many behavioural response patterns following traumatising events. Traumatised children were found to be high on aggression towards peers [29], parents, teachers and authority figures [30]. The acting out tendencies of these adolescents may also interfere with their healthy interpersonal relationship with peer group and social interaction with others [30].

Although dissociation is a defensive reaction against stress experienced after exposure to traumatic events, it may also appear as a mechanism to suppress the emotional disturbance associated with traumatic memories. Thus, thoughts, feelings and emotions are disconnected

from awareness as if they don't exist, and compensatory behaviour may become repetitive and automatic without having a complete awareness. Further, if the trauma originates in the context of a relationship with a significant person, the attachment style of that person may be severely compromised [31,32].

Literature [33] also suggests that Dissociative symptoms arise due to exposure to severe traumatic incidents in the past with which a person feels unable to cope and try to distance himself psychologically from the stressor. Others, however, argue that dissociation may lead to the development of PTSD or other emotional symptoms by disrupting the encoding of traumatic memories and thus resulting in re-experiencing of the trauma [34]. Rana et al. [9] also state that young children with a history of a traumatic experience may present with dissociative symptoms like a trance state, amnesia, emotional and behavioural symptoms.

In summary, dissociation in adolescents is closely linked with traumatic experiences in the past. Childhood trauma is a key predictor of anxiety, PTSD, dissociation and behaviour problems, and PTSD symptoms can also lead to anxiety symptoms. The present study has many advantages along with some limitations also. We used structured tools to measure the outcome variables and confirmed the history and nature of trauma from family members rather than simply relying on the patient's statements. However, as with all research, the present study also comes with a number of limitations. First, the sample size was small and was taken from one centre only, which limits the generalizability of results beyond clinical settings. Second, the interpretation of the relationship among traumatic experiences, dissociation, and externalisation is given in the absence of a comparative sample. The findings should be cautiously interpreted, and longitudinal studies with clinical and non-clinical samples are warranted. Third, a distinction between different type of trauma with the age of onset was not made and actually, we weighted all traumatic experiences equally, while other research and clinical experiences show that different types of trauma and age of onset might differently

affect the severity of the dissociation. Fourth, the study is retrospective, and there is no data available that describe the prior functioning of the patients before the trauma. Apart from this, the recall bias was also a limitation in this study.

In spite of these limitations, we believe that the present study strengthens available findings that the short- and long-term effects of traumatic events can lead to dissociation, PTSD and behavioural problems. However, in future, researches with clear cut distinctions between the type of trauma and its onset with a comparative sample will shed more light on the impact of trauma and dissociation and will be helpful in suggesting appropriate individualised treatment programs.

To conclude, the study shed some new light on how traumatic experiences at an early age can result in significant anxiety and behavioural problems along with the development of maladaptive defences like dissociation. Recurrent experiences of hurt, rejection or any traumatic event can lead children to feel helpless, incapable and shattered. Therefore, they blame themselves, feel incapable of dealing with traumatic memories, and increase the possibility of developing psychiatric and behavioural disorders. History of traumatic life incidents should be ideally explored in detail psychiatric and psychological evaluation and thereafter, should be integrated into the domains of psychological interventions for adolescents diagnosed with dissociative disorders.

Conflict of Interest: None

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