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### ENVIRONMENTAL FACTORS OF CALLOUS UNEMOTIONAL TRAIT AND ITS BEHAVIORAL CONSEQUENCES: MINI-REVIEW

Fatima Safder<sup>1\*</sup>, Rafia Rafique<sup>2</sup>

<sup>1\*</sup>Institute of Applied Psychology, University of the Punjab

<sup>2</sup>Director of Institute of Applied Psychology, University of the Punjab

#### Article Info

\*Corresponding Author

Email Id: [fatimasafder29@gmail.com](mailto:fatimasafder29@gmail.com)

#### Abstract

During the developmental span of an individuals' life, many environmental factors have cause many emotional changes. These emotional changes as in callous unemotional traits (UCT) can cause many behavioral consequences such as antisocial behaviors. There is need to identify how environmental factors, such as parental practices and bullying in educational institutes can affect callous unemotional traits which may cause behavioral changes in adolescences. Literature has signaled the association between parental practices, bullying and callous unemotional traits, which may have subsequent negative behavioral consequences. This mini review briefly discussed the interplay between environmental factors (parental practices and bullying in educational institutes) and callous unemotional traits and its possible behavioral consequences (antisocial behavior). This also helps in determining the factors for better emotional development and management of antisocial behaviors.

#### Keywords

Callous unemotional traits, parental practices, bullying, antisocial behavior



## 1. Introduction

Callous unemotional trait (CUT) is one of the emotional factors that have mild to severe behavioral and social consequences. CUT has influence over personality development which may in turn affect the behavioral outcomes. In almost every culture, there are some common reasons for disruptive behavioral outcome. Among them, CUT is one of the leading factors causing conduct disorder or antisocial behaviors in individuals. In Pakistan prevalence rate of behavioral problem was 33.9%. Conduct problem has the highest prevalence rate (24.4%) among the behavioral problems, and emotional problem (18.6%) being the 2<sup>nd</sup> highest (Khurshid *et al.*, 2018). Conduct disorder and antisocial behavioral has also significant effect on functioning and quality of life. So there is need to identify the underlying environmental, situational or emotional factors of developing CUT. The objective of this mini review was to identifying the contributing environmental factors of callous unemotional traits. Characteristics of callous unemotional traits, includes the inadequate empathy, lack of remorse, lack of guilt, lack of apprehension/concern to others and having shallow affect, has gain much attention from both the clinician and researcher in the past few years. Paul Frick was the first pioneer who made huge contribution in identifying this phenomenon by operationalizing a developmentally sensitive measure in children. Many researchers (Frick & Moffitt, 2010) have employed different methodologies to determine the causes and its leading behavioral factors in children. Callous unemotional traits is considered to be the leading factors in risk for developing many conduct and behavior disorder such as autism in children (Viding *et al.*, 2013). Callous unemotional traits are also considered to be related

with the developmental psychopathy in adulthood eventually (Frick & Viding, 2009). In Diagnostic and Statistical Manual (DSM-5). Callous-unemotional (CU) traits (Frick & Moffitt, 2010) has been included as a specifier for the diagnosis of Conduct Disorder (CD). In the DSM, a specifier is used to identify an important and clinically relevant subgroup within a particular diagnosis that has common features (American Psychiatric Association, 2000). As a result, additional research is required to investigate the role of CUT play not only in the presentation of antisocial behavior (ASB), but in the relationship that ASB also has with other important factors. Research has identified different factors that are intricate in the presentation of ASB, including normal-range personality traits (Miller & Lynam, 2006), trait anxiety (Cunningham & Ollendick, 2010), and reactivity of the stress hormone, cortisol (van Goozen *et al.*, 2007). The social development model (Catalano & Hawkins, 1996) has explained the importance of risk and underlying protective factors including delinquency and substance abuse, and the integrated the role of risk and protective factors, such as delinquency and substance use, and onset of risk or antisocial behaviors. The onset of antisocial behavior predicts the intensity and persistence of behavioral problems in individuals. This not only encompasses the onset, persistence or maintenance but also focus on the underlying causal factors during childhood development. This model also argues about the socializing factors such as family, peers, school and community through which individual learns the antisocial behaviors (Coulacoglou & Saklofske, 2017). Literature has also identified many environmental, psychological, biological and cultural factors that can be the leading factor in developing

callous unemotional traits in children. The most common environmental factors that can lead children towards development of callous emotional traits are parenting styles, parents' marital status, family system, educational institutions and religious institutions.

## **2. Parenting Practices**

As parenting is one of the crucial environmental predictor in the span of an individuals' personality, emotional and behavioral development. Most of the cultures have some common predictors, e.g., family environment, parents' relation, relation with other family members etc, in determining the psycho-social factors of a particular behavior. All these factors certainly affect the parenting which in turn effect the emotional development in children. A longitudinal study (Wimsatt *et al.*, 2014) explains that corporal punishment and poor parental supervision or monitoring found to be the significant predictors of CU traits. Further high level of parental depression has also associated with corporal punishment and CUT in children. But lower level of depression was unrelated to CUT. Parental harshness in twin studies has also highlighted that the children who receive harsh parenting has more aggression and high in CUT (Waller *et al.*, 2018). Many parental practices are also associated with the theory of mind development of children. An empirical review concluded that parents and practitioners should consider the effective parenting and to consider the ways to provide effective nurturance to their children's cognitive understanding. Parents or practitioners consider to treat the children as purposeful participants, behaving in a more profound and receptive manner to their mental states. Parents have to talk to their children about their mental states in such an elaborative and associated way. Parents should also point out the causes and consequences of

the behaviors and also explain that these might be varying for people. Parents also expose their children to a wide range of emotions but also consider that their children have to be careful with the over frequent and negative emotions (Pavarini *et al.*, 2013). Parental practices causes major influence on the cognitive and social development of their children. Through effective parental practices they can make their children better members of a society having emotional intelligence and good social skills. Further, responsive parenting also plays an important role in the children's learning process. An experimental study (Landry, 2014) concluded that parents have to be responsive so they can facilitate the learning of their children through parental understanding and inclination. Literature has also attempt to identify the factors influencing the behaviors in every developmental phase. As childhood is an important phase of an individual's personality, cognitive and social development. Any barrier or lack at this stage can cause an individual's disruptive behaviors in the form of psychopathy. The particular age group of individuals who engage in antisocial behaviors also shows psychopathy in tricyclic combination of emotional, behavioral and interpersonal traits (Goffin *et al.*, 2019). Childhood period is also associated with the parental disciplining as a predictor of antisocial behavior in children, which helps in socialization of their children (Wakschlag *et al.*, 2010). By being disciplined once, the children begin to transgress the social norms, children start to link the unacceptable or inappropriate behaviors with being punished and concern of penalty. From this, children learns that they can inhibit their behaviors and also learn the self-control, apart to learning generally practiced rules of acceptable conduct that are eventually internalized

(Brownell, 2013). A cross sectional study (Waller *et al.*, 2016) also explained different ways of socialization which causes by the interaction of parental discipline and child's temperament. It suggested that parental discipline styles have to match with child's temperament, for parents to effectively socialize their children. A gentle and an appropriate approach should be used to socialize such children who are fearful from their parents. It is proposed that if a child's anxiety is too high when being corrected, this fear prevents successful internalization of actions (Head, 2010). It has become evident that there are combinations of many factors that can leads a child at risk of offending as well as antisocial behavior. Children who engage in antisocial activity early in life are more likely to continue on a chronic and serious path of criminal behavior in early as well as later adulthood (Rhee *et al.*, 2013). Not all of these youngsters, however, grow up to be career criminals. According to studies, the involvement of psychopathic symptoms may identify a subgroup of children with behavior issues that are particularly vulnerable. This group's CU characteristics, in particular, tend to be a reliable indicator (Frick *et al.*, 2003). Extensive research has been done on the disruptive parenting practices and its outcome behaviors which can be mostly negative in nature. One of such negative outcome is callous and unemotional traits. There are many other contributing factors in determining callous unemotional traits, which leads towards the development of antisocial behaviors. One of such factor in bullying in educational institutes

### **3. Bullying**

Bullying is one of the most tragic behavioral problems that present in majority of the educational institutes all around the world. Bullying is known as a collective

phenomenon that occurs in social environment in which multiple factors help to encourage, sustain, or suppress such activity, rather than a twofold relation between a bully and a victim (Olweus, 2001; Rodkin & Hodges, 2003). As a result, researchers have proposed that a social-ecological paradigm is useful in understanding school bullying and its psychosocial consequences. (Espelage *et al.*, 2013). Social ecological theory (Bronfenbrenner, 1979) explains that human development is viewed as a bidirectional relationship between the individuals and the various structures e.g., at home, at school, in society, in community and in the neighborhood, through which they operate. Thus, bullying behavior can be affected by various relationships with friends, relatives, teachers, neighbors, and experiences with social forces, in addition to individual characteristics (e.g., media, technology) (Rivers *et al.*, 2009). Peer witnesses at different environmental setting can also be affected by the bullying and are also at risk for aversive outcomes (Bonanno & Hymel, 2006). Bullying at school is such a form of aggression which involves a perceived powerful individual or a group of some students purposefully and consistently harms other students or individual who perceived to be mentally and physically weaker. When long stretches of aggressive actions are repeated, there is a power imbalance, and violence becomes harassment (Smith & Brain, 2000). In bullying, children play a variety of roles. Some people develop into bullies who engage in violent acts. Some people become abusive victims over and over again. Some people become bullies as well as victim (i.e., bully-victims). Other are witnesses who witness abuse and often want to interfere to stop it (Zych *et al.*, 2019). Some students behave as outsiders among the bystanders, while other students

through their varied behavior reinforce or support the bully and still others protect the victims (Salmivalli, 2010). Many international researchers focused on school related bullying deemed to highlight that bullying has its long term effects on individual's psychosocial development (Gini & Pozzoli, 2013). While reviewing the literature on bullying and callous unemotional traits, empathy has found one of the highlighted construct that shows significant relation with bullying and callous unemotional traits. Empathy is considered to be the negatively correlated with callous unemotional traits in individuals (Munoz *et al.*, 2011). According to a meta-analysis of neuroscientific research, seeing others in pain stimulates the same brain functions as experiencing pain directly (Lamm *et al.*, 2011). Young people with violent behavior disorder have display significant atypical empathic brain responses to photos of people in distress, according to research. Decety, Michalska, Akitsuki & Lahey (2009) also studied that youth who displayed violent or aggressive behaviors display atypical brain responses to the photos of people who are in pain. It appears truthful to assume that empathy is linked to negative reactions to another's suffering. As a result, people with higher level of empathy and lower level callous-unemotional traits tends to resist inflicting pain on others, as well as becoming more prosaically and less aggressive. Literature also shows mixed findings on the relation between bullying and empathy. In addition, bullying perpetration is also associated with the low empathy (Gini *et al.*, 2007). While exploring the gender relations, affective empathy and bullying had a negative relationship in girls but not in boys, while cognitive empathy and bullying had no relationship in either gender (Jolliffe & Farrington, 2006). High cognitive empathy, on the

other hand, was linked to increase in bullying behavior, while high affective empathy was linked to less bullying (Caravita *et al.*, 2009). These underlying developmental factors put an individual at the potential risk of developing other behavioral problems which can severely affect the society.

#### **4. Antisocial behaviors**

Callous unemotional trait is one such factor that can influence the development of many psychopathic behaviors and antisocial behaviors. Affective deficits, such as decreased emotional tolerance, have also been reported in the literature on psychopathy (Blonigen *et al.*, 2006). People with antisocial tendencies and high psychopathic symptoms have been shown to be less sensitive to danger cues, reduced emotion-modulated startle response. Individuals with antisocial behaviors and also low psychopathic traits have lower autonomic arousal to distress signals and also have lower emotion intermediated focus and weaker memory responses to emotional signals (Mills-Koonce *et al.*, 2016). These affective deficiencies are thought to be a predictor of psychopathy and show a fearless disposition (Hare & Neumann 2009). CU characteristics as an emotional factor in personality profiling can be accurately detected in children and teenagers, with certain traits being important in people those with conduct behavior (Frick & Viding 2009). One of the main goals of research on childhood conduct problems has been to identify potentially significant subgroups of children that vary in many types as well as severity of conduct problems they exhibit. Another goal was the direction, history of the related problem activity and possibly significant features that may indicate varied underlying processes which facilitate the behavioral problems (Frick, 2015). There tends to be one category of children with conduct issues that display serious

problems before puberty, typically as an extension of behavior problem which begin in early developmental stage and gradually show fluctuation in intensity and severity during childhood (Kim *et al.*, 2014). A second group of adolescents, on the other hand, develops extreme conduct issues with the onset of puberty and has no prior history of problem activity (Frick & White, 2008). Importantly, relative to the adolescent-onset peers, adolescents with early onset of conduct issues have been shown to have worse consequences, such as having a tendency to engage in antisocial and also criminal activity in adulthood (Larson *et al.*, 2006). In comparison, children in the early childhood onset group have exhibit more violence, impulsivity, cognitive and neuropsychological disturbances, social isolation, and unstable family histories (Frick *et al.*, 2003). Apart from callous unemotional traits many other risk factors are also associated with antisocial behaviors. The twin study (Taylor *et al.*, 2003) has also reported significant genetic influences in the development of callous unemotional traits and their influence over antisocial behaviors. The research provided us with an estimates (e.g., 23% of variation in callous unemotional traits accounted for by genetic effects) in determining antisocial behaviors. As it become clear that callous unemotional traits also have heritable component. However it has not evident that children with antisocial behavior along with or without callous unemotional traits show different genetic pattern (Viding *et al.*, 2005).

## 6. Conclusion

The majority of psychological research on antisocial behaviors or conduct behaviors has been done with the relation of many environmental factors. It is fundamental to produce a better understanding about the environmental, social and other related

contributing factors of callous unemotional traits and also its behavioral outcome which are mostly negative or harmful in nature. Public health and educational institutes have to divert their focus on developing the strategies for put awareness for the effective parental practices and to eradicate the bullying behaviors in institutions. Systematic research on other contributing factors is needed to be done for better understanding of the root cause of the callous unemotional traits in general population.

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