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High Psychopathic Traits and its Association with the Severity of Offending, Recidivism and Failure or Resistance to Treatment amongst Incarcerated Offenders in Malta

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Abstract: This study is the first research that examines psychopathy in Malta and establish its rate amongst incarcerated offenders. The research sought to determine potential cultural differences in the incidence and manifestation of psychopathy. It was expected that 1) higher psychopathy scores are associated with a greater presence of historical risk factors, and 2) higher psychopathy scores are associated with a greater incompliance to correctional care-plans or treatment interventions and have more incidents of institutional misconduct. This study utilized a retrospective design analyzing data from randomly selected 123 files of Maltese offenders convicted and serving a sentence of incarceration between 2020 and 2022. All sentenced inmates were included in the study, inmates on remand and foreign nationals were excluded from this study. To test for associations and strength of the relationships between these variables, cross tabulations and Cramer V statistic to test for strength of relationships were utilized. Findings revealed that this sample consisted of a highly recidivist and persistent group of offenders with a total of 86.2% of the sample having a previous conviction with almost 80% being incarcerated two or more times. A total 38.2% of the sample had scores that exceeded the cut off on the PCL:SV, indicating a highly psychopathic group of offenders. Moderate associations were found for most of the distal risk factors commonly associated with offending behavior such as; recidivism; poor employment and educational history; substance misuse; poor relationships and social detachment; and criminal attitudes and having higher psychopathic traits. Stronger associations were observed between psychopathy and proximal variables of treatment incompliance and disciplinary misconduct. Although, these relationships replicate findings from international studies, the high incidence of psychopathy might indicate

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a cultural difference. This high incidence and care-plan inadherence implies a need to develop specialized programs for these offenders.

Keywords: Psychopathy, Recidivism, Treatment Adherence, Disciplinary Misconduct

This study explored potential cultural difference in the manifestation of the construct of psychopathy amongst Maltese incarcerated offenders. The study explored potential effects of the high incidence of psychopathy on recidivism and adherence to correctional care-plans and institutional misconduct.

Introduction

Defining Psychopathy and its Link to Offending Behavior

Psychopathic personality can be defined as characterized by callousness, grandiosity, remorselessness, superficial charm, deceitfulness, blame externalization, attachment difficulties and higher anxiety (Poythress *et al.*, 1998; Thomson, 2018, 2019). Other common traits used to describe psychopathy are impulsivity, irresponsibility, lack of empathy, shallow emotions, and persistent antisocial behavior (Hare, 2006). Perhaps the inclusion of antisocial behavior in its definition contributes to its inextricable association with crime, aggression, drug abuse and a proclivity for thrill seeking behavior (DeLisi & Piquero, 2011; Farrington, 2005; Pechorro *et al.*, 2015). Psychopathy is also associated with higher levels of recidivism amongst offenders (Mann *et al.*, 2020; Walsh *et al.*, 2007) and could significantly adversely effect adjustment to incarceration and behavior while in treatment in correctional settings (Jeandarme *et al.*, 2017).

Psychopathy in the Maltese Context

The inclusion of culture and ethnical contexts has increasingly become an important consideration when exploring clinical presentations and conducting mental health assessments (Fanti *et al.*, 2019). This implies that culture might play a role in the expression and conceptualization of psychopathy, since culture might influence ideas, cognitions, values, attitudes, and behavioral expressions (Adams & Markus, 2004). International studies demonstrated that the construct of psychopathy shares an empirical association with violent recidivism and criminal activity (Dolan & Doyle 2007; Glannon 2014; Hare 2003). Most of this research has focused on Anglo-Saxon males with few studies exploring psychopathy in different cultural and ethnic groups, especially in how these traits manifest themselves (Pechorro *et al.*, 2015; Perri & Lichtenwald, 2010). Also, most studies on psychopathy have been carried out utilizing tools such as the Psychopathy Checklist Revised (PCL-R: Hare, 2003) and the screening version, the PCL:SV (Hart *et al.*, 1995). These assessment tools have largely been developed, standardized

and normed on North American and Canadian samples (Fanti *et al*., 2019; Hare & Neumann, 2006). Due to the wide usage of these assessments, they have contributed significantly to the operationalization and definition of psychopathy (Sellbom *et al*., 2018), with most research showing these tools as being valid and reliable measures of psychopathy (Hare *et al*., 2018). Although, cultural differences between American and European studies have indicated a potentially lower threshold for the identification of psychopathy in European countries than American counterparts (Fanti et., 2019). Few studies have attempted to explore the role of culture and ethnicity in potentially mediating the manifestation of psychopathy and its association to criminal behavior (e.g., Coid & Yang, 2011). Despite the findings suggesting the cultural differences in psychopathy, many cultures and nations are absent in such studies, namely Malta and the Maltese culture.

The island of Malta has a population that exceeds 500,000 sharing a small overall area of 316km^2. This implies that Malta has a remarkably high population density, exceeding 1000 persons per 1km^2. Historically too, Malta has been colonized repeatedly by different powers. This might have impacted the specific culture of the islands. Anthropological studies by Boussevain (1965; 2013), have applied the concept of amoral familism to explain for aspects of the Maltese psyche, typified by seeking immediate gains for the nuclear or extended family. This amorality has been linked to Malta's past where often native inhabitants had little say on the collective good and the future of their country due to the impact of the colonialization. This familial amorality seems to typify the behavior of a psychopath seeking personal individual gain under the guise that the behavior is performed for the greater good of the individual's family.

Another important cultural influence that might affect the construct of psychopathy in Malta, its prevalence amongst criminal populations and its potential effect on criminal behavior might be the influence of stigmatization of the individual by the criminal justice system (CJS). Clark (2006; 2012) claims that the tight knit community of Maltese villages and the use of gossiping increases the possibility of developing criminal identities after an individual is labelled as deviant. Imprisonment and the response by the CJS and the subsequent ostracization by the community might serve as a further means of compounding deviant attitudes and cognitive distortions (Clark, 2006; 2012) and ultimately be responsible to the crystallization of psychopathic traits. It is almost as if the response of the CJS and incarceration act as a form of group socialization whereby they become more ingrained in criminal careers and criminal value systems (Clark, 2006; 2012). At the same time the CJS might be more likely to imprison those offenders it sees as being incalcitrant criminals, or those offenders with

higher psychopathic traits. These effects of culture, the concept of familial amorality and the effects of living in close knit communities might play a role in the construct of psychopathy and its effects on criminal behavior, both in terms of risk factors related to crime and potential effects of psychopathy on adherence to correctional care-plans, as well as potential treatment and disciplinary misconduct during their incarceration.

Research Aims

The primary aim of this study shall focus on exploring the relationship between psychopathy and criminogenic variables that international studies found to be correlated with this diagnosis. These variables shall be divided into distal factors, typically occurring prior to incarceration, such as recidivism and substance misuse, and more proximal variables, associated with prison adjustment such as adherence to care-plans and disciplinary infringements. Official statistics on recidivism rates for incarcerated offenders in Malta is often sporadic or absent, therefore this study had a secondary aim to establish the rate of recidivism among Maltese offenders. Only two unpublished empirical studies focused on recidivism, and they reported a range of between 66% (Grech Parnis, 2018), but this focused exclusively on community-based offenders and 21% for incarcerated youths (Borg, 2021). In 2018, a government consultant reported that inmate recidivism was 66% (Borg, 2018), however, no methodology was ever published explaining this percentage. This study shall seek to address this gap and present a sound methodological approach to establish a rate of recidivism amongst Maltese incarcerated offenders at the Correctional Services Agency (CSA), Malta's only prison.

Research Hypotheses

This study is expected to contribute to the research on psychopathy determining if there are any cultural differences, stemming from the Maltese context (Wolde *et al.*, 2021). To explore potential cultural differences and congruent with international findings, the first hypothesis of this research postulates that higher psychopathy in Maltese offenders is associated with a greater presence of historical or distal risk factors associated with criminal behavior. These distal factors of interest were recidivism; severity of offending; substance abuse; poor employment and educational history; poor family relations; social detachment; adverse attitudes towards the CJS. A second hypothesis of this study focused on the offenders' progress during their incarceration and postulates that higher psychopathic traits are associated with poor treatment outcomes or incompliance to correctional care-plans and poor disciplinary records.

H1: higher psychopathy scores shall be associated with a greater presence of historical risk factors.

H2: higher psychopathy scores shall be associated with a greater incompliance to correctional care-plans or treatment interventions and have more incidents of institutional misconduct.

Methods

This study utilized a retrospective design extracting data from secondary sources to explore the relationships between psychopathic traits, measured by the Psychopathy Checklist Screening Version (PCL:SV; Hart *et al.*, 1995), and historical risk factors associated with crime and recidivism. It also sought to find associations between the scores on the PCL:SV and proximal outcomes such as poor response to treatment or a lack of adherence to the care-plans and disciplinary infringements while incarcerated.

Procedure

The Inmate Personal Files (IPF) were analyzed utilizing a variable checklist to determine the presence or absence of the variables of interest. This secondary data is collected on a routine basis by the Care and Reintegration Unit (CRU) of CSA and consists of social work, medical, psychological, and behavioral reports on the respective inmates. The IPF also consists of official collateral information which includes official criminal records issued by the Criminal Records Office of the Malta Police Force. Institutional approval from CSA (Annex A) and ethical approval from the MASKED FOR REVIEW (P130826 / Annex B) were sought prior to the commencement of the study.

The principal psychologist acted as a gatekeeper. All these files were anonymized by the gatekeeper to avoid identification of cases and the IPF number was used to randomly select the case files. This process was facilitated through the use a computer software that allowed for the generation of randomized numbers. The researcher was blind to the allocation and the identity of the inmate under review.

Inclusion Criteria

Files that were included in the research consisted of Maltese convicted offenders serving an active incarceration sentence in September 2022. All sentenced inmates were included in the study addressing potential short falls of previous studies of excluding inmates with mental disorders and females (see. Wolde *et al.*, 2021). Foreign nationals were excluded as the study focused exclusively on Maltese offenders while those on remand would not have information such as conviction sheets as they are not yet

sentenced by a court of law. CSA had a total of 557 inmates in September 2022, of which 262 were foreign nationals and a further 64 were Maltese inmates on remand. This meant that the total population of Maltese sentenced inmates was 231. The gatekeeper randomly selected 123 case files, which constitutes almost 54% of the total population of convicted Maltese offenders.

Materials used and Extraction of data

Information for this study was extracted using a variable checklist (Appendix C). The checklist was developed by the researcher as a means of standardized data collection and was compiled to reflect the variables of typically associated with criminogenic risk. This checklist included the following list of variables; previous sentences, offending history, substance abuse, employment, level of education, family and marital, accommodation; leisure and recreation; and history of mental health difficulties; and criminal attitudes. This study sought to determine whether these criminogenic variables are associated with higher rates of psychopathy. The researcher noted the presence or absence of these variables from the data available in the file. The researcher operationalized and defined the variables prior to the data extraction to ensure that the information extracted is the same from each case file.

Extraction of Variables of Interest

Historical Risk Variables

Offending history acted as a marker of recidivism and was also used to code the recidivism, diversity, and severity of offending variables. Recidivism was defined as being convicted for an offence after being found guilty of another offence. This definition stems from the Criminal Code, CAP 9 § 49 of the Laws of Malta (1854) and as amended in XXIV of 2014 - Various Laws (Criminal Matters) Act (2014). This information was retrieved from the inmate's official conviction sheet. For substance misuse, the researcher coded whether the inmate had a history of alcohol, heroin, cannabis, or cocaine use, prior to admission to CSA. This information was extracted from medical and psychological reports.

The next set of categories corresponded to historical risk factors that are based on the risk and needs factors identified by the Level of Service Case Management Inventory (LS/CMI: Andrews *et al.*, 2004). The LS/CMI measures the risk and need factors of offenders and is routinely administered to convicted inmates at CSA to aid in the development of correctional care-plans. Psychologists with the CRU were then

responsible for the compilation of the risk and needs report which summarizes all the information deemed important for this study.

The researcher coded the presence or absence of the variables of interest based on the conclusions of the assessment and reports. The data extracted consisted of; employment history and reliance on social assistance; completion of compulsory education; difficulty in understanding academic subjects, or in relating with teachers or students, or difficult behaviour; presence of stable intimate relationships prior to incarceration; separation or divorce; evidence of domestic violence; difficulties relating to their own children; positive or negative relationships with the father or the mother; evidence of criminal past within the family of origin; stability in accommodation; living in criminogenic hotspots[1]; history of mental health interventions in the community; current referral to mental health services; the presence of negative attitudes towards supervising staff, the CJS or towards their sentence.

Outcomes during Incarceration

Two different proximal variables, relating to their experience in prison, were compared on their association with psychopathy. The first outcome was noting their response to interventions, whether the inmate has a poor adherence to the correctional care-plans or response to treatment. This was coded as being present if the inmate either dropped out of treatment prior to completion, exhibited non-compliance to treatment, non-compliance to the correctional care-plan, refusal of treatment or a failure to complete the intervention program. To code these variables the researcher utilized information available in the IPF through the regular updates that are collated in the file of the inmate's progress on the different intervention programs and their progress on the correctional care-plan. The next category of data was extracted from the Behavior Report Sheet. This sheet which is updated regularly in the IPF consists of all the disciplinary infractions incurred by the inmate during their sentence to date. Inmates that had been the recipient of three or more disciplinary infringements per year were considered to have poor disciplinary record.

The PCL-R:SV

The level of psychopathy was calculated using the PCL-R:SV (Hart *et al.*, 1995). This was scored independently and not by the researcher. PCL-R:SV (Hart *et al.*, 1995) is a tool utilized to screen for psychopathic characteristics. Since it is conceptually equivalent to the PCL-R, has strong reliability (.84) and is shorter to administer, CSA has started screening all newly admitted inmates through the PCL:SV to assess for psychopathy

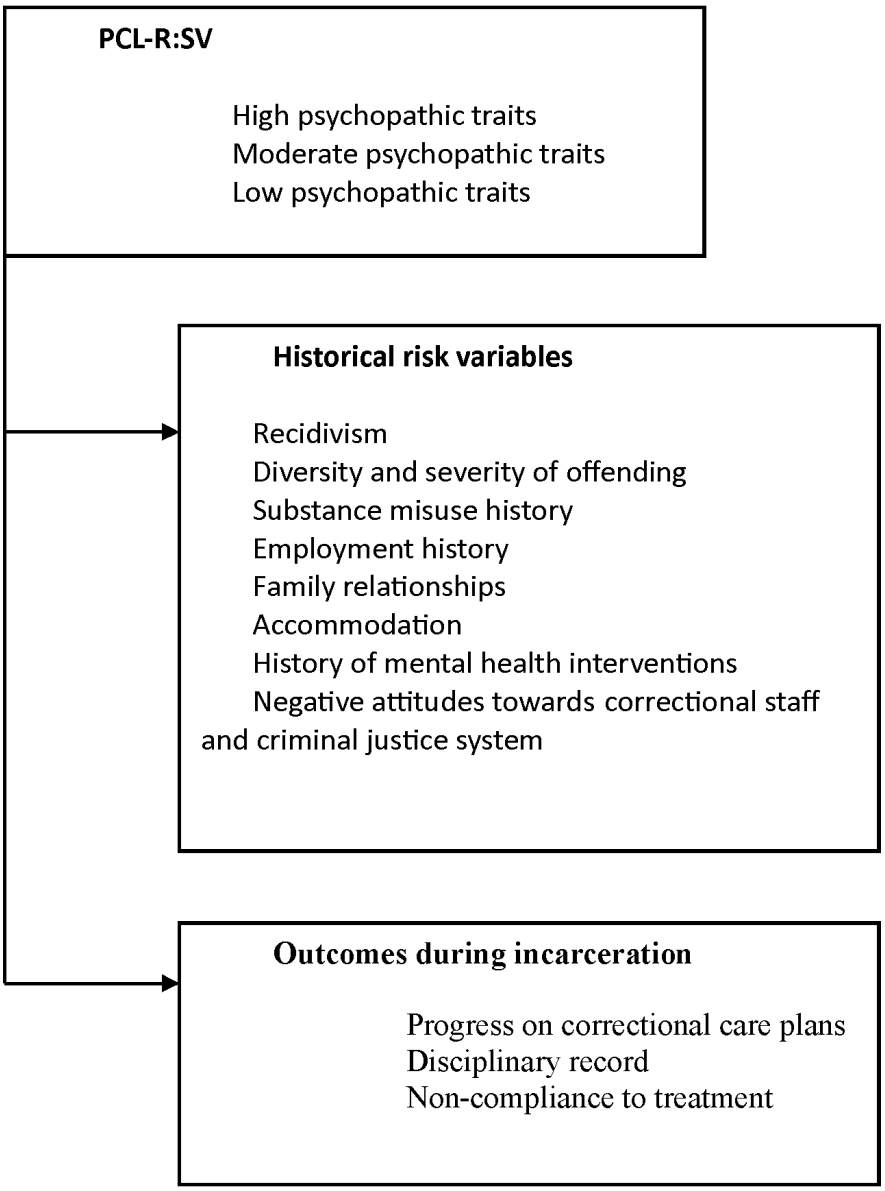

Figure 1: The list of variables extracted from IPF and compared with levels of psychopathy

and determine if further specialized assessment might be necessary. The PCL:SV screening has become the norm in a wide a variety of settings, including criminal and noncriminal populations, rendering it useful as a screening tool amongst inmates on remand and those convicted of an offence (Brazil & Forth, 2016). Studies have confirmed the predictive ability of the PCL:SV with higher scores on this scale being associated

with a greater risk of recidivism (Gray *et al.*, 2007; Steadman *et al.*, 2000), propensity to violence and substance misuse (Coid & Yang, 2011; Neuman & Hare, 2008).

Description of Sample

This study selected at random 123 files of Maltese offenders that were convicted and serving a sentence of incarceration between 2020 and 2022. Table 1 shows the composition of the sample in terms of gender and age range of the offender included in the study and the index offence leading to present incarceration. The mean age of their first conviction was calculated at 20.93 (SD 7.429) years.

Table 1: Demographics Table

Demographic composition		*% Frequency (N = 123)*
Gender	Male	92.7% (114)
	Female	9 (7.3%)
Age range	14 – 21 years	0.8% (1)
	22 – 30 years	13% (16)
	31 – 45 years	56.9% (70)
	45+ years	29.3% (36)
Offence that lead to current conviction	Property offence (theft)	43.9% (54)
	Violent offence	9.8% (12)
	Sexual Offence	11.4% (14)
	Domestic violence	5.7% (7)
	Drug related offences	17.9% (22)
	Economic Crimes	10.6% (13)
	Arson	0.8% (1)

The sample proved to be highly criminogenic, prolific, and persistent offenders. The mean age of their first conviction was 20.93 years (SD = 7.429). This sample seems to be comprised of a highly recidivist and persistent group of offenders with a total of 86.2% of the sample having a previous conviction with almost 80% of them being convicted and incarcerated two or more times.

Analysis of Data

To test for associations and strength of the relationships between psychopathy and criminogenic distal variables and psychopathy and progress during incarceration (adherence to care-plans, treatment compliance and presence of disciplinary infringements) the cross-tabulation chi square test and Cramer V statistic were utilized after the data was entered in IBM SPSS Statistics v26.

Results

This study sought to establish the level of psychopathic traits in Maltese incarcerated offenders and an overall estimate of the recidivism rate amongst this population. The study also endeavored to explore the links between static and dynamic risk factors and psychopathy. Finally, it aimed to analyze the potential association between psychopathy and poor treatment outcomes/adherence to correctional care-plans and poor disciplinary record.

Distal Variables Frequency

Table 2: The Distal Risk Factors

Historical Risk Factors	*Variable*	*% Frequency (N = 123)*
Previous Sentences	Previous imprisonment	95.12% (117)
	Multiple incarcerations (2+)	78.9% (97)
	One previous community-based sanction	81.30% (100)
	Multiple community-based sanctions	64.2% (79)
Offending history	Violent offences	52.8% (65)
	Sexual offences	6.5% (8)
	Economic crimes	24.4% (30)
	Drug related offences	52.8% (65)
	Property offences	71.5% (88)
Evidence of recidivism, persistence, and severity in offending	Recidivist or persistent offender	86.2% (106)
	Severe Offences (5+ years)	47.2% (58)
	Interpersonal offences (sexual or physical violence)	61% (75)
	Diversity of offences	65.9% (81)
Use of substances	Any substance	84.6% (104)
	Alcohol	26% (32)
	Heroin	62.6% (77)
	Cocaine	78.9% (97)
	Cannabis	46.6% (57)
Employment history	Unemployment exceeding 5 years	56.1% (69)
	Unemployed prior to incarceration (less than 5 years)	56.9% (70)
	Reliance upon social assistance	27.6% (34)
Education	Left school prior to completing formal education (Form 5)	46.3% (57)
	Difficulty in understanding academic subjects	42.3% (52)
	Difficulty in relationships with teachers/ educators	49.6% (61)
	Difficulty in relating with others	58.5% (72)
	Difficult behaviour in school	61.8% (76)

Historical Risk Factors	*Variable*	*% Frequency (N = 123)*
Family/Marital	In relationship at present	39% (48)
	Separated	25.2% (31)
	Difficulty in relating with own children	32.5% (40)
	Evidence of domestic violence	22% (27)
	Positive relationship with father	40.7% (50)
	Positive relationship with mother	60.2% (74)
	Criminal family	35% (43)
Accommodation	Homeless or unsuitable housing	20.3% (25)
	Criminogenic area	23.6% (29)
Leisure/recreation	Socially detached	57.7% (71)
	Criminogenic peers	74.8% (92)
Psychological	History of mental health issues	42.3% (52)
	Currently referred for mental health services	28.5% (35)
Negative Attitudes	Supervising authority	56.1% (69)
	Criminal justice system	82.9% (102)
	Sentence	85.4% (105)

Table 2 displays the frequencies of the presence of the variables pertaining to historical risk factors.

Rate of Psychopathy

The mean (SD) of the total reported scores on the PCL:SV was 14.61 (4.672). A total of 47 inmates or 38.2% of the sample had scores that exceeded 18 on the PCL:SV, this means that they attenuated the threshold for a diagnosis of psychopathy. Some 25.2% scored between 13 and 17 on the PCL:SV indicative of moderately high traits of psychopathy. The low PCL:SV score group consisted of 36.6% of the sample. Again, this is indicative of a highly persistent and criminogenic group of offenders.

Distal Variables and Psychopathy

The first set of analyses involved finding possible associations between the following category of dependent variables; offending history; use of substances prior to incarceration; employment history; educational history; family/ marital history; accommodation; leisure/ recreation; psychological factors; and attitudes, and the independent variable of level of psychopathy. Table 3 summarizes the results of the cross tabulations.

Table 3: Level of Psychopathy and static and dynamic risk factors

		Level of Psychopathy (PCL:SV)			
Distal Risk factors associated with criminal behaviour	*Risk Variables*	*High n = 47*	*Medium n = 31*	*Low n = 45*	χ^2 *(df)*
Offending history	Violent offending	29	15	21	2.416 (2)
	Sexual offending	6	0	2	5.501 (2)
	Theft / property offences	42	26	20	25.876 (2) **
	Economic crimes	13	10	7	3.218 (2)
	Drug offences	30	19	16	8.561 (2) *
History of substance use	Substance abuse	44	30	30	17.524 (2) **
	Alcohol abuse	15	6	11	1.622 (2)
	Heroin abuse	32	26	19	14.577 (2) **
	Cocaine abuse	42	28	27	15.155 (2) **
	Cannabis abuse	25	19	13	9.185 (2) *
Employment history	Long period of unemployment exceeding 5 years	32	24	13	21.992 (2) **
	Unemployed prior to incarceration less than 5 years	37	22	11	30.960 (2) **
	Reliance on social benefits	18	9	7	5.985 (2) *
Education	Left school prior to completing formal education	25	13	19	1.436 (2)
	Difficulty understanding academic subjects	24	11	17	2.446 (2)
	Difficulty in relating with teachers	27	19	15	7.616 (2) *
	Difficulty in relating with other peers	36	20	16	15.564 (2) **
	Difficult behaviour in school	36	22	18	14.519 (2) **
Family / Marital	Presently in relationship	15	12	21	2.104 (2)
	Separated or divorced	10	10	11	1.217 (2)
	Dissatisfaction with current relationship	17	9	12	1.040 (2)
	Difficulty in relating to children	18	9	13	1.157 (2)
	Evidence of domestic violence	14	5	8	2.755 (2)
	Positive relationship with father	13	12	25	7.480 (2) *
	Positive relationship with mother	27	16	31	2.520 (2)
	Criminal family - father/mother or siblings incarcerated too	23	12	8	10.072 (2) *

		Level of Psychopathy (PCL:SV)			
Distal Risk factors associated with criminal behaviour	*Risk Variables*	*High n = 47*	*Medium n = 31*	*Low n = 45*	*χ^2 (df)*
Accommodation	Homeless or unsuitable housing	13	5	7	2.530 (2)
	Criminogenic area	10	9	10	.696 (2)
Leisure / recreation	Socially detached	34	21	16	14.452 (2) **
	Criminogenic Peers	40	26	26	10.918 (2) *
Psychological	History of mental health treatment	27	13	12	8.927 (2) *
	Currently under psychiatric care	18	9	8	4.762 (2)
Negative Attitudes	Agents of supervision	39	15	15	24.007 (2) **
	Criminal Justice System	46	25	31	13.792 (2) **
	Sentence	47	24	34	13.091 (2) **

* p < .05 ** p < .001

In the first category of offending history, only the variables of previous property offences, χ^2 (2, n=123) = 25.876, p = <.001 and previous drug offences χ^2 (2, n=123) = 8.561, p = <.014, were found to be significantly associated with higher levels of psychopathic traits. The strength of the relationship varied from a moderate association (φ_c= <.459) for a history of property offences and higher levels of psychopathic traits and a weak association (φ_c= <.264) for previous drug related offences and psychopathy.

A history of substance abuse was found to be significantly associated with higher levels of psychopathic traits χ^2 (2, n=123) = 17.524, p = <.001 with a moderate association (φ_c = <.377). More specifically, history of heroin χ^2 (2, n=123) = 14.577, p = <.001 and history of cocaine χ^2 (2, n=123) = 15.155, p = <.001, were both associated to higher levels of psychopathy with both having moderate associations (φ_c = <.344) and (φ_c = <.351) respectively.

Unemployment was found to be significantly associated with higher psychopathy. Long periods of unemployment χ^2 (2, n=123) = 21.992, p = <.001 had a moderate association (φ_c= <.423) to higher levels of psychopathic traits. Unemployment prior to incarceration χ^2 (2, n=123) = 30.960, p = <.001 also had a moderate association (φ_c= <.502) with psychopathy.

In the category of educational history, difficulty in relating with other peers χ^2 (2, n=123) = 16.564, p = <.001 and difficult behavior in school χ^2 (2, n=123) = 14.519, p = <.001 were found to be significantly associated with higher levels of psychopathy with moderate associations (φ_c = <.367) and (φ_c = <.344) respectively.

In the family / marital category, negative relationships with father χ^2 (2, n=123) = 7.480, p = <.024 and criminal family χ^2 (2, n=123) = 10.072, p = <.006 were found to be significantly associated with higher psychopathy. Cramer V analysis revealed a weak association on both these variables (φ_c = <.247) and (φ_c = <.286) respectively seemingly indicating a weak link between psychopathy and criminal families amongst Maltese convicted offenders.

Accommodation and criminogenic area were not significantly associated with higher levels of psychopathic traits. The lack of suitable leisure / recreation was found to be significantly associated with higher levels of psychopathic traits. Social detachment χ^2 (2, n=123) = 14.452, p = <.001 had a moderate association (φ_c= <.343) to higher levels of psychopathy. Whilst having criminogenic peers χ^2 (2, n=123) = 10.918, p = <.001 had a weak association (φ_c= <.298) to higher levels of psychopathy.

With regards to psychological health, only the variable of past mental health treatment, χ^2 (2, n=123) = 8.927, p = <.012 was found to be significantly associated with higher levels of psychopathic traits. Cramer V analysis revealed a weak association (φ_c = <.269) with psychopathy.

All three criminal attitude variables were significantly associated with higher levels of psychopathic traits. A negative attitude towards supervision, χ^2 (2, n=123) = 24.007, p = <.001 was found to be significantly associated with higher levels of psychopathic traits. The strength of the relationship was a moderate association (φ_c= <.442). A negative attitude towards the Criminal Justice System, χ^2 (2, n=123) = 13.792, p = <.001 and a negative attitude towards the sentence, χ^2 (2, n=123) = 13.091, p = <.001 were found to be significantly associated with higher levels of psychopathy. Effect size analysis revealed a moderate strength of association (φ_c = <.335) and (φ_c= <.326) with psychopathic traits respectively.

Table 4: Level of Psychopathy and Sentencing Outcomes

	Levels of Psychopathy (PCL:SV)			
Sentencing Outcomes	*High n = 47*	*Medium n = 31*	*Low n = 45*	χ^2 *(df)*
Recidivist or persistent offender	45	31	30	22.966 (2) **
Severe offences (5+ years)	17	12	29	8.561 (2) *
Interpersonal offences (sexual or violent offending)	30	16	29	1.530 (2)
Diversity of Offences	39	23	19	18.264 (2) **

* p < .05 ** p < .001

Table 4 shows that there is a relationship between high psychopathic traits and recidivism χ^2 (2, n=123) = 22.96, p = <.001. The strength of this relationship was deemed to be a moderate (φ_c= <.432). Moreover, psychopathy was also related to diversity of offences χ^2 (2, n=123) = 18.26, p = <.001, with a moderate strength of association (φ_c = <.385).

Proximal/ Post Incarceration variables and Psychopathy

Table 5: Levels of Psychopathy and Outcomes during Incarceration

	Levels of Psychopathy (PCL:SV)			
Outcomes during incarceration	*High n = 47*	*Medium n = 31*	*Low n = 45*	*χ^2 (df)*
Poor adherence to care-plan/ treatment outcomes	45	10	12	52.48 (2) **
Poor discipline	29	3	2	44.369 (2) **

* p < .05 ** p < .001

Table 5 shows that there is a relationship between high psychopathic traits and not following the treatment goals set in the correctional care-plan χ^2 (2, n=123) = 52.48, p = <.001, with a strong association (φ_c= <.653). Furthermore, higher levels of psychopathy were also related to a higher incidents of disciplinary misconduct χ^2 (2, n=123) = 44.369, p = <.001, here again a strong association was noted (φ_c = <.601). Thus, strong relationships between having high levels of psychopathy and having poor treatment outcomes, adherence to the correctional care-plans and having higher levels of disciplinary infringements were found.

Discussion

Summary of Main Results

This study has found high levels of recidivism amongst a sample of Maltese incarcerated offenders. It also found high levels of psychopathy as measured by the PCL:SV, and moderate to strong associations between distal and historical risk variables and psychopathic traits. Strong associations were found between the measured psychopathic traits and behavioral outcomes in prison and response to treatment. This seems to imply that psychopathy can be seen as a mediator variable in the general outcomes measured.

Historical Risk Factors and Recidivism

An extensive review of recidivism rates across 11 countries has reported reconviction rates that varied from 20% to 63% and reimprisonment rate varied between 14% to 45%

(Yukhnenko *et al.*, 2020). This study, focusing on Maltese convicted and incarcerated offenders, found that 86.2% had at least one previous conviction and 78.9% had multiple incarcerations. This seems to contradict official statistics (Borg, 2018) with this study reporting much higher levels of recidivism. This might be because this study focused exclusively on Maltese offenders and excluded a mostly transient foreign population of inmates. The findings of this study may also imply that the reconvictions and reimprisonment among the Maltese offenders are substantially higher, depicting Maltese offenders as persistent criminals, also evidenced by the higher number of incarcerations for interpersonal violent crimes (61%) and diverse offences such as theft, fraud, or interpersonal crimes (65.9%) for these offenders.

These high rates of reoffending could be explained through the lack of consistent interventions and attempts at rehabilitation that have occurred in the past. To add further, CSA has only recently attempted to address the rate of recidivism through the launching of correctional care-plans in February 2020 and the introduction of structured offender behavioral programs during the same year (Auditor General, 2021). Furthermore, the lack of investment in psychosocial and professional staff has also recently been addressed in administrations, thus the review of these figures in future studies to determine whether the investment and the introduced programs have had the desired effect would be beneficial.

High Incidence of Psychopathic Traits

Another contributing factor to the high reimprisonment rates might be the significant number of offenders that have been screened with high psychopathic traits in this sample. The reported 38.2% that score 18+ on the PCL:SV is more than double the reported 10-15% that meet the criteria for psychopathy in US federal prisons (Hare, 2012). This high number of offenders incarcerated in Maltese prison with such psychopathic traits might be further indicative of the often incalcitrant criminal attitude and behavior that might make therapeutic interventions difficult.

The reportedly high numbers of psychopathic traits seem to lend credence to the concept of familial amorality which was used to explain aspects of Maltese culture by Boissevain (1965, 2013) in his anthropological studies. This amorality is centered on obtaining material benefits irrespective from where they come and through whatever means necessary. This behavior is justified by the notion that it is being done for the benefit of the family. This mentality is steeped in Malta's colonial past where past rulers of the island exploited the country's resources and geographical location to their benefit often to the detriment of the native population (Boissevain, 2006). Banfield's (1958) term

of familial amorality seems to be indicate a belief system characterized by the notion that one needs to take what one can, when they can. This in part was because of the long history of colonization in southern Mediterranean states. This pseudo-psychopathic belief system might have affected the high incidence of psychopathic traits amongst Maltese offenders. Future studies focusing on community samples might shed light on the prevalence of psychopathic features amongst the Maltese population to determine whether they are higher than typically observed in other countries.

Potentially having such a high number of recidivists amongst the Maltese inmate population might have affected the statistical association between recidivism and psychopathy. Nevertheless, a moderate relationship was evident with high psychopathy inmates having more criminal histories and greater diversity of offending behaviour. This implies that although a cultural difference might exist in the frequency of the occurrence of psychopathic traits, the historical risk variables typically found to be associated with psychopaths in international studies were also found to be present in Maltese samples.

As expected, many distal risk factors typically associated with higher criminal behavior were also associated with higher traits of psychopathy in Maltese samples. This result is congruent to other international studies that also found links between psychopathy and these variables. A history of property and drug offences, a history of cocaine and heroin abuse, unemployment, poor educational histories, poor familial relationships, social detachment, and criminal attitudes all revealed moderate to weak associations with higher levels of psychopathy. Moderate associations were also found for recidivism and diversity of offending.

Some of the strongest relationships were found to be within the employment history of offenders, with offenders having problematic working histories being the most likely to exhibit psychopathic traits. An American survey showed that overall, the public prefers to employ individuals with a clean criminal conduct and as a result excluding individuals with a history of criminal offending (Denver *et al.*, 2017). Thus, the ex-offender might have limited opportunities of meaningful employment, increasing the chances of re-offending (Clark, 2006, 2012).

In this study, 84.6% of the sample had a history of substance abuse within the community. Substance abuse especially heroin (62.6%) and cocaine (78.9%) use seem to be associated with high psychopathic traits. Research shows that prisoners who abuse from substances have extensive social and mental problems, such as higher rates of unemployment, unstable housing, low levels of education attainment and higher psychological, psychiatric, and behavioral problems when compared to other prisoners (Bukten *et al.*, 2020; Dolan *et al.*, 2018). Adding to this, many of the individuals who

abuse from substances end up being convicted for drug related charges to maintain their addiction (Csete *et al*., 2016). In this study, 52.8% of the sample had a previous conviction for drug related offences. Research shows that there is a strong correlation between psychopathy and substance abuse (Jauk & Dieterich 2019). Since individuals with psychopathic traits tend to display stimulation seeking behavior and impulsive behavior, this increases the risks for substance abuse (Walsh *et al*., 2007). It is difficult to extrapolate whether psychopathic traits led to the addiction or whether the addiction itself reinforces those traits to help the offender secure their drug fix.

Poor educational histories are also related to psychopathy with inmates showing the most turbulent behavior in school (61.8%) and difficulties with peers such as bullying behavior, scoring within the high range of psychopathy. This might be indicative of behavioral and social difficulties or the presence of conduct disorder which is often comorbid with psychopathy. Research shows that there is a correlation between early onset of delinquent behavior in children and psychopathy in adults (Baglivio *et al*., 2020; Garofalo *et al*., 2020). Early problematic behavior's that are persistently manifested in childhood, which include difficulty in behavioral regulation, elevated levels of impulsivity and deceitfulness, are most often associated with conduct disorder (Farrington, 2005; Frick 2022). As these personality traits continue to be enforced from childhood to adolescence, this increases the incidence of psychopathic traits (DeLisi, 2009). Furthermore, early onset of delinquency, criminality and aggressive behavior increases the chances of involvement of the CJS, which in turn seems to be linked to presence of psychopathic traits (Bergtrøm & Farrington, 2021). Thus, it appears that criminal behavior and involvement in the criminal justice system from an early age might be an indicator of psychopathic traits or else a creative adaptation of a personality system to mediate for the response of the CJS.

Adverse relationships with the father and having criminal families were also found to be related to psychopathy (Burgess-Proctor *et al*., 2016; Murray *et al*., 2012). This might be linked to the concept of familial amorality or the concept of criminal families, indicating potential biological and environmental factors within the family in the etiology of psychopathy, possibly indicating a potential link between paternal relationships or the lack of paternal involvement and the onset of psychopathy (Bezin *et al*., 2020; Gao *et al*., 2010). More recently, it was found that individuals who come from a criminogenic family tend to be more persistent in their criminogenic behavior and were involved in more violent crimes (Formosa Pce, 2014). Moreover, this study also reported that large number of the Maltese crimes are found within a small number of families sharing criminogenic tendencies.

Social attachment and social alienation which might potentially be a consequence of stigmatization and shame associated with living in small insular communities, where individuals labelled as criminals are ostracized from mainstream and legitimate prosocial activities (Clark, 2012). As the labelling theory suggests, individuals that display criminogenic tendencies are left marginalized from the prosocial individuals and as a result they start associating themselves with other criminogenic individuals who share similar beliefs and attitudes (Bushway & Paternoster, 2014; Kavish *et al.*, 2016). This might also be related to an increased association with criminal others and persistence in offending due to a more crystallized criminal identity.

Only having a history of mental health issues was associated with high psychopathic traits. This might be related to the strong presence of comorbid symptoms associated with substance addiction. Typically, opiate withdrawal charting at CSA requires admission to the Forensic Unit where inmates are also reviewed by a psychiatrist. Possibly embellishing a potential link between past mental health concerns and psychopathy. In fact, being currently under psychiatric care was not significantly related further substantiating that this relationship is present due to comorbidity with substance abuse.

Criminogenic attitudes were all found to have moderate association with increased psychopathy. A majority of the sample harbored resentment towards their sentence and the CJS even though they did not specifically score highly on the PCL:SV.

Proximal Outcomes

Treatment outcomes and psychopathic traits. This study proposed that psychopathic traits might hinder the individuals rehabilitative process during their incarceration. This was measured through care-plan adherence or treatment and disciplinary infringements. Strong associations were found for both these variables with high psychopathic offenders having poor treatment outcomes or adherence to correctional care-plan and more disciplinary infractions per annum than other inmates. These findings are also in line with international studies that have found similar associations between psychopathy and increased failure in treatment and disciplinary infringements (see Olver *et al.*, 2011 & Jeandarme *et al.*, 2017). Thus, one might conclude that there is no cultural difference between Maltese samples and other international samples on these manifestations of psychopathy.

Poor treatment outcomes were also researched by several researchers and the outcome always predicted that individuals with higher traits of psychopathy have poor treatment compliance and treatment dropouts (Olver *et al.*, 2011). Jeandarme and colleagues (2017) reported that psychopathic individuals were often more problematic

in treatment, often dropping out or displaying incompliance to treatment goals. Hare (2003) had suggested that psychopathy is impermeable to treatment interventions. This concept however has largely been challenged by the work of Polaschek (2014) and Salekin, Worley, and Grimes (2010) where although a relatively stable trait psychopathic features can be susceptible to small and incremental positive changes (van Baardewijk *et al*., 2011) which might make the individual more amenable to treatment changes. Walters (2017) suggested that the effects of psychopathy on criminal behavior can be mitigated through cognitive behavioral therapy that addresses specific thinking patterns such as proactive criminal thinking and super-optimism. The strong association between high psychopathy and lack of care-plan adherence might be explained through the lack of apposite intervention programs. Though CSA has now introduced CBT based structured intervention programs, these programs are yet to leave an impact on recidivism.

Disciplinary Infringements and Psychopathy

This study found a strong association between prison misconduct and high psychopathic traits. This study focused on general prison infractions and did not focus exclusively on a specific type of breach of prison discipline. It seems that high psychopathy inmates repeatedly had more than 3 disciplinary infringements per annum during 2020 and 2022. A meta-analysis exploring psychopathy and prison misconduct had only found moderate effect sizes at best with most American studies showing a poor relationship between PCL scores and institutional misbehavior (Guy *et al*., 2005). A research study on youths focusing on violent misconduct reported that youths with high scores of psychopathy have significantly more violent behavior and might appear to be more maladjusted than other prisoners (Schaffer *et al*, 2015). Thomson, Towl, and Centifanti (2016) found that high psychopathic traits were associated with increased disciplinary infringements for both violent and non-violent infractions than non-psychopathic inmates while incarcerated. Prison misconduct might be a sign of prison maladjustment (Schaffer *et al*., 2015) or a characteristic of psychopathy such as impulsivity or antisocial attitudes (Guy *et al*., 2005). Although prison maladjustment was not measured in this study and could have potentially affected both the inmate's response to treatment or adherence to correctional care-plans and their disciplinary record the association between those characteristics inherent in psychopaths and these proximal variables is rather substantial.

Conclusion

This was the first study to research psychopathy amongst Maltese incarcerated offenders. It was only recently that CSA initiated a set of reforms within Malta's only correctional

facility that included screening of offenders through the PCL:SV, the development of correctional care-plans and the launching of offender behavioral programs (Auditor General, 2021). These reforms introduced to target the high recidivism rates that had been reported over the past few years. This empirical study confirmed this high rate of recidivism, with 86.2% having been convicted and incarcerated once before. This study sought to explore potential cultural differences in how psychopathy is manifested amongst incarcerated offenders in Malta. Based on research findings from international studies, this research sought to establish whether distal factors such as recidivism, poor employment and educational histories, adverse familial situations, social detachment and criminal attitudes and more proximal factors such as adherence to correctional care-plans and institutional misconduct are associated with higher levels of psychopathy.

As expected, moderate associations were found for most of the distal variables with psychopathic offenders displaying a greater frequency of the criminogenic variables. Strong associations were also found for the more proximal variables, that of incompliance to correctional care-plans and disciplinary misconduct, with high psychopathic offenders displaying higher frequencies of both these variables. These results are congruent with international findings with psychopathy being associated with recidivism (Dolan & Doyle 2007; Glannon 2014), substance misuse (Hopley & Brunelle, 2012; Jauk & Dieterich 2019), poor educational and employment trajectories (Bukten *et al*., 2020; Dolan *et al*., 2018), poor family relations (Bezin *et al*., 2020; Gao *et al*., 2010), poor treatment outcomes or adherence to care-plans (Jeandarme *et al*., 2017), and increased disciplinary infringements (Schaffer *et al*, 2015).

These findings might lead one to conclude that there are no cultural differences in the relationship between criminogenic variables and psychopathy amongst Maltese offenders. However, this study also found that a high proportion of the sample under review had high levels of psychopathy. This figure is almost double the rate of psychopathy found amongst US inmates (Hare, 2012). Thus, although the manifestation and consequence of psychopathy might be the same for Maltese offenders the incidence of the psychopathy seems to be higher than was expected indicating a possible cultural difference. Future studies might try to research more community-based samples to determine whether concepts such as over-population and high population densities and familial amorality explored earlier might play a role in increasing psychopathic traits. This high incidence of psychopathy amongst Maltese offenders and the strong relationship with not complying to treatment goals also has potential policy recommendations that might need to be introduced to address the lack of responsivity. While it is commendable that CSA had in 2020 introduced generic structured offending behavior programs and

it is still too early to determine the treatment effectiveness of these programs on the level of recidivism. The high treatment incompliance found mainly within the high psychopathy group in this study suggests that CSA should embark on more specific programs that have yielded some positive results with psychopaths (e.g., Walters, 2017). This is especially salient considering that the high psychopathy offenders make up a large proportion of offenders in Malta's prison.

Limitations and Future Studies

This study adopted rigorous methodological procedures to avoid potential biases of carrying out secondary file analysis. Files were anonymized and randomly assigned by a gatekeeper with the researcher being blind to the allocation process and the identity of the offender. Files under review were all up-to-date and out of the 123 files reviewed no information was missing, thus this research avoided potential flaws of having missing data inherent in secondary file reviews. Most of the information collected was retrospective in nature, however, the supervision of case files meant that they were updated with the relevant information and progress of the inmate during their incarceration.

A salient limitation that could not be controlled for was that some of the information gathered depended on the subjective judgement of the professionals reviewing the case in the inmate's progress on the care-plan. Their professional judgement might have been affected by the knowledge of the PCL:SV score, thus potentially, embellish the association between high PCL:SV scores and poor treatment outcome or adherence to the care-plan. Furthermore, the PCL:SV was not normed on Maltese populations despite having been used extensively in research thus, potential the results obtained in this study might be a consequence of potential cultural bias. A larger study utilizing PCL measures might be undertaken to norm the tools on this population. Potentially, if these research findings are replicated amongst community-based samples, different cut-off points for Maltese samples might be required in diagnosing psychopathy.

This study established high concentrations of psychopaths within Maltese samples, higher than those reported in most international studies. Thus, a research study exploring the levels of psychopathy amongst community-based samples would ascertain such high levels of psychopathy are associated with potential cultural differences of the Maltese population. This research only focused on the global score of the PCL:SV and there was no exploration of the different facets that make up psychopathy. Future studies on the island could focus on exploring the composition of the affective facet with its interpersonal and affective factors and the behavioral facet, comprised of

lifestyle and antisocial factors on Maltese samples. This would help in the identification of any potential cultural difference in the facet and dimensional aspects of psychopathy and explore which factors are mostly associated with more serious aspects of offending behavior. Future studies might also concentrate on etiological aspects of this condition and possibly yield conclusions that would help in the early identification and treatment intervention with this population group.

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