

**INTEGRATED MASTER'S IN PSYCHOLOGY**  
PSYCHOLOGY OF JUSTICE AND DESVIANCE

# **The effect of aging in psychopathic and empathic traits**

**Eduarda Beatriz Moreira Rocha**

**M**

**2022**



**Universidade do Porto**

**Faculdade de Psicologia e de Ciências da Educação**

**THE EFFECT OF AGING IN PSYCHOPATHIC AND EMPATHIC TRAITS**

**Eduarda Beatriz Moreira Rocha**

June 2022

Dissertation submitted for the Integrated Master's Degree in Psychology, Faculty of Psychology and Educational Sciences of the University of Porto, supervised by Professor Doutor Fernando Ferreira Santos (FPCEUP) and co-supervised by Carina Fernandes (FPCEUP).

## **LEGAL WARNINGS**

The content of this dissertation reflects the perspectives, work and interpretations of the author at the time of its delivery. This dissertation may contain both conceptual and methodological inaccuracies, which may have been identified at a later date. Therefore, any use of its contents should be exercised with caution.

By submitting this dissertation, the author declares that it is the result of his own work, that it contains original contributions, and that all sources used are acknowledged and duly cited in the text and identified in the reference section. The author also declares that she does not disseminate in this dissertation any content whose reproduction is prohibited by copyright or industrial property rights.

## ACKNOWLEDGEMENTS

I'm grateful to my family, especially my parents, for their constant effort to give me the opportunity to conclude this chapter of my life.

To my closest friends, Paula, Mariana and Cristina, who supported me in my lowest times and always inspired me.

Last but not least, I want to thank me, for believing in me and make the dream of my child-self come true.

## RESUMO

A psicopatia é uma constelação de traços de personalidade caracterizada por desvios comportamentais, desajustes emocionais e interpessoais distintos, sendo muitas vezes marcada pela falta de empatia. Os poucos estudos sobre envelhecimento e psicopatia mostram que a psicopatia geral diminui com o envelhecimento. Apesar dos resultados mistos, as mudanças de desenvolvimento na empatia, que ocorrem ao longo da vida, receberam pouco atenção. Assim, o presente estudo investigou a relação entre envelhecimento, psicopatia e empatia.

Para tal, 274 adultos (199 mulheres) com idades entre 19 e 89 anos completaram um questionário online para avaliar auto-relato de psicopatia (TriPM; SRP-SF) e empatia (QCAE). Os resultados revelaram uma correlação negativa significativa entre o envelhecimento e as facetas de desinibição da psicopatia e estilo de vida, mas também com a empatia cognitiva. Esta investigação constitui uma análise preliminar da relação entre o envelhecimento com psicopatia e empatia numa amostra da comunidade portuguesa.

**Palavras-Chave:** psicopatia, empatia, idade.

## ABSTRACT

Psychopathy is a constellation of personality traits characterized by behavioral deviance and distinctive emotional and interpersonal maladjustments, being often marked by a lack of empathy. The few studies on aging and psychopathy show that overall psychopathy decreases with aging. Despite the mixed results, the developmental changes in empathy, which occur across lifespan, have received little attention. Hence, the present study investigated the relationship between aging, psychopathy, and empathy.

As such, 274 adults (199 females) between the ages of 19 and 89 completed an online questionnaire to assess self-report psychopathy (TriPM; SRP-SF) and empathy (QCAE). Findings revealed a significant negative correlation between aging and the psychopathy disinhibition and lifestyle facets, but also with cognitive empathy. This research constitutes a preliminary analysis of the relationship between aging with both psychopathy and empathy in a Portuguese community sample.

**Keywords:** psychopathy, empathy, aging.

## 1. Introduction

Psychopathy is a constellation of personality traits characterized by prominent behavioral deviance and distinctive emotional and interpersonal maladjustments (Patrick et al., 2009), masking an apparent psychological normality (Cleckley, 1988). Despite being a multidimensional condition (Patrick, 2018), psychopathy is often marked by a lack of empathy (van Dongen, 2020). Developed through social interaction, empathy is an automatic process to catch and interpret the feelings of others (Heyes, 2018). Despite psychopathy and empathy being widely studied, its relationship with aging has yet to be researched in greater detail. Albeit the few studies, there is a tendency for some psychopathy facets to decrease with aging (e.g., Duncan et al., 2012; Harpur & Hare, 1994; Huchzermeier et al., 2008). However, the research on aging and empathy reveals mixed results (Yang & Banissy, 2016). Thus, the main purpose of this research is to study the relationship between aging, psychopathy, and empathy.

Psychopathy has historically undergone different definitions and approaches (see Buzina, 2012, for a review), however one the richest descriptions and most influential definitions has been the one developed by Cleckley in 1941 (Crego & Widiger, 2016; Lynam & Gudonis, 2005). Based on various patients (15 case examples), Cleckley formulated 16 explicit criteria for diagnosing psychopathy (see Cleckley, 1988), some of which were later on considered to be more representative of psychopathy in Crego and Widiger's (2016) work, namely "superficial charm, dishonesty, shallow affect, inadequately motivated antisocial behavior, poor judgment, self-centeredness and incapacity for love, interpersonally unresponsive, and no clear or strong life plan" (p. 79). This study, which systematically analyzed Cleckley's psychopathy case examples, also analyzed additional traits of psychopathy that have been recently developed in measures and models of psychopathy (e.g., manipulation, lack of empathy, insincerity). Therefore, psychopathy is multifaceted (rather than unitary) and dimensional (rather than typological) as seen in contemporary research (Patrick, 2018).

Based on Cleckley's work, Hare (1980, as cited in Harpur et al., 1989) developed an instrument to measure psychopathy within the forensic context (the Psychopathy Checklist; PCL), which later on revealed the existence of bi-factorial structure with factor 1 being characterized by selfish, callous, and remorseless use of others, and factor 2 characterized by chronically unstable and antisocial life-style behaviors (Harpur et al., 1989). Factor 1 correlates more closely with the classic clinical description of the

psychopathic personality, while factor 2 is strongly correlated with variables related to social deviance (Harpur et al., 1989). However, in more recent years “Hare (2003) has conceptualised psychopathy as consisting of four factors with FACT1 being separated into Interpersonal Manipulation (IPM) and Callous Affect (CA) whilst FACT2 has been separated into the factors of Erratic Lifestyle (ELS) and Criminal Tendencies (CT)” (Duncan et al., 2012, p. 547). A self-report measure - the Self-Report Psychopathy Scale-III (SRP-III; Paulhus et al., in press) - was later developed to index PCL-R facets in a non-forensic community sample (Drisdane et al., 2014).

However, longstanding debates regarding the appropriate boundaries of psychopathy led Patrick et al. (2009) to formulate a triarchic model of psychopathy by integrating alternative historic descriptions of psychopathy with findings from the best-established psychopathy assessment instruments (Patrick, 2010). This model encompasses three distinct phenotypic constructs of psychopath: disinhibition, boldness, and meanness. While disinhibition describes a propensity toward impulse control problems, boldness captures a constellation of emotional resiliency, social dominance, and high self-assurance, but also venturesomeness. As for meanness, it refers to an exploitative resource seeking without regard for others (such as empathy deficiency; Patrick et al., 2009). Although interrelated, these constructs are distinct from one another, thus they can be measured and understood separately (Patrick et al., 2009). Patrick (2010) developed the Triarchic Psychopathy Measure (TriPM) to operationalize the three constructs of the Triarchic Model. Because psychopathy encompasses profound deficits in the human tendency to feel and care about what other people feel, but the ability to describe and cognitively attribute a cause to others’ feelings remains, even if no emotional experience is being shared (Dadds et al., 2009), empathy and psychopathy are interrelated.

Empathy can be defined as the “natural capacity to share, understand, and respond with care to the affective states of others” (Decety & Jackson, 2004, p. 71-100), hence playing an important role in social interactions. Two components of empathy can be identified: (a) an affective component characterized by affective sharing or emotional contagion, and (b) a cognitive aspect of mentalizing or perspective taking (i.e., Theory of Mind; van Dongen, 2020). While affective empathy is the result of a dual process between perception and emotion, cognitive empathy is the rationalization of perspective taking (Preston et al., 2002). Cognitive and affective empathy are not independent, but inherently interact to generate as well as to modulate empathic responses (Preston & de Waal, 2002).

Between the two, it is the affective empathy that is thought to play an important role in psychopathy (van Dongen, 2020).

However, both psychopathy and empathy do not remain static across life. In the study of Duncan et al. (2012), the relationship between psychopathy and age in a non-clinical community sample revealed that increasing age was associated with declines in overall psychopathy, but also in all factors of Hare's (2003) psychopathy model (both two and four factor-structures). Other studies of the life course of psychopathy in criminal populations found similar results for overall psychopathy, whilst for the two-factor model only the unstable/socially deviant lifestyle domain decreased with age (Harpur & Hare, 1994; Huchzermeier et al., 2008). Likewise, for the four-factor model the pattern maintains: erratic and criminal behaviors decline whereas interpersonal manipulation and affective callousness remain stable (Huchzermeier et al., 2008).

As for the relationship between empathy and aging, research has shown inconsistent results, perhaps related to the different methods used to study this relationship (i.e., using self-report, behavioral or emotional recognition tasks; Yang & Banissy, 2016). According to Yang and Banissy (2016) review on the mechanisms of empathy throughout adulthood, behavioral studies suggest deficits in both affective and cognitive empathic components for older adults. However, the study of Ze et al. (2014), which analyzed empathy on emotion recognition (study II), did not reveal an impairment for older adults on cognitive empathy, scoring higher affective empathy. On the other hand, in Bailey et al. (2008) self-report study, older adults had significantly reduced self-report cognitive empathy in comparison to younger adults, while no age-related differences were found for affective empathy. Indeed, Yang and Banissy (2016) review on empathy self-report studies reveals the existence of a mixed pattern regarding age differences in empathy.

Despite these findings, and the well-documented research of the neurodevelopment of empathy from childhood to adolescence (Chen et al., 2014), the developmental changes in empathy which occur across life have received little attention (Chen et al., 2014; Yang & Banissy, 2016; Ze et al., 2014). This highlights the pertinence of studying these constructs. Thus, the main purpose of this research is to study the relationship between aging with psychopathy, and empathy. Regardless of the mixed results from literature on the relationship between aging and empathy, since psychopathy has shown to decrease with age (Duncan et al., 2012) and is often marked by a lack of empathy (van Dongen, 2020), it is expected that empathy increases with aging. Hence, our hypothesis are: (H1)

psychopathy and aging are negatively correlated, and (H2) empathy and aging are positively correlated.

## 2. Method

### 2.1 Participants

A purposeful sampling was employed. Participants from the community were invited to take part in an anonymous and confidential online survey. Other participants were purposefully selected from five nursing home institutions in the North of Portugal.

From a sample of 468 participants, 194 did not meet the inclusion criteria (i.e., having completed the survey and being at least 18 years old). Thus, in total, 274 adults (199 females; 72.6%) between the ages of 19 and 89 ( $M = 41.4$ ,  $DP = 21.4$ ) participated in this study. The majority was Portuguese ( $n = 260$ , 94.9%), while the rest was non-Portuguese ( $n = 12$ , 4.38%) and had dual nationality besides Portuguese ( $n = 2$ , 0.73%). In terms of education<sup>1</sup>, 14 participants (5.11%) had no formal education, 30 (10.9%) had 1 to 4 years of schooling, 27 (9.85%) had 5 to 9 years of schooling, 51 (18.6%) had 10 to 12 years of schooling, 61 (22.3%) had 13-15 years of schooling, and 91 (33.2%) had over 15 years of schooling. Only 20 participants (7.30%) were from the nursing home institutions.

### 2.2 Measures

#### *Triarchic Measure of Psychopathy (TriPM; Patrick, 2010, Portuguese Version from Paiva et al., 2020)*

TriPM was designed to assess manifestations of biobehavioral liabilities relevant to psychopathy and other forms of mental illness. It is a 58-item self-report questionnaire, which uses a 4-point Likert scale (*False, Somewhat False, Somewhat True, True*) to capture the three distinct components of psychopathy (*Disinhibition, Meanness, and Boldness*) described in the Triarchic Model of Psychopathy (Patrick et al., 2009).

Disinhibition (20 items) is pronounced by a shortage of inhibitory control and needy regulation of negative affect, reactive aggression, and eager urgency (e.g., “I’ve had problems at work because I was irresponsible”<sup>2</sup>). Boldness subscale (19 items) measures the capacity of remaining calm in dangerous situations and of recovering from

---

<sup>1</sup> The total percentage does not equal 100 due to approximations. Education, as a continuous variable, was grouped in schooling years with the sole purpose of characterizing the sample.

<sup>2</sup> These examples were translated from the Portuguese Version (Paiva et al., 2020).

traumatizing events, high self-esteem, socially successful behavior, and high toleration for unknown and dangerous situations (e.g., “I can move on from things that would traumatize others”). Meanness subscale (19 items) assesses insensibility, lack of empathy, emotional disengagement and willful aggression (e.g., “It doesn’t bother me seeing someone suffering”).

The Portuguese version instrument reveals very good internal consistency, with Cronbach's alpha values for the subscales ranging from .81 to .85, and .86 for the total scale. In the present study, the total scale and subscales of TriPM revealed good to very good internal consistency (see Table 1).

***Self-Report Psychopathy Scale–Short Form (SRP-SF; Paulhus et al., 2016, Portuguese Version from Seara-Cardoso et al., 2020)***

SRP-SF is the short form of the SRP-4 (a 64-item questionnaire) which is used to identify severe, versatile, and persistent psychopathic traits and behaviors. The SRP-SF is a 29-item self-report questionnaire assessing psychopathic traits and behaviors in 5-point Likert scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*). It adopts Hare’s four-factor structure, characterizing psychopathy in its interpersonal, affective, lifestyle, and antisocial components (these were originally named interpersonal manipulation, callous affect, erratic lifestyle, and criminal tendencies, respectively; Gordts et al., 2017). A total score of 70 or greater is elevated and signals the potential of individuals with psychopathic propensities (Paulhus et al., 2016, as cited in Seara-Cardoso et al., 2020).

The interpersonal subscale (7 items) aims to measure dissocial characteristics such as pathological lying and manipulation (e.g., “I would get a kick out of ‘scamming’ someone”). The affective subscale (7 items) focus on the affective aspects of psychopathy, such as lack of empathy, and lack of guilt or remorse (e.g., “I never feel guilty over hurting others”). As for lifestyle (7 items), it relates to imprudent and impellent behaviors (e.g., “I keep getting in trouble for the same things over and over”). Lastly, antisocial (7 items) refers to overt antisocial behavior (e.g., “I have threatened people into giving me money, clothes, or makeup”). In this scale, the items *committed a crime* and *gang activity* are omitted in offender and society samples, respectively, given their low variability in these samples.

The Portuguese version instrument reveals good to very good internal consistency, with Cronbach's alpha values for the subscales ranging from .71 to .76, for the dimensions ranging from .78 to .84, and .87 for the total scale. In the present study, Cronbach's alpha for the antisocial scale was .38. After excluding the item related to gang activity from the

antisocial subscale, its internal consistency increased. The final Cronbach's alpha values of the SRP-SF total scale and subscales are presented in Table 1, revealing acceptable to very good internal consistency.

***Questionnaire of Cognitive and Affective Empathy (QCAE; Reniers et al., 2011, Portuguese version from Queirós et al., 2018)***

The *Questionnaire of Cognitive and Affective Empathy* (QCAE) aims to measure adults' cognitive and affective empathy in a 30-item self-report questionnaire in a 4-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (4).

The *Cognitive Empathy* dimension assesses the ability to form an understanding of others' internal emotional state, whereas the *Affective Empathy* dimension assesses the ability to be sensitive to and vicariously experience others' emotional state. Cognitive empathy can be captured in two dimensions: *Perspective Taking* (10 items) and *Online Simulation* (9 items). While perspective taking refers to being able to see things from others' perspective (e.g., "I am quick to spot when someone in a group is feeling awkward or uncomfortable"), online simulation refers to the attempt of imagining oneself in another's situation by inferring another's emotional state (e.g., "I find it easy to put myself in somebody else's shoes").

Similarly, affective empathy is subdivided into *Emotion Contagion* (4 items), *Proximal Responsivity* (4 items), and *Peripheral Responsivity* (4 items). Emotion contagion assesses the ability to automatically mirror others' emotional states (e.g., "I am happy when I am with a cheerful group and sad when the others are glum"). Both proximal responsivity and peripheral responsivity refer to the emotional response elicited through the perception of others. However, for proximal responsivity the response is towards close one's feelings and moods (e.g., "Friends talk to me about their problems as they say that I am very understanding"), while for peripheral responsivity it is towards social contexts, thus more socially detached to the subject (e.g., "I often get deeply involved with the feelings of a character in a film, play, or novel").

The Portuguese version instrument reveals acceptable to very good internal consistency, with the values of Cronbach's alphas at the subscale and total scale levels ranging from .62 to .87, whereas the cognitive and affective dimensions ranging from .87 and .80, respectively. In the present study, all scales (the total, scales and subscales) of QCAE but one revealed adequate values of internal consistency (see Table 1)

## 2.3 Procedures

The online survey was sent via social media platforms and hosted on Qualtrics (see Appendix A). After presenting the purpose of study and its consent statement (including the right to confidentiality and the right to abandon the survey), sociodemographic information (i.e., sex, age, nationality, and education) was asked. Participants were then presented with the three instruments, with a randomized order. Progression to the subsequent questionnaire required participants to have concluded the previous one. In total, the survey took approximately 15 to 20 min to be completed and no compensation was granted. For the participants from the nursing home institutions, previous authorization from these institutions was obtained, and the survey was completed in the presence of the researcher.

Analysis of data was performed using IBM-SPSS version 28.0. Descriptive and inferential (correlations) analyses were performed to answer the research purpose. Normality assumption was analyzed through kurtosis and skewness. All variables revealed absolute values of kurtosis and skewness inferior to two, except for SRP-SF Antisocial subscale ( $ku = 4.18$ ,  $sk = 1.15$ ). To interpret the results, the conventions of Cohen (1992) were used, considering that an  $r$  of .10 is small (weak association), an  $r$  of .30 is medium (moderate association), and an  $r$  of .50 is large (strong association).

## 3. Results

### 3.1 Descriptive Analysis

On average, participants' self-report reveals low psychopathic tendencies. Out of 232 points for the TriPM total, the average value was approximately 49, which is less than the scale midpoint. As for its subscales, the highest average appeared on the Boldness subscale, followed by Disinhibition and Meanness subscale. These scores can also be considered low taking into account its maximum values (80 for Disinhibition and 76 for the other subscales).

Similarly, the average score on the SRP-SF total scale can be considered low, with its value (approximately 51) being lower than the scale midpoint (70). The average values of the SRP-SF subscales are very similar amongst each other with the highest value being the Lifestyle, followed by Interpersonal, Affective, and Antisocial subscales. Again, these values never exceed its corresponding midpoint value of 17.5. Interestingly, when comparing both scales of psychopathy regarding the maximum values, for TriPM these are

always lower than the midpoints of the total scale and subscales, while for SRP-SF scales the maximum values exceed its respective midpoints.

On the other hand, on average, participants report moderate values of empathy. Out of 234 points of the QCAE total scale, the average value was approximately 90, being almost 30 points above the scale midpoint. On average, participants also reveal moderate values of cognitive and affective empathy, compared with its scale midpoints of 38 and 24, respectively. Within the subscales of Cognitive Empathy, the highest average is seen for Perspective Taking, although this score does not differ much for the Online Simulation subscale. As for Affective Empathy, average values are higher for Emotional Contagion and Proximal Responsivity, and lower for Peripheral Responsivity. Detailed descriptive statistics are presented in Table 1.

**Table 1.** *Descriptive statistics*

	<i>M</i>	<i>SD</i>	<i>min</i>	<i>max</i>	<i>alpha</i>
<b>TriPM Total</b>	49.1	16.9	13	100	.85
Boldness	27.0	8.92	4	51	.78
Meanness	8.3	7.80	0	34	.82
Disinhibition	13.8	8.11	1	40	.81
<b>SRP-SF Total<sup>a</sup></b>	50.6	14.1	29	100	.89 <sup>a</sup>
Interpersonal	12.9	5.17	7	34	.76
Lifestyle	14.0	5.29	7	34	.76
Affective	12.1	4.57	7	28	.69
Antisocial <sup>a</sup>	11.5	2.70	8	25	.65
<b>QCAE Total</b>	90.4	10.4	58	117	.89
Cognitive Empathy	57.4	7.35	28	76	.89
Perspective Taking	29.9	4.48	12	40	.89
Online Simulation	27.5	4.02	14	36	.83
Affective Empathy	32.9	5.26	16	43	.82
Emotional Contagion	12.2	2.23	4	16	.72
Proximal Responsivity	12.1	1.91	7	16	.56
Peripheral Responsivity	8.65	2.23	3	12	.73

*Note.* *N* = 274.

<sup>a</sup>The item related to gang activity is not included.

### 3.2 Correlations between aging with psychopathy and empathy

To test the hypothesis, correlational analysis between age and the total scales of TriPM, SRP-SF, and QCAE were performed (see Table 2). Results reveal a weak significant negative correlation between age and SRP-SF total scale, but also with QCAE total scale. No significant correlation was found between age and TriPM total scale. As for the relationship between empathy and psychopathy, both SRP-SF total scale and TriPM total scale reveal a weak significant negative relationship with QCAE total scale.

**Table 2.** *Correlations between Age, TriPM\_Total, SRP-SF\_Total, and QCAE\_Total*

	Pearson Correlations			
	Age	TriPM_Total	SRP-SF_Total	QCAE_Total
Age	-			
TriPM_Total	-0.077	-		
SRP-SF_Total	-0.15*	0.56**	-	
QCAE_Total	-0.18**	-0.21**	-0.28**	-

Note.  $N = 274$ ; \*  $p = 0.05$ ; \*\*  $p = 0.01$

When further analyzing the relationship between age and the subscales of psychopathy and empathy measures, we found that significant correlations do not occur with all subscales (see Table 3). Indeed, regarding the psychopathy measures, age only correlates significantly with the TriPM Disinhibition subscale (low negative association), and with the SRP Lifestyle subscale (moderate negative association). As for the empathy measure, only the Cognitive Empathy dimension reveals to be significantly correlated with age (weak negative association). Similarly, both Perspective Taking and Online Simulation subscales from this dimension correlate negatively with age (moderate negative associations).

### 3.3 Exploratory correlations between psychopathy and empathy

Lastly, exploratory correlational analysis between psychopathy and empathy subscales reveal a significant negative correlation between Affective Empathy and all subscales of TriPM and SRP-SF (weak associations), except for TriPM Disinhibition subscale. Similar results were found for the subscales of the Affective Empathy dimension, except for Proximal Responsivity and TriPM Boldness, where no relationship was found. However, we found a significant negative correlation between the Cognitive Empathy subscale TriPM Meanness and Disinhibition subscales, and with SRP-SF Interpersonal and Affective subscales. Regarding its subscales, Online Simulation correlates significantly and negatively with all TriPM and SRP-SF subscales (weak to strong associations), except for TriPM Disinhibition. As for Perspective Taking, it only correlates significantly, and negatively, with TriPM Boldness.

## 4. Discussion

This study analyzed the relationship between aging with psychopathy, and empathy. Our results revealed that both overall self-reported psychopathy and empathy decrease with age, which corroborates the first hypothesis but not the second one. Our results regarding psychopathy and age are congruent to those found by Duncan et al.

(2012) in a non-clinical sample. Unlike the lack of evidence of age-related differences on self-reported empathy from Bailey et al. (2008) and Beadle et al. (2013) studies, our results did reveal a small but significant correlation between age and empathy, indicating that overall self-report empathy decreases with aging. However, our results are congruent to those found in the longitudinal study of Helson et al. (2002) which examined the developmental trajectory of empathy, where a small but significant linear decline was also found over the 40-year observation period.

**Table 3.** Multiple Comparisons between Aging and TriPM, SRP-SF, and QCAE subscales

		Pearson Correlations													
		Age	TriPM				SRP				QCAE				
			B	M	D	INT	LIF	AFF	CE	PT	OS	AE	EC	ProxR	PeriR
Age		-													
TriPM	B	0.016	-												
	M	-0.049	0.32**	-											
	D	-0.14*	-	0.50**	-										
SRP-SF			0.008												
	INT	-0.093	0.11	0.34**	0.46**	-									
	LIF	-	0.20**	0.46**	0.59**	0.58**	-								
QCAE	AFF	0.24**	0.11	0.18**	0.40**	0.35**	0.67**	0.58**	-						
	CE	0.11	0.098	-0.26**	-0.16**	-	-0.096	-0.21**	-						
	PT	0.28**	0.11	-0.14*	-0.061	-0.073	0.023	-0.075	0.88**	-					
	OS	0.23**	0.061	-0.33**	-0.23**	-	-0.20**	-0.31**	0.85**	0.50**	-				
	AE	0.25**	-	-0.25**	-0.079	-	-0.19**	-0.26**	0.34**	0.23**	0.37**	-			
	EC	0.031	0.18**	-0.19**	-0.046	-0.13*	-0.17**	-0.19**	0.23**	0.14*	0.26**	0.87**	-		
	ProxR	0.11	0.21**	-	-0.23**	-0.066	-	-0.14*	-0.27**	0.45**	0.33**	0.46**	0.84**	0.71**	-
	PeriR	0.058	0.089	-	-0.085	-	-0.15*	-0.20**	0.19**	0.12*	0.22**	0.77**	0.45**	0.42**	-
		-0.082	-0.13*	-0.20**	-0.085	-0.13*	-0.15*	-0.20**	0.19**	0.12*	0.22**	0.77**	0.45**	0.42**	-

Note.  $N = 274$ . B = Boldness, M = Meanness, D = Disinhibition, INT = Interpersonal, LIF = Lifestyle, AFF = Affective, CE = Cognitive Empathy, PT = Perspective Taking, OS = Online Simulation, AE = Affective Empathy, EC = Emotional Contagion, ProxR = Proximal Responsivity, PeriR = Peripheral Responsivity. SRP-SF Antisocial subscale is not included for not following a normal distribution; \*  $p = 0.05$ ; \*\*  $p = 0.01$

Further analyzing the relation between aging and psychopathy, we found that this negative significant correlation was due to the Lifestyle facet of psychopathy (SRP-SF). Thus, associated with aging was a decrease in psychopathy's imprudent and impellent behaviors, such as need for stimulation/proneness to boredom, parasitic lifestyle, lack of realistic, long-term goals, impulsivity, and irresponsibility (Hares, et al., as cited in Baglolle et al., 2022). No significant correlation was found for the interpersonal and affective facets of psychopathy. Thus, psychopaths' superficial charm, grandiose sense of self-worth, pathological lying and manipulation (interpersonal facet) and their lack of empathy and lack of remorse or guilt, shallow affect, and inability for accountability (affective facet; Hares et al., 2003, as cited in Baglolle et al., 2022) seem to be stable across aging. Interestingly, our results are similar to those found in criminal samples (Huchzermeier et al., 2008). Compared to a non-clinical sample, our results are only similar to those found by Duncan et al. (2012) regarding the lifestyle factor, since aging was a significant predictor for all Hare's four factors.

Regarding the triarchic model of psychopathy (Patrick et al., 2009), we only found a negative significant correlation between aging and the Disinhibition facet of psychopathy (TriPM). That is, with aging, the phenotypic general externalization reflecting "poor planfulness, impaired affect regulation of affect, and deficient behavioral restraint" (Patrick, 2010, p. 2) decreases. The fact that a correlation existed between aging and one facet of psychopathy, but not with overall psychopathy of the triarchic model is not strange, since the model was developed to assess different facets of psychopathy, thus allowing for a separate measurement and understanding of them (Patrick et al., 2009). However, the same does not occur for SRP-SF overall psychopathy since its original instrument (PCL-R) was developed to measure psychopathy as a unitary construct (Patrick et al., 2009).

Further analysis related to empathy revealed that its negative significant correlation with aging was only due to the cognitive dimension. This result was already found in literature. In Bailey and colleagues' study (2008), older adults had significantly reduced self-report cognitive empathy in comparison to younger adults, while no age-related differences were found for affective empathy. Similarly, the Grühn and colleagues' (2008) cross-sectional longitudinal study on assessing the self-reported empathy over the course of 12 years in people between 10 and 87 years of

age revealed lower cognitive empathy for older cohorts compared to younger cohorts, while affective empathy remained relatively stable within cohorts. Like the overall cognitive dimension, in our study both its sub dimensions (Perspective Taking and Online Simulation) were negatively and significantly related to aging.

These results are coherent to the fact that psychopathy encompasses profound dispositional deficits in affective empathy (Dadds et al., 2009; van Dongen, 2020). According to van Dongen (2020), “these deficits are likely to be related to dysfunctions in a wide brain network involved in empathy, including the vmPFC/OFC and amygdala” (p. 7). Blair et al. (2006) also suggests the genetic contribution to emotional dysfunction. Due to this neurobiology (and possible genetic characteristics), it makes sense that affective empathy does not decrease with age. This lack of affective empathy is captured by the meanness facet of the Triarchic Model of Psychopathy (Patrick et al., 2009). Indeed, in our study, both the meanness facet of psychopathy and affective empathy were negatively (albeit small) correlated, but were not correlated with aging.

Similarly, the negative relations between aging, cognitive empathy, and the disinhibition facet of psychopathy may be explained by life experiences. According to Duncan et al. (2012), over time individuals with psychopathic personalities may learn that their behavior is maladaptive causing them to suffer legal actions by engaging in criminal behavior and losing their job or accommodation for maintaining an erratic lifestyle. Huchzermeier et al. (2008) have already hypothesized that antisocial behavior (Hare’s Factor 2) changes with age towards social normalization while affective-emotional abnormalities (Factor 1) persist unchanged into old age. On the other hand, reduced inhibitory control might also lead to a reduction in cognitive empathy (Bailey & Henry, 2008). These changes can also explain the negative relationship between aging and the lifestyle facet of psychopathy since disinhibition was strongly and positively associated with lifestyle in our study (and in that of Drislane et al., 2014). However, unlike disinhibition, in our study psychopathy’s lifestyle facet did not correlate with cognitive empathy but rather affective empathy (with a small correlation).

#### **4.1 Limitations and Practical Implications**

Some methodological and theoretical limitations may be noted. Firstly, related to the questionnaire, its extension due to a high sample attrition (41.4%). Moreover, the questionnaire application was not equal for all participants, since 20 of them were

interviewed in the presence of the researcher in nursing home institutions, while for the rest there was no control in the environment in which they responded. Secondly, a careful interpretation of findings is needed since psychopathy and empathy were assessed using self-report measures. In future studies, neurobiological and/or behavioral measures should also be employed to reduce participants' self-bias and provide a more objective assessment. Albeit its difficulty in operationalization, Huchzermeier et al. (2008) point out the need to use longitudinal studies to define with certainty the long-term changes in antisocial personality disorders. Lastly, the lack of research regarding the relationship between aging and psychopathy can also be considered a limitation. Regardless of these, our research constitutes a preliminary analysis of the relationship between aging with both psychopathy and empathy in a community Portuguese sample. Additionally, while the majority of psychopathy and empathy literature reduces psychopathy to a "lack of affective empathy", in reality psychopathy is a multidimensional clinical condition. In this study, we have made an effort to analyze our findings with a multifaceted view.

## References

- Bailey, P. E., & Henry, J. D. (2008). Growing less empathic with age: Disinhibition of the self-perspective. *The Journals of Gerontology*, 63(4), 219-226. <https://doi.org/10.1093/geronb/63.4.P219>
- Bailey, P. E., Henry, J. D., & Von Hippel, W. (2008). Empathy and social functioning in late adulthood. *Aging Mental Health* (4), 499-503. <https://doi.org/10.1080/13607860802224243>
- Baglione, J. S., Tsang, S., Hare, R. D., & Forth, A. E. (2022). Psychopathic expression From early to late adulthood: An item response theory analysis of the Hare Psychopathy Checklist–Revised. *Assessment*, 29(3), 535–555. <https://doi.org/10.1177/1073191120980063>
- Beadle, Janelle, N., Sheehan, Alexander, H., Dahlben, B., Gutchess, H. A. (2015). Aging, empathy, and prosociality. *The Journals of Gerontology*, 70, 213-222. <https://doi.org/10.1093/geronb/gbt091>
- Blair, R. J. R. (2018). Traits of empathy and anger: Implications for psychopathy and other disorders associated with aggression. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 373(1744), 20170155. <https://doi.org/10.1098/rstb.2017.0155>
- Buzina, N. (2012). Psychopathy - Historical controversies and new diagnostic approach. *Psychiatria Danubina*, 24(2), 34–142. <https://hrcak.srce.hr/file/156431>
- Carre, J. R., Mueller, S. M., Schleicher, K. M., & Jones, D. N. (2018). Psychopathy and deviant workplace behavior: A comparison of two psychopathy models. *The Journal of Personality Disorders* (32), 242-261. [https://doi.org/10.1521/pedi\\_2017\\_31\\_296](https://doi.org/10.1521/pedi_2017_31_296)
- Chen, Y. C., Chen, Cheng Chiang Decety, Jean Cheng, Yawei. (2014) Aging is associated with changes in the neural circuits underlying empathy. *Neurobiology of Aging* (35), 827-836. <http://dx.doi.org/10.1016/j.neurobiolaging.2013.10.080>
- Crego, C., & Widiger, T. A. (2016). Cleckley’s psychopaths: Revisited. *Journal of Abnormal Psychology*, 125(1), 75–87. <https://doi.org/10.1037/abn0000130>
- Dadds, M. R., Hawes, D. J., Frost, A. D., Vassallo, S., Bunn, P., Hunter, K. & Merz, S. (2009). Learning to ‘talk the talk’: The relationship of psychopathic traits to

- deficits in empathy across childhood. *Journal of Child Psychology and Psychiatry*, 50, 599-606. <https://doi.org/10.1111/j.1469-7610.2008.02058.x>
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *Catalog of Selected Documents in Psychology*, 10, 85. [https://www.uv.es/~friasnav/Davis\\_1980.pdf](https://www.uv.es/~friasnav/Davis_1980.pdf)
- Decety, J., Skelly, L. R., & Kiehl, K. A. (2013). Brain response to empathy-eliciting scenarios involving pain in incarcerated individuals with psychopathy *JAMA Psychiatry*, 70(6), 638–645. <https://doi.org/10.1001/jamapsychiatry.2013.27>
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioural Cognitive Neuroscience*, 2, 71-100. <https://doi.org/10.1177/1534582304267187>
- Drislane, L. E., Patrick, C. J., Arsal, G. (2014). Clarifying the content coverage of differing psychopathy inventories through reference to the triarchic psychopathy measure. *Psychopathy Assessment*, 26(2), 350–362. <https://doi.org/10.1037/a0035152>
- Duncan, J., Gill, & Rocco, D. Crino. (2012). The relationship between psychopathy and age in a non-clinical community convenience sample. *Psychiatry, Psychology and Law*, 19, 547-557. [10.1080/13218719.2011.615810](https://doi.org/10.1080/13218719.2011.615810)
- Gao, Y., & Raine, A. (2010). Successful and unsuccessful psychopaths: A neurobiological model. *Behavioral Sciences and the Law*, 28(2), 194-210. <https://doi.org/10.1002/bsl.924>
- Gao, Y., Schug, R. A., Huang, Y., & Raine, A. (2020). Successful and unsuccessful Psychopathy. *The Wiley International Handbook on Psychopathic Disorders and the Law*, 2, 591-605. <https://doi.org/https://doi.org/10.1002/9781119159322.ch26>
- Gordts, S., Uzieblo, K., Neumann, C., Van den Bussche, E., & Rossi, G. (2017). Validity of the Self-Report Psychopathy Scales (SRP-III Full and Short Versions) in a community sample. *Psychopathy Assessment*, 24(3), 308–325. <https://doi.org/10.1177/1073191115606205>
- Harpur, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *A Journal of Consulting and Clinical Psychology*, 1(1), 6–17. <https://doi.org/10.1037/1040-3590.1.1.6>

- Harpur, T. J., & Hare, R. D. (1994). Assessment of psychopathy as a function of age. *Journal of Abnormal Psychology, 103*(4), 604–609. <https://doi.org/10.1037/0021-843X.103.4.604>
- Heyes, T. (2018). Empathy is not in our genes. *International Journal of Law and Psychiatry, 65*, 499-507. <https://doi.org/10.1016/j.neubiorev.2018.11.001>
- Huchzermeier, C., Geiger, F., Kohler, D., Bruß, E., Godt, N., Hinrichs, G., & Aldenhoff, J. B. (2008). Are there age-related effects in antisocial personality disorders and psychopathy?. *Journal of Forensic and Legal Medicine, 15*(4), 213–218. <https://doi.org/10.1016/j.jflm.2007.10.002>
- Lynam, D. R., & Gudonis, L. (2005). The development of psychopathy. *Annual Review of Clinical Psychology, 1*(1), 381-407. <https://doi.org/10.1146/annurev.clinpsy.1.102803.144019>
- Mitina, M., Young, S., & Zhavoronkov, A. (2020). Psychological aging, depression, and well-being. *Aging, 12*(18), 18765–18777. <https://doi.org/10.18632/aging.103880>
- Paiva, T. O., Pasion, R., Patrick, C. J., Moreira, D., Almeida, P. R., & Barbosa, F. (2020). Further evaluation of the Triarchic Psychopathy Measure: Evidence from community adult and prisoner samples from Portugal. *Psychological Assessment, 32*(3), e1–e14. <https://doi.org/10.1037/pas0000797>
- Patrick, C. (2010). Operationalizing the triarchic conceptualization of psychopathy. *Preliminary description of brief scales for assessment of boldness, meanness, and disinhibition*. Unpublished test manual, Florida State University, Tallahassee, FL. <https://doi.org/10.1111/jopy.12119>
- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology, 21*, 913–938. <http://dx.doi.org/10.1017/S0954579409000492>
- Preston, S. D., Bechara, A., Damasio H., Grabowski, T. J., Stansfield, R. B., Mehta, S., & Damasio, H (2007). The neural substrates of cognitive empathy. *Social Neuroscience, 2*, (3-4). <https://doi.org/10.1080/17470910701376902>
- Paulhus, D.L., Neumann, C. S., & Hare, R. D. (in press). Manual for the Self-Report Psychopathy scale (4th edition). Multi-Health Systems.
- Preston, S. D., & de Waal, F. B. (2002). Empathy: Its ultimate and proximate bases. *Behavior Brain Science, 25*(1), 1-20. [10.1017/s0140525x02000018](https://doi.org/10.1017/s0140525x02000018)

- Reniers, R. L., Corcoran, R., Drake, R., Shryane, N. M., Vollm, B. A. (2011). The QCAE: A Questionnaire of Cognitive and Affective Empathy. *Journal of Personality Assessment*, 93(1), 84-95. <https://doi.org/10.1080/00223891.2010>
- Van Dongen, J. (2020). The empathic brain of psychopaths: From social science to neuroscience in empathy. *Frontiers in psychology*, 11, 695. <https://doi.org/10.3389/fpsyg.2020.00695>
- Yang, T., & Banissy, M. J. (2016). Empathy and aging: Mechanisms of empathy throughout adulthood. In D. F. Watt & J. Panksepp (Eds.), *Psychology and Neurobiology of Empathy* (211-226). Nova Editors. [https://www.researchgate.net/publication/317904740\\_Yang\\_T\\_Banissy\\_MJ\\_2016\\_Empathy\\_and\\_aging\\_Mechanisms\\_of\\_empathy\\_throughout\\_adulthood\\_In\\_Psychology\\_and\\_Neurobiology\\_of\\_Empathy\\_Edited\\_by\\_DF\\_Watt\\_and\\_J\\_Panksepp\\_Nova](https://www.researchgate.net/publication/317904740_Yang_T_Banissy_MJ_2016_Empathy_and_aging_Mechanisms_of_empathy_throughout_adulthood_In_Psychology_and_Neurobiology_of_Empathy_Edited_by_DF_Watt_and_J_Panksepp_Nova)
- Ze, O., Thoma, P., & Suchan, B. (2014) Cognitive and affective empathy in younger and older individuals. *Aging and Mental Health*, 18, 929-935 <https://doi.org/10.1080/13607863.2014.899973>

## Appendices

## Appendix A

### **Informed Consent to participants**

Este inquérito decorre do projeto de Mestrado da estudante Eduarda Rocha com supervisão da Doutora Carina Fernandes e do Professor Doutor Fernando Ferreira-Santos (Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto).

Tem como objetivo principal investigar a forma como a manifestação de certos traços de personalidade se altera ao longo da idade.

O inquérito é constituído por algumas afirmações que descrevem pensamentos, sentimentos ou comportamentos. Deverá assinalar em que medida cada afirmação se aplica a si, utilizando as opções de resposta que seguem cada afirmação.

No final deve clicar em “submeter” para terminar o preenchimento do seu inquérito. O preenchimento do questionário demora 15 minutos.

Caso tenha alguma dúvida ou tenha interesse em conhecer os resultados finais do presente estudo, p.f. contacte por e-mail a investigadora Doutora Carina Fernandes ([carinafernandes@fpce.up.pt](mailto:carinafernandes@fpce.up.pt))

Agradecemos a sua participação. Ao avançar, declara ter mais de 18 anos e aceita participar neste estudo de forma voluntária.

Appendix B  
Questionnaire

Q121 Idade

---

Q124 Sexo

---

Q126 Nacionalidade

---

Q128 Escolaridade vertical (o número total de anos que frequentou o ensino; ex: licenciatura= 15 anos)

---

***Triarchic Measure of Psychopathy (TriPM; Patrick, 2010, Portuguese Version from Paiva et al., 2020)***

Este questionário contém afirmações que diferentes pessoas poderiam usar para se descreverem a si próprias. Cada afirmação é seguida por 4 opções: verdadeiro; moderadamente verdadeiro; moderadamente falso; falso. Para cada afirmação, assinale a opção que melhor o descreve. Não existem respostas corretas ou erradas; selecione apenas a que melhor o descreve.

Verdadeiro (1)	Moderadamente Verdadeiro (2)	Moderadamente Falso (3)	Falso (4)
-------------------	---------------------------------	----------------------------	-----------

---

Sou mais vezes  
otimista do que o  
contrário. (1)

O modo como os  
outros se sentem  
é importante  
para mim. (2)

Ajo  
frequentemente  
com base em  
necessidades  
imediatas. (3)

Não tenho um  
grande desejo de  
saltar de pára-  
quedas de um  
avião. (4)

Faltei  
frequentemente a  
coisas às quais  
prometi ir. (5)

Gostaria de estar  
envolvido numa  
perseguição de  
carro a alta-  
velocidade. (6)

Estou bem  
equipado para  
lidar com o  
stress. (7)

Não me importo  
se alguém de  
quem não gosto  
se magoa. (8)

As minhas  
decisões  
impulsivas  
causaram  
problemas com  
pessoas de quem  
gosto. (9)

Assusto-me  
facilmente. (10)

Sou solidário  
com os  
problemas dos  
outros. (11)

Já faltei ao  
trabalho sem me  
preocupar em  
avisar (12)

Sou um líder  
nato. (13)

Gosto de uma  
boa luta física  
(14)

Atiro-me de  
cabeça para as  
coisas sem  
pensar. (15)

Tenho  
dificuldade em  
fazer com que as  
coisas resultem  
da forma que eu  
quero. (16)

Eu retribuo  
insultos. (17)

No passado,  
meti-me em  
problemas  
porque faltei  
demasiado à  
escola. (18)

Tenho queda  
para influenciar  
as pessoas. (19)

Não me  
incomoda ver  
alguém sofrer.  
(20)

Tenho um bom  
auto-controlo  
(21)

Funciono bem  
em situações  
novas, mesmo  
quando não  
estou preparado.  
(22)

Às vezes gosto  
de intimidar as  
pessoas. (23)

Já tirei dinheiro  
da carteira de  
alguém sem  
pedir. (24)

Não me  
considero  
talentoso. (25)

Provoco as  
pessoas só para  
agitar as coisas.  
(26)

As pessoas  
abusam  
frequentemente  
da minha  
confiança. (27)

Tenho medo de  
muito menos  
coisas do que a  
maioria das  
pessoas. (28)

Não vejo por que  
me preocupar se  
o que faço  
magoa alguém.  
(29)

Mantenho os  
compromissos  
que faço. (30)

Muitas vezes  
aborreço-me  
rapidamente e  
perco o  
interesse. (31)

Consigo  
ultrapassar  
coisas que  
traumatizariam  
os outros. (32)

Sou sensível aos  
sentimentos dos  
outros. (33)

Já enganei  
pessoas para  
obter dinheiro  
delas. (34)

Preocupo-me  
quando me meto  
numa situação  
que não me é  
familiar sem  
conhecer todos  
os detalhes. (35)

Não sinto muita  
empatia pelas  
pessoas. (36)

Meto-me em  
problemas por  
não considerar  
as consequências  
das minhas  
ações (37)

Consigo  
convencer as  
pessoas a  
fazerem o que eu  
quero. (38)

Para mim, a  
honestidade é  
mesmo a melhor  
prática. (39)

Já magoei  
pessoas para as  
ver com dor.  
(40)

Não gosto de  
assumir a  
liderança de  
grupos. (41)

Às vezes insulto  
as pessoas de  
propósito para  
obter uma reação  
delas. (42)

Já tirei artigos de  
uma loja sem os  
pagar. (43)

É fácil deixar-  
me  
envergonhado.  
(44)

As coisas são  
mais divertidas  
se houver um  
pouco de perigo  
envolvido. (45)

Tenho  
dificuldade em  
esperar  
pacientemente  
por coisas que  
quero. (46)

Mantenho-me  
tão longe do  
perigo físico  
quanto posso.  
(47)

Não me importo  
muito se o que  
faço magoa os  
outros. (48)

Já perdi um  
amigo porque fiz  
coisas  
irresponsáveis.  
(49)

Não sou muito  
bom comparado  
com a maioria  
das pessoas. (50)

Outras pessoas  
já me disseram  
que estavam  
preocupadas pela  
minha falta de  
auto-controlo.  
(51)

É fácil para mim  
identificar-me  
com as emoções  
das outras  
pessoas. (52)

Já roubei  
alguém. (53)

Nunca me  
preocupo em  
fazer “figuras  
tristes” em frente  
aos outros. (54)

Não me  
incomoda  
quando as  
pessoas à minha  
volta estão a  
sofrer. (55)

Já tive  
problemas no  
trabalho porque  
fui  
irresponsável.  
(56)

Não sou muito  
bom a  
influenciar  
pessoas. (57)

Já roubei alguma  
coisa de um  
veículo. (58)

*Self-Report Psychopathy Scale–Short Form (SRP-SF; Paulhus et al., 2016, Portuguese Version from Seara-Cardoso et al., 2020)*

Por favor, indique até que ponto cada uma destas afirmações se aplica a si.

	Discordo fortemente (1)	Discordo (2)	Neutro (3)	Concordo (4)	Concordo fortemente (5)
Sou uma pessoa rebelde (1)					
Nunca estive envolvido em atividades de gangues delinquentes (2)					
A maioria das pessoas são fracas (3)					
Já fiz muitas coisas perigosas só pela excitação de o fazer (4)					
Já enganei alguém para me dar dinheiro (5)					
Já agredi um agente de autoridade ou um assistente social (6)					
Já fingi ser outra pessoa para conseguir alguma coisa (7)					
Gosto de ver as pessoas a andar ao soco (8)					

Teria prazer em  
"dar o golpe" a  
alguém (9)

É divertido ver  
até onde é que  
podemos picar  
uma pessoa até  
que ela fique  
chateada (10)

Gosto de fazer  
coisas loucas (11)

Já arrombei um  
edifício ou um  
veículo para  
roubar alguma  
coisa ou para  
vandalizar (12)

Já não me  
preocupo em  
manter contacto  
com a minha  
família (13)

Raramente sigo  
as regras (15)

Devemo-nos  
aproveitar dos  
outros antes que  
eles se  
aproveitem de  
nós (16)

Às vezes as  
pessoas dizem-  
me que eu não  
tenho coração  
(17)

Gosto de ter  
relações sexuais  
com pessoas que  
mal conheço (18)

Adoro desportos  
e filmes violentos  
(19)

Às vezes temos  
que fingir que  
gostamos das  
pessoas para  
conseguirmos  
alguma coisa  
delas (20)

Já fui condenado  
por um crime  
grave (21)

Estou sempre a  
meter-me em  
problemas pelo  
mesmo tipo de  
coisas (22)

De vez em  
quando ando com  
uma arma  
(pistola ou faca)  
para me proteger  
(23)

Conseguimos o  
que queremos se  
dissermos às  
pessoas o que  
elas querem ouvir  
(25)

Nunca me sinto  
culpado(a) por  
magoar os outros  
(26)

Já ameacei  
pessoas para me  
darem dinheiro,  
roupa ou  
maquilhagem  
(27)

Muitas pessoas  
são otárias e  
podem ser  
facilmente  
enganadas (28)

Admito que  
muitas vezes digo  
coisas pela boca  
fora sem pensar  
(29)

Às vezes, "deito  
fora" amigos de  
quem já não  
preciso mais (34)

Já tentei bater em  
alguém  
propositadamente  
com o veículo  
que estava a  
conduzir (36)

***Questionnaire of Cognitive and Affective Empathy (QCAE; Reniers et al., 2011,  
Portuguese version from Queirós et al., 2018)***

Por favor, indique até que ponto cada uma destas afirmações se aplica a si. As possíveis respostas são “Discordo Fortemente”, “Discordo Ligeiramente”, “Concordo Ligeiramente” e “Concordo Fortemente”.

	Discordo fortemente (1)	Discordo (2)	Concordo (3)	Concordo fortemente (4)
--	----------------------------	--------------	--------------	----------------------------

Às vezes tenho  
dificuldade em  
ver as coisas do  
ponto de vista de  
outra pessoa (1)

Quando vejo um  
filme ou uma  
peça de teatro,  
normalmente sou  
objetivo(a) e não  
costumo  
envolver-me  
totalmente (2)

Numa situação de  
desacordo, tento  
ver o lado de toda  
a gente antes de  
tomar uma  
decisão (31)

Às vezes tento  
compreender  
melhor os meus  
amigos  
imaginando como  
são as coisas a  
partir da  
perspetiva deles  
(4)

Normalmente,  
quando estou  
chateado(a) com  
alguém, tento por  
momentos pôr-me  
na pele dessa  
pessoa (32)

Antes de criticar  
alguém, tento  
imaginar como  
me sentiria se  
estivesse no seu

lugar (33)

É frequente ficar  
emocionalmente  
envolvido(a) com  
os problemas dos  
meus amigos (7)

Tenho tendência  
a ficar nervoso(a)  
quando as outras  
pessoas à minha  
volta parecem  
estar nervosas  
(34)

As pessoas com  
quem estou têm  
uma grande  
influência no meu  
humor (8)

Afeta-me muito  
quando um dos  
meus amigos  
parece estar  
chateado (9)

Frequentemente  
fico  
profundamente  
envolvido com os  
sentimentos dum  
personagem dum  
filme, peça de  
teatro ou livro  
(10)

Fico muito  
perturbado(a)  
quando vejo  
alguém a chorar

(11)

Fico alegre  
quando estou com  
um grupo de  
pessoas bem-  
dispostas e fico  
triste quando os  
outros estão em  
baixo (12)

Preocupa-me  
quando os outros  
estão  
preocupados e  
nervosos (36)

Consigo perceber  
facilmente  
quando alguém  
quer entrar numa  
conversa (13)

Consigo perceber  
rapidamente  
quando alguém  
diz uma coisa  
mas quer dizer  
outra (14)

É fácil para mim  
pôr-me na pele de  
outra pessoa (15)

Sou bom (boa) a  
prever como é  
que alguém se irá  
sentir (16)

Sou rápido(a) a  
identificar  
quando, num  
grupo, alguém se  
está a sentir  
constrangido ou  
desconfortável  
(17)

As outras pessoas  
dizem-me que  
sou bom (boa) a  
compreender  
como elas se  
estão a sentir e o  
que estão a pensar  
(18)

Percebo  
facilmente se  
alguém está  
interessado ou  
entediado com o  
que estou a dizer  
(37)

Os meus amigos  
conversam  
comigo sobre os  
seus problemas  
porque dizem que  
sou muito  
compreensivo(a)  
(19)

Consigo sentir se  
estou a ser  
intrusivo(a),  
mesmo que a  
outra pessoa não  
mo diga (20)

Consigo perceber  
facilmente aquilo  
de que a outra  
pessoa quer falar  
(21)

Consigo perceber  
quando alguém  
está a esconder as  
suas verdadeiras  
emoções (22)

Sou bom a prever  
o que é que  
alguém irá fazer  
(23)

Normalmente,  
consigo  
compreender o  
ponto de vista de  
outra pessoa  
mesmo que não  
concorde com ela  
(24)

Normalmente,  
mantenho-me  
emocionalmente  
desligado(a)  
quando estou a  
ver um filme (39)

Tento sempre  
considerar os  
sentimentos da  
outra pessoa antes  
de fazer alguma  
coisa (26)

Antes de fazer  
alguma coisa,  
tento ter em  
consideração  
como é que os  
meus amigos vão

reagir (27)

