Temperament, Personality, and Childhood Trauma in the Development of Psychopathy

Jiaxi Que^{1,a,*}

¹ACG Parnell College New Zealand a. Emilyque0415@gmail.com *corresponding author

Abstract: The relationship between temperament, personality traits, and childhood experience impedes the systematic integration of findings on how both individual and situational factors construct the likelihood of developing psychopathy. Based on individual differences in reactivity and self-regulation, one's temperament is determined by their biological make-up, which has been shaped over time by experience and inheritance. When referring to persistent patterns of thoughts, feelings, and behaviors, personality is a broader concept than temperament and includes abilities, values, beliefs, morals, and social cognitions. Increasing knowledge of temperament highlights a central understanding of personality refined during infancy and childhood. Meanwhile, according to existing studies, exposure to childhood maltreatment can be thought of important risk factor that raises the likelihood of a more severe manifestation of psychopathic tendencies in those who are vulnerable. This paper reviews the significance of all three factors during different stages of life to prompt the constitution of such mental disorders.

Keywords: Psychopathy, Temperament, Personality, Childhood trauma, Five-Factor Model

1. Introduction

Many theories and models have been proposed to explain what factors may interfere with the development of psychopathology. This review would mainly discuss two issues which includes identifying the significance of genetic inheritance of temperament in predicting the possibility of psychopathy in early childhood, and how personality traits and childhood traumatic experiences motivate and serve as biological and environmental driving forces to trigger psychopathy within individuals. First, the genetic component of temperament would be identified to suspect how individuals could be primarily predisposed to psychopathy in comparison to the general population. Then, it would move on to associating the structural models involving the Big five personality traits to highlight significant phenotypic features observable in psychopathic individuals [1]. The role of personality traits in psychopathy is not new, for instance, through Hare Psychopathy Checklist-Revised, it puts emphasis on assessing standard personality descriptors including glibness, grandiosity, need for stimulation, untruthfulness, manipulativeness, lack of guilt, shallow affect, callousness, poor behavioural control, impulsivity, irresponsibility, and failure to accept the responsibility which fits in the 20 traits in psychopathy [2]. Alternatively, childhood trauma indicates both the experience of potential psychological and physical harm under the age of 18. More recent research shows that issues with attachment, emotional neglect, and harsh discipline are linked to both

^{© 2023} The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

persistent offending and higher psychopath test scores [3]. Also, childhood psychological trauma may have an impact on how the innate immune system develops, leading to a persistently stimulated and hypersensitive inflammatory response that lasts till adulthood. Alternatively, this increases the potential to affect brain development and its change in function, putting individuals more at risk for developing psychopathy [4].

2. Temperament

Various branches of thought define temperament as an aspect of personality that justifies an individual's behavioural style, prevailing mood, and emotional responses to the external world [5]. Some psychologists view temperament as having a close relationship with personality whereas others tend to neglect this statement, listing several distinctions between the two. Yet, a precise definition of temperament is still a subject of debate. Historically, temperament has been associated closely with the constitutionally based behavioural style found in early childhood. Moreover, its intricate range of behavioural and cognitive choices is influenced by psychosocial factors within adults [6]. According to Kagan, complicated personality traits are the byproducts of environmental effects on temperament over periods of time [7]. Alternatively, Rothbart et al. (2000) point out that temperament should have differences in terms of individual expression of reactivity and self-regulation. Reactivity here refers to the ability of muscular, affective, automatic, and endocrine reaction to arouse. Self-regulation describes behaviors including attention, approach, disengagement, attack, behavioural inhibition, and self-soothing that can help people react more quickly. Therefore, due to the above reasonings and its early appearance, temperament reflects biological differentiations and acts as a baseline or foundation for individuals to shape their core personality, making it evident that there should be early signs of hostility and antisocial behaviour already noticeable at birth for psychopaths [8]. For instance, Hay et al. (2014) discovered that based on data from the Cardiff (UK) Child Development Study, male gender, social risk factors, mother's antisocial symptoms, and mother's prenatal depression were associated with infant contentiousness, which was defined as expressions of anger and use of force [9].

Temperament is crucial because unfavorable temperamental traits frequently elicit early-life negative reactions from others, especially from parents. This further on acts as a barrier for individuals to positively carry on their development in shaping personalities through the interference of environmental factors. A genetic and environmental correlation study conducted by Fearon et al focused on how a child's temperament had an effect on maternal negativity among adoptive mothers. In particular, those children's birth mothers had high externalizing psychopathology which explains the children's negative personality traits through genetic inheritance. Findings suggest that the child's negative temperament did cause adoptive mothers to react negatively to them, however, only in those families that have marital problems. This study concludes with an indication of interaction between genetic risk factors relating to the birth mother's temperament with the environmental factors, causing a reciprocal relationship. An alternative supporting study outlined by EARLS & JUNG shows that temperamental traits like low adaptability and intense emotional expression more accurately predict behavioural issues than environmental and material conditions of the home. In addition to temperament, marital conflicts in families have a relatively selective effect on boys to increase the likelihood of a negative outcome in developing psychopathy. These existing evidence highlights how temperament constitutes a core ingredient of psychopathy which could be seen early in life, allowing early preventive measures [10].

3. Personality Traits

Current studies in associating psychopathy with personality tend to focus on its emphasis on the Five

Factor Model (FFM) made up of major elements of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness, offering a dimensional explanation of individual variances in each of these traits [11]. Psychopathy is identified by a range of symptoms including anti-social behaviour, callousness, shallow affect, and low distress, and the FFM captures these features of psychopathy such as interpersonal antagonism, disinhibition, excitement seeking, and interpersonal callousness [12]. Assary, Salekin, and Barker observed preschoolers aged 4 to 6 years, assessing children to see whether psychopathic traits exist or are phenotypes during early adolescence. According to teachers' ratings, those who are characterized as being the most callous and unemotional in class were also characterized by low agreeableness, low consciousness, high neuroticism, and low openness, a clear correspondence to the FFM. Additionally, a meta-analysis carried out formed a correlation between FFM and other personality disorders which concludes with findings that indicate how most personality disorders are all characterized by high neuroticism and low agreement. However, extraversion and Conscientiousness vary between types of personality disorder [13]. Similarly, a study with a sample of 200 students aged from 6 to 11 in Spain has indicated the importance of psychopathy among youths with severe risk profiles. Additionally, an analysis carried out by López-Romero, Romero, and Andershed specified those with the highest externalizing symptoms had the highest psychopathic personality scores. They were the most indifferent, uncaring, and unemotional among the sampling group. They also had the worst communication skills and emotional regulation.

Various researchers are examining the associations between FFM and psychopathic traits or behaviours. The FFM account proposes that the variety of putative psychopathic deficiencies is caused by psychopathy's complex nature. For instance, if looking widely at dimensions of Neuroticism, psychopaths generally lack the ability to sense anxiety, fear, or depression, while also having low neuroticism. These aspects may link together to form an association with their symptoms of low fear conditioning. Additionally, emotional detachment may be caused by the combination of low Agreeableness and low Neuroticism. Poor response modulation, defined by psychopaths' inability to adapt their behaviour to changing circumstances resulting from an inability to process peripheral cues during a dominant response may be consistent with the personality trait of low Consciousness [1].

A study conducted by Pereira et al explored the relationships between FFM and psychopathy using a sample of 170 male participants drawled from a group of hospitalized offenders. Each participant completed the NEO-Personality Inventory-Revised (NEO-RRI) in measuring the five major domains of personality, and a PCL-R test in measuring behaviours and personality traits. Based on their score on these tests, participants were split into experimental groups of either high psychopathy (PCL-R score ≥ 25) or low psychopathy (PCL-R score < 25). Their results showed a prominently negative relationship between PCL-R score and psychopathy's agreeableness and neuroticism. Meanwhile, the hypothesized negative relationship between FFM openness with PCL-R scores was not found [14]. Findings of this study suggest that, while the FFM model appears to be clinically valid, it has yet to be consistently demonstrated across the general population, considering the variations of individual differences and ethnocentrism.

4. Childhood Trauma

Although fields of study have indicated the importance of genetic properties, childhood traumatic experiences as situational factors also cause a great influence on individuals' cognitive and psychological development for the path of psychopathy. Childhood trauma in this context involves elements including abuse and neglect from relatives or others. Studies focused on the correlation between psychopathy and juvenile delinquency tend to seek how their childhood pathways differ from others. In fact, many researchers propose that high levels of early childhood traumatic

experience positively correlate with increasing scores on psychopathy tests [15]. In-depth of research, some researchers such as Weiler and Widom hypothesized that abuse causes a learnt cognitive process called 'desensitization.' In other words, an individual becomes habituated to traumatic events that happen to both them and those around them. Therefore, sufferers have a reduced function in responding with feelings of empathy to future anxiety-evoking experiences, echoing the behavioural symptoms of callousness as one of the diagnostic traits for psychopaths. Speaking in the biological context, childhood trauma could cause a dramatic change in our working memory and executive functioning, which enable us to pay attention, plan, and memorize instructions [16]. Deterioration in these areas underlies the development of personality disorders. De Bellis, 2001 has noted long-term neurological, cognitive, and psychological impairments after exposure to childhood traumatic events.

A further study carried out by Giuseppe Craparo, Adriano Schimmenti & Vincenzo Caretti examined the correlation between childhood traumatic experience and adult development of psychopathy, focusing only on individuals who are diagnosed with psychopathy in particular. 22 participants aged between 22 to 60 in Italy who were diagnosed with antisocial personality disorder engaged in murdering; raping was selected for this experiment. In order to assess both their personal childhood experience and levels of psychopathy, participants were to assess themselves based on a PCL-R test and a traumatic experience checklist. This checklist assesses traumatic experience based on the form of self-report calculating scores based on categories including emotional neglect; emotional, physical, and sexual abuse. Results reported all 22 participants experienced at least one traumatic experience throughout their lifetime. In a detailed analysis, 18.2% of them were sexually abused, and 50% were physically abused. Specifically, 77.3% of them were exposed to an early childhood traumatic experience, and almost every participant experienced traumatic events before the age of 10 [17]. Reasonably, although a direct cause and effect could not be addressed through this study, the authors conclude that the risk of developing psychopathic traits increases for individuals along with increasing exposure to early traumatic experiences. In turn, this means that childhood neglect and abuse directly lead to psychopathy, it may only be one of the situational factors that promote its development, and its speed of development may depend on individual resistance and the severity of traumatic events, therefore, cooperating the importance of vulnerability and personality when exposed to such experiences.

5. Discussion

Integrating research between temperament and psychopathy is fraught with a series of methodological issues. Temperament is often the focus of developmental psychologists whereas psychopathy is more studied by clinical psychologists. Therefore, integrating these two bodies of research with different theoretical contexts together may result in inconsistency [18]. Additionally, several definitions of temperament have been used to define its role in psychopathy. These important traits include being inherited, evident in early life, and being stable across development. However, this definition does come across several issues. For instance, no single behavioural characteristic is solely determined by its genetic component. A child's behaviour is influenced from the moment of birth by the interaction of both biological and contextual circumstances. As a result, it is unclear what level of biological predisposition is required for a trait to qualify as a temperament. Additionally, all characteristics change as a person develops, even those that are frequently thought of as indicators of temperament [19]. It is therefore unclear to what extent developmental continuity is necessary for a trait to be designated a temperament.

On the other hand, looking at research conducted on children, although findings by Assary, Salekin, and Barker are consistent, there are limiting factors where the sample group is constrained to only one school. Alternatively, a disadvantage of this is the complex role of ethnocentrism within children's expression of personalities through the influence of different cultural backgrounds. While some

cultures find it common to openly express their feelings, others may be more reluctant and keep feelings to themselves. The study's face validity is reduced by relying solely on teachers' ratings as the likelihood of biased perspectives increases. One major argument is that the construction of each psychopath is idiosyncratic and unique [20], despite the fact that their phenotypic expression of symptoms is alike.

6. Conclusion

According to reviews examined in this paper, researchers discovered the likelihood of inheriting genetic components for temperament. Psychopathic traits may appear due to temperamental tendencies as well as the capacity to form attachment bonds with early caregivers. Alternatively, FFM has been a meaningful model in allowing researchers to framework testing hypotheses in the understanding of how personalities underlie significance during individuals' development of psychopathy. Meanwhile, it also highlights how both genes and environmental factors interact with each other to maximize their effect.

Moving onto childhood trauma, this factor fits in with the idea of social basis to psychopathy. The excessive use of instrumental aggressiveness by both children and adults with psychopathy is a key component of their behavioural profile and there is undoubtedly a lot of research showing a link between physical and sexual abuse and a higher risk of aggression and impulsivity in people.

References

- [1] Miller, J. D., & Lynam, D. R. (2003, October). Psychopathy and the Five-Factor Model of Personality: A Replication and Extension. Journal of Personality Assessment, 81(2), 168–178. https://doi.org/10.1207/s15327752jpa8102_08.
- [2] PATRICK, C. J. (1994). Emotion and psychopathy: Startling new insights. Psychophysiology, 31(4), 319–330. https://doi.org/10.1111/j.1469-8986.1994.tb02440.x.
- [3] FARRINGTON, D. P., & WEST, D. J. (1993). Criminal, penal and life histories of chronic offenders: risk and protective factors and early identification. Criminal Behaviour and Mental Health, 3(4), 492–523. https://doi.org/10.1002/cbm.1993.3.4.492.
- [4] Danese, A., & van Harmelen, A. L. (2017). The hidden wounds of childhood trauma. European Journal of Psychotraumatology, 8(sup7), 1375840. https://doi.org/10.1080/20008198.2017.1375840.
- [5] Saudino, K. J., & Ganiban, J. M. (2021, March 18). Behavior Genetics of Temperament and Personality (Advances in Behavior Genetics) (1st ed. 2020). Springer.
- [6] Nigg, J. T. (2006, March). Temperament and developmental psychopathology. Journal of Child Psychology and Psychiatry, 47(3–4), 395–422. https://doi.org/10.1111/j.1469-7610.2006.01612.x.
- [7] Kagan, J. (1997). Temperament and the Reactions to Unfamiliarity. Child Development, 68(1), 139–143. https://doi.org/10.1111/j.1467-8624.1997.tb01931.x.
- [8] Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. Journal of Personality and Social Psychology, 78(1), 122–135. https://doi.org/10.1037/0022-3514.78.1.122.
- [9] DeLisi, M., & Vaughn, M. G. (2015, July). Ingredients for Criminality Require Genes, Temperament, and Psychopathic Personality. Journal of Criminal Justice, 43(4), 290–294. https://doi.org/10.1016/j.jcrimjus.2015.05.005.
- [10] EARLS, F., & JUNG, K. G. (1987, July). Temperament and Home Environment Characteristics as Causal Factors in the Early Development of Childhood Psychopathology. Journal of the American Academy of Child &Amp; Adolescent Psychiatry, 26(4), 491–498. https://doi.org/10.1097/00004583-198707000-00005.
- [11] Lynam, D. R., & Widiger, T. A. (2007, April). Using a General Model of Personality to Identify the Basic Elements of Psychopathy. Journal of Personality Disorders, 21(2), 160–178. https://doi.org/10.1521/pedi.2007.21.2.160.
- [12] Andersen, A. M., & Bienvenu, O. J. (2011, June). Personality and psychopathology. International Review of Psychiatry, 23(3), 234–247. https://doi.org/10.3109/09540261.2011.588692.
- [13] De Pauw, S. S. W., & Mervielde, I. (2010, January 9). Temperament, Personality and Developmental Psychopathology: A Review Based on the Conceptual Dimensions Underlying Childhood Traits. Child Psychiatry & Amp; Human Development, 41(3), 313–329. https://doi.org/10.1007/s10578-009-0171-8.
- [14] Pereira, N., Huband, N., & Duggan, C. (2008, October). Psychopathy and personality. An investigation of the relationship between the NEO-Five Factor Inventory (NEO-FFI) and the Psychopathy Checklist-Revised (PCL-R)

The International Conference on Interdisciplinary Humanities and Communication Studies DOI: 10.54254/2753-7048/7/20221005

- in a hospitalized sample of male offenders with personality disorder. Criminal Behaviour and Mental Health, 18(4), 216–223. https://doi.org/10.1002/cbm.699.
- [15] Krischer, M. K., & Sevecke, K. (2008, June). Early traumatization and psychopathy in female and male juvenile offenders. International Journal of Law and Psychiatry, 31(3), 253–262. https://doi.org/10.1016/j.ijlp.2008.04.008.
- [16] Bedwell, S. A., & Hickman, C. (2022, January 25). Effects of childhood trauma in psychopathy and response inhibition. Development and Psychopathology, 1–6. https://doi.org/10.1017/s0954579421001863.
- [17] Craparo, G., Schimmenti, A., & Caretti, V. (2013, December 1). Traumatic experiences in childhood and psychopathy: a study on a sample of violent offenders from Italy. European Journal of Psychotraumatology, 4(1), 21471. https://doi.org/10.3402/ejpt.v4i0.21471.
- [18] Frick, P. J. (2004, February). Integrating Research on Temperament and Childhood Psychopathology: Its Pitfalls and Promise. Journal of Clinical Child &Amp; Adolescent Psychology, 33(1), 2–7. https://doi.org/10.1207/s15374424jccp3301_1.
- [19] Belsky, J., Fish, M., & Isabella, R. A. (1991). Continuity and discontinuity in infant negative and positive emotionality: Family antecedents and attachment consequences. Developmental Psychology, 27(3), 421–431. https://doi.org/10.1037/0012-1649.27.3.421.
- [20] Blair, R. J. R., Mitchell, D. G. V., Richell, R. A., Kelly, S., Leonard, A., Newman, C., & Scott, S. K. (2002). Turning a deaf ear to fear: Impaired recognition of vocal affect in psychopathic individuals. Journal of Abnormal Psychology, 111(4), 682–686. https://doi.org/10.1037/0021-843x.111.4.682.