

REVIEW ARTICLE

Is there a link between psychopathy and self-harm? a review of the literature

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The aim of this review was to examine whether there is a link between psychopathy and self-harm. A systematic search identified 14 papers which examine this link. A quality appraisal checklist was used to evaluate the quality of each study. The application of the quality appraisal checklist showed that the majority of the studies had good internal validity; however, there were some biases that affected the external validity of some studies. The results indicated that there may be a positive association between total psychopathy score and self-harm; however, some studies with smaller sample sizes and low rates of self-harm failed to show this association. The results of most of the studies showed a positive association between Factor 2 of the Psychopathy Checklist (PCL-R; Hare, 2003) and self-harm. No link was found between Factor 1 and self-harm. The results did not show consistent evidence for a link between any of the four facets and self-harm. Although this review indicates a link between Factor 2 and self-harm, and a possible link between total psychopathy score and self-harm, the small number of studies in this area means that the research is not robust enough to provide strong evidence for these associations.

Key words

Psychopathy, Psychopaths, Self-harm, Self-injury, Literature review, Systematic review

Introduction

A large amount of research has been conducted into the link between psychopathy and criminality (e.g. Dolan and Doyle, 2000; Harris et al., 1991; Hemphill et al., 1998) [1–3]. However, the link between psychopathy and internalizing problems, such as self-harm and suicide, has received less attention [4]. Early conceptualizations of psychopathy suggested that

those who meet the criteria for psychopathy are less likely than those who do not to experience suicidality or self-harm [5]. However, some research is inconsistent with this idea, and has found a positive correlation between antisocial and life-style-related psychopathic traits and lifetime suicide attempts [6,7] and suicide-related behaviour [8]. Although these studies have demonstrated a link between psychopathy and suicidal behaviour, the studies have either not studied the link between psychopathy and non-suicidal self-harm (e.g. Verona et al., 2001; Verona et al., 2005) [6,7] or not separated suicidal and non-suicidal self-harm within their methodology (e.g. Douglas et al., 2006) [8]. Therefore, this review aims to examine the existing research literature to investigate whether Cleckley was correct in his assertion that psychopathy is associated with a lower risk of self-harm, and whether specific factors or facets of psychopathy are more associated with risk of self-harm than others [5].

Method

Literature Search

A search was conducted on May 26, 2016 by a Trainee Forensic and Clinical Psychologist, currently undertaking a doctoral degree. The following databases were searched: Embase, Ovid Medline, PsycInfo and PsycArticles. The following search terms were used:

- A. Keyword search for 'self-harm*' or 'self-injur*' or 'self-mutilat*' or 'parasuicid*' or 'DSH'
- B. Keyword search for 'psychopathy' or 'psychopath' or 'psychopaths' or 'psychopathic' or 'sociopath*'
- C. Combine searches: A and B

Only peer-reviewed journal articles were

included. Grey literature, such as book chapters or conference abstracts, was excluded to ensure that there was enough information available to accurately assess the methodology of the studies. Articles that used the term 'psychopath' to mean something different were excluded (e.g., use of the term 'psychopathic disorder' in the Mental Health Act to mean severe personality disorder). Articles that examined the link between suicide and psychopathy, and did not separate self-harm and suicide were also excluded, as were articles that mentioned self-harm or psychopathy, but that did not directly study them, or articles that studied self-harm and psychopathy, but in relation to a third variable, without directly examining association between psychopathy and self-harm. This resulted in 14 papers being included in this review (see Figure 1 for flow diagram of this process).

Quality Appraisal

In order to assess the quality and scientific rigour of the identified studies, a quality appraisal framework was identified for use

in this review. The National Institute for Clinical Excellence [9] developed a quality appraisal checklist suitable for quantitative studies that report correlations and associations. The checklist is based on the appraisal stage of the Graphical Appraisal Tool for Epidemiological studies (GATE) [10], and examines the internal and external validity of studies. The checklist has been adapted for use in the current review. For clarity, questions relating to 'exposure' and 'outcome' have been changed to 'psychopathy' and 'self-harm', respectively. One question related to contamination of exposure was removed, as it was deemed irrelevant to these studies. An additional question was added to the appraisal criteria which asked about number of individuals who met the criteria for psychopathy within the sample (Question 2.2; see Table 1 for a list of quality appraisal criteria). This checklist was applied to each study by the researcher, and the results of this literature review will be discussed in relation to the quality and findings of each study.

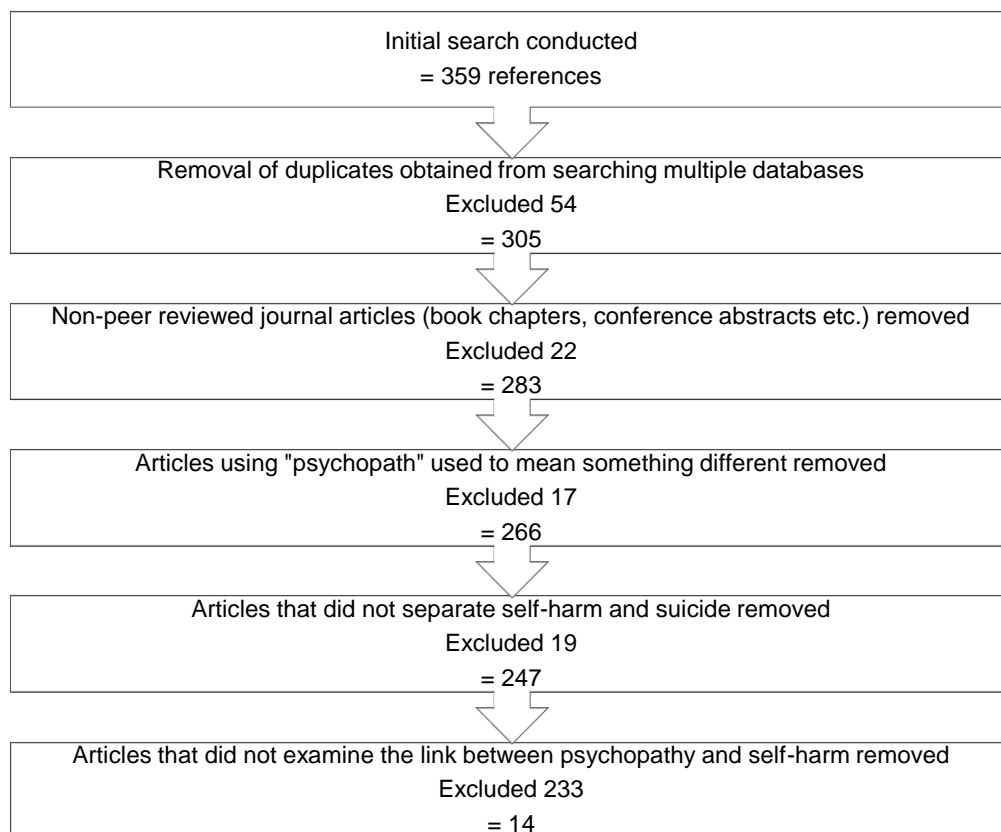


Figure 1. Search and exclusion process.

Table1- Quality appraisal criteria

Section 1: Population	
1.1	Is the source population well described?
1.2	Is the eligible population or representative of the source population?
1.3	Do the selected participants represent the eligible population?
Section 2: Psychopathy measures	
2.1	Selection of psychopathy group. How was selection bias minimised?
2.2	How many/what proportion of the sample were psychopaths?
2.3	Was the measure of psychopathy based on a sound theoretical basis?
2.4	How well were likely confounding factors identified and controlled?
2.5	Is the setting applicable to the UK?
Section 3: Self-harm measures	
3.1	Were the self-harm measures and procedures reliable?
3.2	Were the self-harm measurements complete?
3.3	Were all the important outcomes assessed?
Section 4: Analyses	
4.1	Was the study sufficiently powered to detect an intervention effect (if one exists)?
4.2	Were multiple explanatory variables considered in the analyses?
4.3	Were the analytical methods appropriate?
4.4	Was the precision of association given or calculable? Is association meaningful?
Section 5: Summary	
5.1	Are the study results internally valid (i.e. unbiased)?
5.2	Are the findings generalizable to the source population (i.e. externally valid)?

Result

The description and relevant results of each study are summarized in Table 2, in date order. Each study is summarized based upon its quality, results, and the evidence that it provides in relation to the research question. One article contains two studies with different methodologies [11]. Therefore, the quality of these studies were assessed, and the results presented, separately. Additionally, as some of the studies examined wider research questions than the link between psychopathy and self-harm, only the results directly related to the link between psychopathy and self-harm are presented and discussed within this review.

Quality of the Studies

Overall, 8 of the 15 studies had good internal validity. Problems with internal validity were related to biases in the collection of self-harm data, PCL measures being used on samples that they had not been validated on, non-reporting of the prevalence of psychopathy, and studies being insufficiently powered to detect associations. Overall, only 6 of the 15 studies demonstrated good external validity. Problems with external validity were related to failure to fully explain how participants were recruited, selecting participants from limited sites, and stringent exclusion criteria

that mean that the results were not generalizable.

Summary of Results of Studies

The studies varied in terms of what 'level' of psychopathy they measured. Ten studies measured the link between overall psychopathy score and self-harm. Eleven studies separated psychopathy into Factor 1 and Factor 2 [24]. Four studies separated psychopathy into its four facets: interpersonal, affective, antisocial and lifestyle [24]. Each of these sets of results will now be reported.

a. Examining the association between total psychopathy score and self-harm

Ten studies examined the link between total psychopathy score and self-harm [12–15,18–23]. Four of these studies did not find a significant association between psychopathy and self-harm [12,14,21,22]. However, all four of these studies had small sample sizes or low rates of self-harm. It is not clear, therefore, whether the lack of a significant result was due to the studies being underpowered or whether a relevant association did not exist.

Five of the ten studies found a positive association between psychopathy and self-harm [13,15,19,20,23]. However, it appears that one of these papers may

have misreported the results [15]. Out of the other four studies, three showed good internal and external validity [13,19,23], however one study's external validity may have been affected by using volunteers, and its internal validity is unclear, as the authors did not clearly explain the self-harm measure that was used [20].

Finally, one study showed a negative association between psychopathy and self-harm [18]; however, this association was small ($r=-0.15$). In addition to this, the study's internal validity may have been affected by relying on self-report measures of psychopathy and self-harm, and its external validity may have been affected by the recruitment method, which was not clearly explained, and by the fact that only individuals with one of four personality disorders, or major depression were included in the study.

To conclude, of the ten studies that examined the link between total psychopathy score and self-harm, five found a positive association [13,15,19,20,23]. Although one of these may have misreported the results, the other four are of an acceptable quality. Four studies did not find an association between psychopathy and self-harm [12,14,21,22]. One study showed a small negative association between psychopathy and self-harm [18]; however, this study had potential problems with its internal and external validity. Therefore, overall, there is evidence that indicates that there may be a positive association between psychopathy and self-harm; however further research is required to determine whether the lack of significant results in some of the studies was due to small sample sizes and low rates of self-harm.

b. Examining the Association between Factor 1, Factor 2 and Self-Harm

Eleven studies examined the link between Factor 1 and Factor 2 and self-harm [11–15,17,18,20,21,23] – regarding the article of Verona et al. (2012) both Study 1 and Study 2 are taken into consideration. Two studies found a negative association between Factor 1 and self-harm [15,18], whereas the remaining nine studies found no association. Of the two studies that found a negative association, one study's

internal validity may have been affected by the use of self-reported psychopathy and self-harm, and its external validity may have been affected by the recruitment method, which was not clearly explained, and by the fact that only individuals with one of four personality disorders, or major depression were included in the study [18]. The other study appears to have misreported at least some of the data, and therefore the accuracy of this result is unclear [15]. Therefore, there is not enough evidence to support the notion that there is a link between Factor 1 and self-harm.

In regard to Factor 2, four of the eleven studies did not show a significant association between Factor 2 and self-harm [12,14,20,21]. Of these four studies, two had good external validity [12,14]; however, the external validity of the other two studies may have been affected by using participants who had volunteered to take part [20], and by only using participants from one forensic hospital [21]. Additionally, all of the four studies had biases that may have impacted on their internal validity, including: using the PCL:JV, which is less reliable than the PCL:YV [14], and either not reporting what was included as self-harm, or only including some forms of self-harm [12,20,21].

Six studies found a positive association between Factor 2 and self-harm [11,13,17,18,23] – regarding the article of Verona et al. (2012) both Study 1 and Study 2 are taken into consideration. Five of these studies had good internal validity; however, one study's internal validity may have been affected by using self-report measures of psychopathy and self-harm, which may be inaccurate [18]. Additionally, three of the six studies may have had biases that impacted on their external validity, by using unrepresentative samples [11,17,18] – regarding the article of Verona et al. (2012) consider here only Study 1. Finally, one study found a negative association between Factor 2 and self-harm (15); however, as this study appears to have misreported at least some of the data, the accuracy of this result is unclear.

To conclude, there is not enough evidence to support the notion that there is a link

between Factor 1 and self-harm. However, there is some evidence that there is a positive association between Factor 2 and self-harm.

c. Examining the Associations between the Four Facets and Self-Harm

Four studies examined the link between each of the four facets (Interpersonal, Affective, Antisocial and Lifestyle) and self-harm [4,14,16,23]. In relation to the link between the Interpersonal facet and self-harm, two studies found no association [16,23], one study found a negative association [4], and one study found a positive association [14], but only in one of their two sample groups. All of these studies, apart from one, had some biases in their internal or external validity. Therefore, there is not enough consistent evidence to indicate a link between the Interpersonal facet and self-harm.

In terms of the relationship between the Affective facet and self-harm, one study showed a positive association; however the other three studies failed to find an association. The study that found a positive association had good internal validity; however only patients with certain diagnoses, and only those hospitalized for less than 21 days were included in the study, which may have impacted on the external validity of the study [4]. One of the three studies that showed no association between the Affective facet and self-harm had the same problem with external validity, but good internal validity [16]. One study had good external validity, but used a translated version of the PCL:YV which has not been validated on that sample, which they then modified, affecting the internal validity of that study [14]. The other study had good internal and external validity [23]. Therefore, overall there is not enough good quality evidence to indicate a link between the Affective facet and self-harm.

In relation to the Antisocial and Lifestyle facets, one study showed a weak positive association between both of these facets and self-harm [23], whereas the other three studies showed no association. Although this study had good internal and external validity, the fact that the associa-

tions were weak, and the lack of replication of these results across other studies means that there is not enough evidence to support the notion that there is a link between the Antisocial facet or Lifestyle facet and self-harm.

To conclude, only four studies examined the link between each of the four facets and self-harm. These studies showed inconsistent, and sometimes conflicting results. Therefore, there is not enough evidence to indicate a specific link between any of the four facets and self-harm.

Discussion

Cleckley believed that those who met the criteria for psychopathy were less likely than those who did not to experience suicidality or self-harm [5]. The results of this literature review did not support this idea, and in fact the evidence indicated that the opposite may be true: those who score higher on measures of psychopathy are more likely to self-harm. More specifically, the results indicated that those who score higher on Factor 2 items may be at an increased risk of self-harm. There is not enough evidence indicative of a link between Factor 1, or any of the four facets, and self-harm.

Recommendations for Clinical Practice

Clinicians working with individuals who meet the criteria for psychopathy should be aware that their psychopathic traits may increase, rather than decrease their risk of self-harm, particularly in those individuals who score high on Factor 2 items. This should therefore be considered when undertaking self-harm risk assessments. Additionally when considering interventions aimed at reducing an individual's risk of self-harm, interventions that target Factor 2 traits may be of benefit. However, as this has not yet been empirically tested, further research into whether reduction of Factor 2 traits does reduce self-harm risk is required.

Table 1 - Summary of final studies

Authors/ Year	Aims	Participants	Psychopathy measure	Self-harm meas- ure	Analysis	Results
Gray et al., 2003 [12]	To examine the efficacy of the PCL-R, HCR-20 and Beck Hopelessness Scale in predicting institutional self-harm and suicide.	N = 34 (77% male, 23% female) Patients admitted to one of two medium-secure units in the UK 6% scored above the cut-off (≥ 25) for psychopathy	PCL-R	Aggression Vulnerability Scale (created for this study)	Spearman's Rho, Signal Detection Theory, AUC and Mann-Whitney U	No significant association between SH and Factor 1, Factor 2, or Total PCL-R score
Young et al., 2006 [13]	To identify measures that were associated with self-harm in prison psychiatric treatment.	N = 242 (100% male) Prisoners receiving treatment in a psychiatric unit within a US prison	PCL-R	Prison psychiatric records	T-tests, Chi Square tests, Mann-Whitney tests and Logistic Regression	Presence of psychopathy (Total PCL-R score ≥ 30 ; $\chi^2=3.59$, $p=0.05$) and Factor 2 ($t=2.15$, $p<0.05$) identified those with a history of SH. However, model that best predicted SH did not contain psychopathy at all. Factor 1 results were not reported.
Das, et al., 2007 [14]	To examine the predictive validity of psychopathic traits, as measured by the PCL:SV, for institutional disruptive behaviour in adolescent offenders.	N = 147 (100% male) Adolescents in one secure and one semi-secure treatment facility in The Netherlands 14% scored above the cut-off (≥ 30) for psychopathy	PCL:JV (Dutch version of the PCL:YV)	Records (daily reports)	Spearman's Correlations	Positive correlation between Interpersonal facet and SH in one sample ($\rho=0.28$, $p<0.05$) but not the other. No significant association between SH and Total PCL-R score, Factor 1, Factor 2, or any of the other three facets in either sample.
Semiz et al., 2008 [15]	To examine the relationship between ADHD measures within a population with substance use disorders, self-injurious behaviour, suicide attempts and criminal behaviours.	N = 105 (100% male) Men referred for further psychiatric assessment after being assessed for the Turkish Military, who met the criteria for antisocial personality disorder 35% scored above the cut-off (≥ 30) for psychopathy	PCL-R	Semi-structured interview	Pearson's Correlation Coefficient	Negative correlation between Factor 1 and SH ($r=-0.27$, $p<0.05$) Negative correlation between Factor 2 and SH ($r=-0.39$, $p<0.001$) Positive correlation between PCL-R Total score and SH ($r=0.27$, $p<0.05$) However, data in the table does not match data in the text

Authors/ Year	Aims	Participants	Psychopathy measure	Self-harm meas- ure	Analysis	Results
Swogger, et al., 2009 [16]	To examine the relationship between psychopathy and suicide attempts/ non-suicidal self-injury in a civil psychiatric population.	N = 810 (59% male, 41% female) From one of three acute inpatient hospitals as part of MVRAS Hospitalized for <21 days Diagnoses: schizophrenia, schizophreniform disorder, schizoaffective disorder, major depression, dysthymia, mania, brief reactive psychosis, delusional disorder, alcohol/other drug abuse or dependence, or a PD	PCL:SV	Semi-structured interview about SH in the past two months	Mann-Whitney-Wilcoxon, F-tests and Multinomial Logistic Regression.	No significant association between SH and any of the four facets.
Miller et al., 2010 [17]	To examine the relationships between the three areas of the Vulnerable Dark Triad (vulnerable narcissism, Factor 2 psychopathy, and borderline personality disorder) and personality, environmental etiological factors, and current functioning.	N = 361 (38% male, 62% female) Undergraduate students in the USA	LSRP SRP-III	Deliberate Self-Harm Questionnaire- Short Form (DSHQ-SF)	Regression	No significant correlation between SH and Factor 1. Positive correlation between SH and Factor 2 ($r=0.26$, $p<0.001$)
Witt et al., 2010 [18]	To examine how the NEO-PI-R measures of Fearless Dominance and Impulsive Antisociality are associated with other measures of personality pathology and psychopathology.	N = 733 (36% male, 64% female) Participants recruited for the Collaborative Longitudinal Personality Disorders Study (CLPS) US sample Met criteria for schizoid, borderline, avoidant or obsessive-compulsive PD (86%), or major depressive disorder without PD (14%)	NEO-PI-R	Schedule for Non-adaptive and Adaptive Personality (SNAP)	Concurrent Correlations	Negative correlation between Fearless Dominance and SH ($r=-.47$, $p<0.05$) Positive correlation between Impulsive Antisociality and SH ($r=0.43$, $p<0.05$) Weak negative correlation between FFM Psychopathy and SH ($r=-0.15$, $p<0.05$)

Authors/ Year	Aims	Participants	Psychopathy measure	Self-harm measure	Analysis	Results
Ates et al., 2011 [19]	To examine whether self-mutilation is associated with severity of psychopathy in men with antisocial PD not in prison.	N = 116 (100% male) Men referred for further psychiatric assessment after being assessed for the Turkish Military, who met the criteria for antisocial personality disorder 48% scored above the cut-off (≥ 30) for psychopathy	PCL-R	Interview, records, relatives, physical examination	Fisher's Exact tests and Chi-square tests for categorical data. Independent sample t-tests for continuous data. Spearman's Correlations to examine the association between SH and severity of psychopathy.	Compared to non-psychopaths, psychopaths had more frequent ($p < 0.05$) and more severe ($p < 0.05$) SH Positive correlations between Total PCL-R score and frequency ($r = 0.278$, $p < 0.005$), number ($r = 0.245$, $p = 0.01$) and severity ($r = 0.199$, $p < 0.05$) of SH.
Gunter, et al., 2011 [20]	To examine risk factors for suicidal ideation, suicide attempts and self-harm without lethal intent in a community corrections sample.	N = 337 (65% male, 35% female) Volunteers who responded to study announcements placed in a community corrections office in the USA All were on probation, parole or work release 13% scored above the cut-off (≥ 30) for psychopathy	PCL:SV	Semi-Structured interview for the Assessment of the Genetics of Alcoholism- Revised (SSAGA-II)	Binary Logistic Regression	The model that best predicted SH contained Total PCL:SV score ($OR = 3.92$, $p = 0.001$). No significant association found with Factor 1 or Factor 2.
Verona et al., 2012 [11] [Study 1]	To examine the moderating role of gender in the relationship between psychopathy factors and risk of self-directed violence.	N = 318 (49% male, 51% female) Undergraduate students from one university in the USA	PPI-S SRP-II	One question about lifetime history of SH added into the Suicidal Behaviours Questionnaire-Revised (SBQ-R)	Hierarchical Regression	Negative correlation between Factor 1 and SH approaching significance ($r = -0.10$, $p < 0.1$) Positive correlation between Factor 2 and SH ($r = 0.19$, $p < 0.01$). However, in women this was only true for those scoring high, but not low, on Factor 1
Verona et al., 2012 [11] [Study 2]	To examine the moderating role of gender in the relationship between psychopathy factors and risk of self-directed violence. To examine whether BPD symptoms account for this relationship.	N = 459 (65% male, 35% female) Offenders in prison and the community	PCL:SV	Lifetime History of Aggression Questionnaire (LHA)	Moderating effect of BPD was examined using a composite score of suicide & SH, so will not be discussed. Zero-order correlations are presented.	No significant correlation between Factor 1 and SH Positive correlation between Factor 2 and SH ($r = 0.15$, $p < 0.01$)

Authors/ Year	Aims	Participants	Psychopathy measure	Self-harm measure	Analysis	Results
Negredo, et al., 2013 [21]	To examine the relationships between different definitions of antisocial personality, suicide attempts and self-mutilation in men with mental disorders detained in a forensic psychiatric hospital.	N = 29 (100% male) Patients detained in a forensic psychiatric hospital in Spain	PCL:SV	Semi-structured interview asking about specific forms of self-harm (not validated)	Pearson's Correlation Coefficients	No significant correlations between SH and Factor 1, Factor 2 or Total PCL-R score
Dhingra et al., 2015 [4]	To examine the relationships between the four psychopathy factors and items indexing self-injurious thought and behaviour in a large sample of civil psychiatric patients, when controlling for mixed anxiety-depression, violence victimisation and gender.	N= 871 (58% male, 42% female) From one of three acute inpatient hospitals as part of MVRAS Hospitalized for <21 days Diagnoses: schizophrenia, schizophreniform disorder, schizoaffective disorder, major depression, dysthymia, mania, brief reactive psychosis, delusional disorder, alcohol/other drug abuse or dependence, or a PD	PCL:SV	Six questions relating to self-injurious thoughts and behaviour (not validated)	Latent Class Analysis identified two SH groups: Low-risk and High-risk. Logistic Regression used to assess association between class membership and psychopathy	Low scorers on the Interpersonal facet were more likely to be in the High-risk SH group ($OR = 0.84, p < 0.05$) High scorers on the Affective facet were more likely to be in the High-risk SH group ($OR = 1.27, p < 0.001$) No significant link found with Lifestyle or Antisocial facets
Forouzan & Nicholls, 2015 [22]	To investigate factors of women presenting with psychopathy to evaluate whether these factors play a role in the emergence of psychopathy in females	N = 82 (100% female) French-speaking women who were removed from their family home and placed in Youth Centres during their childhood in Quebec, Canada. 41.5% scored above the cut-off for psychopathy when using cut-off of 25	PCL-R	File review	Phi coefficient	No significant difference between psychopaths and non-psychopaths in regards to history of SH.
Storey, et al., 2016 [23]	To evaluate the psychometric properties of PCL-R ratings for a sample of male offenders.	N = 375 (100% male) All men who were assessed for prison classification over a one year period in the Pacific Region of Canada. 17% scored above the cut-off (≥ 30) for psychopathy	PCL-R	File review	Chi-squared for categorical data Point-biserial correlations	Weak positive correlations between SH and Total score ($r=0.14, p < 0.05$), Factor 2 ($r=0.20, p < 0.001$), Lifestyle facet ($r=0.16, p < 0.05$) and Antisocial facet ($r=0.21, p < 0.001$). No significant correlations between SH and Factor 1, Affective facet or Interpersonal facet.

Recommendations for Further Investigation

Some of the studies that examined the link between total psychopathy score and self-harm failed to show any association. However, this may have been due to small sample sizes or low rates of self-harm. Therefore, further research is needed to examine the link between total psychopathy score and self-harm with larger sample sizes, to establish whether the lack of significant results was due to the studies being underpowered, or due to a 'true' lack of association between psychopathy and self-harm. Only four studies examined the link between self-harm and each of the four facets of psychopathy. The results of these studies were inconsistent, and therefore further research is required to see whether any of the results obtained in previous studies are reliable across different samples and methodologies.

The current review also found that few of the studies that examined the link between psychopathy and self-harm contained, or reported, high numbers of individuals meeting the criteria for psychopathy within their samples. Therefore, it is recommended that further research uses samples that contain higher numbers of individuals that meet the criteria for psychopathy, and that this research directly compares those who meet the criteria and those who do not to see whether the results presented within this review are the same with more psychopathic samples.

Finally, the majority of the studies within this review used self-report measures of self-harm, which may not be reliable due to over- or under-reporting, or recall bias. Therefore, further research could be conducted using more objective measures of self-harm, such as observations or clinical records, and collateral information, for example from family members.

To conclude, further research in this area should include: large sample sizes with greater numbers of individuals who meet the criteria for psychopathy, multiple centres/settings, a well-describe population so that confounding factors such as borderline personality disorder can be considered, a validated measure of psychopathy

such as the PCL-R or PCL:SV, and a valid measure of self-harm that incorporates self-report as well as collateral information.

Limitations of Review

The main limitation of this review is the small number of studies that were found which examine this research question. Overall, only 15 studies were obtained and used in this review. Of these, some studies examined total psychopathy score, some examined Factor 1 and Factor 2, and some examined the four psychopathy facets. Small numbers of studies at each 'level' of psychopathy meant that finding reliable results was difficult. Additionally, only 4 of the 15 studies had good internal and external validity. In reviews with larger number of studies, those deemed of lower quality could be relied upon less; however due to the small numbers of studies in this review, results from those of poorer quality had to be relied upon.

Conclusion

This systematic literature search yielded 14 papers that examine the link between psychopathy and self-harm. The use of a quality appraisal checklist developed by NICE allowed for an appraisal of the quality of each study (9). This showed that most of the studies had good internal validity; however there were some biases that affected the external validity of some of these studies. The results showed that there may be a positive association between total psychopathy score and self-harm; however some studies failed to show this association and therefore further research is required with larger sample sizes to determine whether this was due to the small sample sizes and low rates of self-harm. The results showed a positive association between Factor 2 and self-harm, but failed to show a link between Factor 1 and self-harm. The results did not show consistent evidence for a link between any of the four facets and self-harm. Further research is required in this area to establish whether the results presented in this review are reliable.

Conflict of Interest: none

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