



JOURNAL OF SOCIAL SCIENCES DEVELOPMENT

www.jssd.org.pk



editor@jssd.org.pk


EXAMINING THE PATHWAY FROM EARLY MALADAPTIVE SCHEMAS TOWARDS THE DEVELOPMENT OF ANTISOCIAL BEHAVIOR

Shahid Hussain¹, Mehwish Mursaleen² & Farhan Kamrani³

¹Lecturer, South City Health-Care Education Hub, Karachi, Sindh, Pakistan

²Assistant Professor, Department of Psychology, University of Karachi, Sindh, Pakistan

³Assistant Professor, Department of Psychology, University of Karachi, Sindh, Pakistan

KEYWORDS	ABSTRACT
Early Maladaptive Schemas, Antisocial Behavior, Personality Traits	The Antisocial behavior (ASB) is one of the most serious, problematic and challenging concerns for parents, teachers, and law enforcement institutions because people with this behavior have the tendency to get involved in different minor and major crimes, and their behavior is disruptive or society. The aim of current research was to investigate the association between early maladaptive schemas (EMS) and development of ASB in adult offenders. A total 100 male prison inmates aged between 18 to 30 years were purposively recruited. The ASB and EMS were measured using antisocial behavior scale (short form) and young schema questionnaire (short form). Both scales were administered on offenders involved in the minor offenses after taking their consent. The Pearson's product moment correlation and regression analysis indicated a significant positive association between EMS & ASB. The results provide significant outcomes in reaching desired conclusions and making decisions. Considering the study findings, a comprehensive framework may be formed to create awareness among the parents, teachers, as well as law enforcement personals regarding the increased ASB linked with their higher level of EMS.
ARTICLE HISTORY	 2025 Journal of Social Sciences Development
Date of Submission: 21-08-2025	
Date of Acceptance: 25-09-2025	
Date of Publication: 27-09-2025	
Corresponding Author	Farhan Kamrani
Email:	farhankamrani@uok.edu.pk
DOI	https://doi.org/10.53664/JSSD/04-03-2025-09-100-109

INTRODUCTION

Antisocial behavior (ASB) is mostly defined as behavior that interrupts the fundamental rights of others. In adults, criminal behaviors like physical assault or stealing, but it also includes other more insidious behaviors like manipulating others for private gain, duplicity, or lying, and are commonly related to ASB (Zafar, Malik, Tariq, Umar, Saleemi & Khadija, 2024). These ASBs include standards necessary to complete the diagnosis of antisocial personality disorder, that is specifically identified

by indifference to the victim in any criminal (APA, 2000). Delinquency is the main feature of ASB in the adolescents. Chronic ASB in adolescence and antisocial personality disorder in adulthood are serious societal problems that have financial & personal implications. Such behavior has remained challenge to parents, teachers, community members & enforcement institutions (Marengo, Klibert, Rohling, Warren & Smalley, 2019). Many researchers have been engaged to explain underlying causes of such disruptive behavior in individuals. Moreover, many have emphasized the behavior through numerous areas from physiological to cognitive, and early parenting styles (Mursaleen & Munaf, 2016; 2020).

Others have identified that problematic behavior could be result of self-regulation and emotional instability (Mursaleen, Khan, Sohail, Batool, Khan & Saeed, 2024; Jabeen, Khan & Mursaleen, 2024). One convincing explanation of those divergent outcomes is early exposure to environment propagating aggression and disruptive behaviors (Mursaleen, Kamrani, & Ramzan, 2024). In fact, research suggested that many indicators of ASB result from successive transactional developments that an infant experiences within the social settings (Lahey, Waldman, & McBurnett, 1999; Tariq, Khalid, Mursaleen, Fernandes, Mukhtar, Salam, Khattak, Asif & Ashraf, 2023; Mursaleen et al., 2024). A study by Frick and White (2008) considered the symptom of some ASBs. This research investigated whether children who don't display guilt or empathy and who engage in the reactive versus proactive aggression are more likely to display ASB as adolescents. The results from this study suggest that for some children this assumption was true (Frick, Cornell, Barry, Bodin & Dane, 2003). The concept of "schemas" has been widely researched specially in connection with several psychological disorders and considered the base of some personality disorders (Young, Klosko, & Weishaar, 2003).

Schemas are considered the cause of many psychopathologies in adulthood (Hawke & Provencher, 2012). In this connection, the early maladaptive schemas (EMS) are pervasive, widespread and self-injurious patterns that start at young age and are repeated throughout individual's life. In keeping with definition, EMS include cognitions, emotions, memories and other interpersonal relationships. Also, they include how someone conceptualizes himself and makes relationships with others. These EMS vary within scale of activation frequency and learning intensity that influences information processing and increasing aggressive responses which has been verified in different circumstances (Sullivan, 2016). Considering literature review and theories, it may be assumed that the first EMS can contribute directly or indirectly towards development of personality disorders and antisocial outcomes (aggression, conduct problems, psychopathic traits, antisocial personality disorder) and other maladaptive behaviors in individuals. The aim of this study is to analyze the link between EMS and development of ASB in adult offenders detained in Karachi Central Prison. It was hypothesized that there would be a significant positive relationship between EMS and development of the ASB in adult offenders.

LITERATURE REVIEW

The literature presents the definitions and relevant research about key terms and concepts behind this research in order to examine the research issues in comprehensive manner and extracting new

information about the linkages between early maladaptive schemas and development of antisocial diverse behaviors.

Schemas

The word schema has Greek origin which means “plan” but in the psychology its meaning is slightly different. In the lexicon of psychology, a schema is considered as the blueprint, a scaffold and a representation that defines any object, a series of happenings, or an idea, but also the feelings, and essentially anything that can be experienced (Buschkuehl, 2025). In this regard, the schemas have certain features,

- ✓ They are comprised of units and information about the relationship between those units
- ✓ These units do not contain much detail
- ✓ Schemas are developed by experience
- ✓ Schemas change constantly (Buschkuehl, 2025).

Early Maladaptive Schemas (EMS)

The early maladaptive schemas are a comprehensive, general theme encompassing, cognitions, emotions, memories and sensations concerning oneself and relations with others developed during adolescence or childhood extended during a person's lifetime and nonfunctional to a considerable level (Young, Klosko & Weishaar, 2003). A total of 18 EMS that are grouped in 5 domains. The 1st domain is “disconnection and rejection” and this domain has a total 5 early maladaptive schemas that may include, 1. Abandonment, 2. Mistrust/abuse, 3. Emotional deprivation, 4. Deceitfulness/shame, 5. Social isolation. The 2nd domain is “Impaired autonomy and performance” and it has 4 early maladaptive schemas that may include, 6. Dependence/incompetence, 7. Vulnerability to harm/illness, 8. Enmeshment/undeveloped self, 9. Failure. The 3rd domain is “impaired limit” and it has 2 EMS that are, 10. Entitlement/grandiosity, 11. Insufficient self-control/self-discipline. The 4th domain is “other directedness” which has 3 EMS that are, 12. Subjugation, 13. Self-sacrifice, 14. recognition seeking.

Similarly, the 5th domain is titled Overindulgence and inhibition, and it has 4 EMS that are, 15. Negativity/pessimism, 16. Emotional inhibition, 17. Unrelenting standards, 18. Punitiveness (Young, Klosko & Weishaar, 2003). Moreover, schemas are cognitive arrangements that tell how a person interprets, screen, encode, and react to stimuli around them. Thus, they can be either healthy or unhealthy and people frequently have schemas that encircle many areas of their lives (Young et al. 2003; Beck, 1967). Theoretically, EMS develop during infancy, particularly within the presence of traumatic or toxic experiences frequently relating the individual's family or primary caretakers (Young, 1994). The studies suggest that EMS are steady across several years (Riso, Froman, Raouf, Gable, Maddux, Turini & Cherry, 2006) continued during the course of the life, are highly resilient to change & habitually produce high levels of behavioral patterns that are self-defeating, negative affect, and has a negative impact on one's self-expression, autonomy and basic needs for connection (Young et al., 2003).

Antisocial Behavior (ASB)

Antisocial behavior is against society and is in violation of the rules that are set for good social conduct. This concept is widely discussed in the various fields of study like psychology, sociology,

criminology, and law. Some (Metropolitan Police UK, 2025) categorize it in 3 categories depending on the following:

1. Personal antisocial behavior: it is directed towards any specific individual or group
2. Nuisance antisocial behavior: including trouble, suffering for the whole community
3. Environmental antisocial behavior: wider environments like buildings or public spaces are affected.

According to Dishion and Patterson (2006) ASB in adults and youths share a collective precursor of an early disruptive and aggressive behavior in childhood. Also, if the person has conduct disorder (CD) before the age of 15 he or she can develop antisocial personality disorder. For a set of people, CD is start of an obstinate pattern of ASB. For others, these behaviors desist or continue at subclinical levels. It is relevant to note there that only about quarter of kids with CD are later mostly diagnosed with antisocial personality disorder (APA, 2000). The varied nature of these disorders in context of risk factors, age of onset, symptomatology and relevancy indicates that there is also more than one pathway to later extensive problems related to ASB (Willoughby et al., 2001; Moffitt, 2003; Dodge & Pettit, 2003)

RESEARCH METHODOLOGY

This cross-sectional study was conducted on a sample of purposefully selected 100 male inmates from the Karachi Central Prison, Karachi, Sindh, Pakistan. A sizeable part of sample was involved in theft / robbery and drug related offenses, and others were involved in illegal weapon possession, rape, and counterfeit. The volunteers were recruited from jail ward in-charge, they were subjected to exclusionary criteria as follows: age more than 30, involved in major serious crimes (psychopaths), murder, homicide, arson, and terrorism. Age range of participants was 17 to 30 years (M_{age}=23.23 years, SD=4.12)

Table 1 Demographics of Sample

Characteristics		M(Sd)	f (%)
Age (years) (18-30)		23.23(4.12)	
Reason for detention	Drugs selling /Addiction		38 (38%)
	Illegal weapon possession		12 (12%)
	Thief / Robbery		48 (48%)
	Rape		02 (2%)
Family Structure	Joint		76 (76%)
	Nuclear		26 (26%)
Educational	Intermediate		21 (21%)
	Matric		20 (20%)
	Class 8		31 (31%)
	Class 6		09 (9%)
	Class 5		06 (6%)
	Class 4		04 (4%)

Class 3	02 (2%)
Uneducated	24 (24%)

Note. N=100, M=Mean; SD= Standard Deviation; f=Frequency; %=Percentage

Measures of Study

The following measures were utilized in present study like demographic data sheet, it inquired demographic variables such as age, level of education, family structure, period of detention and reason of detention.

Young Schema Questionnaire short form (SQ-SF young, 1998)

The 75-item tool developed by [Young et al \(1998\)](#) is the short form of EMS Questionnaire (SQ-SF). It is used to assess the 15 EMS that are, Mistrust/Abuse, Abandonment/ Instability, Defect/ Shame, Vulnerability to Illness, Harm, Social Isolation/Alienation, Dependence/Incompetence, Emotional deprivation, Enmeshment/Immature Self, Failure, Eligibility/Grandiose, Undeveloped/ Caught, Self-discipline, Insufficient Self-Control/ Acting out, Obedience, Unrelenting Standards/Hyper criticalness, Emotional Inhibition. In this linking, 6-point scale from “completely false about me” to “completely true about me” is used to rate the items. Similarly, the strong reliability and validity are reported in the numerous studies ([Schmidt et al, 1995](#); [Baranoff et al., 2007](#); [Hoffart et al., 2005](#); [Stopa et al., 2001](#)).

Subtypes of Antisocial Behavior (STAB) (Burt & Donnellan, 2009)

This tool is the shorter version, and it comprises of 32 items with 5-point Likert scale. This scale measures three types of ASB (social aggression, physical aggression and rule breaking). This scale's Cronbach's alpha coefficients range from 0.86 for social aggression, 0.82 and rule breaking 0.84. Furthermore, it is a useful instrument for the research purpose of studying the origins as well as correlations of the different forms of antisocial behavior in different situations and contexts ([Burt & Donnellan, 2009](#)).

Procedure of Study

The study was conducted in Karachi Central Prison. First approval for data collection was sought from the Department of Psychology, University of Karachi, and the jail authorities then the inmates were approached purposefully from Karachi Central Prison in morning time i.e., 08 to 3 pm. The questionnaires along with demographic sheet including (age, family structure, education, reason for detention, period of detention, nature of offense) and consent form was provided to the sample. They were informed about the research, its purpose, and explained that the research has nothing to do with their legal justice process, i.e., by cooperating they will not be given any reward in terms of their sentence and parole eligibility or early trial date, or early release from the prison ever, they have the right to withdraw their consents any time by leaving form unfilled, and for that they will not be punished.

In the end they were given assurance of confidentiality that their personal information and study results will only be used for research purposes. After explaining details of study and answering the questions asked by participants maladaptive schema questionnaire and antisocial behavior scale

were administered. The participants took 30-40 minutes to complete questionnaires. After that the participants were thanked. Thus, the responses collected were analyzed for results with the help of SPSS version 25.

Ethical Considerations

The research guidelines and ethical principles of APA were followed throughout all the steps of this study. Similarly, the consent and authorization were taken from the concerning authorities and individuals. In this connection, the consent forms were provided for the participants and thus, all the participants were assured about the anonymity of data in study and their right to withdraw from study anytime.

RESULTS OF STUDY

Table 2 Correlation between EMS and ASB (N=100)

	1.	M	SD
1. EMS	--	307.18	44.56
2. ASB	0.397*	99.10	36.23

*. Correlation is significant at the 0.01 level (2-tailed)

Table 2 presents the correlation between early maladaptive schemas (EMS) and antisocial behavior (ASB) shows a significant positive correlation amid two variables, indicating that increase in ASB increases EMS.

Table 3 Regression analysis of EMS and ASB (Note. N=100)

ANOVA						
Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	52.256	15	3.484	6.807	.000b
	Residual	42.990	84	.512		
	Total	95.246	99			

a. Dependent Variable: ASB, b. Predictor: EMS

Table 3 presents the results of a regression analysis with ASB as the dependent variable and EMS. The regression model was found to be significant ($F(15,84) = 6.807, p < .001$) indicating that predictor variable explained a significant variance in ASB. Regression model accounted for a total of 52.256 units of the variance in ASB while the remaining variance of 42.990 units was not accounted for by the predictor variables. The total variance in ASB was 95.246 units. The mean square of regression model was 3.484, indicating that, on average, each predictor variable accounted for 3.484 units of variance in antisocial behavior. In conclusion, results suggest that predictor variable is significantly related to ASB.

DISCUSSION

In this research the connection between early maladaptive schemas (EMS) and development of antisocial behavior (ASB) in adult offenders was investigated. In line with expectations, it was found

that there is a significant positive correlation between the variables. Also, the regression analysis further strengthens this finding and suggests that there is a strong link and predictability between the said variables (see table no. 2 and 3). The results of the study are in consonance with the research of Dodge, Bates, and Petit, (1990), which shows that rejection by peers in early age is expounded to aggressive behavior in later life, even when early aggressive behavior is taken under consideration, and it is well defined that these styles of peer relations are associated with higher maladjustment and delinquency (Rubin, Bukowski, & Parker, 1998; Deater-Deckard, 2001). Pihler and Dishion (2007) suggest that being peer of deviant or delinquent people as a child or adolescent increases tendency and occurrence of similar behavior in any child or adolescent. Also, hypothesis proposes that schemas are linked to behavioral patterns or psychopathologies (Dozois & Beck, 2008; Alford & Beck, 1997).

Anxiety, as an example, corresponds to thoughts of threat and danger to an individual's wellbeing. On other hand, depressed people have automatic negative thoughts that emphasize on individual's failure, deprivation and loss. Step in with Beck's notion of content-specificity, the hypothesis that insufficient self-control, lack of trust, and entitlement are exclusively linked to aggressiveness as a trait (Young et al., 2003; Sperry, 2006). There is a lot of research that has authenticated the efficacy of the cognitive and behavioral approaches in treating various disorders (Butler et al., 2006). The Schema therapy was given by Young et al. (2003) has combined a variety of therapeutic methods like object relations and cognitive therapy etc. to measure incidence of EMSs, test their legitimacy and modify these core beliefs. This also helps clients to device coping responses that always serve to preserve given early maladaptive schema, and to interrupt these behavioral patterns. Clearly, it is serious challenge to intervene with those that have an aggressive nature especially once they have reached adulthood.

CONCLUSION

The aim of this research was to find out the link between EMS and development of ASB in the adult offenders. It was concluded that increase in ASB was linked to EMS. However, much research is needed to study the exact causes of ASB. The result of present research has certain limitations such as the sample of this research was taken only from one prison facility from single city of Pakistan thus results may prove fruitful if larger sample would be selected from multiple prison facilities. However, Future directions for empirical work can be assessed specific domains of the maladaptive schemas which contribute to development of such disruptive behavior. Moreover, considering the results of the study, the comprehensive framework may be formed to create awareness in parents, teachers, and law enforcement personnel regarding the impact of these schemas on the person and society as well. However, the effective parenting and a positive socialization may help to tackle this menace effectively.

REFERENCES

- Alford, B. A. A., & Beck, A. T. T. (1997). The integrative power of cognitive therapy. Guilford Press.
- APA (2000). Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR). Washington DC: American Psychiatric Association. <https://doi.org/10.1176/appi.books.9780890423349>.

- Baranoff, J., Oei, T. P., Cho, S. H., & Kwon, S. M. (2007). Factor structure and internal consistency of the Young Schema Questionnaire (Short Form) in Korean and Australian samples. *Journal of Affective Disorders*, 93 (1-3), 133-140.
- Beck, A. T. (1967). *The Depression*. Harper and Row: New York.
- Burt, S. A., & Donnellan, M. B. (2009). Development and validation of the Subtypes of Antisocial Behavior Questionnaire. *Aggressive behavior*, 35 (5), 376-398.
- Buschkuehl, M. (2025). What are Schemas? MIND Education. <https://www.mindeducation.org/resources/what-are-schemas/>.
- Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: a review of meta-analyses. *Clinical psychology review*, 26 (1), 17-31.
- Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42 (5), 565-579.
- Dishion, T. J., & Patterson, G. R. (2006). *The development and ecology of antisocial behavior in children and adolescents*. John Wiley & Sons.
- Dodge, K. A., & Pettit, G. S. (2003). A Biopsychosocial Model of the Development of Chronic Conduct Problems in Adolescence. *Developmental Psychology*, 39, 349-371. <https://doi.org/10.1037/0012-1649.39.2.349>.
- Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science*, 250 (4988), 1678-1683. <https://doi.org/10.1126/science.2270481>.
- Dozois, D. J., & Beck, A. T. (2008). The cognitive schemas, beliefs and assumptions. *Risk factors in depression*, 119-143.
- Frick, P. & White, S. (2008). Research review: The importance of callous-unemotional traits for the development of aggressive & antisocial behavior. *Journal of Child Psychology & Psychiatry*, 49, 359-375. [10.1111/j.1469-7610.2007.01862.x](https://doi.org/10.1111/j.1469-7610.2007.01862.x).
- Frick, P. J., Cornell, A. H., Barry, C. T., Bodin, S. D., & Dane, H. E. (2003). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of abnormal child psychology*, 31 (4), 457-470.
- Hawke, L. D., & Provencher, M. D. (2012). The Canadian French Young Schema Questionnaire: Confirmatory factor analysis and validation in clinical and nonclinical samples. *Canadian Journal of Behavioural Science*, 44 (1), 40-49.
- Hoffart, A., Sexton, H., Hedley, L. M., Wang, C. E., Holthe, H., Haugum, J. A., Nordahl, H. M., Hovland, O. J., & Holte, A. (2005). The Structure of Maladaptive Schemas: A Confirmatory Factor Analysis and a Psychometric Evaluation of Factor-Derived Scales. *Cognitive Therapy and Research*, 29 (6), 627-644.
- Jabeen, S., Khan, Z. H., & Mursaleen, M. (2024). Exploring the Relationship Between Emotional Intelligence and Resilience: A Clinical Psychological Perspective. *Bulletin of Business and Economics*, 13 (1), 372-377. DOI: [10.61506/01.00215](https://doi.org/10.61506/01.00215).
- Lahey, B. B., Waldman, I. D., & McBurnett, K. (1999). Annotation: The development of antisocial behavior: An integrative causal model. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40 (5), 669-682.

- Marengo, S. M., Klibert, J., Rohling, J., Warren, J., & Smalley, K. B. (2019). The relationship of early maladaptive schemas and anticipated risky behaviors in college students. *Journal of Adult Development*, 26 (3), 190-200.
- Metropolitan Police UK. (2025). What is antisocial behaviour? <https://www.met.police.uk>. <https://www.met.police.uk/advice/advice-and-information/asb/asb/antisocial-behaviour/what-is-antisocial-behaviour/>.
- Moffitt, T. (2003). Life-course-persistent and adolescence-limited antisocial behavior: A 10-year research review and a research agenda. In B. Lahey, T. Moffitt, & A. Caspi (Eds.), *Causes of conduct disorder and juvenile delinquency* (pp. 49-75). New York: The Guilford Press.
- Mursaleen, M., & Munaf, S. (2016). Associations of Intellectual Ability with Emotional Intelligence, Academic Achievement, and Aggression of Adolescents. *Journal of Basic and Applied Sciences*, 12, 344-350. DOI: [10.6000/1927-5129.2016.1253](https://doi.org/10.6000/1927-5129.2016.1253).
- Mursaleen, M., & Munaf, S. (2020). Differences of Emotional Intelligence, Aggression, and Academic Achievement among the Students with Different Levels of Intellectual Ability. *Bahria Journal of Professional Psychology*, 19 (2), 48-60.
- Mursaleen, M., Asmatullah, Hafeez, S., & Khanzada, S. (2024). The Psychosocial Impact of Military Deployment on Families: A Clinical Overview. *Kurdish Studies*, 12 (5), 20-28.
- Mursaleen, M., Kamrani, F., & Ramzan, A. M. (2024). The Nexus Between Aggression & Academic Achievement Among Students: A Gender-Based Correlational Study. *Gomal University Journal of Research*, 40(4), 467-476.
- Mursaleen, M., Khan, B., Sohail, S., Batool, Z., Khan, A., & Saeed, H. (2024). The Psychological Benefits of Mindfulness Meditation on Emotional Regulation. *Journal of Policy Research*, 10(3), 306-311. DOI: [10.61506/02.00347](https://doi.org/10.61506/02.00347).
- Piehler, T. F., & Dishion, T. J. (2007). Interpersonal dynamics within adolescent friendships: Dyadic mutuality, deviant talk, and patterns of antisocial behavior. *Child development*, 78 (5), 1611-1624.
- Riso, L. P., Froman, S. E., Raouf, M., Gable, P., Maddux, R. E., Turini-#, N., & Cherry, M. (2006). The long-term stability of early maladaptive schemas. *Cognitive Therapy and Research*, 30 (4), 515-529.
- Rubin, K. H., Bukowski, W., & Parker, J. G. (1998). Peer interactions, relationships, and groups. In W. Damon & N. Eisenberg (Ed.), *Handbook of child psychology: Social, emotional, personality development* (5th ed., pp. 619-700). John Wiley & Sons, Inc.
- Schmidt, B., Joiner, T. E., Young, J. E., & Telch, M. J. (1995). The Schema-Questionnaire: Investigation of psychometric properties and hierarchical structure of a measure of maladaptive schemas. *Cognitive Therapy and Research*, 19, 295-321.
- Sperry, L. (2006). Counseling Strategies in Chronic Illness. In L. Sperry, *Psychological treatment of chronic illness: The biopsychosocial therapy approach* (187-200). American Psychological Association. <https://doi.org/10.1037/11378-009>.
- Stopa, L., Thorne, P., Waters, A., & Preston, J. J. (2001) Are the short and long forms of the Young Schema Questionnaire comparable & how well does each version predict psychopathology scores? *Journal of Cognitive Psychotherapy*, 15, 253-272.

- Sullivan, W. P. (2016). Leadership in Social Work: Where Are We? *Journal of Social Work Education*, 52, S51-S61. <https://doi.org/10.1080/10437797.2016.1174644>.
- Tariq, H., Khalid, U., Mursaleen, M., Fernandes, N. A., Mukhtar, I., Salam, A., Khattak, L. U., Asif, M., & Ashraf, S. R. (2023). The relationship between traumatic life events and resilience in dealing with the depression. *Journal of Population Therapeutics & Clinical Pharmacology*, 30(17), 729-736.
- Willoughby, M., Kupersmidt, J., & Bryant, D. (2001). Overt and covert dimensions of antisocial behavior in the early childhood. *Journal of abnormal child psychology*, 29 (3), 177-187. <https://doi.org/10.1023/a:1010377329840>.
- Young, J. E. (1994). *Cognitive therapy for personality disorders: A schema-focused approach* (Rev. ed.). Professional Resource Press/Professional Resource Exchange.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *The Schema therapy: A practitioner's guide*. Guilford Press.
- Zafar, J., Malik, S., Tariq, S., Umar, S., Saleemi, A., & Khadija, K. (2024). Impact of early maladaptive schemas on behavioral problems of young adults. Mediating Role of Cognitive Flexibility. *Journal of Population Therapeutics and Clinical Pharmacology*, 31 (3), 200-213.