

What are the features of psychopathology for men who commit stalking offences?
A systematic review

R. Wheatley^{a,*}, B. Winder^b, D.J. Kuss^b

^a *NOTTINGHAM Trent University & HMPPS MIDLANDS Psychology Service, HMP NOTTINGHAM, Perry ROAD, Sherwood, NOTTINGHAM NG5 3AG, United Kingdom*

^b *NOTTINGHAM Trent University, United Kingdom*

Aggression and Violent Behavior (2020), 55, 101461. Post-print.

<https://doi.org/10.1016/j.avb.2020.101461>

Abstract:

Background: A systematic review of the bespoke psychopathology features of men who stalk was necessary for informing clinical practice. The absence of such served to perpetuate conjectured links between psychopathology and stalking.

Aim: To systematically review and narratively synthesise published empirical work exploring the psycho- pathology of men who stalk.

Method: The PICO (*POPULATION, Intervention, COMPARATOR and Outcome*) model was utilised to determine the scope of the review. Key inclusion criteria were studies with men who had committed stalking offences, drawn from forensic or clinical settings, employing a non-stalking comparator group that explored psychopathology features. The PRISMA (*Preferred Reporting Items for SYSTEMATIC Reviews AND META-ANALYSES*) process guided this systematic review, followed by a narrative synthesis of study findings.

Results: The systematic review resulted in seven studies, all containing mixed gender samples (typically comprising 90% male) of individuals who had stalked. There were no published men-only comparative studies investigating psychopathology amongst those who stalk. The narrative synthesis highlighted prominent features amongst those who stalk, which were having an insecure (preoccupied) attachment style, and a *PERSONALITY Disorder - Not Otherwise Specified*. Previous assumptions about stalkers having higher intelligence levels than other offenders, and higher prevalence of mental disorders, were challenged. Tentative conclusions were made regarding other psychopathology features.

Conclusions: The links between psychopathology and stalking remain empirically inconclusive. There were few confidently distinct and common psychopathology features amongst stalker samples, unsurprising given study and stalker sample heterogeneity. This systematic review recommended that with the heterogeneity of stalkers as a client group, a case formulation approach to understanding their behaviours is crucial in clinical practice. This is to avoid reliance on limited empirical findings and conjecture surrounding the psychopathology of stalkers as a group. Typology specific, evidence-based literature should underpin clinical and forensic decision-making. Further reviews may benefit from synthesising empirical evidence based on separate typologies, and differentiate between the psychopathology features of males and females who stalk.

1. Introduction

For the purpose of this manuscript, psychopathology is defined as the manifestations of mental disorders' (Maxmen et al., 2009: 5), referring to a person's holistic mental health, psychological functioning and symptoms of mental illness or psychological impairment (Maxmen et al., 2009). Specific responsivity factors would include psychosocial functioning, motivation to change, personality characteristics, mental health, intellectual and cognitive functioning ability (Andrews et al., 2011). Stalking is not rare. Approximately 2.5 million people experience stalking each year in the UK ([Office for National Statistics, 2019](#)). It is a complex and prevalent pattern-based crime ([Pathé et al., 2002](#)), causing serious and sometimes life-threatening harm to victims ([Kropp et al., 2011](#)). Stalking causes psychological harm, often traumatising victims (e.g., [Miller, 2012](#)), and can precipitate post-traumatic stress disorder, anxiety and depression ([Mullen et al., 1999](#)).

It is considered best practice when attempting treatment interventions to first consider mental illness, and respond to cognitive ability and stalker motivation ([MacKenzie et al., 2010](#); [Meloy, 2013](#)). Stalkers motivated by major mental illness are deemed more treatable than stalking that is the result of a personality disorder ([Meloy, 2013](#)). Treatment for the latter often requires long-term and in-depth intervention given the entrenched patterns of dysfunctional interpersonal behaviours, and individuals who are diagnosed are twice as likely to have stalked multiple times ([McEwan & Strand, 2013](#)). Understanding the underlying psychopathology and needs of stalkers is pivotal in improving rehabilitative efficacy (see [Andrews et al., 2011](#); [Nijdam-Jones et al., 2018](#)).

There are neither specific hypotheses to *fully* explain stalking ([Meloy & Fisher, 2005](#)), nor any consensus on associated psychopathology (see [Nijdam-Jones et al., 2018](#); [Purcell & McEwan, 2018](#)). Attachment Theory ([Bartholomew, 1990](#)) has largely been promoted in understanding the psychopathological predisposition for stalking ([MacKenzie et al., 2008](#); [Tassy & Winstead, 2014](#)), conceptualising stalking as behavioural demonstrations of attachment pathology ([Marazziti et al., 2015](#); [Meloy, 2007](#)). Studies have supported the assertion that the insecure, often preoccupied, attachment style is the most common amongst stalkers (e.g., [Dutton et al., 1994](#); [MacKenzie et al., 2008](#)). [Marazziti et al. \(2015\)](#) surmised that this attachment style manifests as a constant anxious state, with the fear of loss and abandonment dominating and leading to desperate and relentless attempts to avoid it. Considering this severe attachment pathology, therapists may inadvertently offer themselves up to become a victim of stalking ([Farber, 2015](#)) as they extend empathy and build the professional relationship. Incidentally, this therapist quality in developing the client-therapist relationship is purported to determine successful therapeutic intervention as opposed to using a specific technique (e.g., [Farber, 2015](#); [Kroll, 1993](#)).

Stalking is not a new behaviour and has historically been linked to major mental illness and general psychopathology (e.g., [Lewis et al., 2001](#); [Meloy, 2007](#); [Nijdam-Jones et al., 2018](#); [Spitzberg & Cadiz, 2002](#)). Sample biases have contributed to the persisting overestimation of psychopathology amongst stalkers, and the assumed severity of stalking outcomes in all cases ([Nijdam-Jones et al., 2018](#)). Unclear and differing legislative frameworks across the globe have led to differences in identifying those who stalk, and who therefore have become sample participants. Most research activities with stalkers have focused on characteristics of, and risk factors, related to stalking offences, using samples

from forensic and/or psychiatric settings, detaining the most serious of stalking offenders ([Lewis et al., 2001](#)).

Assumed links between stalking and psychopathy, personality disorders, and Autistic Spectrum Disorders (ASD) have been explored, acknowledging the potentially different drivers or motivating features. ASD, a lifelong neurodevelopmental condition (Diagnostic & Statistical Manual of Mental Disorders, 5th ed., [DSM-5]: [American Psychiatric Association \[APA\], 2013](#)), has not typically been associated with increased risk of offending ([National Autistic Society, 2017](#)), but offending by an individual with ASD can be attributed to it (see [Allely & Creaby-Attwood, 2016](#); [Browning & Caulfield, 2011](#); [Stokes et al., 2007](#)). For example, individuals with ASD may stalk because of their naïve attempts to establish a relationship in the context of inadequate social functioning ([Stokes & Newton, 2004](#)). Psychopathic stalkers are rare and have motivations for gaining control and interpersonal dominance over another, rather than the underlying emotional attachment of a relationship ([Storey et al., 2009](#)).

Studies have asserted that personality disordered stalkers comprised proportionately the largest subgroup (e.g., 61.5% with personality disorder diagnosis in the study by [Meloy et al., 2000](#)); [Rosenfeld, 2004](#)). Explanations for personality disorder development overlap theories of attachment pathology origins, therefore they may not be separate entities ([Brennan & Shaver, 1998](#)). This is an important conceptual point when exploring psychopathology features of stalkers, given problematic attachment styles are also prevalent ([MacKenzie et al., 2008](#)), as there may be temptation to assign a list of diagnoses and problems without linking them to understand an individual. Stalkers targeting ex-partners (a larger subgroup than those targeting acquaintances or strangers) were found most likely to possess Cluster B personality disorders, with traits of dependent, schizoid and avoidant personality. Of those diagnosed overall, Personality Disorder-Not Otherwise Specified (PD-NOS) was most common (34%: [Meloy et al., 2000](#)). It is noteworthy that this diagnosis presents vast heterogeneity across individuals (see [Johnstone & Boyle, 2018](#)). Two studies have piloted an adapted Dialectical Behaviour Therapy intervention with those who stalk ([Rosenfeld et al., 2007](#); [Rosenfeld et al., 2019](#)), given the suggested prevalence of personality disorder. The first study highlighted some success but the sample was small, and the second study was unable to conclude any success related to this treatment modality. There have been no further published treatment effectiveness studies, and there continues to be an absence of a robust evidence base for effective stalker treatment ([Purcell & McEwan, 2018](#)).

When exploring the links between psychotic disorder and stalking, Erotomania used to dominate the literature ([Mullen & Pathé, 1994](#)), often contextual to stalking in the absence of an intimate relationship. This subtype of stalker are different to ex-partner stalkers and are a less prevalent subgroup. The authors noted that the prototypical individual is an isolated, socially inept person presenting with high levels of sensitivity. They may show narcissistic superiority, and whilst possessing a desire for a relationship they struggle with an associated fear of rejection (see [Mullen et al., 1999](#)).

More recently, [Nijdam-Jones et al. \(2018\)](#) examined psychopathology features of 137 stalkers using *DSM-IV-TR* ([APA, 2000](#)) criteria. Their sample consisted of stalkers referred to a community-based programme between 2005 and 2013 in New York City, USA. The study compared stalkers with and without psychiatric diagnoses. They found that

just over a quarter of their sample did not have a diagnosis and suggested psychopathology may not be as prevalent as previously cited. The prevalence rate of psychotic disorder was similar to that identified within other offender groups, again offering contradictory evidence to previous assumptions ([Nijdam-Jones et al., 2018](#)). These were significant within-group findings.

Attempting to summarise psychopathology features of stalkers is understandably complex. It is widely accepted that those that stalk form a heterogeneous group, leading to a number of classification systems being developed. Categorising stalkers by initial motivation typologies helps to contextualise heterogeneity and inform treatment and risk management planning ([Mullen et al., 1999](#)). For example, studies have explored the features of heterogeneity between typologies of stalker regarding psychopathology. [McEwan and Strand \(2013\)](#) reported that *DSM IV-TR* ([APA, 2000](#)) Axis I and psychotic disorders were significantly more prevalent amongst stranger and acquaintance stalkers than ex-intimate partner stalkers. Gender differences in respect of psychopathology amongst stalkers are also recognised. For example, females are more likely to be classed as an *intimacy seeker* ([Purcell & McEwan, 2018](#); see [Mullen et al., 1999](#) for typologies), and more likely to be diagnosed with serious mental illness ([Strand & McEwan, 2012](#)). The typologies presented by [Mullen et al. \(1999\)](#) and referred to within this manuscript are: *Intimacy Seekers*, who stalk in the context of loneliness; *Incompetent Suitors* who stalk in the context of loneliness or lust, and both tend to target strangers or acquaintances; *Rejected typology* stalkers stalk in the context of a relationship breakdown (usually an ex-partner); the *Resentful stalker*, who commonly feels mistreated or a victim of some form of injustice or humiliation and seeks redress; and *Predatory stalker*, who represent a small number who stalk because of a wider intention, such as sexual assault. International estimates of typology proportions differ due to sample setting biases, varying preferences for classification, and identification biases, perhaps related to legislation. However, the largest proportion is purported to be the Rejected typology, estimated at 47% of total stalking perpetrators in the UK ($n = 124$, [Boon & Sheridan, 2001](#); $n = 60$, [Henley et al., 2020](#)), 45% in the USA (see meta-analysis; [Spitzberg et al., 2010](#)), and 30% in Australia ($n = 250$; [Mullen et al., 2009](#)).

1.1. Aims

Systematic reviews of empirical evidence pertaining to psychopathology in male stalking offenders are lacking. This systematic review aimed to appraise empirical evidence pertaining to the distinct psychopathological features of men who stalk with the research question: Is this client group different to others on psychopathology features? Selected studies for this review therefore had to include a comparator group. Such a review intended to provide a narrative synthesis to assist practitioners in working more collaboratively and therapeutically with men who stalk, and improve rehabilitative and risk management attempts, subsequently affecting public protection and safety.

2. Method

2.1. Scoping search

A scoping search was undertaken prior to commencing the review to identify any existing reviews in this area and to identify relevant literature using The Cochrane Database of Systematic Reviews and Joanna Briggs Institute (JBI) in May 2018 and June 2018. The Cochrane database contains more quantitative research and the JBI more qualitative, therefore providing a useful breadth in the scoping searches. Both yielded no results using “Stalk* Stalking” within the Cochrane database and “All dates > Stalk*” for the JBI database.

2.2. Search strategy

Following initial pilot searches to optimise the sensitivity of search terms, the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA: Moher et al., 2009) guidelines were employed to produce a specific protocol. This protocol was registered on PROSPERO¹ to avoid unplanned duplication and promote transparency from the point of inception. The final search for this review took place in August 2018. Four databases were searched utilising refined search terms, which were: Scopus (the largest database for peer-reviewed literature); PubMed (large US government database giving access to primary literature); ProQuest, specifically PsycINFO (large well-known psychology database); and Criminal Justice Abstracts (EBSCO: criminal justice focus). The universally applied search terms were; “Stalker OR stalking OR ‘obsessional follower’” (line 1), [AND] “disorder OR deficit OR impairment OR syndrome” (line 2); [AND] “psych* OR intell* OR attachment” (line 3). The term “stalk*” was not used given it yielded only brainstem research, and similarly “harass” given it yielded search results pertaining to sexual and discriminatory harassment as opposed to further results linked to the concept of stalking. The term “psych*” was utilised to capture references to psychological, psychopathy and psychiatric references. Table 1 illustrates how the search terms were derived for this review.

Subsequent searches included a review of Google Scholar (first 100 sorted by relevance for search term “male stalker psychopathology”), and searches within key research databases within relevant clinical (National Health Service (NHS) Health Research Authority database) and forensic organisations (Her Majesty's Prison and Probation Service (HMPPS) National Research Committee (NRC) research summaries electronic databases). Grey literature searches were conducted within online databases (PsycINFO: ‘dissertations and theses’, EThOS, and Nottingham Trent University Institutional Repository), and hand searches were conducted within the reference sections of all seven final screened articles. None of the above additional searches produced any new studies for inclusion into the review.

2.3. Study eligibility

¹ PROSPERO is an international prospective register of systematic reviews. The reference number for this review is CRD42018097183. Date of entry June 2018.

The Population, Intervention, Comparator and Outcome (PICO) model (Booth & Fry-Smith, 2004) was utilised to define and deconstruct the review question to develop the inclusion and exclusion criteria for searches. These were applied to search results to screen and determine relevant articles for the final review. The PICO model was chosen given the assumption that comparison studies would be required within the review to answer the question about distinct psychopathology features for stalkers, requiring quantitative methodology.

The studies had to have a sample Population of males who have perpetrated stalking behaviours, including participants aged 18 or over, and those from forensic or clinical settings. This was specified to ensure the target population were recognised either legally or clinically for exhibiting problematic stalking behaviours, hence any college samples were excluded as target samples. The group of interest (Intervention) was determined as those having committed stalking, or related offences, inclusive of other types of offences such as harassment given the different legislative terms used in studies dependent on their year and country of publication. Studies were required to have utilised a Comparator group of assumed non-stalkers (i.e., other types of offenders or a general population sample) to identify distinct psychopathology features for stalkers, including in comparison to general population samples. Whilst there are limitations to this, for example, they could have included people who had stalked but not convicted for such, and were often not sample matched, the focus was to evaluate distinct features of stalkers. The Outcome of studies had to focus on psychopathology, as opposed to stalking behaviours. Given the dearth of published research within this field, the decision was made to include studies from any year of publication and international studies as long as they were available in the English language.

Inclusion and exclusion criteria were determined based on the PICO model and results from piloting search terms to apply when screening search results. Table 2 shows the inclusion and exclusion criteria with brief rationales.

2.4. Data extraction

The PRISMA flow chart shown in Fig. 1 illustrates the stages of data collection, sensitivity of screening within them, and screening outcomes. There were seven final studies to be included in the narrative synthesis (see Table 3). Data collection evidenced there were no studies meeting the exact protocol. Participant groups contained both males and females, and none of the studies for stalker psychopathology employed a comparator group using male-only participants, indicating the general lack of empirical evidence for this offender group, and for this particular aspect of this group, and researcher oversight of potential gender differences in psychopathology.

2.5. Quality assessment

Eligible studies for the narrative synthesis were critically reviewed using an adapted quality appraisal checklist, applicable to comparative study designs originally developed by Cowley (1995). The content of Cowley's checklist (1995) was most appropriate given the nature of the methodology used within the final included articles, and the topic under review. Adaptations were made to ensure contextual validity of the criterion and applicability to the target sample. Specifically, modifications were necessary given the need to appraise studies on the psychopathology of stalkers, considering the reliability and validity of determining measures, and the assumed heterogeneity of stalkers as a group. Further revisions were made based on a review of comparative study design principles to enhance face validity and ability to discriminate over quality. A number of original criteria were retained, e.g., methods of sample matching, use of robust statistical analysis, and processes to prevent bias amongst assessors of psychopathology for their sample. See Table 4 for the adapted checklist utilised in this systematic review. The original quality assessment rating system was utilised as it proved fit for purpose (see Table 5).

3. Results

3.1. Quality assessments

The adapted quality appraisal checklist by Cowley (1995) was used to assess the final included studies through appraising their internal validity and answering the research question, and to appraise the extent to which they may be influenced by key methodological biases in assigning relative weighting to study outcomes in producing conclusive statements.

Each of the seven studies included was deemed adequate in design, contextual to the time period in which it was undertaken, and adequate for exploring the respective research questions. To quality appraise and synthesise findings, each study was peer-reviewed, and assigned a quality rating (see Table 5).

All included studies used a comparative research design, which explores similarities and variance between groups. This type of research design can falter on case selection, especially with small sample sizes. For constructed populations, e.g., stalkers, sample bias can occur in that findings may merely reflect the construction itself (see Mills et al., 2006). For this reason, sensible comparator group selection is essential. None of the included studies employed a randomised sample design and none attended to how they may have controlled for non-stalkers within comparison samples. The strength of selected comparator groups also differed in terms of asserting similarity or variance in study findings. The studies used purposive sampling methods to recruit their target sample given there is poor criminal identification of stalkers. The final included studies included used the best data at their disposal. With samples taken from forensic and clinical (e.g., psychiatry) settings a purposeful bias is created, as the

inclusion criterion aimed to increase the reliability of findings and improve generalisability across this particular population (implications will be covered later within the discussion section). The included studies investigated distinct and some overlapping psychopathology constructs across different time periods, using different tools within different cultures. Therefore, construct equivalence needed consideration (see Mills et al., 2006). This review was pragmatic, open to, and cognisant with, varying terminology for similar constructs under investigation. Notwithstanding, various complexities existed in quality assessing, critically reviewing, and synthesising findings. With comparison studies, there is a limited ability to assign causal associations, and with the included studies there was a limited extent to which it was possible to extend generalisations about stalking offenders outside of studies' populations (external validity). The used samples also reflected differing levels of offending seriousness given there is no internationally convergent framework for what constitutes stalking, and this will conceptually differ based on the different time periods from which the studies have drawn.

3.2. Narrative synthesis rationale

A narrative synthesis of the findings is presented given the heterogeneity of both target and comparator sample groups, and research designs within the included studies, a meta-analysis would not be possible. Following a demographic summary of all studies' samples, the results are organised by psychopathology type (Outcome) to provide a structure for answering the systematic review question, whilst integrating the quality assessment conclusions.

3.3. Demographic information and characteristics of study samples

Demographic information differed across the included studies, impacting on this review's outcome. Studies were conducted between 1995 and 2010, some utilised retrospective (archival) data for analysis, whereas others were prospective in sample selection. Each study provided some demographic information about the target sample, however comparator group selections varied from static groups (i.e., established population norms) to randomised selection. Stalker sample sizes ranged from 17 to 147 (a combined sample of 557). There was a lack of consistent sample matching across studies. Authors did not focus on possible implications of different demographics across their samples, opting for what they believed were 'best-fit' comparator groups. Given varying comparison sample sizes, studies used percentages to highlight similarities and differences, with most employing statistical analyses to interpret any differences found. Whilst most studies recognised the heterogeneity of stalkers as a group, most neither applied a classification system nor report conclusions in this context (n = 4).

The three Australian studies (MacKenzie et al., 2008; MacKenzie et al., 2010;

McEwan et al., 2010) identified their stalker sample using legislative context. Stalkers in these studies had been convicted of, or charged with, stalking offences, or such behaviours had been identified as problematic by the referrer. Harassment offenders were included if the episode lasted over two weeks (considered a 'watershed measure' by Purcell et al., 2002). The studies undertaken by Meloy and Gothard (1995), and Meloy et al. (2000) identified their target sample using criteria such as committing a pattern of stalking or harassment against a person. Their target sample were conceptualised as obsessional followers. Harmon et al. (1995) used similar terminology and identified their target sample by reviewing 379 forensic psychiatry referrals. They screened 48 cases with repeated behaviour patterns of stalking. Sandberg et al. (1998) selected their sample as a committee, and identified those who had displayed stalking behaviours from retrospective observational records spanning a six-year period. Regarding construct equivalence, there was an adequate consistency across studies, given complications in universally defining 'stalkers' as a group because of group heterogeneity.

The three studies conducted in Australia yielded the largest sample numbers (122, 138 and 147 stalkers, respectively), and categorised them by motivational typology (Mullen et al., 1999), attending to the observed heterogeneity amongst stalkers regarding initiating motivations and psychopathology. These three studies were the most recent, conducted in 2008 and 2010, compared to those undertaken in the USA, published between 1995 and 2000. The Australian studies yielded similar demographics amongst their target samples given the similar study time periods, and they used the same participant recruitment source, a forensic clinic with no prerequisite of mental illness. The Australian studies' stalker samples consistently had a higher ratio of males ranging from 89% to 93%, and yielded similar mean ages of between 35 and 36.4 years old (MacKenzie et al., 2008; MacKenzie et al., 2010; McEwan et al., 2010). The stalker typology proportions within the target samples across the three studies were also comparable (see Table 6). The four studies undertaken in the USA (Harmon et al., 1995; Meloy et al., 2000; Meloy & Gothard, 1995; Sandberg et al., 1998) yielded slightly different demographic data and focused primarily on psychiatric illnesses. Their stalker samples came from referrals to forensic psychiatry services and retrospective data taken from archival case records, and suggested typology proportions have been made by the author, based on sample descriptors (see Table 6). The mean ages ranged from 34.9 to 40, sample sizes from 17 to 65, and as with the Australian samples, there was a higher percentage of males within the samples (ranging from 67 to 90%). The sample used by Harmon et al. (1995) produced the lower end of the range, focused on delusional disorder, and employed a purposive sampling approach. Therefore, it yielded a higher number of female participants, standing apart from other studies of stalker psychopathology.

Other than age and gender, very few demographic characteristics of the target and comparator samples from within the included studies could be consistently and meaningfully reported on due to the absence of details.

3.4. Attachment styles

Only one of the included studies focused on attachment styles (MacKenzie et al., 2008) amongst stalkers in comparison to an Australian general public community sample using the Adult Attachment Style measure (Bartholomew & Horowitz, 1991) and the Parental Bonding Instrument (PBI: Parker et al., 1979). Compared to the general population sample, stalkers were significantly more likely to have a negative self-view, to have had emotionally neglectful parental experiences, to have an insecure attachment style as adults, and to score high on the preoccupied subscale. Preoccupied stalkers were described by MacKenzie et al. (2008) as consumed by obsessional, negative thoughts and emotions, and cognitive distortions, and stalking may have roots in attempting to restore self-worth. This aligns with relational goal pursuit theory (e.g., Spitzberg & Cupach, 2003). Two exceptions were found amongst the stalker sample, perhaps reflecting the differing typologies. The intimacy seeker typology sub-group appeared neither more likely than the general public sample to have an insecure attachment style, nor did they hold negative views of self and others above the community sample. Authors hypothesised that as opposed to having a genuinely secure attachment style (and good sense of self-worth), this stalker typology instead possess confidence in the eventuality of a relationship with their victim. The predatory subtype did not exhibit preoccupied attachment styles, supporting the theory that psychopathy is not attachment-based, a common psychopathology for this typology. In both typologies of stalkers the victim is usually an acquaintance/stranger, not an ex-partner.

Further analysis suggested that stalkers remembered their parents as being less caring and more emotionally neglectful than the general public, especially for the rejected (ex-partner stalkers) and predatory stalker typologies. MacKenzie et al. (2008) hypothesised that the two stalker subtypes have responded to the lack of care differently, i.e., one clinging to a relationship out of fear of abandonment (rejected typology), and the other avoiding emotional connections as protection against rejection (predatory typology), manifesting in the initial motivation for stalking. Stalkers also experienced less controlling fathers (paternal controlling characteristics) than the general public, with the exception of the resentful subtype who experienced more. Authors proposed the resentful type (who typically target acquaintances/strangers) do so to redress a perceived injustice, which may either be a replication of their controlling father's behaviour, or a patterned response to prevent re-experiencing powerlessness.

This study is robust and methodologically sound; however the quality assessment suggested the findings should be regarded with some reservations. Whilst odds ratios were employed due to different sample sizes, limitations included utilising the psychometric measures' general community sample norms as comparator groups. The use of such normative data ensures an empirical grounding for comparison, although neither excludes stalkers with high confidence, nor matches on demographic factors.

3.4.1. Attachment styles summary

Stalking appears to be underpinned by psychological vulnerability related to subjective adverse attachment experiences and idiographic interpretation of such, which manifest

differently in adulthood and by typology (see MacKenzie et al., 2008). Stalkers are more likely to have an insecure attachment style, an important psychopathology feature to consider across typologies, and to incorporate into assessment, treatment intervention, and risk management plans.

3.5. Personality disorders

Four included studies evaluated personality disorders. In the first study by Harmon et al. (1995), stalkers had been evaluated using the DSM-III-R (APA, 1987), and only 19% had a personality disorder diagnosis, and Personality Disorder - Not Otherwise Specified (PD-NOS) was the most common. Their stalker sample consisted largely of intimacy seeker or resentful typology stalkers (targeting acquaintances/strangers), sourced from a forensic psychiatry setting, by default therefore most likely to have significant mental health difficulties. These subtypes of stalkers may proportionally be more prevalent within certain forensic psychiatry settings only, therefore generalisability to other stalker subtypes and non-forensic/psychiatric settings would be flawed. Similarly, the prevalence of personality disorder amongst forensic populations is expected to be higher than non-forensic samples. The fifth edition of the Diagnostic and Statistical Manual of mental disorders (DSM-5: APA, 2013) is now in use, which has reorganised the categorisation of personality disorders. It contains a reduced number of disorders relative to the DSM IV-TR (APA, 2000), and has removed and reconceptualised what was known as PD-NOS. Relevant implications are discussed later.

This studies' quality appraisal highlighted strengths. Stalker and comparators samples were sourced from the same setting, in the same time period, and using an internationally recognised diagnostic tool. The limitations provoke doubt over these findings in isolation given the subjective allocation of cases to the stalker sample group (from archival records) and a lack of inter-rater reliability processes for diagnoses. It is also unclear if evaluators for assigning to groups were blind to the psychopathology outcomes, and aims of the study, in doing so.

The second study intended to explore the assumption, in the absence of empirical evidence, of higher mental disorder rates amongst stalking offenders (Meloy & Gothard, 1995). This study used archival case records to compare demographic and clinical variables between obsessional followers (n = 20) and an offender group with mental disorders (n = 30). The obsessional followers sample consisted of 55% ex-partner (rejected typology) stalkers, whilst the remaining stalked acquaintances or strangers. The results showed no significant differences between groups on Axis I disorders (using DSM-III-R; APA, 1987), which makes sense given higher rates of illness amongst non-intimate partner stalkers. However, it also highlighted significant differences on Axis II conditions. The stalker group were more likely to have a personality disorder compared to the comparison group, and 85% met the criteria for Axis II diagnoses. Notably for the stalker sample, only 10% had antisocial personality disorder, whilst 75% had diagnoses for a broad range of other personality disorders or developmental disorder. The most prevalent one was PD-NOS with 40%. The

quality assessment for this second study suggested the findings should be considered with some reservation despite being relatively sound scientifically. It used a small sample size, lacked proportionate sample size analyses and lacked inter-rater reliability processes in determining historical psychopathology diagnoses. The evaluators were however, blind to group allocation and study aims thus reducing bias.

Despite samples consisting of different stalker typologies, these two studies had the same conclusions regarding PD-NOS and the low prevalence of antisocial personality disorder amongst their stalker samples. In contrast, the authors of the second study reported that over a quarter of their comparator sample had antisocial personality disorder diagnoses. These findings perhaps further support the links made between stalking and attachment pathology in understanding the underlying psychopathology. A replication study conducted by Meloy et al. (2000) was assessed in quality similar to the first by Meloy and Gothard (1995), although it employed a greater sample size and equivalent comparator group size. As with the previous design (see Meloy & Gothard, 1995), the study employed a static group archival method of data collection and determined diagnoses using the DSM-III-R (APA, 1987). Researchers found no significant differences between the samples on Axis I or II diagnoses. Within the stalker sample, 62% had Axis II diagnoses, and 9% met the criteria for antisocial personality disorder. Supporting previous findings, the most prevalent diagnosis was PD-NOS (n = 22: 34%), and the most common descriptor trait was narcissistic (n = 19).

The fourth study by Sandberg et al. (1998) used 17 involuntary inpatient stalkers diagnosed following retrospective review of observational records by a subcommittee. This stalker sample were not facing criminal charges but had all harassed hospital staff following discharge. Clinical information from case records were compared to 326 typical inpatients whose clinical and demographic information had been collected in a previous study. Authors reported that their stalker sample were significantly more likely to have a personality disorder diagnosis and/or paranoid disorder (Erotomania subtype). Authors highlighted that their target group were likely to be the most noticeable and serious cases creating a sampling bias, and asserted that findings would be most applicable to formulating systematic management strategies. The quality appraisal suggested findings should be considered with some doubt when making conclusions on the distinct psychopathology of stalkers. This study used a small target sample size without adjusting statistical analysis to account for the difference in size, instead only reporting percentages of prevalence by comparison. There was no inter-rater reliability process for determining psychopathology, and limitations in comparator group selection existed due to reliance on self-reporting. The comparator group could have employed undetected stalking behaviours, given the prevalence of denial and minimisation amongst stalkers (see MacKenzie et al., 2009).

3.5.1. Personality disorders summary

The narrative synthesis is inconclusive of whether stalkers differ from other offender groups regarding personality disorder prevalence given study heterogeneity, most notably sample biasing. The highest quality study (using a large proportion of rejected typology stalkers)

concluded there were no significant differences between groups, but within their stalker sample, PD-NOS was most common (Meloy et al., 2000), commonly found across the studies. This personality subtype has been replaced in the DSM-5 edition (APA, 2013) with Personality Disorder - Trait Specified, which provides a pathological trait profile as opposed to a vague diagnosis, often used to rule out the presence of standard personality disorders (Oldham, 2015).

References to attachment pathology were made amongst the studies. Specifically, Meloy and Gothard (1995) concluded that stalkers were more likely to have non-antisocial personality disorders than offenders with mental disorders. This was deemed the distinguishing feature, and conceptual links to attachment pathology were made. Such links were supported by Brennan and Shaver (1998) and are further considered within the discussion section.

3.6. Delusional disorders

Delusional disorders and stalking have a longstanding presumed association, unsurprising given historical sample biases and the absence of applied classification systems to stalker participants. To illustrate, MacKenzie et al. (2010) found that within their sample, 86% of the intimacy seekers were psychotic; incorporating schizophrenia, delusional disorder and/or bipolar disorder, with delusional beliefs (utilising the DSM-IV-R [APA], 2000). This significant finding was much higher than other stalker subtypes in their target sample, and commensurate with this subtype largely characterised by their delusional presentations. This was the only study considered likely to be valid with confidence. It was most recent, applied stalker typologies to address idiosyncrasies within the target group, and used internationally robust measures, applying inter-rater reliability processes.

Whilst Meloy et al. (2000) found delusional disorder to be uncommon within their stalker sample ($n = 4$: 6%), they reported that psychotic disorder was present at the time of stalking in 22% of the participants. Nine participants (14%) showed symptoms of Erotomania and delusional beliefs, identified most amongst the acquaintance/ stranger victim-type stalkers (likely the intimacy seeker typology). The quality assessment provoked some reservations in asserting the reported findings as robust. For example, as highlighted in the study limitations, it relied on retrospective case information to diagnose participants and did not employ any inter-rater reliability processes.

The included study by Harmon et al. (1995) divided their stalker sample into two sub-groups; those experiencing affectionate/ amorous, and persecutory/ angry type delusions. Amongst the stalker group, 29% of cases had satisfied the DSM-III-R (APA, 1987) criteria for Delusional (Paranoid) Disorder. Only six of these were defined Erotomaniac and these were all female. Of the remaining cases, schizophrenia and personality disorder were identified. They concluded that Erotomania existed amongst their stalker sample (forensic psychiatry setting), but was not the sole delusional disorder driving behaviours. Furthermore, they reported similarities

between their stalker sample sub-groups, suggesting motivations of love pursuit or vengeance are not discriminatory. This study's quality appraisal casts some doubts over conclusions drawn given the range of limitations.

3.6.1. Delusional disorders summary

Delusional disorder is not prevalent amongst stalkers. While the studies within this systematic review appear to contradict this, it is important to note that the stalker samples were drawn from psychiatric and forensic and/or psychiatry settings. This creates a bias in findings and limits generalisability across stalkers as a population. Erotomania featured in two studies, yet at low prevalence, and predominantly related to females. The most consistent finding from robust studies was the presence of psychotic/delusional disorders amongst a particular subtype of stalkers, described as intimacy seekers or acquaintance/ stranger stalkers (MacKenzie et al., 2010; Meloy et al., 2000).

3.7. Clinical syndromes

Included studies reported various clinical syndromes. McEwan et al. (2010) found 86% of their stalker sample had received at least one mental disorder diagnosis; and 40.4% from those diagnosed with Axis I conditions were also diagnosed with a personality disorder. The sample setting (a forensic mental health clinic) may have influenced and perhaps overestimated prevalence rates for mental disorder. The quality assessment of this study highlighted that whilst presenting robust methodology, some reservation over the findings exist due to the small target sample size. To mitigate this, odds ratios were applied to the data to account for varying sample sizes and a variety of adequately matched comparator groups were selected, addressing the study aims with additional rigour.

In a previous study by Meloy and Gothard (1995), 60% of the stalker sample ($n = 12$) had a history of in- or out-patient psychiatric treatment, and 85% had an Axis I disorder diagnosis ($n = 17$). However, Axis I disorder prevalence was similar between the target and comparator groups. Their stalker participants, 'obsessional followers', appeared to consist of a number of typologies based on sample narratives, with around half being rejected typology. Whether Erotomaniac or not, the sample reported a history of conflicted or impaired relationships, or were socially isolated, had never had an intimate relationship, failed on their previous attempts to attain an intimate relationship, and often victimised strangers. Their findings disputed notions that stalking was committed by mentally healthy, otherwise law-abiding individuals, however biases with sample size, setting, and study focus may undermine such a generic assertion for stalkers.

The replication study by Meloy et al. (2000) reaffirmed the view that stalkers may not be law-abiding, trouble free individuals prior to stalking, and that this behaviour may be an extension of problematic antisocial activities. Their study concluded that the most common Axis I

diagnosis for stalkers was substance dependency (86% of their 65 'obsessional followers'), and they found mood disorder to be less common. As with the quality appraisal of the original study, this replication study has limitations regarding sample bias.

3.7.1. Clinical syndromes summary

Some studies included in this review are substantially biased in their conclusions of Axis I disorder prevalence amongst stalkers because of the participant sample sources, and lack of consideration for the variety of stalker subtypes when asserting their conclusion about stalker psychopathology.

3.8. Education and intelligence levels

Various methods were used to report on intelligence levels within the included studies, but are summarised together in this section due to confidence in construct equivalence. In their study, Meloy and Gothard (1995) suggested that none of their stalker sample were of below average intelligence, based on using the Shipley Test (see Meloy & Gothard, 1995), or on the examiner's judgement. The stalker sample were better educated and more intelligent than the comparison group. Whilst they acknowledged limitations to their findings (i.e., reliance on the Shipley Test, clinical examiner judgement, and missing data), this finding was deemed commensurate with the perceived ability of stalkers for manipulation and resourcefulness. In the replication study, Meloy et al. (2000) found that whilst their stalker group had significantly higher estimated IQ levels, they were not better educated. They employed the same assessment methods of IQ, thus the limitations described above persisted, although they had attempted to assign equivalent WAIS-R²² bandings to provide a more descriptive assessment.

Two studies relied solely on demographic data regarding education levels. Within their sample, Harmon et al. (1995) found that their whole stalker cohort had some high school education, compared to only 3% of the comparison clinic cohort. Almost 80% of the stalker sample had completed high school (compared to less than 30% in the comparator group), with 40% being college graduates (compared to 6% of the clinic group). There were no clear descriptions of criteria for assignment to the two sample groups, hence only tentative conclusions can be drawn from these reported differences.

In contrast, Sandberg et al. (1998) found that their stalker and comparator group did not differ significantly regarding education and all had at least a high school education. Both groups were drawn from a specific population and discriminating allocation to groups was weak. The study findings are considered with some doubt based on the quality assessment undertaken.

²² The Wechsler Adult Intelligence Scale (WAIS) is on its fourth edition: Wechsler, D. (2008). Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV). San Antonio, TX: The Psychological Corporation.

The included study by MacKenzie et al. (2010) deemed most valid regarding their findings based on the quality assessment undertaken directly addressed intelligence levels amongst stalkers. They evaluated 147 stalkers and whilst acknowledging the sample did not constitute the most serious cases (sourced from a community-based clinic), authors asserted they were more representative than retrospective case samples used in previous studies. Their comparator group was chosen based on ethnic composition match, and availability of both PIQ and VIQ scores of the sample. The smaller sample size of the comparator group (n = 88) was argued justifiable given the availability of best fit robust IQ measurement and matching. The authors asserted previous assumptions about intelligence levels amongst stalkers may be misleading, highlighting limitations of previous studies (i.e., Meloy et al., 2000; Meloy & Gothard, 1995), similar to those identified by the present review. For example, conclusions based on retrospective analyses of case notes prepared for other purposes, and using years in education as a proxy for standardised IQ measures may be weak. To illustrate, Mackenzie et al. (2010) found no consistent correlation between years in education and IQ scores amongst their stalker sample. The resentful subtype on average spent more years in education, yet had the lowest mean Verbal IQ³³ (VIQ), whilst the predatory subtype had the highest mean VIQ, yet they were less likely to complete high school.

In their study, MacKenzie et al. (2010) administered the Wechsler Abbreviated Scale of Intelligence (WASI⁴⁴). Acknowledging its limitations as an abbreviated test, authors presented correlation coefficients of the WASI with the WAIS-III, and made interpretative adjustments to compare the WASI scores between groups. They compared the WASI scores of the stalker group with two samples: a general population norms adult sample (M = 100, SD = 15, taken from the WASI manual) and an offender sample (M = FIQ 87.66 [SD = 11.15]; VIQ 86.48 [SD = 11.85]; PIQ 91.74 [SD = 11.29]). They found the mean stalker IQ was 91.59 (SD = 16.2), and VIQ scores were significantly lower than PIQ scores. Only 36% of stalkers had completed secondary education. The FIQ and PIQ scores for the whole stalker group fell in the average range, whilst VIQ fell in the low average range, giving a discrepancy (PIQ > VIQ) of 9.8. Authors highlighted the difficulty with estimating FIQ scores when the discrepancy between VIQ and PIQ exists at a significant level.

The comparison of the stalker IQ scores and general population norms showed their FIQ was significantly lower. The same conclusion was revealed for VIQ scores, however the PIQ score for the whole stalker group did not differ from the norm sample. When compared with the general offender comparator sample, the stalker sample did not differ significantly on FIQ. Stalker subtype examination revealed the intimacy seekers and predatory stalker typologies had a higher FIQ than the offender sample. Similarly, there were no significant differences in VIQ scores of both samples, yet the intimacy seeker subtype produced a higher mean score

³ Full Scale Intelligence Quotient (FSIQ) refers to an assessment rating of a person's complete cognitive capacity, comprising of Verbal IQ (VIQ) and Performance IQ (PIQ). VIQ indicates capabilities and limitations in a person's understanding and use of the spoken word. PIQ is a score resulting from assessments of mental capacity using nonverbal skills.

⁴ The Wechsler Abbreviated Scale of Intelligence (WASI) is a much shorter measure of FSIQ, VIQ and PIQ (see Wechsler, 1999).

than the offender sample. The PIQ examination showed similar results, with the intimacy seekers and rejected subtypes producing higher PIQ scores than the offender sample.

These findings suggest the small sub-group of intimacy seekers (known to target strangers and largely suffer major mental disorder) have higher intelligence levels. This may explain the confident conclusions of earlier included studies by Meloy and Gothard (1995), and Meloy et al. (2000), asserting higher intelligence amongst stalking offenders than other offender groups, having relied on psychiatric patient samples. With practical relevance, MacKenzie et al. (2010) posit that given the prevalence of psychosis amongst intimacy seekers (86%), appealing to their intellect as a way to encourage desistance may be futile. Conceptually, they assume that the intimacy seekers' delusional pursuit of the victim must override competent cognitive ability.

3.8.1. Intelligence levels summary.

The robust study by MacKenzie et al. (2010) presents contradictory findings to previous studies that led to a presumption that stalkers are more intelligent than other offender groups. The intelligence levels of stalkers are asserted to be lower than the general population sample, and similar to the offender comparator group. The stalker sample Performance IQ was found to be superior to their Verbal IQ; a finding useful for practical application in designing bespoke intervention.

3.9. Suicide rates

Only one study included in this review focused on suicide prevalence amongst stalkers compared to non-stalking groups (McEwan et al., 2010). It concluded prevalence rates were significantly higher amongst stalkers. A 2.2% incidence rate was found and a relative risk calculation showed the stalker group 80 times more likely to have committed suicide in the study period compared to the three comparator groups. This non-randomised comparison study included 138 participants in the stalker group, using data over a three-year period (2004-2006). The 12-month follow up design employed relative risk ratios to compare data with three comparator groups. These were suicide rates data from the Australian general population between 1995 and 2005, suicide rates data from a 1998 research sample consisting of individuals referred to Australian psychiatric services between 1961 and 1994, and a community-based offenders dataset from England and Wales. Researchers indicated comparability in suicide rates between the UK and Australian general population at that time.

Three participants had committed suicide during the follow up period. They were male and all stalking episodes had been driven by a desire for a relationship; two were intimacy seekers with delusional beliefs, and one fitted the rejected typology. All three had been in contact with the criminal justice system, and two had been subject to protective orders (both breached); none had been violent towards the victim or third parties. They had all been in-patients with

psychiatric services at some point in their lives, with primary concerns being depressive symptoms. Despite the small number, the authors propose that added stressors from the contextual stalking episode may increase risk amongst those with existing mental health vulnerabilities. This study was quality assessed and met most of the methodological key criteria but with some limitations, namely the outcome sample size to draw conclusions from ($n = 3$). Its strengths, however, lie in its sample matching attempts, using best-fit populations from three separate comparison groups.

3.9.1. Suicide rates summary

The empirical evidence suggests a low baseline prevalence, however a comparatively higher risk of suicide amongst stalker groups. This is based on only one methodologically robust study. Whilst McEwan et al. (2010) acknowledged the target group setting influenced mental illness prevalence rates, they urged clinicians to consider suicide risk when working with stalkers, alongside the risks they pose to victims. They assert the need for clinicians to assess stalkers for depression symptoms, and where relevant, incorporate crisis and risk management plans to mitigate risks. Managing the psychological distress experienced by stalkers will similarly benefit victims given the associated links to risk.

4. Discussion

This systematic review collated and appraised empirical evidence on psychopathology features for adult male stalkers. It reviewed studies using participants who had committed stalking offences from forensic and clinical settings (i.e., excluding student samples as they would not reliably consist of formally recognised stalkers and would weaken the systematic review findings). Focusing on specific target sample criteria improved the reliability of findings and generalisability across this particular population (i.e., in comparison to also including stalkers in non-forensic/psychiatric populations). Stipulating the use of nonstalker comparator groups further supported the reliability of findings. All included studies used mixed gender samples. Nonetheless, meaningful conclusions from findings were drawn and valuable implications presented for research and clinical practice.

Seven studies were included in this systematic review and narrative synthesis. Evaluations of this best available evidence were undertaken using internal and external validity assessments. This was an essential step in evaluating established knowledge, and identifying possible explanations for engagement challenges faced by professionals in working with stalkers. In conclusion, prevalent and distinguishing psychopathology features of male stalkers were (1) an insecure attachment style, (2) a Personality Disorder - Not Otherwise Specified diagnosis, and, (3) an average IQ level.

The most recently published study on stalker psychopathology supports this review's findings that mental disorders are not as prevalent as historically presumed (Nijdam-Jones et

al., 2018). In proportionately rare cases where delusional beliefs were driving stalking behaviours, victims were more likely to be strangers or acquaintances (Meloy et al., 2000), and stalkers fit best within the intimacy seeker typology (MacKenzie et al., 2010), which refers to a similar, if not the same, subtype of stalkers. Assessing mental disorder is important in initial assessment and case formulation with stalkers, (1) to rule in or out serious illness that could be driving stalking (e.g., amongst intimacy seeker or resentful typologies) as this psychopathology is thought to be more treatable than that underpinned by personality disorder (Meloy, 2013); (2) to assess and address contributory or symptomatic distress pertaining to stalking pursuits across all typologies. Relatedly, evidence indicates a higher risk of suicide amongst stalkers, potentially linked to current or previous mental health concerns, and identified within the intimacy seeker and rejected typologies (McEwan et al., 2010). Considering the additional emotional stress contextual to the stalking for the stalker may heighten risk in an already psychologically vulnerable population, for themselves and their victim.

Meaningful conclusions about personality disorder prevalence amongst stalkers could not be drawn. The highest quality study in this review concluded there were no significant differences on the prevalence of personality disorders between the stalker sample and other offenders (Meloy et al., 2000). Within the stalker sample, personality disorders were present in 62% cases, and PD-NOS was the most common diagnosis, similar to other studies (Harmon et al., 1995; Meloy & Gothard, 1995). PD-NOS has been summarised by Wilberg, Hummelen, Pedersen and Karterud (2008: 467) as 'a milder form of PD but is nevertheless associated with significant clinical problems'. This may explain why stalkers are often presumed to be otherwise law-abiding, and psychosocially well-functioning. Unfortunately, PD-NOS was a vague diagnosis and arguably of minimal clinical application given the vast heterogeneity within the diagnosis (Oldham, 2015). The latest DSM (5th ed., APA, 2013) addresses this in their hybrid model, intending to provide a more precise and characteristic picture within this diagnosis, now called Personality Disorder - Trait Specified (Sevecke et al., 2016). Given stalker heterogeneity it is perhaps more prudent to avoid assigning a list of psychopathology labels to this offender group and instead seek to understand their individual problematic functioning and worldviews. This may assist in providing more idiosyncratic case formulations.

Within this review, there was robust evidence to conclude that stalkers were more likely to have an insecure attachment style in comparison to the general population, particularly the preoccupied type (Mackenzie et al., 2008). A preoccupied attachment style is rooted in experiencing inconsistent caregiver support (MacKenzie et al. (2008), and it is purported that these experiences of inconsistency lower an individuals' threshold for perceived attachment threats from their environment (Brennan & Shaver, 1998). This could help explain the conceptual links between attachment style, personality disorder traits, and stalking behaviours. A concomitant finding, related to insecure attachment styles, was that stalkers were more likely than the general population to hold a negative self-view (MacKenzie et al., 2008). The origins of personality disorders are deemed relatively poorly understood, although it has been asserted that they are acquired disorders related to negative childhood experiences (Sevecke et al., 2016), and presumably the development of a negative self-view.

Understanding diagnosed personality disorders through attachment theory in relation to stalking may forge a more compassionate case formulation approach to understanding the behaviour and devising treatment and risk management strategies.

The absence of qualitative studies with stalking offenders constitutes a significant knowledge gap in understanding what drives stalking, and which individual psychopathology features may contribute. To understand those who commit stalking offences on a more fundamental and idiosyncratic level, Nijdam-Jones et al. (2018) suggest exploration beyond assumed mental disorders to expose wider psychological and motivational contributors to these persisting behaviours. By paying attention to any responsivity factors in this way, practitioners will be better equipped to tailor treatment pathways and risk management plans (MacKenzie & James, 2011).

4.1. Limitations and external validity

This review set out explicitly to study a specific population as a whole and synthesise findings on psychopathology distinct to this group. It was accepted that comparison studies have limited ability to assign causal associations, and it was clear that the included studies had limited ability in extending generalisations about stalkers of a different typology or classification to those used within them. There were very few psychopathology studies with stalkers that classified typologies within their stalker samples, that employed appropriate comparator groups, and there were none separating genders within target samples, from which to draw reliable conclusions. The quality of studies included in this review varied, and evaluations were based on an otherwise untested adapted checklist.

Included study samples consisted largely of males, however limitations remain in answering the review question given the use of mixed gender sample studies to draw conclusions. There was also clear study heterogeneity. The study settings were all forensic and/or psychiatric, creating bias in the results for mental disorders, and may reflect only the most serious offenders. There may have been gender biases and general biases over diagnosis pertaining to time periods, and the psychometric and diagnostic measures used. Some studies employed retrospective designs, whilst others were prospective in nature, utilising inter-rater reliability processes.

4.2. Implications for practice and policy

Understanding stalker heterogeneity is crucial. Included studies chose different comparator groups to investigate distinct stalking psychopathology, and many did not attend robustly to target sample heterogeneity, neglecting to highlight stalker subtypes, which limits the generalisability of findings. Further research to determine psychopathology of stalker

in general need to be mindful of this. The narrative synthesis herein highlights the differing needs and psychopathology of between stalker subtypes and therefore supports case specific approaches to understanding how best to engage, assess, and develop risk management strategies with stalkers. This review advocates individual level exploration of manifesting psychopathology features (including attachment style), and their relationship to stalking, contrary to further analysis of psychopathology prevalence on a group level given heterogeneity (also see Nijdam-Jones et al., 2018). To avoid reliance on limited empirical findings and conjecture surrounding the psychopathology of stalkers as a group, typology specific, evidence-based literature should underpin clinical and forensic decision-making.

This review challenges historical assumptions of the strength of associations between stalking and major mental illness, and of higher intellectual levels than other offenders. It concludes that whilst there may be some distinct differences between adult male stalkers and other populations (i.e., general, psychiatric, and other offender populations), there are also similarities, and thus each person would benefit from individual and comprehensive psychopathology and responsivity assessments to fully understand their treatment and responsivity needs. This assertion is further supported by the specific findings regarding the prevalence of PD-NOS. This diagnosis, and more importantly the problematic manifestation of a variety of traits the diagnosis infers, can differ amongst stalkers, adding to skepticism over the validity and helpfulness to clients of diagnosis and the wider DSM-5 framework (see Johnstone & Boyle, 2018). The evidence base for formulation approaches as interventions is lacking (see Cole et al., 2015), and understanding an individuals' problem behaviours contextually to them has benefits beyond simply assigning psychiatric diagnoses, which effectively capture symptomatology (Johnstone & Boyle, 2018).

These are all important issues given rehabilitative interventions for stalkers are in their infancy (Purcell & McEwan, 2018). In the current absence of randomised and/or controlled trials focusing on the rehabilitative treatment of stalkers, using individual psychological intervention strategies is helpful (e.g., MacKenzie & James, 2011; MacKenzie et al., 2010; McEwan et al., 2011).

4.3. Future research

The current systematic review highlights a clear gap in robust and consistent empirical evidence regarding the differences between the psychopathology features of male adult stalkers, compared with other offenders, general population samples, and women. Empirical data pertaining to this and case formulation-led research may provide richer explorations of psychopathology features of stalkers, and shape practitioner intervention strategies. Whilst some research has concentrated on the links between stalking psychopathy, and Autistic Spectrum Disorders (ASD), these studies are limited.

5. Conclusion

This systematic review provides a synthesised narrative of included studies regarding the psychopathology of male stalkers. This was an essential step in evaluating established knowledge, and in identifying possible explanations for engagement challenges faced by professionals in working with stalkers. In conclusion, distinguishing psychopathology features of male stalkers were the presence of insecure attachment styles, Personality Disorder - Not Otherwise Specified (PD-NOS), and having an average IQ level (with Performance IQ greater than Verbal IQ).

Given the heterogeneity of stalkers and the evidence of associated distinct psychopathology features within typologies, individual case study research would add to existing empirical evidence. Richer idiosyncratic data pertaining to psychopathology features could assist in further informing policy and clinical practice concerning the assessment, treatment, and management of a subset of stalking offenders. Qualitative and mixed methods approaches may assist in addressing the gaps in the evidence base regarding experiential expert information.

This review supports the suggestion that further research could explore the clinical predispositions of stalkers, including underlying poor self-worth, fragile narcissism, abandonment anxiety, rejection sensitivity, and poor emotional coping strategies (see Nijdam-Jones et al., 2018). Diagnostic labels are perhaps limited and limiting in gaining an understanding of, and assisting in working with those who stalk.

Acknowledgments

This work as part of a Doctor of Psychology research programme was funded by HMPPS, UK.

References

- Allely, C., & Creaby-Attwood, A. (2016). Sexual offending and autism spectrum disorders. *Journal of Intellectual Disabilities and Offending Behaviour*, 7(1), 35-51.
- American Psychiatric Association (1987). *Diagnostic and Statistical Manual of mental disorders* (3rd ed., revised; DSM-III-R). Washington: American Psychiatric Publishing.
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of mental disorders* (4th ed., text revision; DSM-IV-R). Washington: American Psychiatric Publishing.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (DSM-5). Washington: American Psychiatric Publishing.
- Andrews, D. A., Bonta, J., & Wormith, S. J. (2011). The Risk-Need-Responsivity (RNR) model: Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior*, 38(7), 735-755.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147-178.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226.
- Boon, J. C. W., & Sheridan, L. (2001). Stalker typologies: A law enforcement perspective. *Journal of Threat Assessment*, 1, 75-97.
- Booth, A., & Fry-Smith, A. (2004). Developing the research question. *Etext on Health technology Assessment (HTA) Information Resources*.
- Brennan, K. A., & Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, parental death, and perceptions of parental caregiving. *Journal of Personality*, 66(5), 835-878.
- Browning, A., & Caulfield, L. (2011). The prevalence and treatment of people with Asperger's syndrome in the criminal justice system. *Criminology & Criminal Justice*, 11(2), 165-180.
- Cole, S., Wood, K., & Spindelov, J. (2015). Team formulation: A critical evaluation of current literature and future research directions. *Clinical Psychology Forum*, 275,13-19.
- Cowley, D. (1995). Protheses for primary total hip replacement. A critical appraisal of the literature. *International Journal of Technology Assessment in Health Care*, 11, 770-778.
- Dutton, D. G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships 1. *Journal of Applied Social Psychology*, 24(15), 1367-1386.

- Farber, S. K. (2015). My patient, my stalker empathy as a dual-edged sword: A cautionary tale. *American Journal of Psychotherapy*, 69(3), 331-355.
- Harmon, R. B., Rosner, R., & Owens, H. (1995). Obsessional harassment and erotomania in a criminal court population. *Journal of Forensic Sciences*, 40(2), 188-196.
- Henley, S., Underwood, A., & Farnham, F. (2020). National stalking clinic: A UK response to assessing and managing stalking behavior. *Psycho-Criminological Approaches to Stalking Behavior: An International Perspective* 335.
- Johnstone, L., & Boyle, M. (2018). The power threat meaning framework: An alternative nondiagnostic conceptual system. *Journal of Humanistic Psychology*, 22167818793289.
- Kroll, J. (1993). *PTSD/borderlines in therapy: Finding the balance*. WW Norton & Company: New York, USA.
- Kropp, P. R., Hart, S. D., Lyon, D. R., & Storey, J. E. (2011). The development and validation of the guidelines for stalking assessment and management. *Behavioral Sciences & the Law*, 29(2), 302-316.
- Lewis, S. F., Fremouw, W. J., Ben, K. D., & Farr, C. (2001). An investigation of the psychological characteristics of stalkers: Empathy, problem-solving, attachment and borderline personality features. *Journal of Forensic Science*, 46(1), 80-84.
- MacKenzie, R. D., & James, D. V. (2011). Management and treatment of stalkers: Problems, options, and solutions. *Behavioral Sciences & the Law*, 29(2), 220-239.
- MacKenzie, R. D., James, D. V., McEwan, T. E., Mullen, P. E., & Ogloff, J. R. P. (2010). Stalkers and intelligence: Implications for treatment. *The Journal of Forensic Psychiatry and Psychology*, 21(6), 52-872.
- MacKenzie, R. D., McEwan, T. E., Pathé, M. T., James, D. V., Ogloff, J. R. P., & Mullen, P.E. (2009). *Stalking risk profile. Guidelines for the assessment and Management of Stalkers*. Australia: Stalkinc. Pty Ltd and Monash University.
- MacKenzie, R. D., Mullen, P. E., Ogloff, J. R., McEwan, T. E., & James, D. V. (2008). Parental bonding and adult attachment styles in different types of stalker. *Journal of Forensic Sciences*, 53(6), 1443-1449.
- Marazziti, D., Falaschi, V., Lombardi, A., Mungai, F., & Dell'Osso, L. (2015). Stalking: A neurobiological perspective. *Rivista di Psichiatria*, 50(1), 12-18.
- Maxmen, J. S., Ward, N. G., & Kilgus, M. D. (2009). *Essential psychopathology and its treatment* (3rd ed.). New York, USA: WW Norton & Company.
- McEwan, T., Mullen, P., & MacKenzie, R. (2010). Suicide among stalkers. *Journal of Forensic Psychiatry and Psychology*, 21(4), 514-520.
- McEwan, T. E., Pathé, M., & Ogloff, J. R. (2011). Advances in stalking risk assessment. *Behavioral Sciences & the Law*, 29(2), 180-201.

- McEwan, T. E., & Strand, S. (2013). The role of psychopathology in stalking by adult strangers and acquaintances. *Australian and New Zealand Journal of Psychiatry*, 47(6), 546-555.
- Meloy, J. R. (2007). Stalking: The state of the science. Editorial. *Criminal Behaviour and Mental Health*, 17, 1-7.
- Meloy, J. R. (2013). *Stalking*. USA: University of California, San Diego, CA.
- Meloy, J. R., & Fisher, H. (2005). Some thoughts on the neurobiology of stalking. *Journal of Forensic Science*, 50(6).
- Meloy, J. R., & Gothard, S. (1995). Demographic and clinical comparison of obsessional followers and offenders with mental disorders. *The American Journal of Psychiatry*, 152(2), 258-263.
- Meloy, J. R., Rivers, L., Siegel, L., Gothard, S., Naimark, D., & Nicolini, J. R. (2000). A replication study of obsessional followers and offenders with mental disorders. *Journal of Forensic Sciences*, 45(1), 147-152.
- Miller, L. (2012). Stalking: Patterns, motives, and intervention strategies. *Aggression and Violent Behavior*, 17, 495-506.
- Mills, M., Van de Bunt, G. G., & De Bruijn, J. (2006). Comparative research: Persistent problems and promising solutions. *International Sociology*, 21(5), 619-631.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7).
- Mullen, P. E., & Pathé, M. (1994). Stalking and the pathologies of love. *Australian and New Zealand Journal of Psychiatry*, 28(3), 469-477.
- Mullen, P. E., Pathé, M., Purcell, R., & Stuart, G. W. (1999). Study of stalkers. *American Journal of Psychiatry*, 156(8), 1244-1249.
- Mullen, P. E., Pathé, M., & Purcell, R. (2009). *Stalkers and their victims* (2nd ed.). Cambridge: University Press.
- National Autistic Society (2017). *Autism: a guide for police officers and staff*. Retrieved from <https://www.autism.org.uk/products/core-nas-publications/autism-a-guide-for-criminal-justice-professionals.aspx>
- Nijdam-Jones, A., Rosenfeld, B., Gerbrandij, J., Quick, E., & Galietta, M. (2018). Psychopathology of stalking offenders: Examining the clinical, demographic, and stalking characteristics of a community-based sample. *Criminal Justice and Behavior*, 45(5), 712-731.
- Office for National Statistics (2019). *Crime in England and Wales: year ending September 2019*. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/>

- crimeandjustice/bulletins/crimeinenglandandwales/yearendingseptember2019. Oldham, J. M. (2015). The alternative DSM-5 model for personality disorders. *World Psychiatry*, 14(2), 234-236.
- Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52(1), 1-10.
- Pathé, M. T., Mullen, P. E., & Purcell, R. (2002). Patients who stalk doctors: Their motives and management. *Medical Journal of Australia*, 176(7), 335-338.
- Purcell, R., & McEwan, T. (2018). Treatment approaches for stalking. In C. Ireland, J. Ireland, & P. Birch (Eds.). *Violent and sexual offenders: Assessment, treatment and management* (pp. 428-444). London: Routledge.
- Purcell, R., Pathé, M., & Mullen, P. E. (2002). The prevalence and nature of stalking in the Australian community. *Australian and New Zealand Journal of Psychiatry*, 36(1), 114-120.
- Rosenfeld, B. (2004). Violence risk factors in stalking and obsessional harassment: A review and preliminary meta-analysis. *Criminal Justice and Behavior*, 31(1), 9-36.
- Rosenfeld, B., Galietta, M., Foellmi, M., Coupland, S., Turner, Z., Stern, S., ... Ivanoff, A. (2019). Dialectical behavior therapy (DBT) for the treatment of stalking offenders: A randomized controlled study. *Law and Human Behavior*, 43(4), 319-328. <https://doi.org/10.1037/lhb0000336>.
- Rosenfeld, B., Galietta, M., Ivanoff, A., Garcia-Mansilla, A., Martinez, R., Fava, J., & Green, D. (2007). Dialectical behavior therapy for the treatment of stalking offenders. *International Journal of Forensic Mental Health*, 6(2), 95-103.
- Sandberg, D. A., McNiel, D. E., & Binder, R. L. (1998). Characteristics of psychiatric inpatients who stalk, threaten, or harass hospital staff after discharge. *American Journal of Psychiatry*, 155(8), 1102-1105.
- Sevecke, K., Poustka, L., & Popow, C. (2016). Personality disorders and autism spectrum disorder: What is similar and what is different?. *Psychiatric Symptoms and Comorbidities in Autism Spectrum Disorder*, 129-138).
- Spitzberg, B. H., & Cadiz, M. (2002). The media construction of stalking stereotypes. *Journal of Criminal Justice and Popular Culture*, 9(3), 128-149.
- Spitzberg, B. H., & Cupach, W. R. (2003). What mad pursuit?: Obsessive relational intrusion and stalking related phenomena. *Aggression and Violent Behavior*, 8(4), 345-375.
- Spitzberg, B. H., Cupach, W. R., & Ciceraro, L. D. (2010). Sex differences in stalking and obsessive relational intrusion: Two meta-analyses. *Partner Abuse*, 1(3), 259-285.
- Stokes, M., & Newton, N. (2004). Autism spectrum disorders and stalking. *Autism: The International Journal of Research and Practice*, 8(3), 337-339.

Stokes, M., Newton, N., & Kaur, A. (2007). Stalking, and social and romantic functioning among adolescents and adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 37(10), 1969-1986.

Storey, J. E., Hart, S. D., Meloy, J. R., & Reavis, J. A. (2009). Psychopathy and stalking. *Law and Human Behavior*, 33(3), 237-246.

Strand, S., & McEwan, T. E. (2012). Violence among female stalkers. *Psychological Medicine*, 42(3), 545-555.

Tassy, F., & Winstead, B. (2014). Relationship and individual characteristics as predictors of unwanted pursuit. *Journal of Family Violence*, 29(2), 187-195.

Wechsler, D. (1999). Wechsler abbreviated scale of intelligence (WASI). London: Psychological Corporation.

Wilberg, T., Hummelen, B., Pedersen, G., & Karterud, S. (2008). A study of patients with personality disorder not otherwise specified. *Comprehensive Psychiatry*, 49(5), 460-468.

Table 1

Derived search terms.

Concept	Synonyms	Search terms (for TITLE and ABSTRACT)
Stalking (offenders) Stalker; Harasser/harassment; Obsessional follower; stalking Stalker; Stalking; ‘Obsessional follower	Stalking (offenders) Stalker; Harasser/harassment; Obsessional follower; stalking Stalker; Stalking; ‘Obsessional follower	Stalking (offenders) Stalker; Harasser/harassment; Obsessional follower; stalking Stalker; Stalking; ‘Obsessional follower

Table 2

Inclusion and exclusion criteria.

Inclusion criteria:	Exclusion criteria:
<ul style="list-style-type: none"> • PICO, plus the following: • International studies available from searches in English • All dates of publication given dearth of research available • Human participants • All ethnicities and SES given dearth of research available • Research papers with conducted analyses using recognised analysis method 	<ul style="list-style-type: none"> • Female-only stalker participant group given difference in typology, prevalence, and assumed psychopathologies • Children/young adults/juveniles/adolescents given limitations in diagnosing/assessing for psychopathology • Victim studies as unable to answer question • Cyber-stalking given the possible differences in offender methods and psychopathology not yet understood • College students as these are self-reporting participants (this systematic review requires studies with use of participants recognised formally for their stalking behaviour, i.e., in a clinical/forensic context. Any difference in ‘I’ would weaken the systematic review • Commentary/summary/review articles given analyses are already completed. This systematic review requires empirical data • Book/Book chapters for the same reason as above • Assessment manuals given they provide structured/systematic review/summary of empirical data that support risk factors without providing study details • Articles related to risk factors and assessment tools for the same reasons as above • Case studies as there is no comparator

group

- Animal studies (i.e. deer)
 - Medical studies (i.e. brain stem)
-

Authors	Year/country	Group of interest sample	Comparator sample	Outcome	Study aim(s)	Study design	Key findings
Harmon, Rosner and Owens	1995 USA	48 Forensic cases (charged with harassment and menacing) referred Jan 1987-Jan 1994 32 Male 16 Female Mean age of 40 (range of 22 to 66)	Clinical population as a whole (all cases referred to Forensic Psychiatry Clinic 1993) 921 Male 151 Female =1072 (Another table states total comparator group = 915) 14 to 74 (mean age of 31)	Psychiatric disorders; Delusional disorders; Erotomania.	This was not made explicit in the paper. The study aim was to distinguish between the clinical population as a whole and the obsessional followers, on demographic and clinical features.	Comparison study based on clinical and demographic features for all 48 stalkers.	Confirmation Erotomania exists. Other types of mental illness and delusional disorders can result in similar behaviour patterns (including non-erotic harassing). The quality and intensity of the obsession and impairment of judgement is similar to Erotomania, regardless of the content of the delusions. Data suggests these individuals can be more violent/dangerous than suggested.
MacKenzie, Mullen, Ogloff, McEwan and James	2008 Australia	122 stalkers (referred to specialist forensic clinic – Problem Behaviours Program). 93.4% Male. Age mean 36.3 (SD = 10.7)	General community norms data on attachment styles.	Parental bonding; Attachment styles.	To extend the research on stalker attachment styles by sub-type.		Stalkers were found to be more likely to have insecure attachment styles than members of the general community. Supports the theory that stalking evolves from pathological attachment. Highlights need to consider attachment in the assessment and management of stalkers.
MacKenzie, James, McEwan, Mullen and Ogloff	2010 Australia	147 stalkers referred to a community based correctional specialist clinic (mental illness not a pre-requisite for referral). 91.2% Male. Age ranged from 19 to 66 years old. Mean age was 35 (SD = 10.1)	General population norms. Offender sample comprising 88 white prisoners obtained from sample used by Jensen and Faulstich (1988).	IQ; WASI scores. Psychosis (schizophrenia, delusional disorder and bipolar disorder).	To answer questions around intelligence levels amongst stalkers in comparison to other offenders and the general population.	Further analysis of 45 stalkers classified into two categories (affectionate and persecutory). Comparison study; Chi Square analysis.	The study found that stalkers have a significantly lower VIQ than PIQ. Previous assumptions about intelligence levels in stalkers may be misleading. The verbal/performance deficit is important with regards to design/delivery of treatment interventions. The study concluded that the motivational types vary significantly in the education level achieved, intellectual ability and

McEwan, Mullen and MacKenzie	2010 Australia	138 stalkers (criminally charged or referred to a specialist stalking clinic). All but 2 referred from CJ agencies. 123 Male 15 Female Age mean 36.4 (<i>SD</i> = 11.1)	Three comparator groups used: General population; psychiatric population; and UK community-based offender sample	Suicide rates	The aim of this study was to compare the incidence of suicide in a sample of stalkers with that in the Australian population as a whole, with psychiatric patients, and with community-based offenders.		style of cognitive processing. Stalkers committed suicide at significantly higher rates than any of the comparison groups.
Meloy and Gothard	1995 USA	20 obsessional followers in custody 18 Male 2 Female Age ranged from 20 to 50 years old (<i>SD</i> = 7). Average of 35.4 years.	30 offenders with mental disorders in custody	Clinical variables; psychiatric diagnoses	To test the null hypothesis that Obsessional Followers would not differ significantly from a randomly selected group of offenders with mental disorders on certain demographic and clinical variables.	Retrospective case evaluation reviews.	Obsessional Followers were older, more intelligent, better educated than the other offenders. No significant differences were found on DSM-III-R axis I diagnoses. Axis II diagnoses showed significant differences. Obsessional Followers more likely to have a PD other than Antisocial PD. Obsessional Followers are likely to be distinguishable from offenders with mental disorders based on presence of a non-antisocial (related to attachment pathology) PD.
Meloy, Rivers, Siegel, Gothard, Naimark and Nicolini	2000 USA	65 obsessional followers in custody 54 Male 11 Female Age range 21-55, mean 34.94 (<i>SD</i> =7.27)	65 offenders with mental disorders	Clinical variables; psychiatric diagnoses	The aim was to replicate earlier findings by comparing demographic, clinical and criminal variables within sub groups of Obsessional Followers and a comparison group of offenders with mental disorders.	Analytical cohort comparison study. Odds ratios comparing attachment styles with community norms.	Obsessional Followers had significantly greater estimated IQ than the offenders with mental disorders; but were not older nor better educated. No significant differences were found in the high prevalence of both axis I and II (DSM-IV) diagnoses. Obsessional Followers who targeted ex-intimates were significantly more likely to have a substance misuse or dependence diagnosis.

Sandberg, McNeil and Binder	1998 USA	17 'stalkers'; inpatients 14 Male 3 Female Mean age was 37.58 (SD = 11.28).	326 others; inpatients	Clinical/psychiatric characteristics	The study aimed to identify demographic and clinical features of psychiatric inpatients who stalk or harass hospital staff following discharge.	Obsessional Followers who stalked strangers/acquaintances were more likely to be delusional. Stalkers are more likely to have a diagnosis of PD and/or paranoid disorder, erotomanic subtype, and to have a history of physically assaultive or fear-inducing behaviour. Stalkers are more likely to be male, never married, and have histories of multiple hospitalisations, suicidal or self-injurious behaviours, and substance abuse/dependence.
-----------------------------	-------------	---	------------------------	--------------------------------------	---	--

Table 3

Key information for included studies.

Table 4

Adapted Cowley's quality checklist.

Key Criteria	Other criteria
Is the method of assignment to different sample groups appropriate for a comparative study design (from the description, what is the logic for case selection? Was purposeful sampling used?)	If retrospective data is used, were cases selected without knowledge of outcomes?
Are the sample groups matched appropriately for age, gender, (or effect of any differences evaluated in valid statistical analysis)?	Where retrospective data was used, were evaluators blind to the aims of the study?
Was appropriate statistical analysis undertaken?	In prospective studies, were evaluators blind to the aims of the study (i.e. were the researchers independent?), or were adequate steps taken to reduce unacceptable bias?
Were there appropriate and clearly defined criteria for measuring outcomes (i.e. validity of tests used to measure psychopathology – internal validity – and IRR considerations if applicable)?	Were results interpreted sensibly to account for the heterogeneity of the target sample?
	Did the authors provide a quantification of comparative data (i.e. significance levels assigned appropriately)?
	Were bespoke design limitations highlighted by the authors (i.e. selection bias of target or comparator group)?

Table 5

Quality appraisal ratings for included studies.

Included study	Psychopathology/Outcome	No. of key criterion met fully (max 4)	No. of other criteria met fully (max 6)	Overall rating
Harmon et al. (1995): USA	Mental illness; Erotomania	3 1 partially	2 1 Not applicable 2 Not known	C
MacKenzie et al. (2008): AUS	Attachment styles	3	2 S N/A 1 N/K	B
MacKenzie et al. (2010): AUS	Intelligence (IQ)	4	3 2 N/A 1 N/K	A
McEwan et al. (2010): AUS	Suicide rates	3 1 partially	3 3 N/A	B
Meloy and Gothard (1995): USA	Mental illness	3 1 partially	4 1 N/A	B
Meloy et al. (2000): USA	Mental illness (N.B. replication study)	3 1 partially	3 1 partially 1 N/A	B
MacKenzie et al. (2010): AUS	Intelligence (IQ)	4	3	A
Sandberg et al. (1998): USA	Mental illness	1 1 partially 1 N/K	2 2 N/K 1 N/A	C

Table 6

Typology percentage proportions amongst the Australian study samples.

Typology Study	Rejected	Resentful	Intimacy Seeker	Incompetent Suitor	Predatory
MacKenzie et al., 2010	33%	22%	15%	21%	9%
McEwan et al., 2010	27%	24%	16%	24%	9%
MacKenzie et al., 2008	26%	22%	17%	26%	9%
Harmon et al., 1995	0%	33%	67%	0%	0%
Meloy and Gothard, 1995	55%	NK	NK	0%	NK
Meloy et al., 2000	57%	NK	NK	c.1.5%	c.9%
Sandberg et al., 1998	0%	NK	NK	NK	NK

Note. Some typologies were difficult to estimate thus assigned as Not Known (NK). The study by Sandberg et al. (1998) sampled only inpatients targeting staff, thus would not consist of Rejected typology.

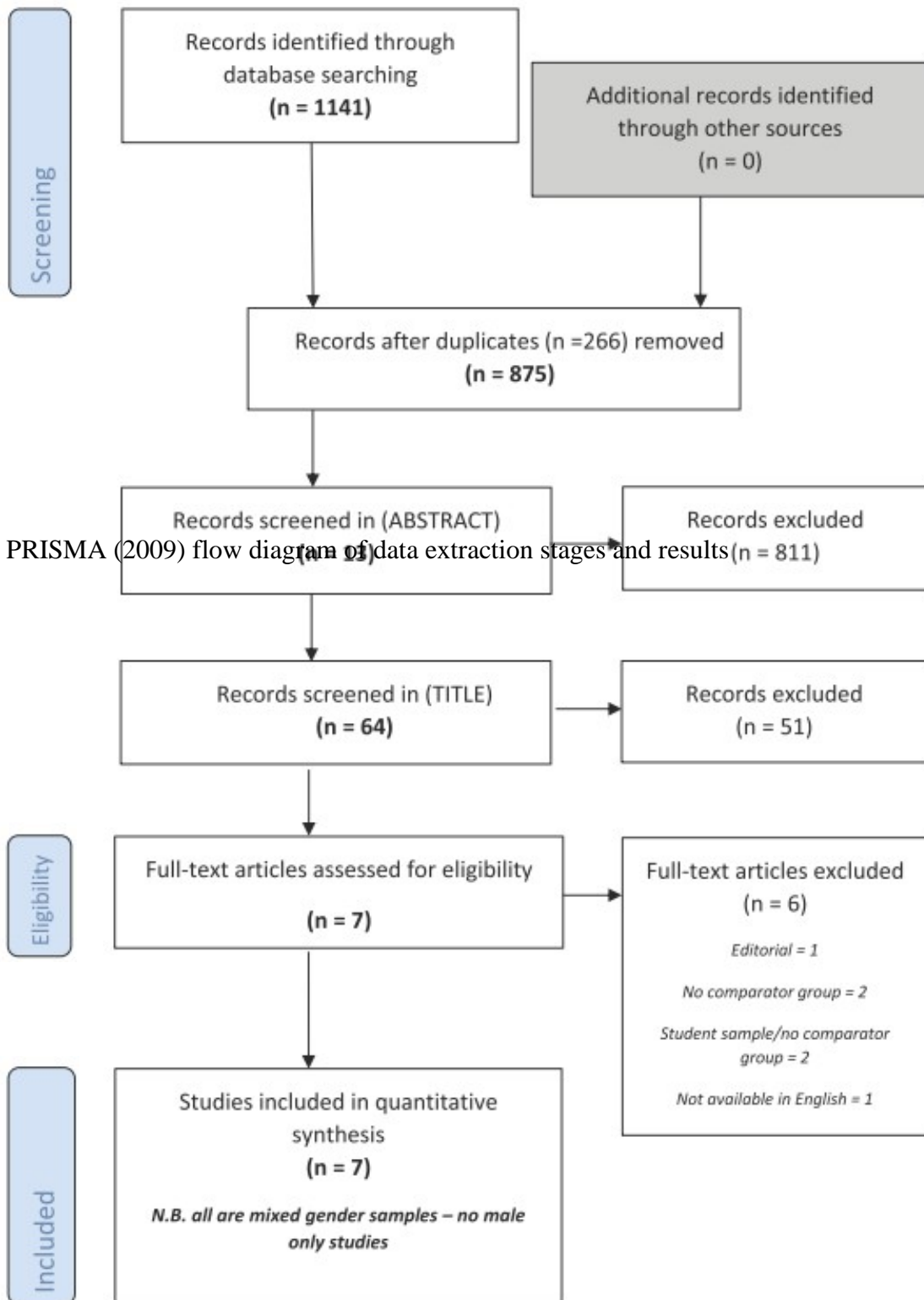


Fig. 1. PRISMA (2009) flow diagram of data extraction stages and results