

PSYCHOPATHY, ¿IS IT BORN OR MADE?

A revision of literature

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ABSTRACT

Although most psychologists agree that psychopathy is a multifaceted clinical condition marked by affective (lack of remorse, low empathy, superficial affect), interpersonal (superficial charm, high self-esteem, manipulation) and antisocial deviance (impulsivity, aggression) traits, its ethology is still unclear. The first step in investigating the origin of a disorder is to analyze the contribution of genetic (A) and environmental factors, shared (C) and non-shared (E). These factors cannot be identified in traditional samples, so it is necessary to use twin samples (the only ones that allow us to separate and estimate the magnitude of each of the factors). In this work, a review of the papers published in the last 5 years on the etiology of psychopathy in twin samples has been carried out. These studies have shown that genetic and environmental factors influence men and women in the same way (although psychopathic tendencies are more frequent in men) and that, in general, psychopathic traits seem to be explained by genetic and non-shared environmental factors. It is important to note that psychopathic callous-unemotional traits seem to be explained more by shared environmental factors in children, while the deficits in the recognition of fear and sadness found in young people with high scores on these traits are explained by genetic factors. These uneven results could be due to the influence of environmental factors at early ages. Further research is needed to better understand the etiology of psychopathy and, above all, to know the contribution of genetic and shared and non-shared environmental factors in the development of the callous-unemotional traits typical of psychopathy.

Key words: Psychopathy, etiology, genetic, shared environment, non-shared environment.

RESUMEN

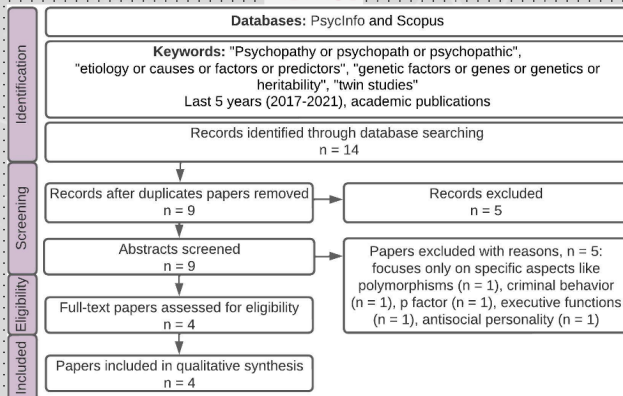
Aunque la mayoría de los psicólogos están de acuerdo en que la psicopatía es una condición clínica multifacética definida por rasgos afectivos (falta de remordimientos, baja empatía, afecto superficial), interpersonales (encanto superficial, alta autoestima, manipulación) y por una desviación antisocial (impulsividad, agresión), su etología todavía no está clara. El primer paso para investigar el origen de un trastorno es analizar la contribución de los factores genéticos (A) y ambientales, tanto compartidos (C) como no compartidos (E). Estos factores no se pueden identificar en muestras tradicionales, por lo que es necesario el uso de muestras de gemelos (las únicas que permiten separar y estimar la magnitud de cada uno de los factores). En este trabajo se ha realizado una revisión de los trabajos publicados en los últimos 5 años sobre la etiología de la psicopatía en muestras de gemelos. Estos estudios han evidenciado que los factores genéticos y ambientales influyen de la misma forma en hombres y mujeres (a pesar de que en los hombres las tendencias psicopáticas son más frecuentes) y que, en general, los rasgos psicopáticos parecen explicarse por factores genéticos y ambientales no compartidos. Es importante matizar que los rasgos psicopáticos relacionados con la crueldad y la frialdad emocional parecen estar explicados más por factores ambientales compartidos que no compartidos en niños, mientras que los déficits en el reconocimiento del miedo y la tristeza encontrados en jóvenes con puntuaciones elevadas en estos rasgos parecen estar explicados por factores genéticos. Estos resultados dispares podrían deberse a la influencia de los factores ambientales en edades tempranas. Es necesario realizar más investigaciones para comprender mejor la etiología de la psicopatía y, sobre todo, para conocer la contribución de los factores genéticos y ambientales compartidos y no compartidos en el desarrollo de los rasgos de crueldad y frialdad emocional típicos de la psicopatía.

Palabras clave: Psicopatía, etiología, genética, ambiente compartido, ambiente no compartido.

INTRODUCTION

- Although all researchers agree that psychopathy is a multifaceted clinical condition marked by serious behavioral deviation and affective and interpersonal problems (Patrick, 2018), its etiology remains unclear.
- To know the etiology, the first step is to identify the **genetic factors (A)**, the **shared environmental factors (C)**, and the **non-shared environmental factors (E)** underlying the disorder.
- These factors can only be studied in **twin samples**, because they have the unique ability to disentangle genetic and environmental influences and estimate the magnitude of each simultaneously (Waldman et al., 2018).
- The aim is to review twin studies on the **etiology of psychopathy** in the last 5 years.

METHOD



RESULTS

Study	Method N Sex Age	Method Personality traits	Study findings																				
Tuvblad et al. (2016) Psychopathic personality traits in 5 year old twins: the importance of genetic and shared environmental influences	595 twins Mixed sample 5-12 years	<u>The Child Problematic Traits Inventory (CPTI):</u> - Callous-Unemotional - Grandiose-Deceitful - Impulsive-Need for stimulation	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>C</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>CU</td> <td>25</td> <td>48</td> <td>27</td> </tr> <tr> <td>GD</td> <td>57</td> <td>17</td> <td>26</td> </tr> <tr> <td>IN</td> <td>74</td> <td>9</td> <td>17</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Psychopathic traits are mostly explained by genetic and non-shared environmental factors. Except the callous-unemotional traits, which are most influenced by shared environmental factors. 		A	C	E	CU	25	48	27	GD	57	17	26	IN	74	9	17				
	A	C	E																				
CU	25	48	27																				
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Tuvblad et al. (2018) Genetic and environmental influences on disinhibition, boldness, and meanness as assessed by the triarchic psychopathy measure in 19-20-year-old twins	1016 twins Mixed sample 19-20 years	<u>The Triarchic Psychopathy Measure (TriPM):</u> - Meanness - Boldness - Disinhibition	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>C</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>24</td> <td>18</td> <td>58</td> </tr> <tr> <td>B</td> <td>30</td> <td>19</td> <td>51</td> </tr> <tr> <td>D</td> <td>49</td> <td>5</td> <td>46</td> </tr> </tbody> </table> <ul style="list-style-type: none"> All psychopathic traits are mostly explained by genetic and non-shared environmental factors. 		A	C	E	M	24	18	58	B	30	19	51	D	49	5	46				
	A	C	E																				
M	24	18	58																				
B	30	19	51																				
D	49	5	46																				
Dotterer et al. (2021) Elucidating the role of negative parenting in the genetic v. environmental influences on adult psychopathic traits	921 twins Mixed sample 18-49 years	<u>Self-Report of Psychopathy (SRP-E):</u> - Affective callousness - Interpersonal manipulation - Erratic lifestyle - Antisocial tendencies	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>C</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>36</td> <td>0</td> <td>64</td> </tr> <tr> <td>I</td> <td>30</td> <td>5</td> <td>65</td> </tr> <tr> <td>E</td> <td>28</td> <td>5</td> <td>68</td> </tr> <tr> <td>A</td> <td>30</td> <td>7</td> <td>63</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Psychopathic traits are mostly explained by genetic and non-shared environmental factors. All facets of psychopathy are associated with negative parenting except affective callousness. 		A	C	E	C	36	0	64	I	30	5	65	E	28	5	68	A	30	7	63
	A	C	E																				
C	36	0	64																				
I	30	5	65																				
E	28	5	68																				
A	30	7	63																				
Moore et al. (2019) Genetic underpinnings of callous-unemotional traits and emotion recognition in children, adolescents, and emerging adults	607 twins Mixed sample 9-20 years	<u>Inventory of Callous-Unemotional Traits (ICU):</u> - Callous-unemotional (CU) - Unemotional - Uncaring/callous	<ul style="list-style-type: none"> People with callous-unemotional traits show deficits in emotion recognition. <ul style="list-style-type: none"> Unemotional is associated with deficits in recognize surprise and disgust. Uncaring/callous is associated with deficits in recognize fear and sadness, and this is explained by genetic factors. 																				

DISCUSSION AND CONCLUSION

Although psychopathic traits are more frequent among males than females, this personality disorder are influenced by genetic and environmental factors **similarly in men and women**.

Psychopathic traits seem to be explained mainly by **genetic factors and non-shared environmental factors** in adult samples. Importantly, the **callous-unemotional traits** are more influenced by shared environmental factors in a sample of 5-year-old twins (Tuvblad et al., 2016).

Surprisingly, **perceived negative parenting** was not associated with **affective callousness** (Dotterer et al., 2021). This result conflicts with previous work in youth that has linked negative parenting to CU traits in adulthood (Waller et al., 2013). What we know is that **CU** is related to **deficits in emotion recognition** (fear and sadness) and this seems to be explained by **genetic factors** (Moore et al., 2019).

Participant age may be one variable accounting for these results, due to there are shared environmental influences related to the **family** (neglect, prenatal stressors) and **contextual factors** in the community that exert a great impact on **meanness traits** at younger ages. More research is needed to increase our understanding of the etiology of psychopathy and, particularly, the importance of shared and non-shared environmental factors for callous-unemotional traits.

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