

MEDIATING THE ROLE OF FAMILY FUNCTIONING, CHILDHOOD TRAUMA AND ADDICTIVE BEHAVIORS

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Abstract

The purpose of the study was to examine the mediating role of family functioning with regards to the relation between childhood trauma and addictive behaviors. It employed correlational research design and non-probability purposive sampling technique. This sample was composed of 200 adults aged between 18 and 55 years. The assessment tools used were standardized measures that included Demographics Information Form (DIF), Family Functioning Style Scale (Deal et al., 1988), Childhood Trauma Questionnaire-Short Form (Bernstein & Fink, 1998), and Addictive Behavior Questionnaire (Christo et al., 2003). An analysis of data was performed through reliability analysis, Pearson product-moment correlation, multiple regression analysis, and mediation analysis. The results showed that there is a strong positive correlation between childhood trauma and family functioning and addictive behaviors. It was shown that childhood trauma is highly linked to addictive behaviors in adulthood. Additionally, family functioning significantly contributed to addictive behaviors and it met the criteria of mediation between childhood trauma and addictive behaviors. These findings bring out the relevance of looking at the family in dealing with early traumatic experiences as to the cause of addiction. The study suggests that the therapeutic and preventive interventions aimed at addressing the enhancement of family functioning should be conducted, which can also minimize the long-term impacts of childhood trauma and increase the likelihood of avoiding addictive behaviors

INTRODUCTION

Trauma is anything that cannot be termed as a form of normal occurrence and can provoke the worst forms of stress and sadness. Emotional difficulties caused by interpersonal trauma can guide emotional susceptibility because of the pain of betrayal and offence (Lilly & London, 2015). Such emotions can lead to issues with internal regulation in the future by disrupting the emotional response system of a person. During the early years, the child has to feel supported and secure so that he is daring enough to investigate his world freely, even when he can fail (Rosmalen, et al., 2016).

CHILDHOOD TRAUMA

Roche et al. (2018) reveals that exposure is a traumatic experience or mistreatment during childhood (before age eighteen) and can be physical, sexual, or emotional abuse or neglect. However, it may also involve more pervasive trauma and dysfunction in the family, as a significant accident, witnessing parent drug abuse, or experiencing parent death (Roche et al., 2018).

Trauma is any event that occurs outside of normal circumstances which could result in extreme frustration and stress. Emotional troubles generated by interpersonal trauma could result in emotional weaknesses as the

individual may feel

violated and betrayed (Lilly & London, 2015). When these feelings arise, they can disrupt an emotional response system of a person and lead to difficulties in its regulation (Barlow et al., 2017).

During early development, a child must feel secure and safe to confidently and autonomously discover the environment around them even when it comes with a higher likelihood of failure. When a child is subjected to traumatizing experiences, development of behavioral issues arises because the functioning of the brain of the victim changes due to the challenges they have experienced or observed (Galletly et al., 2011; Connell et al., 2018).

Therefore, psychopathology has a possibility of developing (Dye, 2018). Childhood trauma is a broad term that involves a variety of painful experiences that might have a painful and severe effect on the emotional, psychological, and physical development of a child. Emotional abuse entails recurring tendencies of manipulation, isolation, and humiliation that negatively affect the self-esteem and perception of reality in children (Thompson et al., 1996).

FAMILY FUNCTIONING

Family functioning determines the quality of the emotional relationships, communication, and orderliness, and flexibility in a family system (Lewandowski et al., 2010). It highly influences the physical and psychological health of children and adolescents, in particular, with chronic illnesses, such as persistent pain. Emotional cohesion, structured roles, adaptability in handling stress, as well as the existence of communication are considered healthy characteristics of family functioning, whereas high conflict, lack of control in emotional expression, and lack of organizational styles are considered a dysfunction (Alderfer et al., 2008; Palermo & Chambers, 2005).

There are three essential dimensions of family functioning identified by the Circumplex Model, namely, cohesion (emotional bonding), flexibility (the ability to adapt to changes), and communication, which facilitates the balance amid the other two (Olson, 2014; Ortiz-Sanchez et al., 2023). The maladaptive functioning in families is linked with higher risks of developing mental illnesses, including depression and bipolar disorder, whereby maladaptive family relationships can retard improvement and is a risk factor of relapse (Felitti et al., 1998; Du et al., 2014).

Studies have shown

that conflict and poor functioning will be more common in the family of adolescent with chronic pain than those families having healthy children (Anttila et al., 2004). According to a model postulated by Palermo and Chambers (2005), the relationship of the pain behaviors of the children is correlated due to the interaction of the dyad and the stress at home. As an example, high conflict may strengthen the pain behaviors, which accelerates disability and increases the emotional distress. The finding of recent research also relates enmeshment and bad communication to pain-related impairment among the adolescents (Logan et al., 2006). Despite the accumulating evidence, there is the scarcity of integrated studies of the association between components of family functioning and child outcome. Further research should aim at determining which dimensions play a more compelling role in the development of pain and mental health issues in young people, and how to employ family-based interventions in order to enhance child health (Jordan et al., 2008).

ADDICTION BEHAVIORS

Addictive behavior (substance or behavioral) is an increasing communal health issue on a worldwide scale. It can impact people of all

ages, with different backgrounds, and differing colors of the economical status, and it can cause a significant deterioration of personal, social, and occupational performance. Broadly characterized, Addiction is a progressive, repetitive disease disorder that involves compulsive involvement on stimulating factors despite the negative outcomes (American Society of Addiction Medicine [ASAM], 2022). Substance use disorders are an officially defined condition, whereas behavioral addictions are gaining recognition as an important clinical problem (Gordon et al., 2018).

Behavioral addictions are characterized by repetitive and uncontrollable participation in non-substance covered behaviors defined as gambling, computer activity, gameplay, eating, shopping, or sex. These actions will produce the effect of substance on the reward system of the brain and causes the release of dopamine and beta-endorphin, where the brain will develop the compulsive cycle (Haass et al., 2020). With time, the person gets addicted to it as a need to control the mood or avoid emotional intolerance, which in many cases can lead to an impairment of health, relationships, and duties.

Among the symptoms of addiction, there is also behavioral and psychological

manifestation.

These are the impossibility to resist the desire to practice the behavior, greater tolerance of it, withdrawal syndrome, and loss of interest in other activities, secrecy, guilt, and interpersonal confrontation (Blanchet & Fecteau, 2014). Regardless of whether the addiction is due to substances or behaviors the processes involved are incredibly similar, compulsion, impaired control, and negative consequences.

The addictive behavior is maintained and developed under the influence of social and environmental factors. The risk is increased in individuals exposed to childhood trauma, chronic stress, peer pressure or socioeconomic disadvantage. Addiction prone individuals also are as a result of genetic predisposition and neurobiological vulnerability (Zou et al., 2017). Hence, addiction can be well comprehended within a biopsychosocial construct that takes into cognizance biological, psychological, and environmental factors.

LITERATURE REVIEW

The long term psychological effects of childhood trauma and the connection of such issues with development of addictive diseases in future have been confirmed by a vast amount of literature. Researchers suggest that almost every child undergoes at least one

traumatic experience during their development though a significant portion remains to be affected by them long after until adulthood (Heinzelmann and Gill, 2013). Jirek (2011) also emphasizes another critical feature of the early trauma that is common to doctor in adulthood as anxiety, depression, emotional dysregulation, and maladaptive coping mechanisms. Addictive behavior, substance abuse as well as behavioral addictions are one of the most common maladaptive outcomes. Khalily (2011) within the Pakistani context defines traumatic experience-induced emotional dysregulation as a dominant factor towards the expanding problem of addictive behavior in the country. In spite of this, the distinct lack of literature on regional research on the specific interaction of childhood trauma with family functioning on top of its contribution to addiction stands out. Since Pakistani family systems have cultural, structural and social peculiarities, this relationship should be investigated thoroughly. Inadequate family functioning, which is characterized by intense family conflicts, poor family cohesion, uneven parental discipline, and lack of emotional availability in all family members has been discovered to not only compound the psychological consequences of childhood trauma but also as a contributing

factor towards addictive behaviors (Felitti et al., 1998). Families with inadequate emotional support, free communication, and healthy boundaries are unable to create a buffering environment to external stressors or, in the case of trauma. In addition, family dysfunction can not only raise direct risks of becoming addicted but also can be a mediating variable when it comes to the direct effect of trauma on such behaviors. According to Lilly and London (2015), emotional regulation and trust may be seriously undermined by interpersonal trauma, in particular, rendering individuals more susceptible to temporarily escaping in behaviors and substances contributing to addictions. A trauma that is entrenched into the family has the effect of making it difficult to recover and increases the risk.

RATIONALE OF THE STUDY

Trauma in childhood is a commonly encountered problem, with trauma researchers estimating that up to 90% of children may have at least one exposure to a traumatic event during their lifetime which shows long-term detrimental effects (Heinzelmann & Gill, 2013; Jirek, 2011). When it comes to the case of Pakistan, childhood trauma as a contributing element to emotional instability has been reported to be a key that led to high prevalence

rates of addictive behavior among the population (Khalily, 2011).

The psychological consequence that childhood trauma might have on the perceptibility of the person is long-lasting, resulting in susceptibility to problems with addiction, including substance abuse, compulsive behavior, and self-harm. Unhealthy family relationships, or a difficult family background, including conflict, instability, neglect or absence of emotional support, will add to the effects of trauma and considerably increase the probability of addiction. On this basis, the relationship between childhood trauma and the addictive behavior with the mediation of the family functioning is also analyzed in the present study.

This research could contribute to better intervention and prevention measures of adults who have a history of addiction in early lives by determining critical causes involved in this relationship. This research endeavors to examine the role of early traumatic experiences and the dysfunctional family environment in relation to addictive behaviour and the role of family functioning as a risk factor as well as protective cushioning factor. This complicated relationship has to be understood in order to create more specific, trauma based strategies of

psychological

healing, rehabilitation, and the long term mental well-being.

HYPOTHESES OF THE STUDY

- There is likely to be a relationship between family functioning, childhood trauma and addictive behaviors.
- Family functioning, childhood trauma is likely to be predictor of addictive behaviors.
- Family functioning is likely to mediate relationship between childhood trauma and addictive behaviors.

METHODOLOGY

The current research used a correlational research design to assess the correlation between childhood trauma and family functioning and addictive behaviors among adults. Participants were recruited by a purposive sampling non-probability technique. The sample was composed of 200 adults, both male and female, aged 18 years to 55 years. The sample was acquired through the rehabilitation centers in the city of Lahore, Pakistan; both the government and the private ones. Men as well as women could take part in the study. Those who have significant background of serious psychological illness and people who were married were not included in the study to ensure the attention is focused on the target

population and to limit the confounding variables.

DEMOGRAPHICS

TABLE 1: DEMOGRAPHIC INFORMATION OF STUDY PARTICIPANTS (N = 200)

Demographic Variables	<i>F</i>	%	<i>M(SD)</i>
Age in years			1.63(.86)
18-25	110	55.0%	
26-35	71	35.5%	
36-45	3	1.5%	
46-55	16	8.0%	
Gender			1.38(.48)
Male	125	62.5%	
Female	75	37.5%	
Education			1.63(.89)
Matric	111	54.5%	
Intermediate	68	35.0%	
Bachelors	18	9.0%	
PhDs	3	1.5%	
Family System			1.64(.48)
Nuclear	74	37.0%	
Joint	126	63.0%	
Socio Economic Status			1.93(.64)
Lower Class	49	24.5%	
Middle Class	117	58.5%	
high Class	34	17.0%	

Note. *F*= Frequency, % = Percentage, *M* =Mean, *SD* = Standard Deviation.

MEASURING INSTRUMENTS

Demographic Sheet .A demographic information sheet was also employed to gather bare backgrounds or demography of the

participants which would also be relevant to the study variables. The questionnaire contained questions regarding age, gender, level of education, siblings, birth position,

family structure, marital status and socio-economic status.

Childhood Trauma Questionnaire-Short Form (CTQ-SF) designed by Bernstein and Fink (1998) was utilized to measure retrospective childhood abuse and neglect. The CTQ-SF encompasses 28 questions and has 5 subscales which include Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect and Physical Neglect. The items are calculated on a 5-point Likert scale of never (1) to very often (5). The results are the scores acquired on the subscales (5-25), and a larger number indicates a greater vulnerability to childhood trauma. There has been good internal consistency with a Cronbachs alpha of .79 to .81.

Functioning Style Scale (FFSS) that was developed by Deal, Trivette and Dunst (1988) that measured the perceptions of strength as well as coping procedures and functioning of the family was used. It has 26 items on a 5 level Likert scale of 1 (not at all like my family) to 5 (almost always like my family). The FFSS targets five dimensions of family. There has been a very high degree of reliability on the scale and a Cronbachs alpha of .92.

Addictive Behavior Questionnaire (ABQ) (Christo et al., 2003) was employed to measure various possible addictive behaviors. This scale

has 10 behaviours

namely overeating, gambling, sexual activity, internet use, workaholism, and poor relationship behaviours. The first item will first ask a yes/ no question whether it is present or not and then follow up with a 5-point likert scale with scores of 0 (none at all) to 4 (extremely) to measure the severity or frequency of the behavior. The ABQ has been proved reliable as its Cronbachs alpha has been found out to be 0.91.

PROCEDURE

Data collection commenced after the approval of the research by the institutional research ethics committee. Permissions from the original authors of the measurement scales was taken through email before data collection. A sample of 200 adults was taken using both the private and the public rehabilitation centers in Lahore. Responses were gathered through self-administered surveys, which were given in hardcopy as well as in the form of online Google Forms to have easy access. The researcher described the aim, procedure and purpose of the research to the subjects before collecting their data. The study was purely voluntary and all individuals signed an informed consent before being included in the study. The questionnaire was completed in about 10 to 15 minutes. The participants were

assured of confidentiality, privacy and the right to withdraw at any time without any repercussions. At the end of the process, the participants were thanked, and feedback was

RESULTS

RELIABILITY ANALYSIS

TABLE 2: PSYCHOMETRIC PROPERTIES OF THE STUDY QUESTIONNAIRES (N = 200)

Questionnaires	<i>k</i>	<i>M</i>	<i>SD</i>	<i>Range</i>		α
				Potential	Actual	
FFSS	28	99.58	14.14	28-140	60-124	.86
CTQ	26	92.58	13.30	26-130	66-133	.85
ABQ	30	101.6	15.08	30-150	71-144	.88

Note. *k* = no. of item, α = Cronbach Alpha, CTQ = Childhood Trauma Questionnaire, FFSS = Family Functioning Style Scale, ABQ = Addictive Behavior Questionnaire.

The Family Functioning Style Scale proves to exhibit good internal consistency with Cronbach alpha of 0.86. In the same manner, Childhood Trauma Questionnaire is also highly reliable having a Cronbachs alpha of 0.85. Addictive Behavior Questionnaire has an excellent internal consistency with the Cronbach alpha 0.88.

CORRELATION ANALYSIS

TABLE 3: PEARSON PRODUCT MOVEMENT ANALYSIS BETWEEN STUDY VARIABLES (N = 200)

Variables	1	2	3
1 Family Functioning	-	.95***	.99***
2 Childhood Trauma		-	.95***
3 Addictive Behaviors			-

Note. * $p < .05$, ** $p < .01$, *** $P < .001$.

The results indicates that childhood trauma, as well as addictive behaviors, was significantly and positively associated with family functioning ($r = .95$, $p < .001$); addictive behaviors ($r = .99$, $p < .001$). Moreover, childhood trauma was also related positively and significantly with addictive behaviors ($r = .95$, $p < .001$). These results show a positive

association that is significant between all three variables.

HIERARCHAL REGRESSION

TABLE 4: LINEAR REGRESSION ANALYSIS FOR THE PREDICTION OF ADDICTIVE BEHAVIORS (N = 200)

Variables	Addictive Behaviors				95% CI		
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>R</i> ²	<i>LL</i>	<i>UL</i>
Constant	3.21	.90		3.56	.98	1.43	5.09
Family Functioning	1.09	.03	.96***	33.80		1.03	1.15
Childhood Trauma	.03	.03	.03	.1.03		-.28	.09
ΔR^2	.98						
<i>F</i>	703.43						
<i>p</i>	.000						

Note. CI=Confidence Interval, β = Standardized Coefficient Beta, SE = Standard Error.

The impact of family functioning and childhood trauma on the addictive behaviors was analyzed through multiple linear regression analysis. The general regression equation was found to be statistically significant, $F(2, 197) = 703.43$, $p < .001$, with 98.0 % variance in addictive behaviors explained ($R^2 = .98$). Family functions turned to be a strong predictor of addictive behaviors ($\beta = .96^{***}$, p

$< .001$) but childhood trauma did not significantly show any strong correlation of influence in addictive behaviors. These findings imply that the family functioning is a significant predictor of addictive behaviors whereas the direct effect of childhood trauma is not significant predictor of the addictive behaviors, after controlling for family functioning.

MEDIATION ANALYSIS

TABLE 5: DIRECT & INDIRECT MEDIATION EFFECT OF FAMILY FUNCTIONING BETWEEN CHILDHOOD TRAUMA AND ADDICTIVE BEHAVIORS (N = 200)

Variables	Model 1	Model 2	Model 3	95% CI
Constant	3.02			[-.86, 6.91]
CT \rightarrow Family Functioning	.89***			[-.86, .93]

Constant		3.21***	[1.43, 4.99]
CT → Addictive Behaviors		.03	[-.02, .09]
FF → Addictive Behaviors		1.09***	[1.02, 1.15]
Constant		6.52**	[1.92, 11.13]
CT → Addictive Behaviors		1.01***	[-.96, 1.06]
R ²	.01	.37	.02
F	2.21	60.29***	4.87*

Note. CI = Confidence interval, LL = Lower limit, UL = Upper limit, FF = Family Functioning, CT = Childhood Trauma.

A mediation analysis was used to determine the role that family functioning plays in mediating the effects of childhood trauma to addictive behaviors. Model 1 showed that childhood trauma was significant in predicting family functioning ($\beta = .89$, $p < .001$), that is, individuals who had more childhood trauma had lower family functioning. In Model 2, the results indicated that family functioning was a statistically significant predictor of addictive behaviors ($\beta = 1.09$, $p < .001$), but childhood trauma was not ($\beta = .03$, $p > .05$). However, in Model 3, childhood trauma was a key predictor of addictive tendencies when family functioning was held constant ($\beta = 1.01$, $p < .001$). This implies that these findings provide partial mediation, since the influence of childhood trauma on the addictive behaviours is mediated by the family functioning. As such family functioning

becomes an important mediator factor in childhood trauma-addictive behavior pathway.

DISCUSSION

Childhood trauma alone indicated a highly significant relationship with addictive behaviours in adulthood, and function of family was significantly related to both childhood trauma and addictive behaviours. These findings correspond to the findings of earlier studies, such as Hu et al. (2022), in which the study of adolescents showed that poor family functioning and mental symptoms, including anxiety and depression, were associated significantly with childhood trauma and family dynamics related to the system. Their results proved that dysfunctional families may be as the results of trauma and an agent of trauma and shape addictive behaviors. The positive prediction of poor family functioning in relation to teenage addiction was also reported by Jan et al. (2023), the relationship is

also strengthened by additional anxiety and depressive effects serving as mediators. Furthermore, Gori et al. (2025) examined not only the correlations among the sub dimensions of childhood trauma and love addiction but also found that the emotional and physical abuse were positively correlated with the levels of addiction, and these relationships were mediated by some dysfunctional family patterns (enmeshment, rigidity, and chaos). The findings of the present study is in accord with findings of the past studies.

Family functioning was a strong predictor of addictive behaviors, but the childhood trauma was not a strong predictor of addictive behaviors when they were modeled together. With these findings, it can be concluded that family functioning is more directly involved in the determination of addictive behaviors than childhood trauma. The results are consistent with other studies like Tafa and Baiocco (2009) who reported that parent and adolescent measures of the characteristics of the family system in their study predicted patterns of adolescent addictive behavior significantly and the measures assessing the family cohesive measures and adolescent addictive tendency measures. In the same way, Chen et al. (2020) described that the dysfunctional family

environment was a

reason behind emotional problems among young adolescents who, in turn, developed a higher level of vulnerability to the development of Internet addiction. Their chain-mediated path analysis rate the family dysfunction factor as a nice predictor of addictive behaviors in adolescents. Furthermore, Marzilli et al. (2020) suggested that the indirect pathways of poor family functioning affecting the risk of addiction comprise emotional distress, including sadness and anxiety.

The effects of childhood trauma was mediated by family functioning to a considerable degree. In particular, childhood trauma did not predict addictive behaviors in a direct manner, but when family functioning was added in the model, childhood trauma emerged as a powerful predictor reflecting the idea that the effect of childhood trauma on addictive tendencies is manifested mostly through family functioning quality. These results are consistent with the previous studies. A recent research by Du et al. (2024) on childhood trauma and family functioning in depression and bipolar disorder established that family functioning played significant roles in determining long-term responses of participant who had been subjected to early childhood

trauma. The authors discovered that the family role of the family could intervene between childhood trauma and mental health, and this case can be seen in the current study regarding addiction. Similarly, Fan (2022) determined the connection between family functioning with psychological distress and concluded at the end that family functioning had a direct positive effect and worked as the mediator type between social support and Internet addiction. This is a reason why the present study has an idea that family functioning is the main element that defines the behavioral and mental implications of early adversity. Overall, the findings indicate the necessity of emphasizing the use of family functioning as a clinical and prevention intervention to minimize the long-term effects of childhood traumas on addictive behaviors.

CONCLUSION

The current study attempted to examine the association between childhood trauma, family functioning, and adult addictive behaviors, especially between the family functioning as the mediating variable. Based on correlation research design and the non-probability samples, the results showed that childhood trauma, family functioning, and addictive behaviors were significantly linked to one another in a positive manner. Notably, the

findings illustrated

that apart from having direct effects on addictive behaviors, family functioning mediated the connection between childhood trauma and addictive behaviors. These results emphasize the importance of the family systems as far as the development of and possible intervention of addiction-related problems that are based on early traumatic events. All in all, the research provides beneficial knowledge in the domain of mental health and explains the need to acknowledge the aspect of family functioning in clinical practice and future research.

IMPLICATIONS OF THE STUDY

The results of the research have significant practical considerations to professionals in the field of mental health who deal with individuals who have experienced childhood trauma. This knowledge may be utilized by clinicians by designing specific clinical interventions to correct certain parenting behaviors and improve parent-child relationships. Additionally, the findings indicate the need to focus on preventive strategies to mitigate on the prevalence of childhood trauma. The identification of parenting styles that carry greater risk will enable the at-risk families to receive help under communal initiatives and parenting training

programs in making the home environment more nurturing and supportive. The other study also notes a need to conduct additional research, especially longitudinal studies and cross-cultural studies, to better understand the relation of parenting practices to childhood trauma and also improve the success of intervention and prevention measures.

LIMITATIONS AND SUGGESTIONS

There were some limitations to this research. The study sample was also quite small (N = 200), which possibly restricts the reliability and generalizability of the research results. Furthermore, only one facility (a rehabilitation center in Lahore) was used to collect data, and it may be challenging to generalize the findings to other populations because of the limited geographic area. Finally, the cross-sectional design also restricts casual inference; to provide more accurate information concerning the interactions between childhood trauma and family functioning and behaviors linked to addictions, a longitudinal study is likely to be more appropriate in the future.

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