

Role of Adverse Childhood Experiences in Aggression among Young Adults with Parenting Style as a ModeratorJaveria Zammurad^{a,*}, Tanvir Akhtar^a^a Department of Psychology, National University of Modern Languages (NUML) Rawalpindi, Campus, Pakistan.**Abstract**

The study was designed to investigate the relationship between Adverse Childhood Experiences (ACEs) and aggression among young adults of Rawalpindi and Islamabad, with a particular focus on parenting style as a moderator. A sample of 177 young adults was recruited using snowball sampling technique. The instruments used in the study were the Buss-Perry Aggression Questionnaire (BPAQ), the Parenting Authority Questionnaire (PAQ - Short version), and the Adverse Childhood Experiences Questionnaire (ACEQ). The findings indicated that men reported greater instances of physical aggression compared to women. Individuals who had experienced ACEs showed significantly higher levels of aggression. Furthermore, a positive relationship was found between both permissive and authoritarian parenting styles and aggression in young adults. Notably, permissive parenting style was found to moderate the relationship between ACEs and aggression. This indicates that permissive parenting exacerbates the effects of ACEs on aggression. The findings highlight the critical role of parenting in shaping the behavioral outcomes of individuals with adverse childhood histories. Present research will be helpful for the policy makers to recommend, and for the parents to adopt an appropriate parenting style for nurturing children into psychologically healthy adults.

Keywords: Adverse Childhood, Aggression, Parenting Style**Correspondence:** Dr. Tanvir Akhtar

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1. Introduction

Childhood experiences, particularly Adverse Childhood Experiences (ACEs), have a lasting impact on personalities and behavioral outcomes throughout life. ACEs encompass distressing incidents such as maltreatment, neglect, and dysfunctional household circumstances, which can lead to mental health issues, aggression, and chronic physical ailments in adulthood. Aggression can manifest in various ways, including physical, verbal, and relational aggression, and can be influenced by parenting styles. Research has shown a positive association between childhood trauma and aggression, and certain parenting styles, such as authoritarian and permissive parenting, can contribute to the development of aggressive behavior in children. The purpose of this research is to explore the role of parenting styles in mediating the correlation between ACEs and aggressive behavior in young adults.

There are various other theoretical frameworks such as intergenerational transmission model (Sforza & Feldman 1973), trauma coping model (Ford et al., 2006), ecological model (Polat 2017) that suggest the relationship between childhood maltreatment or adversities with aggression. The role of parenting style when studying aggressive behaviors is of significant importance as well. Social learning theory (Bandura 1977) states that behavior is learnt through observation, imitation and modelling. For aggressive behaviors SLT suggests that children learn aggressive behavior by copying the models in their surroundings such as parents, friends or family members.

Adverse childhood experiences are associated with several negative outcomes in adulthood such as poor mental health, stress, anxiety and in severe cases often it is linked to post-traumatic stress disorder (Ross et al., 2020). It not only affects mental health, but physical health is also affected in the form of chronic diseases, including diabetes (Anda et al., 2010; Ross et al., 2020). In addition to physical and mental health problems ACEs have also been linked with poor self-regulation skills (Weissman et al., 2019) and poor relational skills (Khodabandeh et al., 2018). It also tends to affect coping skills (McLafferty et al., 2019). These difficulties lead to emotional dysregulation increasing the chances of indulging in aggressive behavioral responses (Brodbeck et al., 2022; Robertson et al., 2012; Sullivan et al., 2010).

The emergence of aggressive behavior is a known outcome linked to a history of maltreatment, which in turn predicts unfavorable future consequences (Cullerton-Sen et al., 2008; Moreno-Manso et al., 2016; Richey, Brown, Fite, & Bortolato, 2016). Specifically, childhood maltreatment is associated with subsequent displays of physical and verbal aggression, as well as heightened levels of anger and hostility. Numerous researches propose that children who are exposed to verbal aggression within their household (a form of emotional abuse) suffer detrimental effects on their development of emotion regulation and interpersonal relationships (Allen, 2011; McCann & Pearlman, 1990).

Rationale

Aggression is a complex human behavior influenced by several factors, and this study aims to identify the role of Adverse Childhood Experiences (ACEs) and parenting styles in the emergence of aggression among adults. Childhood experiences have a lasting impact on personality, and literature suggests a strong association between ACEs and aggression. Parenting styles also play a significant role, and this study investigates how ACEs and parenting styles intersect to impact aggression. When ACEs and harsh parenting coincide, the

impact on aggression can be significant, while nurturing parenting can mitigate the consequences of adversity (Altaf et al, 2021). Research suggests that ACEs correspond to worsening physical and mental health outcomes in adulthood, and studying aggression in adults can provide more objective leads and outcomes due to their advanced ability to describe feelings and perceptions. Investigating aggression in adults can inform interventions to prevent or modify negative behavior outcomes and enhance positive parenting and social support.

2. Methods

2.1 Research Design

The study was cross-sectional in nature with a correlational design to investigate the relationship between Adverse Childhood Experiences, Parenting Styles and Aggression in young adults of Rawalpindi and Islamabad.

2.2 Sampling Technique

Snowball sampling technique was used for the selection of participants.

2.3 Population and Sample

The population of the study was young adults of Rawalpindi and Islamabad, from which a sample size of 177 adults who have experienced any Adverse Childhood Experiences was drawn.

2.4 Instruments

The following instruments were used in the study: Adverse Childhood Experiences Questionnaire (ACE-Q) ACE-Q (Felitti et al. 1998) is a scale to measure adverse childhood experiences. It is valid for a population above 18 years of age. The scale consists of 10 items which are close ended and are to be responded with a yes or no option. The three different areas of abuse which the scale assesses include emotional, sexual and physical abuse, physical and emotional neglect and abuse associated with a dysfunctional household. The scale has an acceptable reliability (0.71). Buss & Perry Aggression Questionnaire (BPAQ) Arnold H. Buss and Mark Perry's Aggression Questionnaire is a 5-point Likert scale consisting of 29 items with item 7 and 18 as reversely scored. The scale is constructed to measure aggression and is based on four factors or sub-scales i.e. Physical Aggression (item 1-9), Verbal Aggression (item 10-14), Anger (item 15-21) and Hostility (item 22-29). The scale has a good reliability (0.85). Parental Authority Questionnaire (Short Version) Parental Authority Questionnaire by John P. Buri (1989) is based on Diana Baumrind's theory of parenting styles (1967). The scale is designed to assess Permissiveness, Authoritarianism and Authoritativeness as parenting styles. The short version of this scale was constructed by Hussain Alkharusi (2011). It is a 5-point Likert scale consisting of 20 items. Item 1-7 are for authoritative parenting style, item 8-14 are for authoritarian parenting style and item 15-20 are for permissive parenting style. The scale has an acceptable reliability (0.63).

2.5 Procedure

Snowball sampling techniques were inculcated to collect data from 177 participants. The participant's written informed consent was sought before responding to the items proposed in the scales. The gathered data was analyzed by means of statistical techniques and results were generated.

3. Results

Table 1 indicates mean differences on aggression for participants with Adverse Childhood Experiences and those without any Adverse Childhood Experiences. The participants with ACEs scored more on

aggression ($M=62.65$, $SD=14.17$) as compared to those without ACEs ($M=55.26$, $SD=14.16$). This result stands in favor of hypothesis-II ($p=.001$), thus, hypothesis II supported.

Table 2 shows the Pearson correlation between Authoritarian and Permissive Parenting Style and Aggression. The result indicates that there is a positive relationship between the three variables.

Table 1

Mean differences of the participants ($N=177$)

Variables	Participants with ACEs	Participants without ACEs	95%CI			
Aggression	M (SD)	M (SD)	p	t	UL	LL
	62.65 (14.17)	55.26 (14.16)	0.001	3.34	11.75	3.02

Table 2

Correlation of the study variables ($N=177$)

Variables	M	SD	1	2	3
1. Authoritarian Parenting Style	15.77	5.81	-	-	0.41**
2. Permissive Parenting Style	12.71	3.46	-	-	0.19**
3. Aggression	59.94	14.57	0.41**	0.19**	-

Note: BPAQ=Buss and Perry Aggression Questionnaire for Aggression; N = Total Number of Participants; M =mean; SD =Standard Deviation. (Significance level; * $p<.05$, ** $p<.01$ and *** $p<.001$).

Table 3

Regression analysis of the study ($N=177$)

Variables			Model 1				Model 2	
	B	β	SE	ρ	B	β	SE	ρ
Aggression (constant)	59.93		0.94	.000	60.03		0.97	.000
ACEs	-4.51	-0.31	0.97	.000	-4.56	-0.31	0.99	.000
Authoritarian Parenting Style	4.93	0.34	0.97	.000	4.93	0.33	0.98	.000
Authoritarian Parenting Style (Moderator)					0.38	0.02	0.92	0.67
R^2				0.26				0.26
ΔR^2								0.00

Note: BPAQ=Buss and Perry Aggression Questionnaire for Aggression; ACEQ= Adverse Childhood Experiences Questionnaire for ACEs; β =Beta; SE=Standard Error. (Significance level; * $p<.05$, ** $p<.01$ and *** $p<.001$).

Table 4

Moderation analysis ($N=177$)

Variables			Model 1				Model 2	
	B	β	SE	ρ	B	β	SE	ρ
Aggression (constant)	59.93		1.00	.000	59.68		0.99	0.000
ACEs	-5.45	-0.37	1.01	.000	-4.8	-0.33	1.03	0.000
Permissive Parenting Style	2.18	0.15	1.01	.05	1.61	0.11	1.02	0.11
Permissive Parenting Style (Moderator)					-2.28	-0.17	0.96	0.01
R^2				0.18				0.20
ΔR^2								0.02

Note: BPAQ=Buss and Perry Aggression Questionnaire for Aggression; ACEQ= Adverse Childhood Experiences Questionnaire for ACEs; β =Beta; SE=Standard Error. (Significance level; * $p<.05$, ** $p<.01$ and *** $p<.001$).

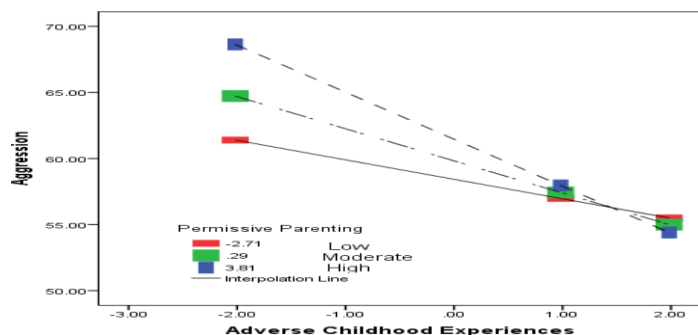
The ΔR^2 of .02 revealed 2% change in variance of model 1 and model 2 ($\Delta F=3.93$, $p=0.01$). This result stands in favor of Hypothesis-VII, thus the hypothesis VII is supported.

4. Discussion

This study investigated the relationship between Adverse Childhood Experiences (ACEs) and aggression among young adults, and how parenting styles moderate this relationship. There has been surplus literature evidence in favor of the notion that the Adverse Childhood Experiences lead to Aggression, but the findings of the current study contradict this claim. The results of this study (conducted on young adults of Rawalpindi and Islamabad) highlight a negative relation between Adverse Childhood Experiences and Aggression as well as a 15.3% variance in Aggression, for ACEs. There can be several reasons for this finding. Pakistani culture, being a collectivistic one provides considerable social support (family, friends and peers) which can help overcome the internalization of such adversities. Healthy coping mechanisms and religious beliefs can also detract from being aggressive or violent in context to any such instances faced by the individual himself. Individual's resilience also acts as a protective factor and overcomes the risk of becoming a perpetrator of violence (Dambacher et al., 2021). Moreover, the study was conducted by means of self-report measures and there can be chances of response bias for participants with Adverse Childhood Experiences to underreport aggression to sustain the social desirability bias.

Figure 1

Moderation of Permissive Parenting Style between ACEs and Aggression



The lines representing low, medium, and high levels of permissive parenting cross those of ACEs and Aggression, indicating an interaction between ACE and permissive parenting. Aggression remains relatively stable with ACEs when permissive parenting is high.

The comparison between individuals having adult childhood experiences and those without any adversities was made and the individuals with ACEs reported greater instances of aggression as compared to those without ACEs. These results are in favor of the reviewed literature (Hoeve et al. 2015; Cullerton-Sen et al., 2008; Moreno-Manso et al., 2016; Richey, Brown, Fite, & Bortolato, 2016). Comparison of aggression on the basis of gender resulted in men reporting greater instances of physical aggression as compared to women. This can be due to gender bias against men as being more aggressive. It is an established belief across all cultures and is supported by various significant studies (Bjorkqvist 2017). Among various parenting styles authoritarian and permissive parenting are reported to be positively correlated with aggression (Hesari &

Hejazi, 2011; Rodriguez, 2010; Marion et al., 2009) the results (reflected in Table 7 and 8) are in favor of this hypothesis.

It was hypothesized that authoritarian parenting moderates the relationship between adverse childhood experiences and aggression, but the hypothesis has not been supported by results. The literature review reflects that authoritarian parenting style leads to aggression (Rodriguez, 2010; Marion et al., 2009). As the results of the present study are not in line with the literature reviewed, the inconsistency of results can be attributed to the cultural and traditional upbringing practices for rearing children in our country. Child rearing practices in Pakistan are mostly based on the notion that parents are the sole authorities and exercising full control over the lives of their children. It is an established notion in our society that children have to be checked and admonished on all their activities by their parents. Parents in Pakistan even use corporal punishment to harness their children to grow up as suitable individuals of the society. It is also propagated through media that corporal punishment is even permissible to teachers by the parents. The premise behind this is that they want to rear their children in accordance with the laid propositions of Islam, the religion followed by majority of the population.

As the children have been brought up in the above stated medium they do not necessarily find this as an abnormal practice and do not internalize the adversities of authoritarian parenting. Moreover, certain personality traits such as resilience and high self-esteem also tends to moderate the effect of authoritarian parenting on the personalities of children thus, mitigating the chances of developing aggression (Ozdemir et al., 2017).

On the other hand, the study findings are in favor of permissive parenting style moderating the relationship between adverse childhood experiences and aggression (Table 10, Fig. 2). The somewhat neglectful premise behind permissive parenting style aggravates the negative consequences brought about ACEs thus, leading to aggressive behavior (Elizabeth et al., 2012; Nik Rosila et al. 2010).

Limitations

Collectivistic culture may influence the reporting as well as relationship of ACEs and aggression and the results cannot be generalized to an individualistic culture. Moreover, there is a limitation to using Adverse Childhood Experiences Questionnaire (Felitti et al. 1998) those having experienced any other type of adversity apart from these categories. Self-reported inventories which have been used as a source of collecting data for the study are subject to biases as the participant may hold some of the information or may not respond appropriately to the questions asked.

Future Direction

The study can be replicated as a longitudinal one, examining the long-term effects of ACEs on various other personality aspects and the way individual maintains his/her interpersonal relationships. Several other parenting styles (other than authoritative, authoritarian and permissive) such as uninvolved, free-range, affectionless control can be implied as moderators to investigate the strength of relationship between ACEs and aggression.

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References

- A.D. de Haan, P. Prinzie & M. Dekovic. (2010). How and Why Children Change in Aggression and Delinquency from Childhood to Adolescence: Moderation of Overreactive Parenting by Child Personality. *Journal of Child Psychology and Psychiatry* 51(6), 725-733.
<https://doi.org/10.1111/j.1469-7610.2009.02192.x>
- Altaf, S., Hassan, B., Khattak, A. Z., & Iqbal, N. (2021). Relationship of parenting styles with decision-making and self-concept among adolescents. *Foundation University Journal of Psychology*, 5(2). DOI: <https://doi.org/10.33897/fujp.v5i2.318>
- Anda, R., Butchart, A., Felitti, V., & Brown, D. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 39(1), 93–98.
<https://doi.org/10.1016/j.amepre.2010.03.015>
- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, Ch., Perry, B. D., Dube, B.
- D., & Giles, W. H. (2006). The Enduring Effects of Abuse and Related Adverse Experiences in Childhood. *European Archives of Psychiatry and Clinical Neuroscience*, 256(3), 174-186.
<https://doi.org/10.1007/s00406-005-0624-4>
- Baumrind, D. (1968). Authoritarian vs. Authoritative Parental Control. *Adolescence*, 3, 255-272. Baumrind, D., & Black, A. E. (1967). Socialization Practices Associated with Dimensions of Competence in Preschool Boys and Girls. *Child Development*, 38(2), 291-327.
- Bokhari, N., Badar, N. M., Naseer, N. U., Waheed, N. A., & Safdar, N. F. (2015b). Adverse Childhood Experiences & Impulsivity in Late Adolescence & Young Adulthood of Students of University of the Punjab Lahore. *PJPPRP*, 6(1).
<https://doi.org/10.62663/pjpprp.v6i1.90>
- Brodbeck, J., Botschi, S., Vetsch, N., Berger, T., Schmidt, S., & Marmet, S. (2022). Investigating emotion regulation and social information processing as mechanisms linking adverse childhood experiences with psychosocial functioning in young Swiss adults: The FACE epidemiological accelerated cohort study. *BMC Psychology*, 10(1).
<https://doi.org/10.1186/s40359-022-00798-5>
- Burke, C., Ellis, J. D., Peltier, M. R., Roberts, W., Verplaetse, T. L., Phillips, S., Moore, K. E., Marotta, P. L., & McKee, S. A. (2022). Adverse childhood experiences and pathways to violent behavior for women and men. *Journal of Interpersonal Violence*, 38(3–4), 4034–4060.
<https://doi.org/10.1177/08862605221113012>
- Dambacher, C., Kreutz, J., Titze, L., Lutz, M., Franke, I., Streb, J., & Dudeck, M. (2021). Resilience as a Mediator between Adverse Childhood Experiences and Aggression Perpetration in Forensic Inpatients: An Exploratory Study. *Journal of Aggression Maltreatment & Trauma*, 31(7), 910–925.
<https://doi.org/10.1080/10926771.2021.2019155>
- Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F. & Giles, W.H..(2001). Childhood Abuse, Household Dysfunction, and the Risk of Attempted Suicide throughout the Life Span. *The Journal of the American Medical Association*, 286(24), 3089-3096.
<https://doi.org/10.1001/jama.286.24.3089>
- Elizabeth A. S., Karen, B., Robert J. M. and Liliana, J. L. (2000). Parenting Practices and Child Disruptive Behavior Problems in Early Elementary School. *Journal of Clinical Child Psychology* 29(1):17-29
https://doi.org/10.1207/S15374424jccp2901_3
- Elizabeth B. Hurlock (1998). *Developmental Psychology: A Lifespan Approach*. McGraw Hill Education Private Limited.
- Felitti, V. F., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M. & Edwards, V. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245–258.
[http://dx.doi.org/10.1016/S0749-3797\(98\)00017-8](http://dx.doi.org/10.1016/S0749-3797(98)00017-8)
- Ford, J. D., Chapman, J., Mack, J. M., & Pearson, G. (2006). Pathways from Traumatic Child Victimization to Delinquency: Implications for Juvenile and Permanency Court Proceedings and Decisions. *Juvenile and Family Court Journal*, 57(1), 13–26.
<https://doi.org/10.1111/j.1755-6988.2006.tb00111.x>
- Fox, B. H., Perez, N., Cass, E., Baglivio, M. T., & Epps, N. (2015). Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders. *Child Abuse & Neglect*, 46, 163–173.
<https://doi.org/10.1016/j.chiabu.2015.01.011>
- Hart, C. H., Nelson, D. A., Robinson, C., & McNeilly-Choque, M. K. (1998). Overt and Relational Aggression in Russian Nursery-School-age Children: Parenting Style and Marital Linkages. *Developmental Psychology*, 34(4), 687–697.
- Heim, C., & Nemeroff, C. B. (2001). The role of childhood trauma in the neurobiology of mood and anxiety disorders: preclinical and clinical studies. *Biological Psychiatry*, 49(12), 1023–1039.
[https://doi.org/10.1016/s0006-3223\(01\)01157-x](https://doi.org/10.1016/s0006-3223(01)01157-x)
- Hoeve, M., Colins, O. F., Mulder, E. A., Loeber, R., Stams, G. J. J. M., & Vermeiren, R. R. J. M. (2015). The association between childhood maltreatment, mental health problems, and aggression in justice-involved boys. *Aggressive Behavior*, 41(5), 488–501.
<https://doi.org/10.1002/ab.21586>
- Khan, N. A., & Shabbir, N. Z. (2019). Parenting Styles, Aggression and Alexithymia among Young Pakistani Adults. *PJPPRP*, 10(2).
<https://doi.org/10.62663/pjpprp.v10i2.61>
- Khodabandeh, F., Khalilzadeh, M., & Hemati, Z. (2018). The impact of adverse childhood experiences on adulthood aggression and self-esteem-a study on male forensic clients. *Novelty in Biomedicine*, 6(2), 85–91.
<https://doi.org/10.22037/nbm.v6i2.20695>
- McLafferty, M., Armour, C., Bunting, B., Ennis, E., Lapsley, C., Murray, E., & O'Neill, S. (2019). Coping, stress, and negative childhood experiences: The link to psychopathology, self-harm, and suicidal behavior. *Psychiatry Journal*, 8(3), 293–306.
<https://doi.org/10.1002/pchj.301>
- Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of adverse childhood experiences among university students. *Journal of American College Health*, 66(6), 531–538.
<https://doi.org/10.1080/07448481.2018.1462825>
- Narayan, A. J., Lieberman, A. F., & Masten, A. S. (2021). Intergenerational transmission and prevention of adverse childhood experiences (ACEs). *Clinical Psychology Review*, 85, 101997.
<https://doi.org/10.1016/j.cpr.2021.101997>
- Navarro, R., Rubio, E., Jimenez, S., & Villora, B. (2022). Associations between adverse childhood experiences within the family context and in-person and online dating violence in adulthood: A scoping review. *Behavioral Science*, 12(6), 162.
<https://doi.org/10.3390/bs12060162>
- Nik Rosila Nik Yaacob F & Huang Sin Siew (2010). Mother working status and physical aggressive behavior among children in Malaysia. *Procedia Social and Behavioral Sciences* 5, 1061–1066
- Novais, M., Henriques, T., Vidal-Alves, M., & Magalhaes, T. (2021). When problems only get

- bigger: The impact of adverse childhood experience on adult health. *Frontiers in Psychology*, 12.
<https://doi.org/10.3389/fpsyg.2021.693420>
- Raine, A. (2002). Biosocial studies of antisocial and violent behavior in children and adults: A review. *Journal of abnormal child psychology*, 30(4), 311-326.
- Roberton, T., Daffern, M., & Bucks, R. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior*, 17(1), 72-82.
<https://doi.org/10.1016/j.avb.2011.09.006>
- Rodriguez, K., McDonald, S., & Brown, S. (2021). Relationships among early adversity, positive human and animal interactions, and mental health in young adults. *Behavioral Science*, 11(12), 178.
<https://doi.org/10.3390/bs11120178>
- Ross, N., Gilbert, R., Torres, S., Dugas, K., Jefferies, P., McDonald, S., Savage, S., & Ungar, M. (2020). Adverse childhood experiences: Assessing the impact on physical and psychosocial health in adulthood and the mitigating role of resilience. *Child Abuse Neglect*, 103.
<https://doi.org/10.1016/j.chiabu.2020.104440>
- Sullivan, T., Helms, S., Kliewer, W., & Goodman, K. (2010). Associations between sadness and anger regulation coping, emotional expression, and physical and relational aggression among urban adolescents. *Social Development*, 19(1), 30-51. <https://doi.org/10.1111/j.1467-9507.2008.00531.x>
- Susannah M. Moore, Marilyn C. Welsh & Eric Peterson (2019). History of Childhood Maltreatment: Associations with Aggression and College Outcomes. *Journal of Aggression, Maltreatment & Trauma*
<https://doi.org/10.1080/10926771.2019.1637989>