

Childhood Neglect and Malevolent Creativity among Emerging Adults: Exacerbating role of Light Triad Traits

Kashaf Amreen¹, Afreen Komal² & Muhammad Faran³

¹Bahria School of Professional Psychology, Bahria University, Islamabad

²Ph.D. Bahria School of Professional Psychology, Bahria University, Islamabad

³Ph.D. Bahria School of Professional Psychology, Bahria University, Islamabad

Ph.D. Bahria School of Professional Technology, Islamabad, Pakistan

ARTICLE INFO

ABSTRACT

Article History:

Received: March 20, 2025

Revised: May 05, 2025

Accepted: May 10, 2025

Available Online: May 16, 2025

Keywords:

Childhood Neglect, Light Triad Traits, Malevolent Creativity, Emerging Adults.


Corresponding Author:

Kashaf Amreen

Email:

kashafamreen247@gmail.com

OPEN



ACCESS

Early life experiences, particularly childhood neglect, can significantly influence personality traits and creative expression in adulthood. The study aimed to examine the moderating role of light triad traits between childhood neglect, and malevolent creativity among emerging adults. Using a correlational design, data were collected from N=330 participants (n=155 men, n=175 women) aged 18–25 years (M = 20.63, SD = 1.88), recruited through purposive sampling from educational institutions in Rawalpindi, Islamabad, and Abbottabad. The Childhood Trauma Questionnaire (Bernstein et al., 2003), Light Triad Scale (Kaufman et al., 2019), and Malevolent Creativity Behavior Scale (Hao et al., 2016) were used for data collection. Pearson product moment correlation analysis revealed that childhood neglect negatively correlated with light triad traits and positively correlated with malevolent creativity, while light triad traits were negatively associated with malevolent creativity. Moderation analysis revealed that light triad traits significantly moderated the relationship between childhood neglect and malevolent creativity. These findings underscore the complex psychological mechanisms linking early adverse experiences to antisocial creative expression and highlight the protective role of light triad traits in mitigating these effects. The study offers valuable insights for clinical and developmental interventions, and lays the groundwork for future research.



Introduction

Emerging adulthood, spanning the late teenage years to the mid to late twenties represents a transitional phase between adolescence and early adulthood characterized by unique developmental milestones. This period is marked by challenges and opportunities as individuals navigate increasing independence, pursue education or career training, and maintain social ties

(Arnett et al., 2014). Neglect presents a considerable risk to children's development and is frequently linked to long-term adverse effects that persist into adulthood (Manly et al., 2013).

However, neglect is still a type of abuse that is not as well recognized or researched (Stoltenborgh et al., 2013). The inability of caregivers to fulfill the child's essential physical, medical, educational or emotional needs is known as childhood neglect. This encompasses the lack of sufficient food, housing, or supervision that are essential for the child's welfare (Dubowitz et al., 2022). Furthermore, we follow the common differentiation of neglect into physical and emotional neglect. The most typical kind of neglect is physical neglect which involves failing to fulfill a child's fundamental requirements, like proper housing, clothes, and medical attention, or leaving the child unattended in hazardous situations (Dubowitz et al., 2022). When a parent or other caregiver doesn't provide a child with the emotional support, compassion, attention, and nurturing that they need to thrive, it is known as emotional neglect (Glaser, 2011). The enduring effects of childhood neglect extend beyond immediate harm, influencing personality development and behavior patterns in adulthood.

Recent studies emphasize the protective role of positive personality traits, such as those within the light triad, which focuses on promoting benevolent interpersonal behavior (Kaufman et al., 2019). Over the past two decades, psychological research has predominantly focused on the "dark traits" of personality (Moshagen et al., 2018) and paying less attention to strengths and virtues (Paulhus & Williams, 2002; Gable & Haidt, 2005). One approach to addressing this gap is the light triad, a concept introduced by Kaufman et al. (2019) to highlight benevolent traits. The term light triad refers to a set of positive personality traits, including prosocial (Johnson, 2018), loving (Kaufman et al., 2019), caring (Gerymski & Krok, 2019), and benevolent (Lukić & Živanović, 2021) qualities. The light triad is a construct that includes positive personality traits such as humanism, faith in humanity, and kantianism. Humanism is concept that all people, regardless of their personality, are valuable and deserving of respect. Faith in humanity is the conviction that people are good by nature. The belief that people should be valued for their inherent potential rather than for their potential for use is known as kantianism (Kaufman et al., 2019).

Personality traits play a significant role in shaping creativity, influencing both its productive and malevolent expressions. Creativity is often viewed as having two contrasting sides. On one hand, it is recognized as the ability to generate novel ideas or products that are valuable and practical, contributing to problem-solving, social progress, and innovation (Runco & Jaeger, 2012). On the other hand, creativity can take a darker form, known as malevolent creativity, which is intentionally directed toward causing harm to others, society, or property (Cropley et al., 2014; Kapoor & Kaufman, 2022). The notion that creativity may have a dark side has been acknowledged since the time of Aristotle (Becker, 2014). The key distinguishing factor between these two forms of creativity is intent. Malevolent creativity involves the deliberate use of creative ideas to inflict harm, whereas negative creativity does not necessarily entail intentional harm (Cropley, 2010). Malevolent creativity is specifically defined as the intentional generation of novel yet harmful or unethical ideas (Wu et al., 2022).

The concept of malevolent creativity is often referred to as "dark creativity" (Kapoor & Kaufman, 2022). The term "dark creativity" was first introduced by McLaren (1993) and encompasses both the current capacity for harmful creative thinking and the inclination to engage in harmful creative actions (Hao et al., 2016). Two fundamental components of malevolent creativity are originality and harmful intent (Harris & Reiter-Palmon, 2015).

A theoretical framework for comprehending individual variations in creative behavior is provided by the interactionist model of creativity (Woodman & Schoenfeldt, 1990), which integrates

antecedent conditions (environmental factors), person variables (personal traits) and situation variables (behavior outcome). Antecedent conditions, such as early socialization and family position, have an impact on how a person develops their personality and cognitive style, which in turn help define their current circumstances and may inspire innovative action. The model can explain current study's conceptual framework that how childhood neglect (antecedent conditions/environmental factor) interacts with light triad traits (a personal factor) to predict malevolent creativity (the creative outcome).

Research shows that childhood maltreatment, especially neglect, is linked to the development of malevolent creativity. While positive family environment promote benevolent creativity, negative experiences like poor parental care and conflict foster distrustful and harmful behaviors (Csathó & Birkás, 2018; Jankowska & Karwowski, 2018). Neglect increases aggression, impairs social functioning (Logan-Greene & Jones, 2015), and leads to cognitive deficits that contribute to harmful creativity (Kavanaugh et al., 2017). Studies confirm that neglected individuals are more likely to lie, deceive, or harm others creatively (Infurna et al., 2016; Jia et al., 2020). However, empathy and social support can reduce these effects (Ceballos & Watt, 2023).

Landa-Blanco et al. (2024) found that benevolent childhood experiences promote adult flourishing, with traits like faith in humanity and humanism playing a mediating role. Light triad personality (LTP), linked to altruistic values, contrast with dark triad personality (DTP), which align with egoistic values and both influence pro-environmental behavior through value orientations (Ucar et al., 2023). While dark traits have been widely studied (Moshagen et al., 2018), less attention has been given to positive traits like light triad traits and their interaction with childhood neglect and malevolent creativity. To address this gap, the study incorporates recently proposed light triad traits (Kaufman et al., 2019) to examine whether these positive traits can reduce the impact of childhood neglect on malevolent creativity. It hypothesizes relationship between childhood neglect, light triad traits, malevolent creativity, and demographic variables with light triad traits likely moderate the relationship between childhood neglect and malevolent creativity among emerging adults.

Method

The present study was a quantitative research that utilized a correlational (cross-sectional) research design and employed a non-probability convenience sampling technique. The sample of study was consisted of N=330 emerging adults including males (n=155) and females (n=175) participants, aged between 18 and 25 years ($M=20.63$; $SD=1.88$). The sample was recruited from Islamabad, Rawalpindi and Abbottabad cities. The inclusion criteria was participants who were unmarried, who were living with both parents and who had lived in the same family system (either nuclear or joint) and had parents with the same employment status (either employed or unemployed) throughout their childhood and into adulthood. Exclusion criteria was individuals with physical impairment or mental health conditions that may affect their ability to comprehend and respond to the study measures accurately and those individuals whose parents had any physical or mental health impairments were excluded.

Measures

Demographic Sheet

A demographic sheet included questions about age, gender, participant's years of education and parents' education.

Short Form of Childhood Trauma Questionnaire (CTQ-SF)

The Short Form of Childhood Trauma Questionnaire (CTQ-SF), developed by Bernstein et al. (2003) was administered to assess childhood neglect among emerging adults. It is a self-report assessment and consisted of 28 items (25 clinical items and 3 validity items). It includes five subscales: physical abuse (PA), physical neglect (PN), emotional abuse (EA), emotional neglect (EN), and sexual abuse (SA). In this study, subscales of physical neglect (5 items, 2 items are reverse coded) and emotional neglect (5 items, all reverse coded items) were utilized with permission of author. Each item is scored on a five-point Likert type scale (1 = never true to 5 = very often true). Total neglect score were calculated, the total scores for childhood neglect range from 5 to 50. Higher scores reflect higher levels of childhood neglect. The CTQ-SF has good psychometric properties including internal consistency. The alpha reliability for emotional neglect is .91 and for physical neglect is .61.

Light Triad Scale (LTS)

Light Triad Scale (LTS) is a measurement tool created by Kaufman et al. (2019) was used as a measure of the light triad among emerging adults. It is self-report measure and has 12 items. The scale evaluates three factors of benevolent orientation towards others, namely, faith in humanity, humanism and kantianism each factor consist of 4 items. A 5-point Likert scale is used to score each item (1= strongly disagree, 5= strongly agree). The individual with higher scores is high on light triad traits. Light triad scale has good psychometric properties including internal consistency. The alpha reliability for three factors, namely, faith in humanity, humanism and kantianism are $\alpha = 0.82, 0.79, \text{ and } 0.72$. The alpha reliability for light triad scale is 0.84.

Malevolent Creativity Behavior Scale (MCBS)

The Malevolent Creativity Behavior Scale (MCBS), developed by Hao et al. (2016), was used to assess malevolent creative behavioral tendencies among emerging adults. This self-report measure consists of 13 items. It includes three dimensions (hurting people= 6 items, lying= 4 items, playing tricks=3 items). Each item is scored on a 5-point Likert scale (1 = never, 5 =always). Higher scores reflect higher frequency of malevolently creative behaviors. Malevolent creativity behavior scale has good psychometric properties including internal consistency. The alpha reliability for three dimensions, namely hurting people, lying and playing tricks are $\alpha = 0.80, 0.76 \text{ and } 0.61$. The alpha reliability for malevolent creativity behavior scale is 0.80.

Results

Statistical analyses were performed using IBM SPSS software version 26 on the collected data. For study variables, descriptive statistics and reliability coefficients were used. Present study employed Pearson Product Correlation analysis to examine correlations among demographic variables, childhood neglect (emotional and physical neglect), light triad traits (faith in humanity, humanism, kantianism) and malevolent creativity (hurting people, lying, playing tricks). Moderation analysis was conducted to examine light triad traits as a moderator in predicting malevolent creativity from childhood neglect using the *PROCESS* macro by Hayes, (2017).

Table 1 provides a summary of participants' demographic characteristics. Most participants were 20 years old on average ($M = 20.63, SD = 1.88$). There are 155 men (47%) and 175 women (53%). The participants had an average of 15.61 years of education ($SD = 1.49$). The average number of years of education for mothers was 9.23 ($SD = 4.04$), on average, fathers had 12.60 years of age ($SD = 3.99$).

Table 1: Descriptive Statistics of the Demographic Characteristics of the Sample (N = 330).

Variables	f (%)	M (SD)
Age (in years)		20.63 (1.88)
Gender		
Men	155 (47)	
Women	175 (53)	
Education (in years)		15.61 (1.49)
Mother's education (in years)		9.23 (4.04)
Father's education (in years)		12.60 (3.99)

Note. M=mean, SD=standard deviation, f=frequency, %=percentage.

Table 2 depicted the alpha reliability levels of scales and their subscales. The reliability analysis for childhood neglect indicated high internal consistency ($\alpha = .82$), with emotional neglect demonstrating strong reliability ($\alpha = .85$), while physical neglect showed acceptable reliability ($\alpha = .52$). The light triad traits scale exhibited good reliability ($\alpha = .81$), with its factors (faith in humanity, humanism, and Kantianism) ranging from .61 to .75. Malevolent creativity displayed excellent reliability ($\alpha = .87$), with its dimensions (hurting people, lying, and playing tricks) showing acceptable reliability, ranging from .64 to .75.

Table 2: Descriptive Statistics and Cronbach's Alpha for Childhood Neglect (Emotional Neglect and Physical Neglect), Light Triad Traits (Faith in Humanity, Humanism and Kantianism), and Malevolent Creativity (Hurting People, Lying, Playing Tricks) among Emerging Adults (N = 330).

Variables	k	M	SD	Range		α
				Potential	Actual	
Childhood neglect	10	22.38	8.14	10-50	10-47	.82
Emotional neglect	5	11.84	5.10	5-25	5-25	.85
Physical neglect	5	11.25	3.34	5-25	5-23	.71
Light triad traits	12	42.60	8.40	12-60	18-60	.81
Faith in humanity	4	13.69	3.47	4-20	4-20	.62
Humanism	4	13.91	3.37	4-20	4-20	.75
Kantianism	4	13.98	3.28	4-20	4-20	.61
Malevolent creativity	13	30.62	10.12	13-65	14-59	.87
Hurting people	6	13.62	4.99	6-30	6-27	.75
Lying	4	9.78	3.63	4-20	4-19	.74
Playing tricks	3	7.22	2.91	3-15	3-15	.64

Note. k = Number of items; M=Mean; SD= Standard Deviation; α = Cronbach's Alpha.

Table 3 highlights that childhood neglect and its subscales (emotional neglect and physical neglect) showed a significant negative correlation with light triad traits and its factors (faith in humanity, humanism and kantianism). Childhood neglect and its subscales (emotional neglect and physical neglect) exhibited a significant positive correlation with malevolent creativity and its dimensions (hurting people, lying, playing tricks), while emotional neglect showed a non-significant correlation with playing trick the dimension of malevolent creativity. Light triad traits and its factors (faith in humanity, humanism and kantianism) exhibited a significant negative correlation with malevolent creativity and its dimensions (hurting people, lying, playing tricks).

Table 3: Bivariate Correlation between Childhood neglect (Emotional Neglect, Physical Neglect), Light Triad Traits (Faith in Humanity, Humanism, Kantianism) and Malevolent Creativity (Hurting People, Lying, Playing Trick) among Emerging Adults (N=330).

Sr	Variables	1	2	3	4	5	6	7	8	9	10	11
1	Childhood neglect	-	.92***	.87***	-.44***	-.29***	-.42***	-.36***	.26***	.22***	.28***	.17***
2	Emotional neglect		-	.62***	-.41***	-.27***	-.38***	-.35***	.17***	.15***	.21***	.08
3	Physical neglect			-	-.38***	-.24***	-.38***	-.29***	.31***	.26***	.30***	.26***
4	Light triad traits				-	.81***	.83***	.80***	-.35***	-.35***	-.33***	-.20***
5	Faith in humanity					-	.51***	.46***	-.29***	-.32***	-.23***	-.16***
6	Humanism						-	.52***	-.36***	-.33***	-.38***	-.21***
7	Kantianism							-	-.20***	-.19***	-.19***	-.13*
8	Malevolent creativity								-	.93***	.87***	.81***
9	Hurting people									-	.70***	.64***
10	Lying										-	.57***
11	Playing trick											-

*p < .05; ** p < .01; ***p < .001.

Table 4 shows that age was found to be significantly negatively correlated with malevolent creativity and its dimensions (hurting people, lying, playing trick). Results further reveal that participant's years of education significantly negatively correlated with lying the dimension of malevolent creativity. Similarly participants' years of mother's education significantly negatively correlated with malevolent creativity and its dimensions (hurting people, lying, playing trick). Furthermore, years of father's education was found to be significantly negatively correlated with malevolent creativity and its dimensions (lying, playing trick).

Table 4: Bivariate Correlation between Demographic Variables (Age, Education, Parental Education) and Malevolent Creativity (Hurting People, Lying, Playing Trick) among Emerging Adults (N=330).

Sr	Variables	1	2	3	4	5	6	7	8
1	Age	-	.61***	.04	.10	-.13**	-.11*	-.11*	-.12*
2	Years of education		-	-.00	.09	-.10	-.05	-.13**	-.10
3	Years of mother's education			-	.42***	-.20***	-.18***	-.18***	-.16***
4	Years of father's education				-	-.15*	-.08	-.14**	-.13*
5	Malevolent creativity					-	.93***	.87***	.81***
6	Hurting people						-	.70***	.64***
7	Lying							-	.57***
8	Playing trick								-

*p < .05; ** p < .01; ***p < .001.

Table 5: Moderating Role of Light Triad Traits in Predicting Malevolent Creativity from Childhood Neglect among Emerging Adults (N = 330).

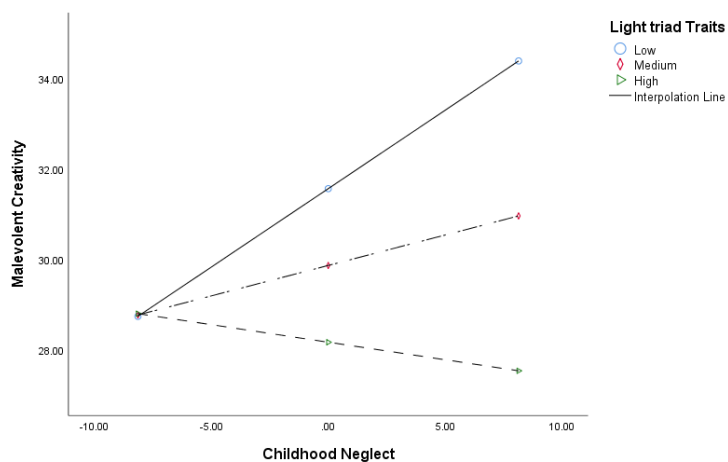
Variables	B	SE	95% CI	
			LL	UL
Constant	35.68***	1.62	32.47	38.87
Childhood Neglect	.13*	.06	-.00	.26
Light Triad Traits	-.20**	.07	-.34	-.06
Childhood Neglect × Light Triad Traits	-.02***	.00	-.03	-.01
Low light triad traits	.34***	.07	.19	.49
Medium light triad traits	.13*	.06	-.00	.26
High light triad traits	-.07	.08	-.25	.09
Covariate				
Gender	-3.80***	1.00	-5.76	-1.82
R^2	.22			
F	22.73***			

Note. B=Coefficient value; SE= Standard Error; F= Model Fit; R^2 =Coefficient of variation.

* $p < .05$; ** $p < .01$; *** $p < .001$.

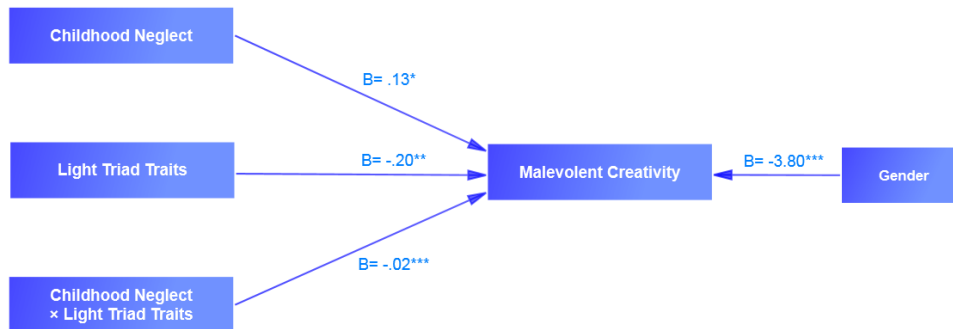
Table 5 indicates that light triad traits significantly moderated the relationship between childhood neglect and malevolent creativity. The analysis demonstrated that childhood neglect was a significant positive predictor of malevolent creativity ($B = .13$, $p < .05$), while light triad traits had a significant negative association with malevolent creativity ($B = -.20$, $p < .01$). The interaction between childhood neglect and light triad traits was significant ($B = -.02$, $p < .001$), indicating that light triad traits moderated the relationship between childhood neglect and malevolent creativity. The conditional effects revealed that at low levels of light triad traits, childhood neglect was positively associated with malevolent creativity ($B = .34$, $p < .001$). This effect remained significant but weaker at moderate levels of light triad traits ($B = .13$, $p < .05$) and became non-significant at high levels ($B = -.07$, $p > .05$). Additionally, gender was found to be significant negative predictors of malevolent creativity ($B = -3.80$, $p < .001$). The overall model explained 22% of the variance in malevolent creativity ($R^2 = 0.22$) and was statistically significant ($F = 22.73$, $p < .001$).

Figure 1: Slope Plot Showing Interaction Effect of Light Triad Traits and Childhood Neglect on Malevolent Creativity among Emerging Adults (N = 330).



The interaction plot showed that the relationship between childhood neglect and malevolent creativity was significant at low and medium levels of light triad traits, with a stronger positive association observed at low level. However, at high levels of light triad traits, the relationship between childhood neglect and malevolent creativity was non-significant.

Figure 2: Pathway Model Showing Interaction Effect of Light Triad Traits and Childhood Neglect on Malevolent Creativity among Emerging Adults (N = 330).



Discussion

The core objective of the current study was to examine the relationship between childhood neglect on malevolent creativity in emerging adults. Additionally, the study aimed to investigate the moderating effect of light triad traits on malevolent creativity.

It was hypothesized that there is likely to be a relationship between childhood neglect, light triad traits, and malevolent creativity among emerging adults. The findings of current study indicate childhood neglect and its subscales (emotional neglect and physical neglect) significantly negatively correlated with light triad traits and its factors (faith in humanity, humanism and kantianism). These results align with those from earlier research, indicated that childhood trauma leads to negative impacts on temperament and personality traits. The extent and nature of these effects are influenced by the specific characteristics of the adversity experienced (Clark, 2005). Emotional neglect is associated with higher neuroticism and lower extraversion, conscientiousness, and agreeableness, while physical neglect correlates with increased neuroticism and reduced agreeableness (Hengartner et al., 2015). The light triad shows a strong association with agreeableness but only a weak link to conscientiousness, extraversion, openness, and neuroticism (Gerymski & Krok, 2019; Kaufman et al., 2019).

The findings also indicated that childhood neglect and its subscales (emotional neglect and physical neglect) exhibited a significant positive correlation with malevolent creativity and its dimensions (hurting people, lying, playing tricks), whereas emotional neglect showed a non-significant correlation with playing trick the dimension of malevolent creativity. The findings are consistent with existing literature which indicates a positive correlation between individual malevolent creativity and childhood neglect (Jia et al., 2020; Li et al., 2022). The previous research also indicates that individuals who experience neglect of their physical and emotional needs may develop harmful behaviors, such as deceiving others, lying, or playing tricks in their interactions with others (Bedu-Addo et al., 2023).

The results showed that light triad traits and its factors (faith in humanity, humanism and kantianism) exhibited a significant negative correlation with malevolent creativity and its dimensions (hurting people, lying, playing tricks). This aligns with previous research, which found that individuals scoring high on the light triad scale are less prone towards malevolent creative

behaviors, such as theft or lying even when faced with persistent hostility from supervisors (Malik et al., 2020). Another study found that the prosocial personality trait tends to negatively predict the tendency for unethical behavior (Anyaeibunam & Anazonwu, 2016).

It was hypothesized that there is likely to be a relationship between demographic variables and malevolent creativity and its dimensions (hurting people, lying, playing tricks). In present study age was found to be significantly negatively correlated with malevolent creativity and its dimensions (hurting people, lying, playing trick), suggesting that older individuals tend to engage less in malevolent creativity. This is in line with previous research which suggest that deviant behavior typically emerges in early adolescence (ages 12–14), increases in frequency during mid-adolescence (ages 14–17), and starts to decline as individuals reach late adolescence (ages 17 and beyond) (Kim & Bushway, 2018).

Findings of current study further showed that there is negative correlation between participant's years of education and lying the dimension of malevolent creativity. The study emphasized that individuals who are more engaged in education are likely to develop improved coping strategies, which can contribute to a decline in lying tendencies. This suggests that as students advance in their education, they may foster stronger ethical values and enhanced self-regulation, reducing their likelihood of dishonest behavior (Chiu et al., 2016).

Results of study further revealed that participants' years of mother's education negatively associated with malevolent creativity and its dimensions (hurting people, lying and playing trick), suggesting that individuals whose mothers are more educated are less prone to engage in these forms of malevolent creativity. Previous study indicated that parental education has a beneficial impact on children's outcomes even into adulthood. For example, adult offspring of parents with higher levels of education are less likely to smoke (Fagan et al., 2005) or experience serious depression (Park et al., 2013).

Furthermore results of study indicated a significant negative correlation between years of father's education and malevolent creativity (hurting people and playing trick). This suggests that individuals whose fathers have higher educational level are less likely to engage in these harmful or deceptive behaviors. These findings are in line with the literature, which suggests that educated fathers create a supportive environment, model ethical behavior, and promote positive conflict resolution, which may reduce malevolent creativity in children. Additionally, higher parental education is linked to better social skills in children (Blair et al., 2015).

It was hypothesize that light triad traits are likely to moderate the relationship between childhood neglect and malevolent creativity among emerging adults. Present study found that the light triad traits moderated the relationship between childhood neglect and malevolent creativity, this suggests that as childhood neglect increases, individuals with stronger light triad traits tend to exhibit a decrease in malevolent creativity. A prior study demonstrated that the light triad traits both decreased the association between psychological contract violation and malevolent creativity and reduced the impact of abusive supervision on malevolent creativity (Malik et al., 2020). These results indicate that individuals with strong light triad traits are less likely to use malevolent creativity to deliberately harm other people. Specifically, such individuals exhibit a heightened concern for the impact of their actions on others and strive to ensure their behavior is not perceived as harmful (Kaufman et al., 2019).

Conclusion

The present study examined the relationship between childhood neglect and malevolent creativity among emerging adults, with light triad traits as a moderator. Results showed that higher childhood neglect was linked to increased malevolent creativity, but this association was non-significant among those with strong light triad traits, suggesting a protective effect.

The present study provides an empirical basis for understanding how childhood neglect relates to malevolent creativity, moderated by light triad traits. The findings suggest the importance of culturally relevant interventions that promote positive traits to improve community well-being and social interactions in Pakistan. Study also highlight the need to strengthen child protection laws and policies and support welfare organizations in addressing parenting challenges to prevent neglect and its negative psychological and creative effects.

Limitations

The use of self-report measures to assess sensitive behaviors like malevolent creativity may have influenced how openly participants responded, even though anonymity was assured. It's also worth noting that other personality traits — such as impulsivity or aggression — were not considered in the current model, yet they may play a meaningful role in shaping malevolent behaviors. Including these factors in future research could offer a more complete understanding of the dynamics involved.

References

1. Anyaegbunam, M. C., & Anazonwu, C. O. (2016). Influence of prosocial personality trait on unethical behaviour among university staff. *African Psychologist: An International Journal of Psychology and Allied Profession*, 6(1). <https://link.springer.com/article/10.1007/s10551-016-3079-9>
2. Arnett, J. J. (2014). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199929382.001.0001>
3. Becker, G. (2014). A socio-historical overview of the creativity-pathology connection: from antiquity to contemporary times. In J.C. Kaufman (Ed.), *Creativity and Mental Illness* (pp. 3-24). Cambridge University Press. <https://doi.org/10.1108/LODJ-09-2019-0386>
4. Bedu-Addo, P. K. A., Mahama, I., Amoako, B. M., Amos, P. M., & Antwi, T. (2023). Neglectful parenting and personality traits as predictors of malevolent creativity among Ghanaian tertiary education students. *Creative Education*, 14(2), 232-244. <https://doi.org/10.4236/ce.2023.1420161>
5. Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., ... Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse Neglect*, 27(2), 169–190. [https://doi.org/10.1016/s0145-2134\(02\)00541-0](https://doi.org/10.1016/s0145-2134(02)00541-0)
6. Blair, B. L., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2015). Identifying developmental cascades among differentiated dimensions of social competence and emotion regulation. *Developmental psychology*, 51(8), 1062. <https://doi.org/10.1037/a0039472>.
7. Ceballos, N. A., & Watt, T. T. (2023). The Influence of Adverse Childhood Experiences on 103 Malevolent Creativity in Young Adulthood. *Behavioral Sciences*, 13(12), 961. <https://doi.org/10.3390/bs13120961>

8. Chiu, S. L., Hong, F. Y., & Chiu, S.-I. (2016). Undergraduates' day-to-day lying behaviors: Implications, targets, and psychological characteristics. *Social Behavior and Personality: An International Journal*, 44(8), 1329–1338. <https://doi.org/10.2224/sbp.2016.44.8.1329>
9. Clark, L. A. (2005). Temperament as a unifying bases for personality and psychopathology. *Journal of Abnormal Psychology*, 114, 505–521. <http://dx.doi.org/10.1037/0021-843X.114.4.505>
10. Cropley, D. H. (2010). The dark side of creativity: A differentiated model. In D. H. Cropley, J. Kaufman, A. J. Cropley, & M. A. Runco (Eds.), *The dark side of creativity* (pp. 360-373). Cambridge University Press. <https://doi.org/10.1108/LODJ-09-2019-0386>
11. Cropley, D. H., Kaufman, J. C., White, A. E., & Chiera, B. A. (2014). Layperson perceptions of malevolent creativity: The good, the bad, and the ambiguous. *Psychology of Aesthetics, Creativity, and the Arts*, 8(4), 400-412. <https://doi.org/10.1108/LODJ-09-2019-0386>
12. Csatho, A., & Birkas, B. (2018). Early-life stressors, personality development, and fast life strategies: An evolutionary perspective on malevolent personality features. *Frontiers in Psychology*, 9, 305. <https://doi.org/10.3389/fpsyg.2018.00305>
13. Dubowitz, H., Kobulsky, J. M., & Proctor, L. J. (2022). The nature of neglect and its consequences. In R. D. Krugman & J. E. Korbin (Eds.), *Handbook of child maltreatment* (2nd ed., Vol. 14, pp. 1–10). Springer, Cham. https://doi.org/10.1007/978-3-030-82479-2_2
14. Fagan, P., Brook, J. S., Rubenstone, E., & Zhang, C. (2005). Parental occupation, education, and smoking as predictors of offspring tobacco use in adulthood: a longitudinal study. *Addictive Behaviors*, 30(3), 517-529. <https://doi.org/10.1016/j.addbeh.2004.08.002>
15. Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103–110. <https://doi.org/10.1037/1089-2680.9.2.103>
16. Gerymski, L. R., & Krok, D. (2019). Psychometric properties and validation of the Polish adaptation of the Light Triad Scale. *Current Issues in Personality Psychology*, 7(4), 341-354. <https://doi.org/10.5114/cipp.2019.92960>
17. Glaser, D. (2011). How to deal with emotional abuse and neglect—Further development of a conceptual framework (FRAMEA). *Child Abuse & Neglect*, 35(10), 866-875. <https://doi.org/10.1016/j.chiabu.2011.08.002>
18. Hao, N., Tang, M., Yang, J., Wang, Q., & Runco, M. A. (2016). A new tool to measure malevolent creativity: The malevolent creativity behavior scale. *Frontiers in Psychology*, 7, 682. <https://doi.org/10.3389/fpsyg.2016.00682>
19. Harris, D. J., & Reiter-Palmon, R. (2015). Fast and furious: The influence of implicit aggression, premeditation, and provoking situations on malevolent creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 9(1), 54–64. <https://doi.org/10.3724/SP.J.1041.2022.00154>
20. Hengartner, M. P., Cohen, L. J., Rodgers, S., Müller, M., Rössler, W., & Ajdacic-Gross, V. (2015). Association between childhood maltreatment and normal adult personality traits: exploration of an understudied field. *Journal of Personality Disorders*, 29(1), 1-14. https://doi.org/10.1521/pedi_2014_28_143
21. Infurna, M. R., Reichl, C., Parzer, P., Schimmenti, A., Bifulco, A., & Kaess, M. (2016). Associations between depression and specific childhood experiences of abuse and neglect: A meta-analysis. *Journal of affective disorders*, 190, 47-55. <https://doi.org/10.1016/j.jad.2015.09.006>
22. Jankowska, D. M., & Karwowski, M. (2015). Measuring creative imagery abilities. *Frontiers in Psychology*, 6, Article 159933. <https://doi.org/10.3389/fpsyg.2015.01591>

23. Jia, X., Wang, Q., & Lin, L. (2020). The relationship between childhood neglect and malevolent creativity: The mediating effect of the dark triad personality. *Frontiers in Psychology*, 11, Article 613695. <https://doi.org/10.3724/SP.J.1041.2022.00154>
24. Johnson, L. K. (2018). *The light triad scale: Developing and validating a preliminary measure of prosocial orientation* (Publication No.29245982) [Doctoral dissertation]. University of Western Ontario]. Electronic Thesis and Dissertation Repository. <https://ir.lib.uwo.ca/etd/5515>
25. Kapoor, H., & Kaufman, J. C. (2022). The evil within: The AMORAL model of dark creativity. *Theory & Psychology*, 32(3), 467-490. <https://doi.org/10.1177/09593543221074326>.
26. Kaufman, S. B., Yaden, D. B., Hyde, E., & Tsukayama, E. (2019). The light vs. dark triad of personality: Contrasting two very different profiles of human nature. *Frontiers in Psychology*, 10, 467. <https://doi.org/10.3389/fpsyg.2019.00467>
27. Kavanaugh, B. C., Dupont-Frechette, J. A., Jerskey, B. A., & Holler, K. A. (2017). Neurocognitive deficits in children and adolescents following maltreatment: Neurodevelopmental consequences and neuropsychological implications of traumatic stress. *Applied Neuropsychology: Child*, 6(1), 64-78. <https://doi.org/10.1080/21622965.2015.1079712>
28. Kim, J., & Bushway, S. D. (2018). Using longitudinal self-report data to study the age-crime relationship. *Journal of Quantitative Criminology*, 34(2), 367-396. <https://doi.org/10.1007/s10940-017-9338-9>
29. Landa-Blanco, M., Herrera, T., Espinoza, H., Girón, K., Moncada, S., & Cortés-Ramos, A. (2024). The impact of Benevolent Childhood Experiences on adult Flourishing: the mediating role of Light Triad traits. *Frontiers in Psychology*, 15, Article 1320169. <https://doi.org/10.3389/fpsyg.2024.1320169>
30. Li, W., Zhang, L., Qin, Z., Chen, J., & Liu, C. (2022). Childhood trauma and malevolent creativity in Chinese college students: moderated mediation by psychological resilience and aggression. *Journal of Intelligence*, 10(4), 97. <https://doi.org/10.3390/jintelligence10040097>
31. Logan-Greene, P., & Jones, A. S. (2015). Chronic Neglect and Aggression/Delinquency: A Longitudinal Examination. *Child Abuse & Neglect*, 45, 9-20. <https://doi.org/10.1016/j.chiabu.2015.04.003>
32. Lukić, P., & Živanović, M. (2021). Shedding light on the light triad: Further evidence on structural, construct, and predictive validity of the light triad. *Personality and Individual Differences*, 178, Article 110876. <https://doi.org/10.1016/j.paid.2021.110876>
33. Malik, O. F., Shahzad, A., Waheed, A., & Yousaf, Z. (2020). Abusive supervision as a trigger of malevolent creativity: do the Light Triad traits matter?. *Leadership & Organization Development Journal*, 41(8), 1119-1137. <https://doi.org/10.3390/bs12070242>
34. Manly, J. T., Oshri, A., Lynch, M., Herzog, M., & Wortel, S. (2013). Child neglect and the development of externalizing behavior problems associations with maternal drug dependence and neighborhood crime. *Child Maltreatment*, 18, 17-29. <https://doi.org/10.1177/0886260514563836>
35. McLaren, R. B. (1993). The dark side of creativity. *Creativity Research Journal*, 6(1-2), 137-144. <https://doi.org/10.3390/bs12070242>
36. Moshagen, M., Hilbig, B. E., & Zettler, I. (2018). The dark core of personality. *Psychological Review*, 125(5), 656. <https://doi.org/10.1037/rev0000111>

37. Park, A. L., Fuhrer, R., & Quesnel-Vallée, A. (2013). Parents' education and the risk of major depression in early adulthood. *Social Psychiatry and Psychiatric Epidemiology*, 48, 1829-1839. <https://doi.org/10.1007/s00127-013-0697-8>.
38. Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556-563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
39. Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92-96. <https://doi.org/10.1080/10400419.2012.650092>
40. Stoltenborgh, M., Bakermans-Kranenburg, M. J., & Van Ijzendoorn, M. H. (2013). The neglect of child neglect: a meta-analytic review of the prevalence of neglect. *Social Psychiatry and Psychiatric Epidemiology*, 48, 345-355. <https://doi.org/10.1007/s00127-012-0549-y>
41. Ucar, G. K., Malatyali, M. K., Planalı, G. Ö., & Kanik, B. (2023). Personality and pro environmental engagements: The role of the Dark Triad, the Light Triad, and value orientations. *Personality and Individual Differences*, 203, Article 112036. <https://doi.org/10.1016/j.paid.2022.112036>
42. Woodman, R. W., & Schoenfeldt, L. F. (1990). An interactionist model of creative behavior. *The Journal of Creative Behavior*, 24, 279–290. <https://doi.org/10.3389/fpsyg.2020.613695>
43. Wu, Q., Cao, H., Lin, X., Zhou, N., & Chi, P. (2022). Child maltreatment and subjective wellbeing in Chinese emerging adults: A process model involving self-esteem and self-compassion. *Journal of Interpersonal Violence*, 37(15-16), NP13685-NP13706. <https://doi.org/10.1177/0886260521993924>