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Psychopathy and crimes against humanity: A conceptual and empirical examination of human rights violators

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ABSTRACT

Purpose: There is a dearth of empirical data on the contributions of personality, psychopathology, and psychopathy to terrorism and its actors. Because of a fortuitous set of circumstances, we had access to a sample of men convicted of *crimes against humanity* (CAH) committed during the Pinochet regime, each rated by expert clinicians on the Psychopathy Checklist-Revised (PCL-R). We also had PCL-R ratings for samples of general offenders and community participants.

Methods: We determined the psychometric properties of the PCL-R for these samples, performed structural equation modeling (SEM) to investigate the factor structure of the PCL-R, and conducted a latent profile analysis (LPA) of the obtained factors to identify classes or subtypes within the samples.

Results: The PCL-R's psychometric properties and factor structure were in accord with findings from other countries and settings. The PCL-R total scores of the CAH and general offenders were virtually the same but much higher than those of the community sample. However, the CAH group had extraordinarily high scores on the Interpersonal/Affective facets yet relatively low scores on the Lifestyle/Antisocial facets. LPA identified the expected four latent classes, with most CAH men located within the Callous-Conning class.

Conclusions: The results of this study provide unique information about the psychopathic propensities of a sample of state violators of human rights. Their pattern of PCL-R scores was consistent with an extreme disposition for self-serving, callous, and ruthless treatment of others, without guilt or remorse, and in the absence of a prior documented history of severe antisocial behavior.

1. Introduction

To our knowledge, this is the first study to use a validated clinical/forensic measure of psychopathy among army and police officers convicted of a particular form of State terrorism, *crimes against humanity*. The scale was the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). The men had played an active role in the atrocities committed during the Pinochet dictatorship in Chile. Psychological research of this sort is rare in any jurisdiction, particularly in Latin American states still dealing with the aftermath of military dictatorships (Fondevila & Meneses Reyes, 2015; United Nations Human Rights Council, 2013). Military dictators in these states had concealed their crimes, as detailed by the National Commission on the Disappeared (1984), the National Commission on Truth and Reconciliation (1991; "Rettig Report"), and the National Commission on Political Imprisonment and Torture (2004; "Valech Report"). Subsequent democratic governments in Chile have not provided a reliable register of murders committed by state agents (Fondevila & Meneses Reyes, 2015).

The current study is a result of a fortuitous chain of events. It started more than 15 years ago when León-Mayer, Jorge Folino, and Robert Hare began a series of forensic seminars and PCL-R workshops in Chile. Since then, León-Mayer and Folino have conducted many workshops and research projects in Chile and other Latin American countries. Several years ago, the Director of the Gendarmería de Chile (Chilean Penitentiary System) attended one of their PCL-R workshops and expressed considerable interest in psychopathy and criminality. León-

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Mayer suggested that Chile had an unusual and fascinating prison population worth careful psychological study. Two months later, she received permission to conduct research in the prison that housed human rights violators from the Pinochet era (1973–1990). Rocuant Salinas, a senior member of the prison facility, joined León-Mayer and Folino to explain the purpose of the study to the authorities and inmates and obtain their active cooperation. These efforts formed the basis for the current study, which reports findings unusual in the literature on terrorism.

As behavioral scientists and clinicians, our areas of expertise lie without the varied and disputatious fields of terrorism. Nevertheless, we found it necessary to delve into issues that seemed most relevant to the purpose of our study, namely the role of psychopathy in terrorist proclivities and actions. We expected the literature to be large and complex, and arduous, and we were correct. The initial drafts contained an extensive account of our understanding and conclusions about the main issues of concern as a broad context for our research and findings. The result was a long preamble to a lengthy empirical report. Therefore, we decided to trim the introduction and make the more extended version available on request, hoping that it will be helpful to other investigators contemplating entry into this contentious but essential field of inquiry.

Theoretically and empirically, psychopathy is a multidimensional construct (Hare, 1980; Harpur, Hare, & Hakstian, 1989; Lilienfeld, 2018). As first demonstrated by Harpur et al. (1989), the dimensions or factors relate in different ways to a variety of external variables. The PCL-R four-factor model has made it possible to formulate structural models for use in a nuanced exploration of the many ways in which psychopathy impacts society. We begin with a brief description of the construct and its measurement with the PCL-R, with more details in the Method section (3). We follow this with an outline of some themes common to terrorism in general and State terrorism in particular in Chile. We then summarize theory and research concerning the use of personality, psychopathology, and psychopathy to describe and understand the commission of crimes against humanity.

1.1. Psychopathy

Psychopathy is a clinical construct that includes a cluster of personality traits and behaviors, including deception, manipulation, irresponsibility, impulsivity, stimulation-seeking, poor behavioral controls, shallow affect, a lack of empathy, guilt, or remorse, and a range of unethical and antisocial behaviors, not necessarily criminal. Among the most devastating features of psychopathy are a callous disregard for the rights of others and a high risk for a variety of predatory and aggressive behaviors. Modern conceptions of psychopathy are the product of a rich clinical tradition (Cleckley, 1976; Felthous & Sass, 2021; Lilienfeld, Watts, Smith, Patrick, & Hare, 2018) and decades of empirical research leading to the development of the first edition of the 20-item construct rating scale, the PCL-R (Hare, 1991). The instrument has become an international standard for measuring psychopathy in clinical and forensic settings (DeLisi, 2019; Felthous & Sass, 2021; Hare, Neumann, & Mokros, 2018; Marques, Paulino, & Alho, 2022). There is extensive evidence (e.g., Hare, 2003, 2021; Neumann, Hare, & Newman, 2007; Neumann, Hare, & Pardini, 2015) that the PCL-R captures a *superordinate* construct (psychopathy) underpinned by four narrow (first-order) factors or facets, *Interpersonal*, *Affective*, *Lifestyle*, and *Antisocial,* and two broad (second-order) factors, labeled *Factor 1* (Interpersonal/Affective) and *Factor 2* (Lifestyle/Antisocial). A trained assessor uses interview and collateral information *and explicit criteria* to rate each item on a 3-point scale (0, 1, or 2) according to the extent to which the item description matches the individual. The total score varies from 0 to 40, reflecting the degree to which the individual matches the "prototypical" psychopath. Comprehensive accounts of the development, properties, and use of the PCL-R are available elsewhere (Hare, 2021; Hare et al., 2018).

Most psychopathy research has used variable-centered analyses, such as confirmatory factor analysis (CFA) and structural equation modeling (SEM). These analyses inform us about the group properties of PCL-R items and factors but not about how individuals differ in the configuration of the items and domains. On the other hand, person-centered analyses, including latent profile analysis (LPA), seek to determine clinically meaningful varieties, subtypes, or classes of psychopathic and externalizing individuals. LPA of the manifest PCL-R four-factors has proven particularly useful in demonstrating the existence of such classes or subtypes (Hare et al., 2018; Mokros, Hare, Neumann, & Habermeyer, 2021; Neumann, Vitacco, & Mokros, 2016). Several studies provide strong support for a latent four-class model. The classes or subtypes are as follows, with the class number in brackets: *Prototypic* (C1), with a high score on each facet; *Conning-Callous* (C2), with elevations on the interpersonal and affective facets; *Externalizing* (C3), also referred to as sociopathic, with a high score on the lifestyle and antisocial facets; and *General* (C4), with relatively low scores on each facet. Subsequent researchers have confirmed this four-class model in a variety of settings and sample types (e.g., Klein Haneveld, Neumann, Smid, Wever, & Kamphuis, 2018; Krstic et al. (2018), and McCallum, Boccaccini, Varela, and Turner (2021).[1]

The PCL-R is the primary basis for conceptualizing and discussing the psychopathy construct throughout this article, supplemented by one of its direct derivatives, the Self-Report Psychopathy-Short Form (SRP-SF) scale (Paulhus, Neumann, & Hare, 2016). There is extensive evidence concerning their psychometric properties, factor structure, and correlates. The latent correlations between the SRP-SF and PCL-R total and factor (facet) scores are moderate to strong, with the strongest for the Lifestyle and Antisocial factors (Neumann et al., 2015, Table 3). The SRP traits have good construct validity in a variety of offender and community settings, and are associated in the expected theoretical directions with many relevant external correlates, such as criminal offenses, externalizing psychopathology, moral reasoning, functional imaging, and personality measures (Neumann et al., 2015; Paulhus et al., 2016; Seara-Cardoso, Vasconcelos, Sampaio, & Neumann, 2022). There is increasing evidence for the ethnic and cultural generalizability of the SRP scales (Fanti, Lordos, Sullivan, & Kosson, 2018; Paulhus et al., 2016; Seara-Cardoso, Queirós, Fernandes, Coutinho, & Neumann, 2020; Seara-Cardoso, Vasconcelos, Sampaio, & Neumann, 2022).

As described in Section 3, we used the Chilean translation of the PCL-R and the SRP-SF in this study (León-Mayer, Folino, Neumann, & Hare, 2015).

1.1.1. Relevance to terrorism

Psychopathy has close theoretical and empirical associations with antisocial, criminal, and violent behaviors. As DeLisi (2019, p. i) remarked, "For over two centuries, psychopathy has stood as perhaps the most formidable risk factor for antisocial behavior, crime, and violence." Further, "It is noteworthy that no study exists, to my knowledge that has found that psychopathy was *unrelated* to crime and various aberrant conduct" (p. 6; emphasis in original). This statement reflects the enormous clinical and research literature on the antisociality of psychopathy and the expressions of its traits in deviant and criminal behaviors of all kinds and different civil and forensic settings (e.g., DeLisi, 2019; Felthous & Sass, 2021; Marques et al., 2022). Much of the research is on threats and risks for violence. Although not designed as risk tools, several meta-analyses demonstrate that the PCL-R and its clinical/forensic derivatives predict violence about as well as purpose-built instruments (Garb & Wood, 2019).

Researchers (e.g., Meloy, 2006) have found it helpful to differentiate between aggressive and violent acts that primarily are planned, instrumental, or predatory (*predatory/instrumental*) and those that mainly are emotionally laden and committed as a response to threat or provocation

[1] Using a PCL-R threshold of 30, Mokros et al. (2015) identified two latent classes of offenders, one labeled as *Manipulative* and the other as *Aggressive* psychopaths, each a variation on the theme of psychopathy.

(*reactive/affective*). Hare (1999, p. 74) noted, "In general, psychopathic violence tends to be callous and coldblooded, and more likely to be straightforward, uncomplicated, and businesslike than an expression of deep-seated distress or understandable precipitating factors." The results of numerous empirical studies provide strong support for these accounts (Blais, Solodukhin, & Forth, 2014; Woodworth & Porter, 2002). Homicide studies offer an excellent example of the instrumental nature of psychopathic violence and the specific importance of the PCL-R affective facet (Declercq, Willemsen, Audenaert, & Verhaeghe, 2012; Sohn, Raine, & Hong, 2021). In a systematic review of homicide studies, Fox (2019, p. 296) concluded that, as measured by the PCL-R and PCL: YV, there was "considerable support for high levels of instrumentality in the murders committed by psychopaths." The links between psychopathy and violence also apply to sadistic and sexually coercive behaviors (Hawes, Boccaccini, & Murrie, 2013; Krstic et al., 2018; Krstic, Longpré, Knight, & Robertson, 2019; O'Connell & Marcus, 2019).

The research literature suggests that psychopathy should have considerable explanatory power for understanding individuals who engage in terrorism, by definition violent. Unfortunately, however, there is little credible research on how psychopathy—or other clinical constructs, disorders, or personality traits, for that matter—inform an understanding of terrorism. As discussed below, the little research we have is anecdotal, speculative, and based on unvalidated measures of the psychopathy construct. This state of affairs is not surprising, given the many complex methodological problems and fractious geopolitical factors that hinder influence and color attempts to research terrorism in general and its actors in particular. Moreover, as indicated in the following sections, the obstacles to impartial research apply not only to psychopathy but also to psychopathology in general. Fortunately, we had the unusual opportunity to circumvent some of these difficulties and provide empirical analyses of a substantial sample of men who violently violated the rights of others.

1.2. Terrorism

The literature on terrorism and radical extremism is vast, diverse, and dominated by historical, socioeconomic, ethnic, religious, ideological, and geopolitical interests (English, 2016; Silke (2019). A common theme is that articles and discussions are conceptual, impressionistic, philosophical, driven by episodic events, based on secondary sources and literature reviews, and lack empirical data (Schuurman, 2020). Nevertheless, there are hundreds of academic, regional, and national definitions of terrorism, many different typological systems (Doering, Davies, & Corrado, 2020; Victoroff, 2005), more than 200 institutions and centers devoted to its study (Bergema & Kearney, 2021), and some large and accessible databases.[2] Still, despite decades of worldwide debate and argument, there is no generally accepted legal definition of terrorism. Instead, researchers have offered academic designations that differ across disciplines and according to the type of actors and tactics involved. These include lone actors, devoted and rational actors, individual terrorist groups, state and nonstate actors, and various religious and ideological groups, usually related to threat and risk assessment (e.g., Meloy & Hoffmann, 2021). Primoratz (2005) remarked that researchers and commentators in the social sciences and philosophy often focus on nonstate terrorism, believing that states have a legitimate right to use violence for controlling disorder and dissident movements. Blakeley (2008, p. 156) suggested that social scientists and criminologists may be reluctant to study state terrorism because it is the state that defines what is criminal. Further, she noted that it is difficult for social scientists to access data on terrorists other than those provided by databases and by "governments or government-sponsored academic institutions and think tanks" (p. 7).

On the other hand, some scholars have argued that the definition and study of terrorism must include state actors. In a comprehensive commentary, Al-Kassimi (2019, pp. 5–6) observed that excluding state terrorism diminishes "the extensive terrorism used by right-wing state [s] which sought to repress left-wing movements across Latin America."[3] Lutz (2010, p. 10) suggested that most analysts agree that terrorism involves threats or violence to achieve political aims and objectives, whether or not carried out by the state. On the other hand, Schuurman (2020, p. 1013) submitted that definitional matters are "less of an issue than is often thought" and that a more pressing concern is the need for more and better empirical research. Similarly, in a blueprint for future multidisciplinary research, English (2016, p. 136) noted that definitional disagreements do not prevent scholars from doing credible research. Moreover, his approach was "to recognize that states and nonstate actors practice terrorism, but that the dynamics and scale respectively involved in the two processes are divergent and therefore difficult to study synoptically."

1.3. Crimes against humanity: Chile

The depictions of terrorism mentioned above are compatible with the voluminous accounts of the Pinochet regime (1973–1990) and its use of state agencies, such as the military, police, and security services, for a reign of terror against segments of the Chilean population. The International Commission of Jurists (1999, p. 31) noted,

> Pinochet was a dictator who would stop at nothing to consolidate his power. His regime eliminated thousands of opponents. During the dictatorship, arbitrary executions, arrests, assassinations, torture, and "disappearances" were standard practices. Tens of thousands of Chileans met their fate at the hands of Pinochet's ruthless regime (p. 7)…the acts attributed to Mr. Pinochet constitute crimes against humanity and grave infractions of international humanitarian law.

The background and dynamics of the Pinochet regime are complicated, fraught with long-standing geopolitical, economic, religious, and international intrigue, and all well beyond the scope of this article. However, several general themes provide a backdrop for the actions of those convicted of crimes against humanity. Throughout much of the 20th century, Chile experienced chronic inequities and struggles among the working classes, large landowners, financial and bureaucratic oligarchs and bourgeoisie, and multinational companies (Drake, 1981). The Cold War, the rise of socialism, fear of communism, economic problems, nationalization of industries, and American intervention in Chilean affairs colored political and military attitudes and behaviors. The nature and role of the military—and to an extent, the police and security forces—are essential here. For example, the military in Latin America traditionally has been professional, career-oriented, modeled after civilian institutions, concerned with external threats and warfare, and separate from the country's politics. Students, primarily from the middle class, entered the Military Academy in their mid-to-late-teens and progressed through a military analog of university studies. By the 1960s, in the wake of "revolutionary insurgencies" in other countries, military personnel began to study at the United States Escuela de las Américas (School of the Americas) in the Panama Canal Zone, where they learned interrogation, warfare, and counterinsurgency techniques. The military's role became political, managerial, concerned with internal challenges to national security, skilled in dealing with suspected subversives, and repressive (School of the Americas Watch, 2021).

In 1970, Salvador Allende Gossens, a medical doctor from an upper-

[2] The databases include The *National Consortium for the Study of Terrorism and Responses to Terrorism* (University of Maryland, www.start.umd.edu), which provides access to the open-source *Global Terrorism Database* (GTD), among many other compilations of terrorist data.

[3] The literature contains many references to right-wing terrorism, with "state terrorism by liberal democratic states being almost completely absent from scholarship within the social sciences" (Blakeley, 2008, p. 155).

middle-class background, became president of Chile. His attempts to restructure Chile as a socialist democracy led to some reforms, political, economic, and civil unrest, and conflicts with the interests of other countries, particularly the United States. The military coup and death of Allende in 1973 saw the establishment of the National Intelligence Directorate (DINA), referred to as Pinochet's secret police or Gestapo. The DINA and various military, intelligence, security, and police forces, including the militarized federal police (Carabineers), targetted and violently suppressed opposition by political leaders, students, trade union activists, workers, journalists, and social militants (Lessa, 2019). Because of pressure from the United States in 1977, the military dictatorship replaced the DINA with the Central Nacional de Informaciones (CNI), which carried on business as usual. Operation Condor facilitated these individual state operations, a transnational system of state terror that allowed one country to track down its citizens in another Latin American country and kidnap, torture, kill, or "disappear them" (Lessa, 2019). "Condor effectively integrated and expanded the state terror unleashed across South America during the cold war, after successive right-wing military coups, often encouraged by the US, erased democracy across the continent. Tremlett (2020) described Operation Condor consisted of Argentina, Chile, Uruguay, Bolivia, Paraguay, Brazil, Peru, and Ecuador. "They formed a single network that covered four-fifths of the continent…The men perpetrating such crimes saw themselves as warriors in a messianic, frontierless war against the spread of armed revolution across Latin America…Bringing them to justice has been slow, piecemeal, and often hampered by opposition from the countries involved in the crimes."

The relevance of the above outline is that the participants in the current study were members of the DINA, CNI, or related military and police organizations, referred to as the *Armed Forces*. They operated in an unstable political and socioeconomic environment that fostered and rewarded both the "bright" and "shadow" aspects of leadership (Fisher, Hutchings, & Sarros, 2010). The former includes physical courage, risk-taking, adaptability, self-reliance, and support of subordinates. The latter involves unethical or unlawful behaviors of leaders and followers, influenced or facilitated by being in a dangerous, chaotic, or violent environment. As noted by Fisher et al. (2010, p. S107), "The lack of taboos and prohibitive rules found in war may allow leaders to rationalize behaviors that would be unacceptable in a different context." Before and during the Pinochet years, the socioeconomic and political conditions provided a fertile environment for ambitious men with bright and shadow leadership qualities who shared the regime's view that communism was a threat to the country. We might argue that such a milieu would be particularly favorable for those most willing and able to exploit the opportunities afforded by "darkness and chaos," with little concern for the morality of their actions. Babiak and Hare (2019, p. 164) suggested, "[P]sychopaths are emotionally unaffected by the human physical and psychological carnage that accompanies chaotic disasters. They are, by nature, predisposed to take callous but pragmatic advantage of the turmoil and terror experienced by others." Why, then, is there such a dearth of research on psychopathy and terrorism?

1.4. Obstacles to empirical research

Psychologists and other behavioral scientists face several difficulties in researching terrorism and terrorists. These include definitional issues, the sheer complexity and diversity of terrorist organizations and actors, difficulty in gaining access to the actors, poor research designs, and failure to use validated clinical and forensic measures of personality traits and mental disorders. Victoroff (2005) noted that terrorism research is expensive, potentially dangerous, and may involve ethical concerns from institutional review boards (IRBs). Interestingly, Mills, Massoumi, and Miller (2020) have discussed the ethics of researching terrorism and political violence. Monahan (2015) has outlined the often-insurmountable difficulties he and his colleagues have in gaining Institutional Review Board [IRB] approval and institutional access to groups of known terrorists, particularly for research to identify *risk factors* for the future commission of terrorist acts.[4] Morrison, Silke, and Bont (2021) have proposed a framework for IRBs to evaluate research proposals for terrorism research.

Behavioral scientists may be reluctant to study terrorism because it intrudes into other stakeholders' domains. As put by Horgan (2017, p. 201), "To characterize terrorism as an expression of psychological disturbance is problematic. At the very least, it might appear to belittle the social and political context in which terrorism flourishes while also cloaking the psychological development of the terrorist in unnecessary and misleading ideological baggage." Behavioral scientists also may find—as did we—that it is daunting to enter fields of inquiry and debate that are vast, heterogeneous, imbued with ideological and political dynamics, and lacking in the fruits of impartial empirical endeavors. Schuurman (2020, p. 1020) described terrorism as "a field of study in which experts mostly talked amongst themselves, endlessly referencing books, articles, and media reports." Our attempts to review the literature on terrorism—more accurately, the literature—confirmed Schuurman's description and revealed that journal, chapter, and book citation rates generally were surprisingly low for such vital topics.

Unlike most academic studies, which have ready access to student or offender participants, "…active terrorists are not likely to cooperate with psychological or psychiatric assessment…authorities may deny access to incarcerated terrorists because of security and secretive concerns. The result is that the data derived from systematic investigations are severely limited" Piccinni et al. (Piccinni, Marazziti, & Veltri, 2017, p. 142). In a review of recent terrorism research, Schuurman (2020) reported that only two of 2552 articles in nine journals devoted to terrorism involved clinical assessments, a situation he considered to be "…particularly problematic [and] urgently in need of a more extensive and robust empirical basis"(p. 1020)." However, according to Lutz (2010, p. 33), "Governments, much to the dismay of academics everywhere, are more interested in practical research (often narrowly defined) and not very interested in the pure research that so many academics are particularly fond of." Even without the above obstacles, constructive and informative psychopathy research in this field requires willing participants and researchers with the training and experience to conduct reliable and valid clinical/forensic (PCL-R) assessments of the participants, not solely with self-report personality tests or inventories. In our view, self-reports are helpful but not sufficient for the individual assessment of psychopathy.

1.5. Terrorism, personality, and psychopathology

There is relatively little systematic empirical research on the personality and psychopathology of terrorists, with some notable exceptions discussed below. Well-known truisms about the topic are somewhat discouraging for potential researchers. As stated by Monahan (2012, p. 179), "In no society studied to date have personality traits been found to distinguish those who engage in terrorism from those who refrain from it." Piccinni et al. (2017) stated, "No evidence exists that terrorist behavior is caused by either prior psychiatric disorders or psychopathy" (p.143). Corner et al. (2021) put it more forcefully, "The search for a single 'terrorist personality was always overly ambitious, yet at the same time overly simplistic. It was doomed to failure from the start." It also was naïve, or perhaps merely an early and convenient starting point for understanding the nature of those who engage in terroristic acts. No doubt for these reasons, Ferguson and McAuley

[4] There is a difference between investigating the psychology of terrorists and the search for risk factors to predict who might commit a terrorist act. We were concerned only with the former. The latter usually involves the development of specialized instruments for use in counterterrorism, particularly with lone, dedicated actors (Meloy & Hoffman, 2021; Monahan, 2015; Scarcella, Page, & Furtado, 2016).

(2021, p. 6) stated, "The research on how and why people become involved in violent extremism has moved away from answers based on psychopathology or personality profiles" to the roles of social and collective identity. The authors did not rule out the contribution of personality factors to understanding terrorism. Still, they noted that "community and societal context along with global ideological forces" might have more explanatory value than personality traits, a view consistent with much of the literature on terrorism and violent extremism. However, Merari (2010, p. 253) commented, "By and large, the opinion that terrorists do not have a common psychological profiles rests on the *absence of research* rather than on direct findings" [our emphasis].

Further, he advocated for the use of standard psychological tests and clinical interviews, as in his studies of suicide bombers. In this sense, the truisms mentioned above are misleading. In any event, behavioral scientists now direct their efforts to the development of theories and research on group and individual differences *among* terrorists (Corner et al., 2021; Doering et al., 2020; Horgan, 2017; Monahan, 2015), and *within* various forms of terrorism (Victoroff, 2005).

1.6. Reintroduction of psychopathology

Some investigators now argue that it is essential to renew efforts to examine the roles of psychology and psychopathology—especially psychopathy—in accounting for the behaviors of terrorists (Gill & Corner, 2017; Horgan, 2017). Zepinic (2018) commented that psychopaths in power are involved in crimes against humanity, use terrorism as a methodology rather than ideology, do not consider themselves criminals, and *rarely if ever, are assessed for psychopathy* [our emphasis]. Bogerts et al. (2018, p. 131) suggested that a significant proportion of terrorists have a "biological predisposition to violent behavior." The primary basis for this suggestion is the authors' review of the burgeoning literature on the structural and functional brain anomalies associated with psychopathy, empathy, and aggression and the argument that the violence of both psychopaths and terrorists is planned, instrumental, and remorseless.

Criminology, a discipline traditionally concerned with social, economic, and group factors, now considers personality—more specifically, psychopathy—as an integral part of its accounts of criminality. DeLisi (2009, p. 268, Note 2) commented, "Despite the long clinical history of psychopathy, it was arguably only 'introduced' to criminology in 1996 (Hare, 1996)." Fox, Jennings, and Farrington (2015) described how the interpersonal and affective features of psychopathy had provided insights into the ten leading developmental and life-course (DLC) theories in criminology. "It is important to incorporate such personality constructs into key criminological theoretical frameworks" (Fox et al., 2015, p. 275). Correctly measured, psychopathy has much to contribute to the understanding of terrorism and its actors, over and above the contributions of environmental forces (Bogerts et al., 2018; Gill & Corner, 2017).

1.6.1. Psychopathy and terrorism

At one time, there was speculation that the clinical construct of psychopathy could help to explain the dynamics of terrorism. However, the zeitgeist was not receptive to this suggestion. In an informative review and integration, Gill and Corner (2017) described how psychopathy (and more generally, mental disorders) progressed from being early keys to understanding terrorism to be part of more inclusive contextual-social-political-psychological variables. They noted that the empirical research was of poor quality and often confused psychopathy with more general psychopathology. Interestingly, Corner and Gill (2022, p. 392) commented, "Standard clinical procedures require direct access to individuals in clinical settings for prolonged periods. These protocols were not followed in terrorism studies."

Further, "The lack of valid concepts and objective empirical research, alongside the advancement of psychological research concerning psychopathy, and development of the widely accepted validated measure (PCL-R) aided the gradual demise of the psychopath as-terrorist theory. This permitted other psychological theories to come to the fore." The PCL-R provided a clinical/empirical measure that made it difficult for commentators to use the term casually and allowed clinicians and researchers to study both groups and the individuals therein. Häkkänen-Nyholm and Nyholm (2012, p. 195) commented, "...even if there are no empirical studies about the subject, a very dangerous situation may occur when you have persons with psychopathic traits in the lead of both the nation's politics and the military. In practice, the military and political leadership may be personified in one person." Of course, the name that immediately comes to mind is Pinochet. However, we did not assess him and therefore did not comment on his personality traits; many others have done so.

In their review, Corner et al. (2021) identified only two studies that used a validated measure of psychopathy, the short form of the SRP (SRP-SF; Paulhus et al., 2016). Each study conducted an online survey of community participants to examine the association between the SRP-SF and self-reported right-wing authoritarianism (Jones, 2013) or self-sacrifice for a cause (Bélanger, Caouette, Sharvit, & Dugas, 2014). Most of the other reviewed studies had administered self-report inventories of normal-range personality traits—considered by some to be pertinent to psychopathy—to a variety of community and terrorist samples. These studies tell us little about the psychopathy-terrorism link. Investigation of the nexus between psychopathy and terrorism is demanding. It requires access to sizable groups of individuals involved in specified types of terrorist acts. It is essential to consider the milieu in which the acts occurred and to use validated clinical/forensic measures of psychopathy for group and individual analyses.

2. The current study

This study focuses on psychopathy among men convicted for crimes against humanity (CAH) committed while serving in the military or police/security forces during the Pinochet regime in Chile. We might argue that, by itself, the CAH sample provides unique information about the presence of psychopathic features in those convicted of state-sanctioned acts of extreme violence. Our goal was to determine the "absolute" level and variability of psychopathy in the CAH men and provide a specific context for evaluating the findings. However, compelling interpretations of the data require some knowledge of the distribution of psychopathic features in other relevant segments of the Chilean population. Ideally, this would have included a matched contemporaneous comparison sample of men who had served in the regime without receiving charges or convictions for similar crimes. We attempted, without success, to obtain permission from the authorities to recruit such a sample. Barring this, it was impossible to acquire a comparison sample as a proxy for those convicted of crimes against humanity.

Moreover, even if we had obtained a sample of *current* members of the military and police, it would not have reflected the political, social, and psychological milieu that characterized our CAH sample. However, we had PCL-R and SRP-SF data for two other groups of Chilean men, consisting of incarcerated offenders and community members. Though imperfect as comparison groups, they provided a helpful context for evaluating psychopathy in the CAH group.

In addition to customary psychometric analyses and group comparisons, we used a latent variable-centered approach to test if the PCL-R and SRP-SF four-factor model of psychopathy provided good fits to the Chilean data. We also sought to replicate the four LPA classes described in the literature and Section 1.1.

3. Method

3.1. Participants and procedures

3.1.1. CAH sample

In 1995, the Chilean government constructed a prison specifically for men convicted of human rights violations committed during the Pinochet dictatorship in Chile. These men had been instrumental in directing and carrying out the suppressive policies of the regime.[5] By 2016, the number of inmates in the facility reached 120. We requested and received approval from the Penitentiary Service of Chile (Gendarmería de Chile) to conduct this study and ask for volunteers. Our CAH sample comprised 101 (84.2%) volunteers from this population. Each was aware of the purpose and nature of the study, volunteered, and gave informed consent for the researchers to videotape the interview and access prison and other collateral information. The latter included psychosocial, psychiatric, psychological, and medical reports, police and prison records, court documents, and third-party information when considered necessary to address some issues. The interviews and inspection of the collateral data occurred between July and October of 2016. At the time of the interview, the men varied in age from 50 to 90, with a mean of 71 (SD = 8.2). As far as we could determine from extensive file information, none of the men had a diagnosable mental or cognitive disorder while serving under the regime or in prison. Documented or self-reported substance abuse was rare; 63.4% abstained from alcohol, 12.9% had an alcohol problem, and 1% had a drug problem. Most (77.2%) were married, 2% had lived common-law, 11.9% were divorced or separated, and 8.9% were widowers.

All but one had been members of the *Armed Forces*, 67% in the military and 33% in the police forces. Sixty-five (65%) of the CAH group were commissioned officers, many of high rank. There were 12 Generals, 8 Brigadier Generals, 24 Colonels, 7 Lieutenant Colonels, 8 Majors, 3 Captains, and 3 Lieutenants. The rest (33%) were non-commissioned Warrant officers, along with two civilians. The group was well educated, with all but one being graduates of a military or police facility analogous to a university, which they had entered at age 15 or 16. In interpreting our findings, we note that these institutions did not accept students with evidence of prior unlawful behavior. However, those whose profile fitted the job requirements became candidates for recruitment by military, police, or intelligence units. During the regime, the officers involved in repression had joined the Armed Forces well before the Coup D'Etat. They had reputations for ruthlessness in carrying out their official duties and controlling subordinates. General Manuel Contreras selected them for the DINA and CNI.[6] Most were in their early to late 20s at the beginning of the 17-year regime and in the late 30s to early 40s at its end. All were graduates of the School of the Americas, where they developed techniques and skills for the interrogation, torture, and murder of suspected communists, "educators, union organizers, religious workers, student leaders, the poor and peasants who fight for their rights" (School of the Americas Watch, 2021). Forty-four of the men had a conviction for murder, 49 for kidnapping, four for criminal conspiracy, and four for torture and illegal constraint. Only five military men were still in the armed forces at trial. The rest were retired or working in various civilian positions such as security or administration.

3.1.2. Offender sample

Detailed descriptions of this sample are available elsewhere (León-Mayer et al., 2015). It consisted of 209 (91%) of the 230 male inmates in a Chilean prison, interviewed and assessed in 2009 and 2010. The 30 inmates not included in the sample had declined to participate, or the documentary evidence needed for scoring the PCL-R was inadequate. Each study volunteer was aware of the purpose and nature of the study and gave informed consent for the researchers to videotape the interview and gain access to prison and other collateral information. The latter included psychosocial, psychiatric, psychological, and medical reports, police and prison records, court documents, and third-party information when considered necessary to address some issues. The age of the inmates varied from 20 to 69, with a mean of 35.5 years (SD = 10.4). The men in the sample generally were not well educated; only about 30% had attended a secondary school or technical institute. At the time of incarceration, 38.8% were single, 17.7% were married, 35.9% were living common-law, 1.9% were widowers, and 5.7% were divorced or separated. Substance abuse was widespread, with 56.5% and 76.1% having an alcohol and drug problem. Most were unskilled workers.

3.1.3. Community sample

This sample consisted of men from the community, nominated for assessment by 50 psychologists who had attended a PCL-R Workshop conducted by León-Mayer in 2017 or 2018. As a post-training exercise, each attendee enlisted three male volunteers—friends, neighbors, handymen, colleagues, and so forth—to study personality characteristics in the community. Each volunteer was aware of the purpose and nature of the study, gave informed consent for the researchers to videotape the interview, and gathered collateral information from those who knew them. Each participant was over 50 years old with no indications of mental disorders or cognitive problems. The psychologists obtained as much collateral information about their volunteers as possible, including interviews with their friends and family members. The men gave informed consent and permission to videotape the interview, with assurance that all information would remain confidential. León-Mayer randomly selected 101 men from the pool of 150 men and scored the PCL-R from the material provided by the psychologists. Age in this community sample varied from 50 to 87, with a mean of 64 (SD = 7.7). Alcohol abuse was a problem for 14.9% of the men, while 28.7% abused drugs, mainly of the "soft" variety, especially marihuana. The men in this sample generally were relatively well educated; 36.6% had attended high school, 26.7% were university graduates, and 25.7% had a technical school education. Most men were married (62.4%), 5% lived common law, 10.9% were widowers, and 17.8% were separated or divorced. The sample consisted of teachers, various businesses or technical trades, and blue-collar workers.

3.2. Measures

Government officials limited our psychological instruments to the PCL-R and SRP-SF and placed restrictions on disseminating the raw data.

3.2.1. Psychopathy Checklist-Revised

We used a Spanish translation of the PCL-R adapted in Chilean prisons (León-Mayer, Asún Salazar, & Folino, 2010). León-Mayer translated the PCL-R and its scoring criteria, and a professional Chilean translator back translated the material. Together, they made several minor changes in wording to adapt the scale to the Chilean context. The psychometric properties, factor structure, and external correlates of the translated PCL-R are consistent with those obtained with NA offenders (León-Mayer et al., 2010, 2015). As indicated in the sample descriptions, extensive collateral information and a videotaped semi-structured interview provided the basis for León-Mayer to score the PCL-R for each participant in this study. Of course, the collateral information for the community sample was not nearly as extensive as it was for the two offender groups but considered sufficient to provide credible ratings. In cases where it was not possible to score an item (not enough information, not applicable to the individual), the rater omitted the item and

[5] The courts acquitted some contemporary actors. Others fled the country or were deceased.

[6] Contreras died before this study began. Payne (2008, p. 144) commented, "Within and outside the armed forces, and within and outside Chile, Contreras had a reputation as one of the most shadowy, ruthless men in the world."

prorated the score to a 20-item scale, following PCL-R guidelines (Hare, 2003, p. 21). Because the inmates in the CAH sample had no previous convictions and no opportunity to violate conditional release, Item 19 (Revocation of Conditional Release) did not apply to this group. For Item 20 (Criminal Versatility), the files contained only the most serious conviction for each individual. Few had been charged with more than three crimes, thus receiving a 0 on the item. As a result, the antisocial facet scores for the CAH group may be slighty underestimated.

Based on videotaped interviews and collateral information, Rocuant Salinas made PCL-R ratings for a subset of participants from the CAH (15), Offender (54), and Community (30) groups. To estimate reliability of PCL-R ratings, we calculated intraclass correlations (ICCs) and 95% confidence intervals (CI), using a two-way random-effects, consistency, single measure model. The estimated ICC [95% CI] for the PCL-R total score of the CAH, Offender, and Community samples was, respectively, 0.85 [0.61–0.95], 0.93 [0.88–0.96], and 0.98 [0.96–0.99], each highly significant ($p < .001$) and considered good to excellent according to conventional (Cicchetti, 1994) and strict (Koo & Li, 2016) guidelines. Similarly, factor and facet ICCs generally were good to excellent for each sample (details on request).[7] These ICCs are consistent with those reported in the research literature for trained and experienced raters and in the absence of adversarial bias (DeMatteo & Olver, 2021; Hare et al., 2018).

3.2.2. Self-report psychopathy-short form (SRP- SF)

The SRP has gone through several iterations since its introduction by Hare in 1985 (Paulhus et al., 2016). The latest versions are the SRP-III and the SRP-4, which differ only in minor changes in wording. The SRP-SF is a 29-item version with reliable and valid scores and a latent structure consistent with the four-factor PCL-R model (Neumann et al., 2015; Neumann & Pardini, 2014). In keeping with the PCL-R terminology, the current labels for these dimensions are the same as those for the PCL-R: *Interpersonal Affective, Lifestyle, and Antisocial*, respectively. The first three facets have seven items each, and the antisocial facet has eight items. Respondents rate each item on a 5-point Likert scale from 1 (*Disagree Strongly*) to 5 (*Agree Strongly*). For the total aggregate sample, Cronbach's alpha was 0.88; the full-scale alpha for the CAH, Offender, and Community samples was 0.81, 0.85, and 0.87, respectively. Mean interitem correlations (0.16 to 0.26) indicated that scale homogeneity generally was acceptable.

3.3. Data analytic plan

We used analysis of variance (ANOVA) to test for sample differences in total scores, and multivariate analysis of variance (MANOVA) for facet score differences. We then conducted posthoc (Tukey HSD) follow-ups to compare PCL-R and SRP-SF total and factor scores of the CAH sample with those of the Offender and Community samples. The analyses included inspection of the total and facet scores among CAH men as a function of their age and military rank, expecting that Factor 1 (Interpersonal/Affective) scores would be highest for the most senior officers. However, there is evidence that scores on Factor 2 (Lifestyle/Antisocial) decrease with the age of assessment, whereas scores on Factor 1 (Interpersonal/Affective) remain relatively stable (Hare, 2003, pp. 59–62; Baglole, Tsang, Hare, & Forth, 2022). Therefore, we examined each group for associations between age at assessment and PCL-R scores. Because of the advanced age of the men in the CAH group, and for comparative purposes, we included PCL-R data from the sample of older NA offenders (Late Group) described by Baglole et al. (2022). Because of age differences among samples, we repeated the MANOVAs with age as a covariate. As reported below, there were no substantive group differences in the results with age taken into account.

3.3.1. Confirmatory factor analysis (CFA)

In addition to sample-level inferential statistics, we used a structural equation modeling (SEM) approach to conduct latent variable- and person-centered analyses. First, we employed SEM to test how well the four-factor model of psychopathy fit separately for the PCL-R and SRP-SF items. Earlier confirmatory factor analysis (CFA; León-Mayer et al., 2015) indicated that fit was good for the Offender sample described in this study, but the CAH and Community samples were too small for individual CFAs. However, Neumann et al. (2015) reported that CFA of psychopathy measures from many pooled samples yielded a four-factor solution that similar to CFAs of individual samples, and in line with the large empirical literature indicating that psychopathy is a dimensional construct (Neumann & Hare, 2008). By pooling the PCL-R items of the CAH, Offender, and Community samples into a mega-sample, we determined the fit of the four-factor model based on a wide range of Chilean PCL-R and SRP-SF scores. Items were specified to load only on their respective facets (Interpersonal, Affective, Lifestyle, Antisocial), and facets were allowed to correlate. Thus, we tested a strict CFA model for both the respective PCL-R and SRP-SF item sets. We expected a good fit, based on a strong empirical record for the four-factor model of psychopathy (Hare et al., 2018; Neumann et al., 2015).

To assess model fit, we used a two-index strategy (Hu & Bentler, 1999), namely the incremental Comparative Fit Index (CFI) and the absolute Root Mean Square Error of Approximation (RMSEA). We relied on the traditional CFI > 0.90 and RMSEA <0.08 as indicative of acceptable model fit to avoid falsely rejecting viable latent variable models (West, Taylor, & Wu, 2012). All analyses were conducted in Mplus with the robust weighted least squares (mean and variance adjusted)-procedure (WLSMV) for parameter estimation and for assessing model fit, given the ordinal nature of the measures (Muthén & Muthén, 1998-2011).

3.3.2. Latent profile analysis (LPA)

LPA is a variant of latent class analysis based on observed continuous rather than categorical variables. As a mixture-distribution model, LPA seeks to identify nominal variables that underlie continuous data, allowing de-mixing the data (Rost, 2006). Individual cases have associated probabilities for belonging to a given latent class. Therefore the more distinct the average latent class probabilities are for the most likely class membership, the more useful is a latent class solution. Specifically, the average probability of group membership for all persons provides information about the class allocation quality, with average probability values for viable LPA solutions being approximately 0.80 or above (Mokros et al., 2015; Rost, 2006). In addition, Monte Carlo simulations indicate the use of large samples, many indicators, and a greater degree of class separation help to uncover the true latent class solution (Tein, Coxe, & Cham, 2013). Finally, both information criteria (e.g., the Bayesian information criterion; BIC) and modified likelihood ratio tests (LRTs; Lo, Mendell, & Rubin, 2001; Nylund, Asparouhov, & Muthén, 2007) can be used to decide on the number of latent classes. For the BIC (Schwarz, 1978), a smaller value indicates a better model fit for the optimal trade-off between model parsimony and residuals. In addition to classification accuracy, we relied upon the BIC for gauging the best LPA solution because the bootstrap LRT is more strongly affected by nonsymmetrical data distributions (Nylund et al., 2007) and often remains inconclusive (Kupzyk, 2011). We used Mplus version 8.4 for all LPAs (Muthén & Muthén, 2017).

We conducted an LPA of the four manifest variable PCL-R facets in our pooled sample. We expected that a 4-class solution would be optimal, with high classification accuracy. Specifically, we expected to obtain the Prototypic, Callous-Conning, Externalizing, and General subtype described in Section 1.1.

[7] The PCL-R total score ICC for the mean of two raters was 0.92, 0.93, and 0.99 for the CAH, Offender, and Community samples, respectively.

4. Results and discussion

4.1. Confirmatory factor analysis

Fit was excellent for the PCL-R (CFI = 0.97; RMSEA = 0.07) and SRP-SF (CFI = 0.96; RMSEA = 0.03) four-factor model CFAs based on the mega-sample (N = 411). The factor loadings and correlations were highly significant (p's < 0.001) for each model. Figs. 1 and 2 display the standardized parameters for the PCL-R and SRP-SF models, respectively. These four-factor models are consistent with the literature and provide a firm basis for determining if the factors relate in different ways to external correlates relevant to psychopathy, as well as for the delineation of classes or subtypes of offenders. The pattern of associations among the PCL-R facets implies the presence of two broad factors, describe in the Psychopathy section, and in the literature, as Factor 1 and Factor 2.

To compare our current study with previous modeling research, we ran a joint PCL-R/SRP-SF four-factor CFA (i.e., an eight-factor model, 4 PCL-R & 4 SRP-SF factors), which also fit well (CFI = 0.94; RMSEA = 0.04). The latent PCL-R and SRP-SF correlations were significant (p's < 0.05–0.001), except for the latent correlation between the PCL-R Interpersonal and SRP-SF Lifestyle factors (r = 0.09). Overall, the pattern of correlations between the PCL-R and SRP-SF factors was consistent with previous mega-sample research (Neumann et al., 2015). That is, the correlations between the respective Interpersonal-Affective facets were weaker (mean r = 0.23, p < .05) than were the correlations between the respective Lifestyle-Antisocial facets (mean r = 0.54, p < .01). Thus, the strength of association between interview/file ratings (PCL-R) and self-reports (SRP-SF), each designed to assess psychopathic propensities, depends on the nature of the domain (interpersonal-affective vs. lifestyle-antisocial).

4.2. Psychopathy scores

4.2.1. PCL-R

Table 1 (upper panel) presents PCL-R descriptives and effect size statistics for the CAH, Offender, and Community samples. The listed PCL-R totals are raw scores based on the 18 items in the factors, plus Items 11 and 17. Because the number of defining items is not the same for each facet, the listed entries are mean item scores (sum of item score/number of items in the facet). Using mean item scores as a standard metric allows direct comparisons across PCL-R facet domains (Neumann et al., 2016).

The ANOVA for PCL-R total score was highly significant, F(2, 406) = 276.60, p < .001), as was the MANOVA for the four PCL-R facets, F(8, 806) = 131.26, p < .001), each with a large multivariate effect size (η^2 = 0.57 and 0.56, respectively).[8] As expected, posthoc comparisons indicated that the mean for the CAH (21.06) and Offender groups (20.93) was much higher than it was for the Community group (5.21), with large effect sizes (see Table 1). The CAH and Offender groups did not differ statistically from one another. The PCL-R total scores of the three groups were very close to those of comparable offender and community groups from North America and other countries (Hare, 2003; Hare et al., 2018; Neumann & Hare, 2008; Sanz-García, Gesteira, Sanz, & García-Vera, 2021). Even though the mean total scores of the CAH and Offender groups were almost identical, only 7% of the CAH participants had an elevated PCL-R score (≥ 27), compared with 21% of the Offender group and 0% of the Community group, X(2)2 = 33.23, p < .001. The relatively low percentage of CAH men with very high PCL-R scores reflects the low dispersion (SD) of scores and low Factor 2 scores (Table 1).

The CAH and Offender groups differed considerably in the pattern of their PCL-R facet scores (Table 1). As Fig. 3 illustrates, the CAH inmates had much higher mean item scores on Factor 1 (Interpersonal/Affective facets), but much lower mean item scores on Factor 2 (Lifestyle/Antisocial facets) than did the Offenders. For illustrative purposes, the CAH total score would fall at about the 46th percentile for the NA Reference sample of male offenders, as listed in the PCL-R Manual (Hare, 2003; Table 9.1). By contrast, the mean Factor 1 score (Interpersonal/Affective facets) would fall at about the 92nd percentile. Further, 10% of the CAH inmates—but only 0.5% of the Offenders—received the maximum raw score of 16 on Factor 1, a value that places them at the 100th percentile of the NA Reference sample. The mean CAH Factor 2 item score (Lifestyle/Antisocial facets) would fall at about the 25th percentile of the Reference sample.

LPA has shown that some offenders exhibit a pattern of relatively high Factor 1 and low Factor 2 scores, referred to as a Callous-Conning class (Mokros et al., 2021). In Section 4.5, we report the LPA findings of the current study. Here, we emphasize that it is unusual for offenders to have Factor 1 scores as high as those observed in our CAH sample. Moreover, it is rare to have so many with the highest possible score on Factor 1 components, accompanied by very low Factor 2 scores. There are several possible explanations for this finding, including age-related reductions in the severity of Factor 2 items and underestimation of scores on the antisocial facet. Nonetheless, these men's brutal and criminal activities throughout their service must have been extensive and varied and deserving of a high score (2) on Criminal Versatility. On the other hand, many scored 0 on this item because they had been charged only with the most serious of their crimes. In addition, we had little information about how their routine activities might have been consonant with the regime's policies. It is possible, for example, that the item, Poor Behavioral Controls, often was scored 0 because it's defining behaviors were within the accepted norm. It also is likely that low antisocial facet scores reflected the geopolitical/socioeconomic context during the Pinochet regime, and policies and practices for selecting and managing military and police personnel. As discussed in the Introduction, military and police training in Chile—as in the other Latin-American countries of Operation Condor—tended to exclude applicants with evidence of overt antisocial or delinquent behaviors. At the same time, the Pinochet regime fostered—and no doubt promoted—those who most readily could adapt to a new culture of chaos and violence, notably if it advanced the suppression of socialism and the nation's protection as patriotic duties (see Section 1.3). In essence, before and during the Pinochet era, Chile's political and economic atmosphere was ideal for the emergence of a brutal, despotic regime populated by ambitious, unscrupulous, and opportunistic individuals who seamlessly adopted a role as defenders of the state. Section 4.5 illustrates that those who rose to the top were the most psychopathic of all.

4.2.2. SRP-SF

Table 1 (lower panel) presents SRP-SF descriptive and effect size statistics for the CAH, Offender, and Community samples. The totals are raw scores based on 29 items. As with the PCL-R, SRP-SF facet values are mean item scores. The MANOVA for the data set was highly significant, with a large multivariate effect size, F(8, 802) = 30.73, p < .001, η^2 = 0.23. Table 1 also contains the posthoc comparisons among groups. The effect size difference between each pair of samples was large for the total score, with the Offenders having the highest score and the Community sample having the lowest score. Though significant, the CAH and Community total score difference was only about seven points. Posthoc analyses and Fig. 4 show that the Offender group had the highest score on each facet. The only appreciable difference between the CAH and Community groups was for the antisocial facet, with the CAH having the higher score.

[8] An analysis of covariance indicated that age was not a significant covariate for PCL-R total score (p = .96). As expected, a multivariate analysis of covariance was significant for the PCL-R facet scores (p < .001, η^2 = 0.13). However, the results remained substantively unchanged for total and facet score analyses (η^2 = 0.57 and 0.44, respectively).

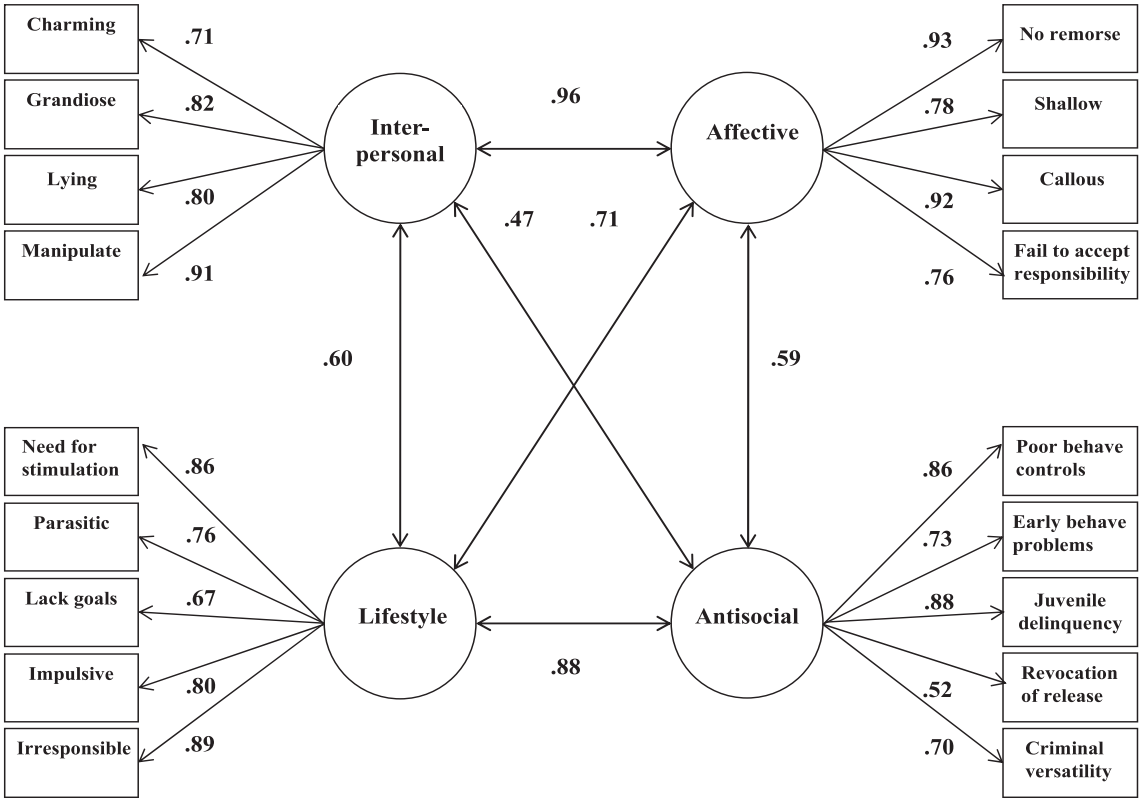

Fig. 1. Confirmatory factor analysis results: Four-factor PCL-R model.

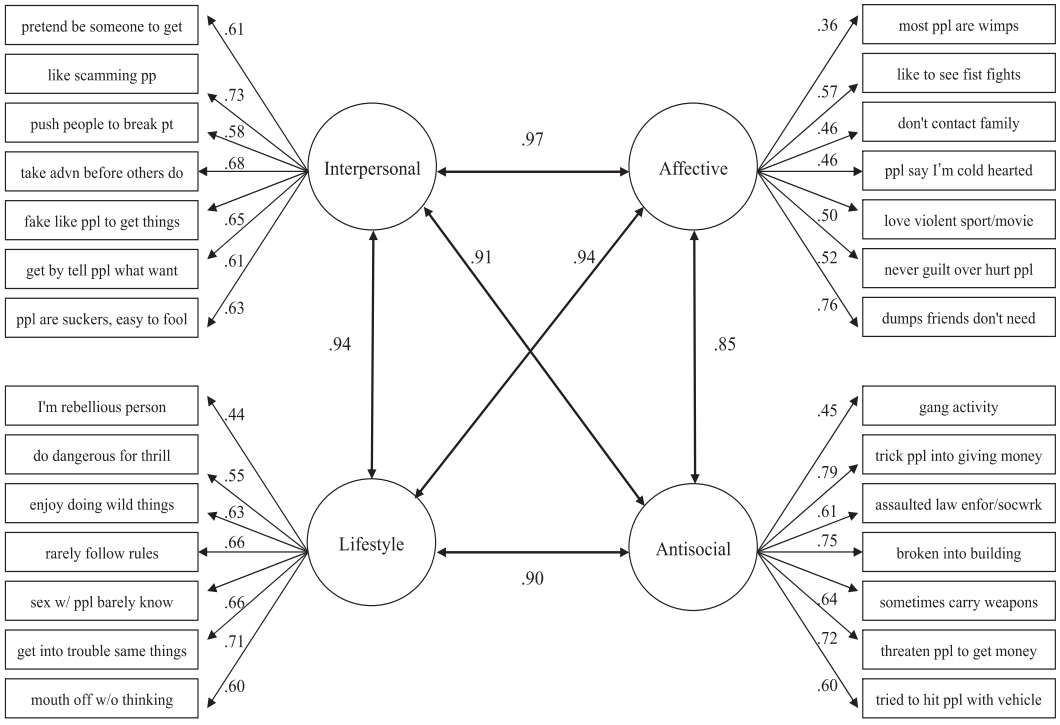

Fig. 2. Confirmatory factor analysis results: Four-factor SRP-SF model.

4.2.3. Expert ratings versus self-reports of psychopathy

A comparison of Figs. 3 and 4 indicates that the self-reports of the Offender and Community samples, but not those of the CAH sample, were more or less in line with their corresponding PCL-R facet scores. Thus, the Offender sample generally had higher mean SRP-SF facet scores than the Community sample, but the differences between the CAH and Community samples were small. In line with these patterns, the PCL-R/SRP-SF total score correlation was lower for the CAH sample

Table 1
Descriptive statistics and effect sizes for CAH, Offender, and Community comparisons: PCL-R & SRP-SF

	Total sample		CAH		Offenders		Community		Effect size		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	CAH v Off	CAH v Com	Off v Com
PCL-R Facet											
Interpersonal	0.89	0.62	1.43[a]	0.45	0.91[b]	0.54	0.31[c]	0.34	**1.05**	**2.82**	**1.35**
Affective	1.10	0.60	1.64[a]	0.32	1.19[b]	0.45	0.37[c]	0.35	**1.19**	**3.81**	**2.06**
Lifestyle	0.96	0.54	1.00[a]	0.24	1.28[b]	0.39	0.24[c]	0.30	**−0.90**	**2.83**	**3.01**
Antisocial	0.67	0.55	0.51[a]	0.29	0.99[b]	0.54	0.16[c]	0.22	**−1.17**	**1.36**	**2.20**
Total Score	17.12	8.93	21.06[a]	4.53	20.93[a]	6.85	5.21[b]	4.51	0.02	**3.50**	**2.77**
SRP-SF Facet											
Interpersonal	1.70	0.62	1.56[a]	0.44	1.90[b]	0.65	1.42[a]	0.57	**−0.64**	0.28	**0.80**
Affective	2.02	0.63	1.90[a]	0.51	2.22[b]	0.59	1.75[a]	0.69	**−0.57**	0.25	**0.73**
Lifestyle	1.88	0.69	1.59[a]	0.45	2.17[b]	0.71	1.56[a]	0.59	**−1.01**	0.04	**0.93**
Antisocial	1.87	0.67	1.81[a]	0.37	2.22[b]	0.65	1.21[c]	0.39	**−0.80**	**1.57**	**1.94**
Total Score	54.04	15.67	49.71[a]	9.87	61.63[b]	15.22	42.59[c]	12.49	**−0.95**	**0.64**	**1.37**

Note. CAH = Crimes against humanity. Values for the PCL-R and SRP-SF facets are mean item scores (facet total/number of items). Means with common superscripts do not differ. Effect sizes = Hedges's *g*; bolded = $p < .001$.

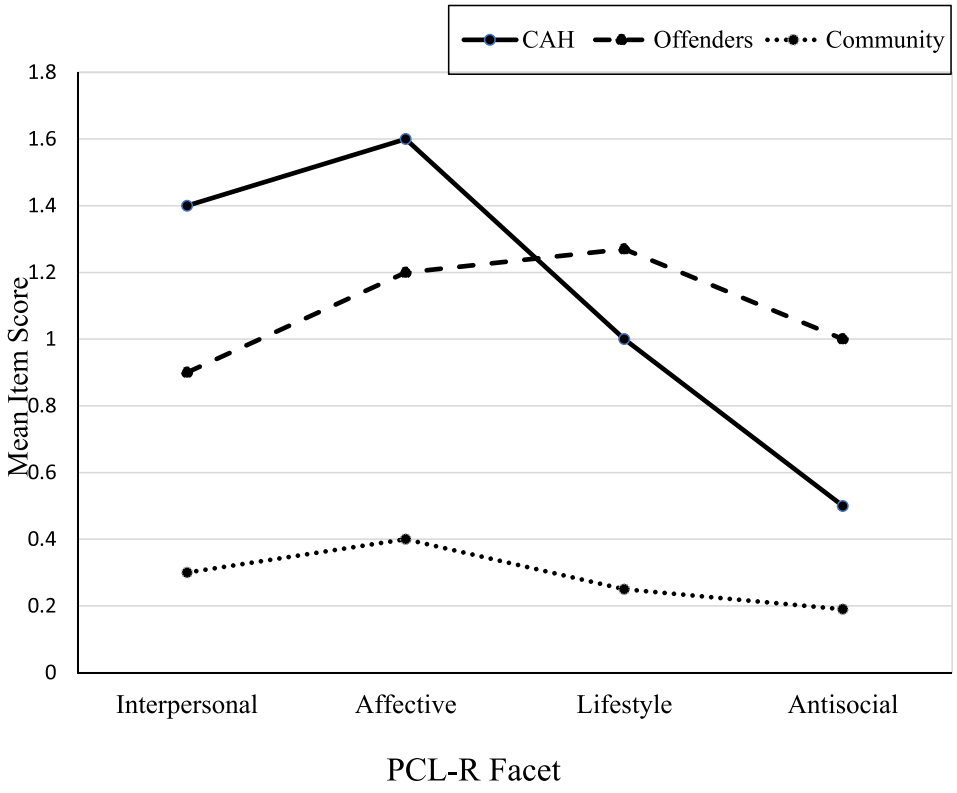

Fig. 3. Mean PCL-R item scores for each sample. CAH = Crimes against humanity.

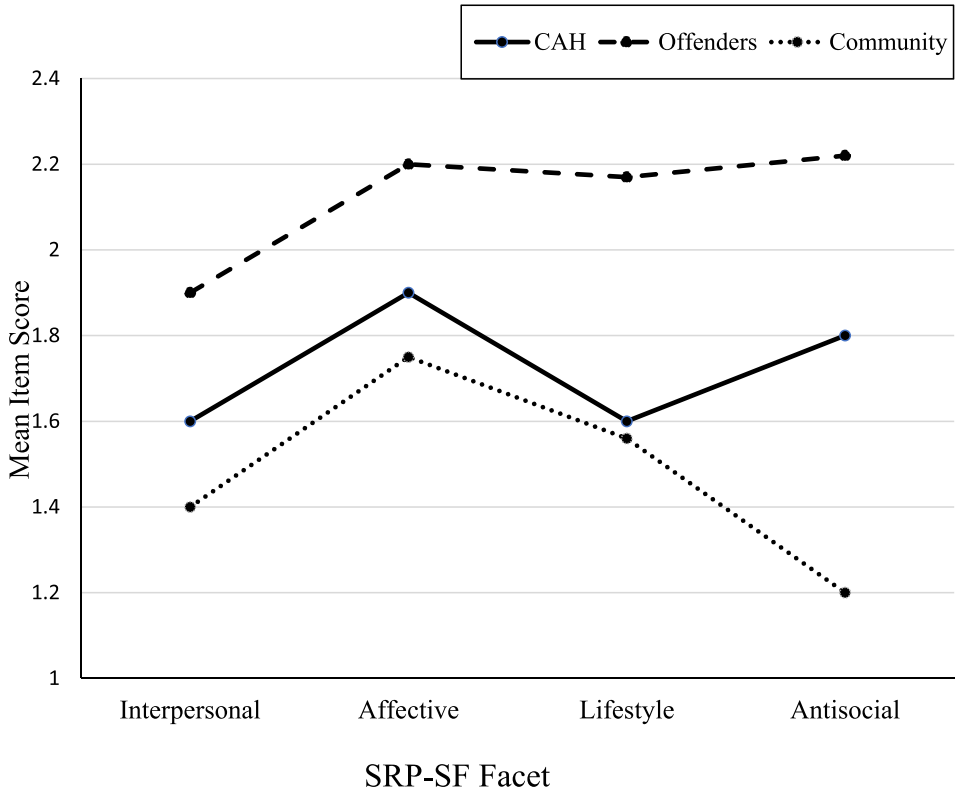

Fig. 4. Mean SRP-SF item scores for each sample.

($r = 0.13$, ns) than for the Offender ($r = 0.19$, $p < .01$) and Community ($r = 0.31$, $p < .005$) samples. To obtain a more precise indication of group differences in the association between measures, we conducted a structural equation modeling (SEM) analysis of the link between the latent measures for each group. The model for each group was acceptable, with each SEM having the same fit (CFI =92, RMSEA = 0.08). However, the PCL-R scores accounted for much less variance in SRP-SF scores in the CAH group ($R^2 = 0.02$) than in the Offender ($R^2 = 0.17$) and Community group ($R^2 = 0.42$). That is, the *reported* self-perceptions of the CAH men diverged considerably from expert clinical assessments, perhaps because of a lack of insight or, more likely, positive impression management.[9] Gillard and Rogers (2015) found that offenders with high Factor 1 scores were particularly successful at manipulating risk assessment scores and at concealing or minimizing antisocial and criminal activities. However, the mean SRP-SF total and *antisocial* facet scores were higher among the CAH sample than among the Community sample, with large effect sizes (Table 2, lower panel). This suggests that the CAH cases were aware of some of their antisocial propensities, perhaps viewing and reporting them as personal strengths or as not damaging to their public image.

Table 2
Correlations between age and psychopathy measures

Group	Total	Factor 1	Factor 2
PCL-R			
CAH	0.20*	0.19	0.16
Offender	−0.04	0.20*	−0.32**
Community	−0.05	0.05	−0.11
SRP-SF			
CAH	0.29**	0.26**	0.17
Offender	−0.16*	−0.11	−0.14
Community	−0.19	−0.19	−0.03

Note. CAH = Crimes against humanity. * $p < .05$; ** $p < .01$.

4.3. Psychopathy and age at assessment

4.3.1. PCL-R

As indicated in Section 3.3, there is empirical evidence of a modest inverse association between Factor 2 scores and age. Compared with the

[9] Hare (1998) commented that prison inmates often are test-wise and that some have access to psychological test manuals or scoring criteria. He also described instances in which offenders had a copy of the PCL-R, in one case smuggled in by a lawyer. One inmate had a rare *perfect* score of 40 on the PCL-R (see Hare (1999, pp. 80–82). His control of the prison system was remarkable, presenting himself as normal or mentally disturbed, depending on the circumstances. He was a master at manipulating professionals to transfer him to a forensic medical facility, return to prison, back to the facility, and so on. Facilitating his shams was an unusual ability to back up convincing play-acting with concordant responses on personality inventories. He openly mocked the experts for their failure to appreciate his dissimulation: "I'm a liar but I'm not crazy."

other groups, particularly the Offender group, the men in the CAH group were much older at the time of assessment and had lower Factor 2 scores. We do not know what direct influence the advanced age of the CAH members had on their PCL-R assessments. However, we can explore the association between the PCL-R and age of assessment within each sample. The results, presented in Table 2 (upper panel), indicate that none of the correlations between age and the PCL-R was significant in the Community group. However, the pattern was similar to that found with NA samples. In the Offender sample, the correlation was positive for Factor 1 and negative for Factor 2, with the latter value being considerably larger than in NA samples. The results for the CAH group were unlike those found with NA samples, in that age at assessment correlated *positively* with the PCL-R total and Factor scores. The effect sizes were small but informative.

In addition, we computed tests for the significance of the difference between two correlations. The difference between the CAH and Offender samples was significant for the PCL-R total ($p < .05$) and Factor 2 score ($p < .001$) but not for Factor 1 score ($p < .10$). On the other hand, none of the differences between CAH and Community groups was significant.

For descriptive purposes, it may be helpful to compare the factor scores of the CAH sample with those of older NA offenders described by Baglole et al. (2022). Baglole et al. had conducted an item theory analysis (IRT) of the large sample of male offenders described by Hare (2003, pp. 53–54), divided into three age groups: Early (18–30), Middle 31–49), and Late (50+). The mean PCL-R score of the early, middle, and late groups was 21.4, 20.2, and 15.4, respectively. Importantly, Factor 2 was the reason for the sharp decline in the late group's PCL-R score. The mean item score for this group was 0.92 and 0.64 for Factors 1 and 2, respectively. Thus, compared with Chilean and older North American offenders, the men in the CAH group displayed similar Factor 2 features but a much higher level of Factor 1 components.

4.3.2. SRP-SF

There also is an inverse association between age at assessment and SRP-SF scale scores in community samples. Paulhus et al. (2016, p. 80) reported that the correlations between age and SRP-SF total, Factor 1, and Factor 2 scores in the Community Reference sample were, respectively, −0.15, −0.09, and − 0.16. Table 2 (lower panel) presents the results of the present study. As with the Community Reference sample, all correlations between age and SRP-SF scores were *negative* in the Community and Offender samples. Conversely, the correlations were *positive* in the CAH sample. The CAH group differed significantly from the other two groups for total ($p < .001$) and factor scores ($p < .05$ to 0.001).

4.4. Psychopathy and military rank

To determine if Factor 1 features in the CAH group were most prominent among those with the most authority and control, we divided the sample into three ranks: Junior (Warrant Officers, Lieutenants, and Captains; $n = 39$); middle (Majors, Lieutenant Colonels, and Colonels; $n = 39$); and senior (Brigadier Generals and Generals; $n = 20$). The mean (*SD*) total PCL-R score for the junior, middle, and senior ranks was, respectively, 19.1 (4.6), 21.4 (6.1), and 23.7 (6.9), $F(2, 95) = 8.71$, $p < .001$, $\eta^2 = 0.15$. Tukey tests indicated that the mean PCL-R score of men in the junior ranks was significantly lower than that of those in the middle ($p < .05$) and senior ranks ($p < .001$). Fig. 5 displays the mean item score for each facet and each rank, with the Offender group as a comparison. The main source of the difference among military ranks was the Interpersonal facet, $F(2, 95) = 18.00$, $p < .001$, $\eta^2 = 0.27$, followed by the Affective facet, $F(2, 95) = 5.54$, $p < .01$, $\eta^2 = 0.10$. In each case, the association was linear, with the senior ranks having the highest score and the junior ranks having the lowest score. Each rank had scores considerably higher than those of the Offenders. As noted in Subsection 4.2.1., the mean Factor 1 scores were very high in the CAH group. They were even higher for the CAH senior ranks, at the 96th percentile for the Interpersonal facet and 98th percentile for the Affective facet. All those with the maximum Factor 1 score of 16 were in the senior ranks. As Babiak, Neumann, and Hare (2010) found with corporate executives, the ability to deceive, manipulate, and control can be beneficial in the right context.[10]

4.5. Latent profile analysis

Table 3 displays the LPA results for the pooled sample of PCL-R scores. As expected, the 4-class model provided the optimal solution. There was a large drop in BIC (24%) from a 1- to a 2-class solution and a flattening of the BIC change from a 4- to a 5-class solution (6%). The 4-class solution provided slightly better classification accuracy than the 5-class solution; the latter solution divided the low-scoring cases into two low-scoring subtypes and thus offered little meaningful differentiation among these specific subtypes. The 4-class solution was associated with large effect size differences among the subtypes (mean $\eta^2 = 0.74$).

Fig. 6 contains the factor plots for each class based on the pooled sample. Consistent with PCL-R subtyping research (Mokros et al., 2021), there was a sizable representation of offenders in the Prototypic (C1; 21.0%), Callous-Conning (C2; 26.2%), Externalizing (C3; 25.9%), and General subtypes (C4; 26.9%). Thus, the LPA captures well the typical heterogeneity of psychopathic features among a mixed sample of offenders and community members. The mean PCL-R total score for the C1 through C4 subtypes was, respectively, 27.06 (*SD* = 3.32), 22.28 (*SD* = 3.63), 16.5 (*SD* = 3.59), and 4.85 (*SD* = 2.94). The patterns and factor scores of the emergent subtypes generally were similar to those obtained in the literature, with a notable exception. Typically, C1 has the highest score on Factors 1 and 2 (Hare et al., 2018). However, in this study, C2 had the highest Factor 1 score because C2 consisted mostly of members of the CAH sample, whereas C1 consisted almost entirely of members of the Offender sample (Table 4). Thus, the LPA data in Fig. 6 are in part redundant with the sample data in Fig. 3. Even so, Fig. 6 and Table 4 provide useful information about the composition of the CAH sample. Specifically, there was within-sample variation in the relative contribution of the psychopathy facets, with 7% of the members in C1 (Prototypic), 14% in C3 (Externalizing), and 1% in C4 (General). That is, 15% of the sample of those convicted of crimes against humanity did not have Factor 1 ratings indicative of a deceptive, manipulative, and callous psychopathic personality. Yet, they had committed heinous crimes. These individuals came from the lower ranks, and we might speculate that their actions were less a result of psychopathic propensities than of extant cultural and organizational factors that promoted violent and criminal behaviors, as in sociopathy or "secondary psychopathy" (Mokros et al., 2021). Relatedly, Schimmenti, Capri, La Barbera, and Caretti (2014) found that low- or mid-members of the Mafia, convicted for a variety of violent crimes, had lower PCL-R total and Factor 1 scores than did other male offenders with similar convictions. The authors commented that the members had internalized Mafia ideals and principles, had strong family ties, and committed criminal acts more out of loyalty to the organization and their family than out of personal interest. Schimmenti et al. also noted that Italian law prevented them from interviewing higher levels (bosses) of Mafia organizations, among whom psychopathic traits might be more severe. We did not have the same problem.

5. General discussion

Sociopolitical and methodological challenges make it difficult to conduct empirical research on the personality and psychopathology of terrorists. In what may be the first study of its kind, we used the PCL-R to evaluate psychopathic traits among a sample of Chilean men convicted

[10] The senior ranks tended to have the highest SRP-SF scores, but the differences among groups were small.

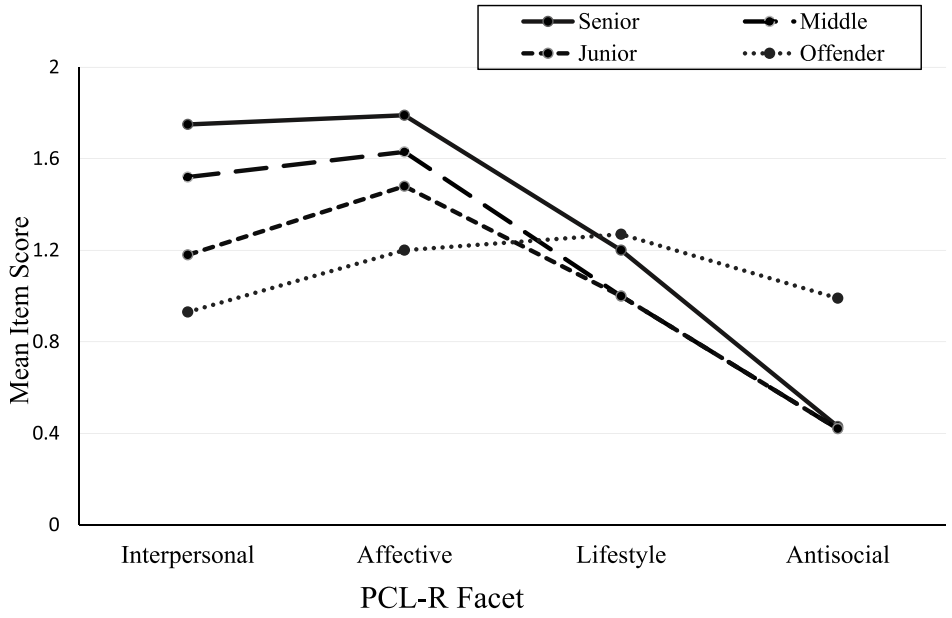

Fig. 5. Mean PCL-R item facet scores for military ranks and the offender sample.

Table 3
Latent profile analysis (LPA) Results

Model Fit/Latent class solution	1	2	3	4	5
Log-Likelihood	−1417.704	−1071.893	−936.754	−849.204	−785.605
No. of Free Parameters	8	13	18	23	28
BIC-$_{adjusted}$	2858.132	2180.712	1924.638	**1763.741**	1650.744
Classification Accuracy Avg.	–	0.95	0.94	**0.92**	0.92

Note. Bold = best fitting model.

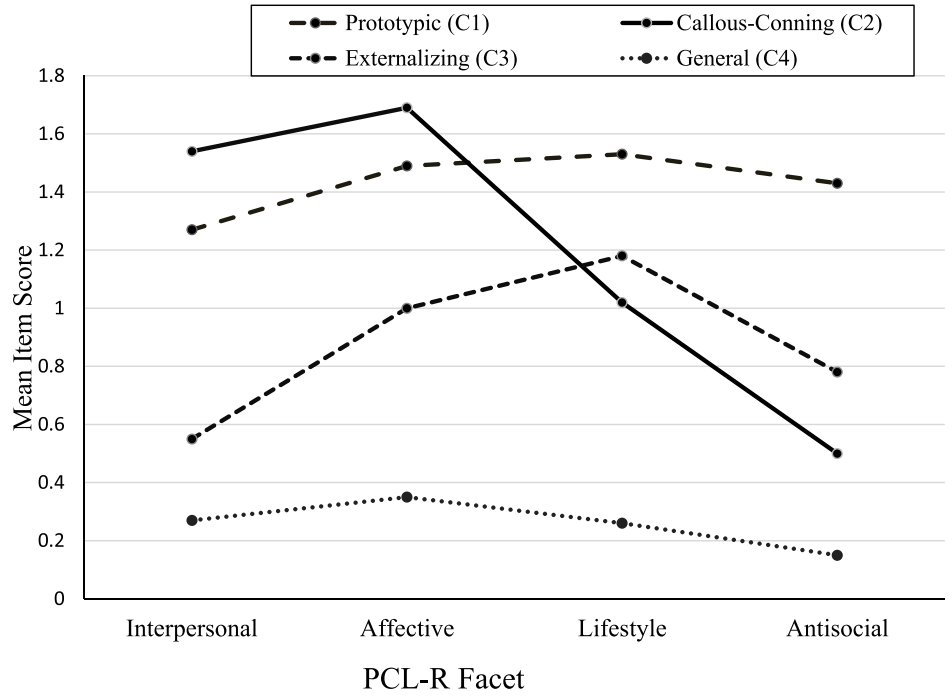

Fig. 6. PCL-R profiles derived from latent profile analysis (LPA) of the pooled sample (N = 411). Entries are mean item scores.

Table 4
Percentage of sample members in each LPA Class

Class				
Prototypic	Prototypic (C1)	Callous-Conning (C2)	Externalizing (C3)	General (C4)
CAH	7	74	14	1
Offenders	93	23	82	15
Community	0	3	4	85

Note. CAH = Crimes against humanity.

of crimes against humanity (CAH) and among comparison groups of prison inmates and community men. The psychometric and structural properties of the PCL-R in these samples were consistent with the international literature (Neumann et al., 2015). Expressly, variable-centered modeling indicated that the four-factor model of psychopathy (Interpersonal, Affective, Lifestyle, and Antisocial) generalized to the Chilean context. Further, person-centered analyses of the factors confirmed the presence of four classes or subtypes of offenders, labeled Prototypic Psychopathy, Callous-Conning, Externalizing, and General, in line with previous large sample studies (Hare et al., 2018). These findings provided a framework for understanding the role of psychopathy among convicted human rights violators.

The most interesting findings were that the mean PCL-R total scores of the CAH and prison samples were about the same but differed widely on the pattern of factor/facet scores. Compared with the other prison inmates (and, of course, the community sample), those in the CAH sample had an extraordinarily high mean score on PCL-R Factor 1 (Interpersonal/Affective facets) and a low score on Factor 2 (Lifestyle/Antisocial facets). As rated, these men generally were extremely grandiose, manipulative, deceptive, callous, and remorseless, about as impulsive, irresponsible, and sensation seeking as other offenders, yet not burdened with a manifest history of delinquent or severe antisocial behavior. This particular *pattern* of clinically rated traits and behaviors in a well-defined group of human rights violators is remarkable, even unique, in the empirical literature on psychopathy and terrorism. It appears that ambitious, callous, and ruthless officers were suitable candidates for roles dedicated to suppressing and eliminating proclaimed enemies of the state.

A common feature of these actors was a declared lack of remorse or moral responsibility for actions that purged the state of political deviants. As Diggelmann (2016, p. 1073) put it, "[There] is a substantive gap between the assumed and the actual role of apology and remorse in international criminal proceedings...cases of sincere remorse or apologies among high ranks...are hardly existent, and fakery of remorse is fostered by judicial practice." Importantly for our purposes, Diggelmann distinguished between perpetrators with the *highest* ranks and those with only a *high* rank. The former are *conflict entrepreneurs* who use *neutralization* techniques to create a group value system and identity to normalize criminal and violent enterprises [emphases added]. They "formulate and spread the ideology and demand allegiance from the rest" (p. 1093), and their actions and lack of remorse are related to psychopathologies, such as malignant narcissism or psychopathy. According to this view, perpetrators' actions below the highest rank result, in large part, from *conforming* to the group's sense of morality and purpose rather than from psychopathology.

The findings of this study indicate that the higher the military rank, the more psychopathic the member, in partial support of Digglmann's argument. While those in the lower grades may have been conformers and followers, they also displayed a higher level of the Factor 1 features that appeared compatible with the regime's ideology and policies. They may have been "soldiers" who do most of the dirty work, but unlike soldiers in criminal organizations, such as the Mafia, the lower ranks of the CAH sample were high on Factor 1 of the PCL-R. Like the "highest rank," almost all expressed little or no guilt or remorse and often claimed to be political prisoners, unaware of any wrongdoing, sworn to silence, and loyal to the cause. Still, the interviews suggested that those with the highest ranks had the most excuses and were the most fervent about their valiant attempts to save the country from the scourge of communism.[11]

Some researchers would describe the pattern of high Factor 1 and low Factor 2 scores (our Callous-Conning class) as indicative of "primary psychopathy," and the pattern of low Factor 1 and high Factor 2 scores (our Externalizing class) as "secondary psychopathy." Some even adulterate the PCL-R construct of psychopathy by referring to Factor 1 as primary psychopathy and Factor 2 as secondary psychopathy. For reasons given elsewhere (Mokros et al., 2021), we consider these concepts problematic, particularly the latter (e.g., secondary to what?). Nonetheless, it would be understandable for an investigator to view the CAH profile and the Conning-Callous class as extreme exemplars of so-called primary psychopathy.

The PCL-R conceptualization of psychopathy, as described by Hare, Neumann, and colleagues, includes overt antisociality as a defining attribute (Hare et al., 2018; Neumann et al., 2007). Typically, this means at least a moderately elevated Factor 2 score. However, as Fig. 3 shows, the score for the antisocial component of Factor 2 was extremely low in the CAH group, probably because of the age-related reasons discussed in Section 4.2.1. At the same time, we must consider that these actors were elite operatives with a relatively specific mission who acted within particular boundaries and expectations set by organizations for which they worked. In this respect, some of Pinochet's killing machines were soldiers following orders, but many were ruthless, mission-oriented individuals whose nature fitted the job description.

These findings raise an interesting question worthy of investigation. Does the clinical significance of an extreme high Factor 1/low Factor 2 pattern depend on the nature of the context in which it occurs? Many commentators have noted that psychopathic traits can be advantageous or disastrous, depending on the circumstances. For example, Babiak and Hare (2019, pp. 210–212) described a high Factor 1/low Factor 2 pattern of PCL-R scores among high-potential executives who managed to rise to the top in spite of poor performance reviews, corporate malfeasance, and employee bullying and intimidation. Their ruthlessness was an asset when making tough, cold-hearted, self-serving decisions. Similarly, Häkkänen-Nyholm and Nyholm (2012) speculated that a hypothetical psychopathic political/military leader convicted of crimes against humanity "would score higher than other political and military leaders on the items reflecting interpersonal and affective features of psychopathy." Their depiction was congruent with that of the psychopathy profiles of our CAH sample.

We used the PCL-R and the SRP-SF in a multimodal approach for assessing psychopathy. In community samples, the correlation between the two instruments typically is positive but modest, as was the case in this study. However, their association in the CAH sample was weak, though slightly stronger for the antisocial facet. This is an interesting finding in view of evidence that the SRP and other self-report psychopathy scales are a viable and informative adjunct to the PCL-R (Neumann et al., 2015). The reasons for the current result are unclear, but may relate to the extremely high Factor 1 scores of the CAH group, a lack of insight, or unusual ability to "control the situation" through impression management. Whatever the explanation, it is clear that the PCL-R and SRP-SF did not provide congruent representations of the psychopathy construct among men convicted of crimes against humanity. Had we used only the SRP-SF, we would have concluded that these actors were much less psychopathic than were general offenders,

[11] Payne (2008) provided a detailed account of confessions by perpetrators of state violence in Chile and other Latin American countries. He commented that confessions involved either "denial or sadism," neither advancing democracy (pp.7–8). Sadistic confessions "reveal torture as emblematic of a greater political issue and not only as a common crime perpetrated by an individual psychopath" (p. 140).

and no more psychopathic than were community men. More generally, these results suggest that investigators should be circumspect when comparing research findings based *solely* on self-report measures of psychopathy with those based on the PCL-R, especially when dealing with a population likely to harbor individuals with very high Factor 1 scores. Beyond this, the SRP-SF may have provided clinical information about how highly psychopathic individuals deal with questions about their nature. Of course, the interview protocol for the PCL-R involved verbal responses to similar rater questions. The difference is that self-reports are simple, specific, and structured, whereas the PCL-R interview is semi-structured, allowing the rater to explore, probe, crosscheck, and evaluate the individual's responses. This study's raters noted, anecdotally, that the CAH men were familiar with personality tests but were unsure how to react to direct questionning and challenges during the interview.

5.1. Limitations

The study has several limitations, the most obvious being a lack of apropos comparison samples for evaluating the psychopathy assessments of the CAH actors. As noted in Section 2, the ideal comparison or control group would have been a contemporary sample of men who had served in the regime without receiving charges or convictions for similar crimes against humanity. Unfortunately, the political and technical obstacles to obtaining such a sample were insurmountable, as they may be for investigators in other jurisdictions. However, we might argue that findings for the CAH group more or less stand on their own, and that comparisons with the convenience samples provide additional substantive information about psychopathy among violators of human rights. The CAH sample matched other offenders in their level of psychopathy and greatly exceeded that of the community sample. As Gill et al. (2021, p, 69) noted, "One simple route to developing a greater understanding [of] the salience of different factors is by comparing their presence in a violent extremist population to a general population." Another limitation of this study is that we lacked data from psychological instruments other than the PCL-R and SRP-SF. Future research should include a variety of standardized measures of general personality and psychopathology.

The practical implications and generality of our findings remain to be determined, although we expect that they would extend to the other Latin American countries in the former Operation Condor. Egregious violations of human rights are common in many parts of the world, and come in such diverse forms that even conceptual replications of this study will be challenging.

5.2. Conclusions

The psychometric properties of the PCL-R were in accord with those obtained in other countries. Similarly, SEM replicated the PCL-R's correlated four-factor model (Interpersonal, Affective, Lifestyle, and Antisocial). The PCL-R scores of the CAH and general offenders were virtually the same, with both groups having much higher scores than did the community sample. However, compared with other offenders, the CAH group had much higher scores on the PCL-R's Interpersonal/Affective facets (Factor 1) and lower scores on the Lifestyle/Antisocial facets (Factor 2). LPA identified the expected four latent classes, with most CAH men falling into the Callous-Conning class. The results of this study provide unique information about the psychopathic propensities of a sample of state violators of human rights. The pattern of PCL-R scores was consistent with an extreme disposition for the self-serving, callous, and ruthless treatment of others, without guilt or remorse, yet absent a prior documented history of severe antisocial, externalizing behavior. These results also undermine the assertion (Skeem & Cooke, 2010) that a high PCL-R score requires demonstrable evidence of criminality. Although those in the CAH sample had convictions for violent crimes, most scored 0 on items 18 (Delinquency) and 20 (Criminal versatility) and received an "omit" (and prorate) on item 19 (Revocation of release). Raters do not assign a score to items 19 and 20 simply because of recorded or admitted criminality, but for violation of judicial conditions for release into the community (item 19), and recorded or admitted commission of a variety of different types of offences (item 20). Because of the PCL-R's explicit scoring criteria, in most cases a conviction for a crime against humanity did not contribute directly to the scores assigned to items 19 and 20. Of course, there was ample evidence that the CAH actors had engaged in antisociality serious enough to warrant a high score on other items. As explicated by Hare and Neumann (2010; also see Hare, Neumann, & Mokros, 2018; Neumann et al., 2015), antisociality, not criminality, is a fundamental feature of the psychopathy construct.

Finally, we understand that our findings would not surprise the countless victims and casualties of the Pinochet dictatorship or of any state-sponsored terrorism. Behavioral science often confirms the obvious. It also provides standard metrics for communication of theory and findings and rational discussions among the sundry disciplines and stakeholders concerned with terrorism and its actors. Recognition of the psychological makeup of actors who were responsible for the planning, oversight, and commission of crimes against humanity is of considerable importance. However, the challenge is to use this information for preventative and management purposes, difficult tasks in a world plagued with intractable ideologies and geopolitical conflicts, many fostered and facilitated by actors with the temperaments described herein.

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Declaration of Competing Interest

Robert Hare receives royalties from the sale of the PCL-R and its derivatives, including the SRP-SF. Craig Neumann receives royalties from the sale of the SRP-SF. The other authors report no conflicts of interest.

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