



Psychopathy in Community: Social Status, Professional Occupation, and Antisocial Behavior

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Abstract

The concepts of psychopathy and antisocial behavior have long been subjects of study within the scientific community, with a predominant focus on forensic samples. To address this gap, the present study aimed to examine the relationship between psychopathy, its facets, and antisocial behaviors in a community sample, as well as their associations with socioeconomic status (SES) and professional occupation. The sample comprised 254 participants (74.7% female), aged between 18 and 60 years. Data were collected online using a Sociodemographic Questionnaire, the Self-Report Psychopathy Scale – Short Form, the D-CRIM, and the Socially Desirable Response Scale-5. Results revealed that the Lifestyle facet of psychopathy had the highest scores, while the Antisocial facet had the lowest scores. Significant positive correlations were observed between criminal behaviors and psychopathy total scores, as well as the Interpersonal and Lifestyle facets. High SES was associated with lower scores on psychopathy total scores and the Interpersonal and Lifestyle facets, whereas less qualified professional occupations were linked to higher scores on psychopathy total scores and the Affective and Lifestyle facets, and lower scores on the Antisocial facet. These findings highlight the importance of considering SES and professional occupation when examining psychopathy in community samples and suggest that the relationship between psychopathy facets and these variables differs. Implications for the practice will be further discussed.

Keywords Psychopathy · Antisocial behavior · Socioeconomic status · Professional occupation · Community

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Introduction

The concepts of psychopathy and antisocial behavior have long been subjects of study within the scientific community. However, owing to the complexity of these constructs, their definition remains a topic of ongoing debate (Bronchain et al., 2019). While psychopathy is not formally described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; Persson & Liliefeld, 2019), it is recognized as one of the oldest disorders (Boduszek et al., 2021).

Psychopathy has a long history in scientific research (Hare & Neumann, 2008), with a key milestone being Hervey Cleckley's book "Mask of Sanity" published in 1941. Psychopathy was, for the first time, portrayed as a condition that could be devoid of any involvement in antisocial behavior or criminal activities (Rahman, 2012). Cleckley (1988) distinguished psychopathy from criminal behavior, describing it as a personality-based condition rather than one defined by criminal acts. Key traits include a lack of emotional depth, remorse, or meaningful attachments, alongside a superficially normal appearance (e.g., Sanz-García et al., 2021). While individuals with psychopathic traits may never engage in crime (Cleckley, 1988), they often exhibit socially maladaptive and ethically questionable behaviors, such as impulsivity, failure to adhere to long-term goals, superficial relationships, and extreme self-centeredness.

Cleckley's conception of psychopathy has profoundly shaped the field, particularly influencing the work of Robert D. Hare, a leading authority on psychopathy. Hare's most significant contribution was the development of the Hare Psychopathy Checklist-Revised (PCL-R) in 1991 (Hare, 1991), which has since become the "gold standard" for evaluating psychopathy in forensic and correctional settings (Seara-Cardoso et al., 2020). Hare's extensive research has not only advanced an understanding of psychopathy but has also stimulated critical discussions about its conceptual framework, alongside contributions from other notable scholars (e.g., Scott, 2014).

Despite sustained interest in psychopathy, research has primarily focused on forensic populations, particularly prison inmates (DeMatteo & Olver, 2022), and predominantly within North American contexts (e.g., Braga et al., 2023). However, although psychopathy is characterized by prominent maladaptive traits (Scott, 2014) and its prevalence is lower in the general population than in forensic samples (Patrick & Drislane, 2015; Sanz-García et al., 2021), evidence suggests that certain psychopathic traits—such as fearlessness and interpersonal dominance—may be prevalent and even adaptive in certain occupations, such as entrepreneurs, managers, politicians, investors, salespeople, and lawyers (Babiak & Hare, 2019; Fritzon et al., 2020; Scott, 2014), and associated with individuals of higher socioeconomic status (SES; Persson & Lilienfeld, 2019).

Therefore, while the study of psychopathy in forensic samples is essential, it is equally important to explore psychopathic traits among individuals who are integrated into society—often referred to as "successful psychopaths" (Lilienfeld et al., 2015). Furthermore, research on psychopathy should extend beyond North American contexts to provide a more comprehensive understanding of the construct. Accordingly, this study aimed to investigate psychopathy within a community sample in Portugal, examining its relationship with criminal behavior, professional occupation, and social status.

Psychopathy

The conceptualization and assessment of psychopathy have been extensively studied, yet no universally agreed-upon definition exists (e.g., Moreira et al., 2014; Patrick, 2022). Among the most influential contributions to this field is Robert D. Hare's work, whose perspective emphasizes the combination of specific personality traits defined by interpersonal (e.g., grandiose, arrogant, and manipulative interpersonal style), affective (e.g., lacking in empathy, guilt, and remorse), and behavioral characteristics (e.g., irresponsible and impulsive lifestyle, and violation of social and moral conventions; Hare, 2003). This perspective of psychopathy is outlined in the Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003). Initial research (Hare, 1991) established that psychopathy comprises two overarching factors: Interpersonal-Affective facet (Factor 1), representing the interpersonal and affective traits; and Lifestyle–Antisocial facet (Factor 2), reflecting impulsivity, irresponsibility, and behavioral indicators of antisocial behavior. Later, Hare (2003) proposed a more refined model which integrated the two original factors within four distinct but interrelated facets – Interpersonal (i.e., superficial charm, grandiose self-esteem, pathological lying, and manipulative style), Affective (i.e., lack of remorse/guilt, affective superficiality, lack of empathy), Lifestyle (i.e., stimulation/tendency towards boredom, parasitic lifestyle, impulsiveness, irresponsibility), and Antisocial (i.e., early behavior problems, juvenile delinquency, criminal versatility) – to provide a comprehensive structure for understanding psychopathy.

Psychopathy is characterized by the early and persistent display of behaviors that conflict with societal, moral, or legal norms that increase risk for an array of harmful outcomes across the lifespan, including criminal behaviors (De Brito et al., 2021; Hare, 2003; Patrick, 2018; Widiger & Crego, 2018). Indeed, a considerable body of research among forensic and psychiatric samples underscores the significance of specific psychopathic traits as near-indispensable predictors of criminal and violent behavior (e.g., Gillespie et al., 2022; Hare, 2003; Mancino & Attia, 2022). For instance, the Interpersonal facet predominantly involves manipulative behaviors and psychological or verbal coercion rather than physical violence (McCarthy et al., 2024). In contrast, the Affective facet is closely linked to instrumental aggression and violence (Klein Haneveld et al., 2017; McCarthy et al., 2024; Sohn et al., 2020). The Lifestyle facet correlates with impulsive behaviors, including substance abuse and crimes of passion (Klein Haneveld et al., 2017; Sohn et al., 2020), and property and societal crimes, mainly drug offenses (McCarthy et al., 2024). Finally, the Antisocial facet is a strong predictor of both general and violent recidivism and is associated with reactive and instrumental aggression, and a broad spectrum of criminal behaviors (Klein Haneveld et al., 2017; McCarthy et al., 2024; Sohn et al., 2020).

Nonetheless, the notion that psychopathy inevitably leads to criminal behavior has been challenged, as problematic or unethical behaviors linked to psychopathy do not always translate into criminal acts (Hare, 1993). Additionally, the understanding of psychopathy has evolved, shifting from a categorical model to a continuum-based perspective (Marsh, 2019). Research has also demonstrated that psychopathic traits can be reliably identified in the general community using self-report measures (Coffey et al., 2018; Paulhus et al., 2016; Seara-Cardoso et al., 2020). While psychopathy remains a strong predictor of certain types of criminality, this association should not be generalized across all individuals or contexts (e.g., Boduszek et al., 2021; Sanz-García et al., 2021). Traits such as emotional callousness and manipulative tendencies, often seen as

hallmarks of psychopathy, may also serve adaptive functions in specific professional settings (Steinert et al., 2017; Scott, 2014).

In this framework, psychopathy is best understood as a personality construct that does not inherently entail antisocial behavior but instead varies in expression based on individual and contextual factors such as gender, age, socioeconomic background, and family history (De Brito et al., 2021). However, the connection between psychopathy, criminal behavior, and other relevant outcomes, such as social status, and professional occupation, in the general population remains unclear. This study aims to explore these relationships in a community adult sample from Portugal, shedding light on how psychopathic traits manifest across different social and occupational contexts.

Successful Psychopathy, Criminal Behavior, Professional Occupation, and Social Status

The concept of “successful psychopathy”, sometimes referred to as “adaptive psychopathy”, remains subject to debate, largely due to the lack of a standardized definition of success (Persson & Liliefeld, 2019; Palmen et al., 2020). However, literature increasingly acknowledges individuals with elevated psychopathic traits who do not engage in criminal or violent behavior yet achieve considerable personal and professional success. These individuals have been labeled as “successful psychopaths” (Lilienfeld et al., 2015), “non-criminal psychopaths”, or “semi-successful psychopaths” (cf. Palmen et al., 2020).

A widely accepted perspective defines successful psychopaths as those who maintain adaptive social functioning despite their psychopathic traits (Bronchain et al., 2019). Certain psychopathic characteristics – such as self-centeredness, emotional insensitivity, charm or charisma, manipulativeness, and poor impulse control (Bronchain et al., 2019; Palmen et al., 2020) – can be seen as advantageous in specific contexts (Mededovic & Kujačić, 2020). Notably, successful psychopaths often exhibit high self-control and are overrepresented in leadership positions (Palmen et al., 2020).

Another perspective suggests that successful psychopaths benefit from protective factors absent in their incarcerated counterparts. These may include privileged educational opportunities, stable SES (Wallace et al., 2022), adequate impulse control (Mahmut et al., 2008), intact executive functioning, lower stress levels, and diminished fear responses (Palmen et al., 2020). Traits such as superficial charm and reduced empathy can facilitate decisive decision-making in fields like business and politics (Boccio & Beaver, 2018). However, while these traits may benefit the individual, they can have broader negative implications for corporations, economies, and even global well-being (Sutton et al., 2020).

Although some studies suggest that individuals with psychopathic traits in the community are less prone to engage in crime (Wallace et al., 2022), the relationship between psychopathy and criminal behavior in the general population remains complex. A meta-analysis by Sleep et al. (2019) found that sample characteristics moderated the link between psychopathy and antisocial behaviors. More recently, a study of a nationally representative U.S. sample found that disinhibition (e.g., poor impulse control, lack of foresight, impaired regulation of affect, deficient behavioral restraint) and boldness (e.g., resilience under pressure, social confidence, tolerance for unfamiliarity and danger) were associated with criminal behavior, while meanness (e.g., lack of empathy, rebelliousness, excitement seeking, exploitativeness) was not (Berluti et al., 2025).

Rather than directly predicting criminality, psychopathic traits among community samples appear to be more broadly linked to deviant and antisocial behaviors (Sutton et al.,

2020). Interpersonal-affective traits—such as superficial charm and manipulativeness—are more prevalent in subclinical populations, such those in the community, where they manifest in covert and sometimes adaptive ways (Palmen et al., 2020; Wallace et al., 2022). Notably, Neumann and Hare (2008), found a higher prevalence of psychopathic traits among high-level managers compared to the general population.

A systematic review and meta-analysis by Sanz-García et al. (2021) also revealed significant variations in psychopathy prevalence across different occupational groups. Higher rates were found among certain job positions, such as managers, executives, procurement professionals, and advertising compared to university students or general community members. Similarly, Babiak and Hare (2006) noted that psychopathic traits vary based on occupational roles, citing examples such as politicians, police officers, security personnel, and lawyers. Babiak et al. (2010) further found that individuals in managerial positions exhibited psychopathy scores higher than those in community samples, with these scores positively correlating to traits like charisma, effective communication, and strategic skills.

SES represents another variable of interest in psychopathy research, though findings remain inconsistent. While some studies identified negative correlations between SES and psychopathy (e.g., Kahn et al., 2013), others reported positive correlations (Garcia et al., 2012; Persson & Lilienfeld, 2019; Wallace et al., 2022; Zwaanswijk et al., 2018), and some found no significant relationships at all (e.g., Lynam et al., 2007, 2008). Furthermore, despite its relevance, SES has often been used as a control variable rather than the primary focus of psychopathy studies (e.g., Mills-Koonce et al., 2016; Zwaanswijk et al., 2018), underscoring the need for further research in this area.

Current Study

The significance of continued research on psychopathy in community samples is considerable. To advance this field, it is crucial to expand investigations to include a broader range of countries and cultures, as most existing studies are concentrated in North America (Braga et al., 2023). Cross-cultural variations in psychopathy – both in terms of average scores and behavioral expression (Cooke, 1998; Fanti et al., 2018; Sanz-Garcia et al., 2021) – highlight the need for more research in different countries and cultures. For instance, Cooke (1998) reported that individuals in European samples tend to score lower on psychopathy than those in North American populations, suggesting differences in prevalence or manifestation of psychopathy. Additional research has supported this pattern, indicating that countries such as Portugal, United Kingdom, Germany, and Belgium typically report lower psychopathy scores compared to North America, while scores in Finland, Norway, and Spain are more closely aligned with North American findings (Fanti et al., 2018). A systematic review on the prevalence of psychopathy in the general adult population also found that prevalence rates vary depending on several factors, including the participants' country of origin (Sanz-Garcia et al., 2021). Additionally, given the ongoing debate regarding the core traits of psychopathy, it is essential to identify which features are most prominent in individuals with psychopathic traits in the community (Steinert et al., 2017) and how these traits relate to criminal behavior, professional occupation, and social status.

This study is particularly innovative, as it opens avenues for further research, especially in Portugal, where studies into psychopathy within community samples remain scarce, and which has been identified as one of the European countries with the lowest psychopathy levels (Fanti et al., 2018). Moreover, it applies Hare's four factor model, which has primarily been used in forensic samples, despite the availability of reliable

self-report measures for assessing psychopathy based on this framework (e.g., Paulhus et al., 2016; Seara-Cardoso et al., 2020). As previously noted, psychopathy has been predominantly examined in forensic settings, with studies indicating a lower prevalence in community samples compared to forensic or prison populations (Sanz-Garcia et al., 2021). This underscores the importance of investigating psychopathy within community samples to gain a deeper understanding of its manifestations, variations in trait expression, and associations with antisocial behavior. In addition, research has suggested that among the general population factors such as professional occupation or socioeconomic status can be related to psychopathic traits. Another critical consideration is the potential impact of this study on the development of prevention programs. The societal response to psychopathy and antisocial behaviors tends to be reactive rather than proactive (Reidy & Bogen, 2022), emphasizing the need for a deeper understanding of these issues to inform preventative measures effectively.

Building on prior scientific research, this study aims to identify in which facets of psychopathy individuals from community score highest and to examine the relationship between psychopathy and antisocial behaviors. Additionally, the study seeks to explore differences in psychopathy facet scores in relation to sociodemographic variables, including SES and professional occupation. The following hypotheses were proposed: a) individuals will score higher on the Affective and Interpersonal facets compared to the other facets (Lifestyle and Antisocial); b) individuals will score lower on the Antisocial facet than on the other facets (Affective, Interpersonal, and Lifestyle); c) there will be significant relationship between psychopathy levels and the presence of antisocial behaviors; d) individuals with higher SES are expected to exhibit higher scores on psychopathy (total score and facets); and e) individuals in more qualified professional occupations are anticipated to exhibit higher scores on psychopathy (total score and facets).

Method

Procedures

The study initially underwent evaluation by the Ethics and Deontology Committee for Scientific Research (CEDIC) of the Lusófona University and received approval.

Data collection was conducted in Portugal using an online survey hosted on the “Qualtrics Survey” platform. To ensure a diverse sample, the survey link was disseminated through multiple channels, including social networks such as Facebook, Instagram, LinkedIn, and Twitter. Additionally, it was shared via personal and institutional emails targeting various student associations, parent associations, and professionals from fields such as health, management, and justice. Individuals who met the predefined inclusion criteria were invited to participate. Before completing the questionnaires, participants provided informed consent online. The study objectives were clearly explained, along with potential risks, while emphasizing the assurance of privacy, confidentiality, and anonymity. Participation in the study was entirely voluntary, with no incentives offered. Completing the questionnaires typically took between 20 and 25 min.

Sample

This study utilized a cross-sectional quantitative design conducted online with a convenience sample of community members in Portugal. Participants were selected based on the following inclusion criteria: a) being 18 years or older; b) residing in Portugal; and c) being proficient in reading and writing Portuguese.

A total of 1244 individuals accessed the study link. However, 581 participants were excluded for not meeting the inclusion criteria or failing to complete the entire survey. Furthermore, due to missing data in sociodemographic variables that will be included in most analysis, the final sample consisted of 245 community participants, 183 (74.7%) of whom were females, with ages ranging from 18 to 60 years ($M = 28.98$; $SD = 9.44$). Most participants were of Portuguese nationality ($n = 230$; 93.9%) and single ($n = 168$; 68.6%), although a substantial proportion reported being in an intimate relationship ($n = 164$; 66.9%). The majority were graduates ($n = 93$; 38.0%) or high school graduates ($n = 73$; 29.8%). The prevailing SES was medium ($n = 117$; 47.8%), followed by low ($n = 110$; 44.9%), and high ($n = 18$; 7.3%). None of the participants reported being convicted of a crime.

Professional occupations were classified using the Portuguese Classification of Professions from the Institute of Employment and Vocational Training (IEFP), which organizes occupations into ten major groups based on four skill levels (IEFP, 2010). Due to the small representation of certain groups, participants were grouped into two broader categories: more qualified professions, including legislators, executives, leaders, directors, executive managers, specialists in intellectual and scientific activities, and technicians and intermediate-level professionals; and less qualified professions, including administrative personnel, workers in personal services, protection, security, and sales, as well as farmers, skilled agricultural, fishing, and forestry workers, and skilled workers in industry, construction, and crafts. The final sample included 118 (48.2%) participants in more qualified professions and 127 (51.8%) participants in less qualified professions. Detailed sociodemographic information is presented in Table 1.

Measures

The *Sociodemographic Questionnaire* was used to collect data on variables such as age, nationality, gender, SES, professional occupation, and academic qualifications.

The *Self-Report Psychopathy Scale – Short Form* (SRP-SF; Paulhus et al., 2016; Seara-Cardoso et al., 2020), adapted from the Hare Psychopathy Checklist-Revised (PCL-R), is a self-report instrument comprising 29 items selected from the full 64-item version of the SRP-4 (Paulhus et al., 2016). SRP-SF assesses psychopathy across four facets: Interpersonal, Affective, Lifestyle, and Antisocial. Each facet includes seven items, except for the Antisocial facet, which comprises eight items. Responses are recorded on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Facet scores are calculated by summing the responses to the corresponding items, at a possible maximum of 145. According to the SRP norms (Paulhus et al., 2016), scores of 70 or higher are considered elevated and may indicate individuals with psychopathic tendencies. Both the original and Portuguese versions of the SRP-SF demonstrate reliable internal consistency, with Cronbach's alpha values ranging from good to very good (Paulhus et al., 2016; Seara-Cardoso

Table 1 Sociodemographic characteristics of the sample ($n = 245$)

Sociodemographic characteristics	<i>n</i>	%
Gender		
Female	183	74.7
Male	60	24.5
Non-binary	2	0.8
<i>Missing</i>	0	
Nationality		
Portuguese	230	93.9
Other	5	2.0
<i>Missing</i>	10	
Marital Status		
Single	168	68.6
Married	64	26.1
Divorced	13	5.3
<i>Missing</i>	0	
Relationship/Dating		
Yes	164	66.9
No	81	33.1
<i>Missing</i>	0	
Academic Qualifications		
First cycle (4 th year)	2	0.5
Second cycle (6 ^o ano)	3	0.6
Third cycle (9 ^o ano)	9	2.3
High cycle (12 ^o ano)	73	37.3
Post-high school	21	5.9
Graduation	93	43.3
Master's degree	40	9.5
Doctorate	4	0.8
Professional Status		
Employed	153	62.4
Student-worker	89	36.3
<i>Missing</i>	3	
Socioeconomic Status		
Low	110	44.9
Medium	117	47.8
High	18	7.3
<i>Missing</i>	0	
Professional Occupation		
More qualified professions	118	48.2
Less qualified professions	127	51.8
<i>Missing</i>	0	

et al., 2020). In the present study, the total scale showed a reliability of 0.87, with the following alpha values for each facet: 0.76 for the Interpersonal Facet; 0.70 for the Affective Facet; 0.76 for the Lifestyle Facet; and 0.71 for the Antisocial Facet.

The *D-CRIM* (Basto-Pereira et al., 2015) is a self-report measure consisting of 12 items that encompass a range of criminal behaviors, including physical and verbal violence, threats, homicide, and the use of weapons. The tool evaluates both violent and non-violent behaviors, assessing their occurrence over a lifetime and within the past 12 months using a binary (yes or no) response scale (Basto-Pereira et al., 2015). For this study, only the lifetime antisocial behavior scale was utilized. The total score is obtained by summing the 12 items, with a maximum possible score of 12. The violent and non-violent subscales are calculated by summing their respective items, with maximum possible scores of 7 and 5, respectively. The D-CRIM has demonstrated high convergent validity (Basto-Pereira et al., 2015).

The *Socially Desirable Response Scale-5* (SDRS-5; Hays et al., 1989; Pechorro et al., 2019) measures the tendency of participants to provide socially desirable responses, presenting themselves in a more positive or socially acceptable manner. The scale consists of five items rated on a five-point Likert scale, ranging from “totally true” to “totally false”. The total score is calculated by summing up the 5 items, with a maximum possible score of 25 points. The original version reported reliability coefficients of 0.66 and 0.68 across two samples (Pechorro et al., 2019). The Portuguese adaptation of the SDRS-5 exhibited valid psychometric properties with higher internal consistency than the original version (Pechorro et al., 2019). In the present study, the SDRS-5 demonstrated a reliability coefficient of 0.57.

Data Analysis

All the analyses were conducted using the Statistical Package for Social Sciences (SPSS version 29). Descriptive statistics, such as mean, standard deviation, minimum, maximum, frequencies, and percentages, were employed to characterize the sample.

To test the first two hypotheses, a linear mixed model was considered. Data was transformed into a long format with a single variable including all four facets. This variable entered the model as a dependent variable. Although the first two hypotheses only concern each facet, we added the identification of each facet as a fixed effect to the model, but also considered other variables such as antisocial behaviors, SES (low/medium/high), professional occupations (less/more qualified), gender and socially desirability (SDRS-5 scale) in order to control their effect. Random intercepts were also considered. The assumptions of normal distribution, homogeneity, and independence of errors, as well as the existence of a linear relationship between the variables, were validated, by inspecting the residuals. No outliers were identified.

To test the last three hypotheses, four multiple linear regressions were performed, each with a different facet as dependent variable and antisocial behaviors, SES (low/medium/high) and professional occupations (less/more qualified) as independent variables, controlling the effect of gender and socially desirable responses. A fifth multiple linear regression, with the total score of psychopathy as dependent variable, was also performed. The assumptions of normal distribution, homogeneity, and independence of errors, as well as the existence of a linear relationship between the variables, were validated. The assumptions of linearity, normality and homogeneity were validated by visual inspection of the residuals graph, the independence of errors with the Durbin-Watson statistic ($d \approx 2 (\pm 0.4)$), as described in Marôco (2021). The VIF (Variance Inflation Factor) was always less than 5 for all variables, which does not reveal any problems related to multicollinearity (Marôco, 2021). Observations with $|studentized\ deleted\ residual| > 3$ were considered

outliers. However, most of those outliers were not influential points, since Cook's distance was less than 0.090 (Marôco, 2021). Only when the Antisocial facet was the dependent variable, there was one observation that had $|studentized\ deleted\ residual| > 3$ and was an influential point. In this case, the regression was performed without this observation. Nevertheless, the difference between the results with and without this participant is mentioned. Although the variable gender had three response categories, one of them (non-binary) had very few responses. Therefore, to perform the linear mixed model and the multiple linear regression, only the other two response categories were considered. For the multiple linear regressions, the variable SES, having three response categories, entered the models as two dummy variables, with the low SES as the reference category. For all regressions, the effect size Cohen's f^2 was considered, with $f^2 \approx .02$, $f^2 \approx .15$ and $f^2 \approx .35$ being considered a small, medium and large effect size, respectively (Cohen, 1988). A significance level of 0.05 was considered.

Results

According to Table 2, the total psychopathy score, as assessed by SRP-SF, had a mean of 76.12 points in the present sample, exceeding the Portuguese validation average ($M = 45.42$; Seara-Cardoso et al., 2020). Additionally, the Lifestyle facet recorded the highest mean score ($M = 20.05$), also surpassing the Portuguese validation average ($M = 14.12$; Seara-Cardoso et al., 2020). In terms of social desirability, as assessed by SDRS-5, participants exhibited scores exceeding the average ($M = 12.5$), indicating a notable inclination among participants to provide socially desirable responses. The average score of antisocial behaviors, as assessed by D-CRIM, was lower than the Portuguese validation sample average ($M = 1.68$; Basto-Pereira et al., 2015) (see Table 2).

Upon closer examination of specific antisocial behaviors, 243 individuals (99.2% of the 245 respondents to this question) were found to have engaged in some form of antisocial behavior. More specifically, Table 3 reveals a higher prevalence of violent behaviors, with

Table 2 Descriptives of antisocial behavior (DCRIM), psychopathy (SRP-SF), and social desirability (SDRS-5) instruments

	<i>N (%)</i>	<i>Minimum</i>	<i>Maximum</i>	<i>M</i>	<i>SD</i>
DCRIM					
Non-violent behaviors	243 (99.2)	0	4	0.40	0.67
Violent behaviors	243 (99.2)	0	4	0.60	0.99
Total	245 (100.0)	0	7	0.99	1.38
SRP-SF					
Interpersonal Facet	245 (100.0)	13	33	18.30	4.29
Affective Facet	245 (100.0)	13	28	18.48	3.46
Lifestyle Facet	245 (100.0)	14	31	20.05	3.83
Antisocial Facet	245 (100.0)	15	30	19.29	2.04
Total	245 (100.0)	60	114	76.12	10.94
SDRS-5					
Total	245 (100.0)	9	25	17.41	3.17

Note. DCRIM = antisocial behavior; SRP-SF = Self-Report Psychopathy Scale – Short Form; SDRS-5 = Socially Desirable Response Scale – 5

Table 3 Descriptive analyses of the antisocial behaviors

	Lifetime <i>N</i>	%
Using violence to take something that didn't belong to you	6	2.4
Intentionally assaulting or injuring someone	21	8.6
Treating your girlfriend/wife with physical or verbal violence	31	12.7
Forcing someone to have sex	1	0.4
Carrying around armed with a pistol, knife, razor or chain	12	4.9
Kill someone	1	0.4
Treating a family member with physical or verbal violence	55	22.4
Threaten or blackmail someone	22	9.0
Total of violent behaviors	149	58.9
Taking something that didn't belong to you without the person seeing it	41	16.7
Driving without a driving license	43	17.6
Sell drugs	9	3.7
Intentionally damaging or spoiling something that does not belong to you	11	4.5
Total of non-violent behaviors	104	41.1

Table 4 Descriptive data from the average responses

	<i>N (%)</i>	<i>Minimum</i>	<i>Maximum</i>	<i>M</i>	<i>SD</i>
SRP-SF					
Interpersonal Facet	245 (100.0)	1.86	4.71	2.61	0.61
Affective Facet	245 (100.0)	1.86	4.00	2.64	0.49
Lifestyle Facet	245 (100.0)	2.00	4.43	2.86	0.55
Antisocial Facet	245 (100.0)	1.88	3.75	2.41	0.26

SRP-SF = Self-Report Psychopathy Scale – Short Form

149 instances reported, compared to non-violent behaviors, with 104 instances reported. Within the category of violent behaviors, the most frequently reported incidents included physical or verbal violence directed towards family members, girlfriends/wives, and the use of threats and blackmail. Conversely, among non-violent antisocial behaviors, the most reported incidents were taking something that did not belong to the person and driving without a license.

To examine differences among the facets, mean scores for each facet were computed (see Table 4). We note that, as already mentioned, the score of each facet is obtained by summing the corresponding items. Therefore, since the facets do not all have the same number of items, those with a higher number of items could have a higher score simply due to the number of items that are related to that facet. To avoid false conclusions and to find true differences between the facets, one can use the mean score, that is, instead of summing the items, we consider the mean of the items. Considering these mean scores, a linear mixed model determined that there were statistically significant differences between the facets (see Table 5). Subsequent Bonferroni post-hoc tests indicated statistically significant differences between the Interpersonal facet and the Lifestyle facet ($p < 0.001$);

the Interpersonal facet and the Antisocial facet ($p < 0.001$); the Antisocial facet and the Affective facet ($p < 0.001$); the Lifestyle facet and the Antisocial facet ($p < 0.001$); and the Affective facet and the Lifestyle facet ($p < 0.001$). No significant differences were found between the Interpersonal facet and the Affective facet ($p = 1.000$). The Lifestyle facet exhibited a significantly higher average, while the Antisocial facet demonstrated a lower average score compared to the others (see Table 4).

To analyze how antisocial behaviors, SES and professional occupation influence the levels of psychopathy, several hierarchical multiple regressions were performed, controlling the effect of gender and SDRS-5. As can be seen in Table 6, when performing the multiple linear regression with the total score of psychopathy as dependent variable, the model was statistically significant and explained 30% of the variance of psychopathy. Both gender and SDRS-5 were significant and negative predictors of the dependent variable, meaning that women present significantly lower levels of psychopathy than men and that a higher tendency to present socially desirable responses is related with lower levels of psychopathy. A higher number of antisocial behaviors is significantly related to higher levels of psychopathy and those with high SES present significantly lower levels of psychopathy than those with low SES (repeating the analysis with high SES as the reference group, we can also conclude that those with high SES present lower levels than those with medium SES). Those with less qualified professions present higher levels of psychopathy. Detailed data can be found in Table 6.

As can also be seen in Table 6, when performing the multiple linear regressions with each psychopathy facet as dependent variable, the models were always statistically significant, explaining between 11 and 24% of the variance of psychopathy. Both gender and SDRS-5 were always significant and negative predictors of the dependent variable. Regarding D-CRIM it was only a significant predictor of the Lifestyle facet, with a higher number of antisocial behaviors being related to higher levels of this facet, and SES was only a significant predictor of the Interpersonal and the Lifestyle facets, with those with high SES presenting lower levels of these two facets than those with low SES (repeating the

Table 5 Linear Mixed Models to evaluate the difference in mean values between facets ($n = 243$)^(a)

Level of Psychopathy		
Predictors	<i>F</i>	df1; df2
Facets	64.62***	3; 726
Gender	24.90***	1; 215
SDRS-5	2.78***	16; 215
Total DCRIM	0.8	7; 215
SES	2.39	2; 215
Professional Occupation	6.09*	1; 215
Random Effects		
σ^2	0.13	
$\tau_{00 \text{ ID}}$	0.08	
N	243	
Marginal R^2 /Conditional R^2	0.269/0.547	
Marginal f^2 /Conditional f^2	0.368/1.121	

DCRIM = antisocial behavior scale; SDRS-5 = Socially Desirable Response Scale – 5; SES = Socioeconomic status. * $p < .05$ ** $p < .01$ *** $p < .001$; (a) only women and men were considered, since there were only two participants that were non-binary

Table 6 Multiple Linear Regressions with the total score/facets of Psychopathy as dependent variables

		β	t	df1, df2	F	R ²	f ²
Total score (n = 243)^(a)				6, 236	16.54	.30***	.429
	Gender	-.30	-5.37***				
	SDRS-5	-.35	-6.06***				
	Total DCRIM	.12	2.08*				
	Medium SES	-.02	-0.28				
	High SES	-.15	-2.62**				
	Professional Occupation	.13	2.25*				
Interpersonal facet (n = 243)^(a)				6, 236	13.41	.24***	.316
	Gender	-.23	-4.05***				
	SDRS-5	-.38	-6.40***				
	Total DCRIM	.08	1.32				
	Medium SES	-.05	-0.89				
	High SES	-.15	-2.41*				
	Professional Occupation	.09	1.59				
Affective facet (n = 243)^(a)				6, 236	10.03	.20***	.250
	Gender	-.20	-3.38***				
	SDRS-5	-.33	-5.39***				
	Total DCRIM	.03	0.44				
	Medium SES	-.01	-0.14				
	High SES	-.07	-1.09				
	Professional Occupation	.17	2.75**				
Lifestyle facet (n = 243)^(a)				6, 236	11.82	.23***	.299
	Gender	-.28	-4.85***				
	SDRS-5	-.21	-3.46***				
	Total DCRIM	.17	2.81**				
	Medium SES	.01	0.16				
	High SES	-.15	-2.52*				
	Professional Occupation	.17	2.79**				
Antisocial facet (n = 242)^(b)				6, 235	4.98	.11***	.124
	Gender	-.22	-3.55***				
	SDRS-5	-.16	-2.46*				
	Total DCRIM	.11	1.64				
	Medium SES	.04	0.68				
	High SES	-.11	-1.68				
	Professional Occupation	-.13	-2.00*				

DCRIM = antisocial behavior scale; SDRS-5 = Socially Desirable Response Scale - 5; SES = Socioeconomic status. * $p < .05$ ** $p < .01$ *** $p < .001$; SES: the reference group is low SES and two dummy variables were created (one for medium SES and another for high SES); Professional Occupation: the reference group is more qualified professions; (a) Gender: the reference group is men and only women and men were considered, since there were only two participants that were non-binary; (b) When the Antisocial facet was the dependent variable, there was an outlier that was, simultaneously, an influential point. Including that point in the analysis, there were no differences in the Antisocial facet between those with less and those with more qualified professions. Excluding that point, differences between those two groups were found. Here, we report the results without that point

analysis with high SES as the reference group, we can also conclude that those with high SES present lower levels than those with medium SES). Finally, Professional occupation was a significant predictor of the Affective, the Lifestyle and the Antisocial facets. For the Affective and Lifestyle facets, those with less qualified professions presented higher levels. However, for the Antisocial facet, those with less qualified professions presented lower levels (this was the only difference between the results of the regressions with and without the influential point, since there were no differences in the Antisocial facet between those with less and those with more qualified professions, when that influential point was included in the analysis). Detailed data are provided in Table 6.

Discussion

This study aimed to identify the predominant facet of psychopathy within a community sample and explore the correlations between psychopathy and antisocial behavior. Furthermore, it sought to analyze differences among psychopathy and psychopathy facets in relation to SES and professional occupation. By shifting the focus from forensic samples primarily centered in North America and utilizing Hare's (2003) four factor model, this study makes a valuable contribution to the literature by examining psychopathy within a community sample outside of America. It also addresses the less-explored relationship between psychopathy, criminal behavior, SES, and professional occupation among a community sample in Portugal (e.g., Hare, 1993; Mills-Koonce et al., 2016).

An intriguing observation in the present study is the notably high scores on total psychopathy and psychopathy facets, especially when compared to the SRP-SF Portuguese validation sample (Seara-Cardoso et al., 2020) and community sample norms from the original version (Paulhus et al., 2016). This result is particularly concerning as scores exceeding 70, according to the SRP manual (Paulhus et al., 2016), are considered elevated and may indicate individuals with psychopathic propensities. These findings align, however, with research by DeMatteo et al. (2006), which explored psychopathy in a non-institutionalized sample and reported significant psychopathy facet scores among individuals with no involvement in the criminal justice system. Similarly, a meta-analysis on psychopathy prevalence in the general adult population highlighted significant rates, particularly when assessed using instruments other than the PCL-R (Sanz-García et al., 2021). In this study, psychopathy was assessed through a self-report measure, which, along with the high scores on social desirability found, could partly explain the considerably high scores observed.

Our results indicated that the Lifestyle facet exhibited the highest scores within the sample. Consequently, our first hypothesis was not supported, as we expected higher scores for the Affective and Interpersonal facets. However, these findings align with those of Declercq et al. (2015), who, in a study focusing exclusively on a community sample of women, also identified the Lifestyle facet as having the highest scores. This similarity is particularly noteworthy given that our sample predominantly comprises female individuals. Another factor contributing to the elevated scores in the Lifestyle facet may be related to the mean age of our participants. According to the literature, this age corresponds to "emerging adulthood", a developmental phase marked by significant life transitions and increased responsibilities (e.g., Arnett, 2015; DeVargas & Stormshak 2020). This stage, representing the transition between adolescence and adulthood (Papalia & Feldman, 2013), provides a framework for understanding the prominence of the Lifestyle facet in our sample. The

behaviors encompassed by the Lifestyle facet, as reflected in its items, include involvement in dangerous activities, rebelliousness, engaging in sexual activities with unfamiliar individuals, impulsivity, infrequent adherence to rules, repeatedly getting into trouble, and finding pleasure in adventurous activities. From a developmental perspective, casual sexual involvement has become increasingly common and normalized, especially among emerging adults and university students (Papalia & Feldman, 2013). Furthermore, casual sexual activities with unfamiliar partners may reflect self-centered or egocentric attitudes rather than a lack of interpersonal involvement or closeness (James-Kangal et al., 2018). These insights help contextualize why the Lifestyle facet emerged as more prominent compared to the Affective and Interpersonal facets. The impulsivity component within the Lifestyle facet can be defined as an internal and/or external behavior that neglects potential negative consequences (Moeller et al., 2001 as cited in Marzilli et al., 2021). This trait is often associated with rebellious behavior, impulsive behaviors, risky activities, substance abuse, and difficulty adhering to rules (Klein Haneveld et al., 2017; Marzilli et al., 2021; McCarthy et al., 2024; Sohn et al., 2020). According to the literature, such tendencies may be linked to a lack of parental bonding, emotional support, and parental control during childhood and adolescence (Marzilli et al., 2021). Consequently, these factors can act as risk factors, fostering behaviors that align with the Lifestyle facet's psychopathic characteristics. Moreover, difficulties in developing a sense of identity during emerging adulthood may increase susceptibility to engaging in risky behaviors (Schwartz et al., 2011 as cited in Schwartz & Petrova, 2019).

The results of the second hypothesis revealed that the Antisocial facet had the lowest scores, with significant differences compared to the other facets, consistent with prior literature (DeMatteo et al., 2006). This outcome aligns with expectations that individuals in a community sample are less likely to exhibit current or early antisocial behaviors (e.g., Wallace et al., 2022). As noted in the literature, some behaviors observed in community samples may reflect lapses in ethical conduct rather than overtly illegal or criminal actions (Hare, 1993; Sutton et al., 2020). However, an important point for consideration is the potential risk associated with elevated scores on the Lifestyle facet, particularly in relation to future antisocial and criminal behaviors. Historically, the Lifestyle and Antisocial facets have been correlated and often assessed as a single factor. As a result, the criminal justice system frequently considers both facets when evaluating individuals' criminal behaviors and lifestyles (Leistico et al., 2008). This is particularly critical given the higher prevalence of criminal behaviors reported by individuals in our sample, especially acts of violence against intimate partners and family members.

Our third hypothesis proposed significant correlations between psychopathy levels and the presence of antisocial behavior in community individuals. This hypothesis was confirmed for total psychopathy and the Lifestyle facet. Consistent with existing literature, psychopathy was significantly correlated with antisocial behavior in both forensic (DeLisi, 2016; Hare, 2003) and community samples (e.g., Berluti et al., 2025; Sleep et al., 2019). Indeed, psychopathy is marked by the early and persistent display of behaviors that conflict with societal, moral, or legal norms, serving as a risk factor for engaging in overt criminal behaviors (Hare, 2003; Patrick, 2018; Widiger & Crego, 2018). A recent study with a representative general population sample also found significant correlations between criminal behavior and traits linked to poor impulse control, lack of planfulness, and deficient behavioral restraint (Berluti et al., 2025). Additionally, studies with forensic samples also have shown that the Lifestyle facet of psychopathy is significantly associated with impulsive behaviors, including substance abuse, crimes of passion (Klein Haneveld et al., 2017; Sohn et al., 2020), and property and societal crimes (McCarthy et al., 2024). Considering

the notably high scores on psychopathy—particularly in the Lifestyle facet—found in our study, along with the high prevalence of both violent and non-violent criminal behavior reported by participants, these results are not entirely surprising. Notably, the high prevalence of psychological and physical violence against intimate partners and family members stands out. Prior studies have linked such behaviors with elevations in the Lifestyle facet (e.g., Theobald et al., 2015). These findings underscore that psychopathy facets may correlate differently with criminal behaviors depending on the type of crime and the sample context. Interestingly, despite the high prevalence of reported criminal behaviors in our study, none of the participants reported a criminal justice conviction. This aligns with the notion that some individuals with psychopathic traits may exhibit “successful” characteristics, enabling them to evade legal consequences for their actions (Benning et al., 2018). These individuals appear capable of attaining significant psychopathy facet scores while avoiding formal legal repercussions. However, it is important to emphasize that the overall frequency of criminal behaviors in our sample is low, indicating that participants generally do not engage in (or report) such behaviors. This finding further suggests that individuals in community settings with elevated psychopathy scores may exist without engaging in frequent criminal activity (Cleckley, 1988).

However, it is important to note that the positive correlation between antisocial behaviors and psychopathy (total scores and the Lifestyle facet) was observed only when high SES and professional occupation were also significant. This suggests that social status (encompassing both SES and professional occupation), may significantly impact the relationship between antisocial behaviors and psychopathic traits. Previous studies have shown that impulsivity is more strongly associated with antisocial behavior in lower SES neighborhoods (Meier et al., 2008). This may occur because higher SES neighborhoods typically exhibit stronger informal social control and have residents more likely to intervene, reducing opportunities for antisocial behavior (Meier et al., 2008). Moreover, family background is consistently identified as a crucial factor influencing the development of psychopathic traits and engagement in criminal behavior (e.g., Zwaanswijk et al., 2018). The social status of a family can predict such outcomes, with individuals from lower status families being more likely to develop these behaviors during adolescence (Farrington & Bergstrom, 2022; Zwaanswijk et al., 2018).

Regarding the fourth and fifth hypotheses, the study found significant correlations between SES and psychopathy total scores, as well as the Interpersonal and Lifestyle facets. Similarly, professional occupation correlated significantly with psychopathy total scores, along with the Affective, Lifestyle, and Antisocial facets. Higher SES was associated with lower psychopathy total scores and lower scores in the Interpersonal and Lifestyle facets, while less qualified occupations were linked to higher psychopathy total scores, higher scores in the Affective and Lifestyle facets, and lower scores in the Antisocial facets. Despite inconsistencies in prior literature, these findings align with studies reporting negative correlations between social status (including occupational qualifications) and psychopathy (e.g., Kahn et al., 2013). Primary and secondary psychopathy may offer insight into these results. Primary psychopathy (affective and interpersonal traits) is theorized to result from genetic predispositions, while secondary psychopathy (lifestyle and antisocial traits) is often shaped by adverse environmental factors, such as low SES or competitive disadvantage (Mealey, 1995; Palmen et al., 2020). These findings suggest that low SES might contribute to the development of psychopathic traits. However, the significant correlations between SES and the Interpersonal facet in this study may indicate that SES also influence primary psychopathy. This is especially relevant given that less qualified occupations, often associated with lower SES, were linked to higher psychopathy total scores and

higher Affective facet scores. While psychopathic traits are largely influenced by genetics (e.g., Bezdjian et al., 2011; Larsson et al., 2006), these findings suggest that environmental factors may also play a significant role in their development.

The connection between less qualified occupation and higher psychopathy total scores and Affective facet scores may also reflect risk factors such as precarious working conditions, low job satisfaction, and salary dissatisfaction (Jaydarifard et al., 2023). Individuals in higher-status professions may experience more protective factors and opportunities, which could explain our findings. Nonetheless, it is important to note that the manifestation of psychopathic traits may vary depending on an individual's specific professional role (Babiak & Hare, 2019; Babiak et al., 2010; Sanz-García et al., 2021). Due to the necessity of aggregating different professions into broad categories, this study was unable to analyze specific links between individual professional roles and psychopathy, which may have impacted the findings. Nonetheless, interestingly, less qualified occupations were associated with lower scores on the Antisocial facet. This could be attributed to the sample's composition, which included mostly female community members with generally low scores on this facet. Additionally, the absence of significant correlations between the Antisocial facet and criminal behaviors reported by participants may further explain these findings.

Finally, although gender was included only as a control variable, it was observed that female gender was significantly correlated with lower scores on psychopathy and all its facets. This finding aligns with existing research, which consistently reports higher prevalence rates of psychopathy among males in both forensic and community samples (Laskey & Bates, 2018; Sanz-García et al., 2021). Moreover, previous studies have highlighted differences in the manifestation and correlates of psychopathic traits between males and females (e.g., Hare, 2003; Verona & Vitale, 2018).

Despite the valuable contributions of this study, it is important to acknowledge its limitations. While online studies offer benefits such as cost-effectiveness, anonymity, and efficiency, they also present challenges, including the potential for omitted responses, variations in question interpretation, and other methodological issues. This study recognizes the issue of missing responses, as participants had the right to withdraw at any time or choose not to answer specific questions. Additionally, the use of self-report instruments introduces another limitation. Although self-report tools are valued for their brevity and participants appeal (Pechorro et al., 2019), there is no consensus on their suitability for assessing constructs like antisocial traits (Vasconcellos et al., 2018). Some studies suggest that self-report measures may increase social desirability bias, potentially compromising the reliability of results (Kreitchmann et al., 2019). In this study, the SDRS-5 instrument was used to mitigate this risk, revealing high levels of social desirability among participants. This high social desirability limits the robustness of conclusions, especially since it was statistically correlated with psychopathy total score and its facets in our study. Another limitation involves gender discrepancies in the sample. Although psychopathy is more prevalent among males (Laskey & Bates, 2018), females tend to participate more in research studies, as reflected in this study. This gender imbalance may limit the generalizability of findings and influence the scores obtained for psychopathy and criminal behaviors. Furthermore, the underrepresentation of non-binary identities highlights the need for greater inclusivity and diversity in research. The study also faced limitations concerning the SES variable, particularly the underrepresentation of the high-SES group compared to medium and low-SES groups. This may stem from the online data collection method or the manner in which SES was assessed, as participants were asked to self-identify their SES based on monthly income. Similarly, the study did not allow for a detailed analysis of specific professions and professional roles. Due

to the low prevalence of some professions, broader categories were used to enable statistical analysis. Notably, the group of highly qualified professional occupations lacked representation from high-status roles, such as political, executive, or director-level positions. Instead, it primarily comprised professionals in intellectual and scientific activities, which, while qualified, do not represent the highest social status according to the Portuguese Classification of Professions. Similarly, less qualified occupations in the sample did not include categories such as plant and machine operators, assembly workers, or unskilled laborers. Future studies should explore specific high-status positions, such as political positions, and explore their potential correlations with psychopathy. Additionally, incorporating a broader range of high and low-status professions would enhance understanding. This recommendation is supported by literature linking psychopathy to conservative ideologies endorsing racism, misogyny, homophobia, and related issues (Preston & Anestis, 2018).

The findings of this study have potential implications for research, as well as for the development of intervention and prevention programs. On the intervention front, individuals exhibiting psychopathic traits are often subject to punitive approaches. This study advocates for community-based prevention programs informed by scientific research (Reidy & Bogen, 2022). By identifying areas requiring attention, such as lifestyle, sexual behavior, impulsivity behaviors, and prioritizing populations, such as emerging adults, males or adolescents from low SES, and less qualified occupations, this study offers actionable insights. Current interventions often focus on reducing impulsive and antisocial behaviors (Polaschek & Skeem, 2018) rather than targeting specific psychopathic traits (Moreira et al., 2014), which may lead to unaddressed deviant behaviors in individuals not captured by the justice system. In terms of practical implications, the findings should inform the design and implementation of such programs, emphasizing the facets with the highest scores in community samples, particularly within the Lifestyle facet. The results also provide a foundation for future research across diverse populations. Much existing research has been conducted in North America, creating a gap in comparative studies across different cultures and countries (Fanti et al., 2018; Seara-Cardoso et al., 2020).

In conclusion, psychopathy is a universal construct that transcends gender, cultures, ethnicities, social sectors, and class (Babiak et al., 2012). This underscores the importance of continued exploration within community samples, as demonstrated by this study. Furthermore, considering SES and professional qualifications is essential when examining psychopathy, particularly as our findings suggest distinct relationships between psychopathy facets and these variables.

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Data Availability The data presented in this study are available on request from the corresponding author due to privacy issues.

Declarations

Ethical approval and consent to participate. All procedures performed were in accordance with the ethical standards of the institutional ethics committee and with the 1964 Helsinki declaration and its later amendments. The study was approved by the Lusófona University Ethics Committee (CEDIC-2020-15-8 on December 15, 2020). Informed consent was obtained from all subjects involved in the study.

Conflict of Interest: The authors have no conflicts of interest to declare that are relevant to the content of this article.

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