Assessing and managing risk with adults with intellectual disabilities (ID)

Rachael Lofthouse

Primary Supervisor: Dr Laura Golding, University of Liverpool
Secondary Supervisors: Dr Vasiliki Totsika and Professor Richard Hastings, University of Warwick and Professor William Lindsay, The Danshell Group.

Date of resubmission: 17th October 2016

Submitted in partial fulfilment of the degree of Doctorate in Clinical Psychology at the Department of Clinical Psychology, Liverpool University

Acknowledgements

This thesis is dedicated to my husband, son & daughter for their endless support and patience whilst I completed this thesis. This is the last one I promise.

Many thanks to all the service users who agreed to participate in the research- I hope the work described in this thesis will contribute towards further supporting your selves and other adults with ID to live fulfilled lives in the community. I am greatly indebted to John Hutchinson, Andy Pearson and Bill Lindsay and their colleagues for generously giving their time to help recruit to this study.

A big thank you to Dr. Vaso Totsika, Professor Richard Hastings, Professor Bill Lindsay and Dr Laura Golding for their support and wisdom during this project.

Table of Contents

List of Tables

List of Figures

Word Count: 21,429

Introductory chapter

The assessment and prediction of aggression has been the subject of considerable research attention among mainstream adult populations. With the inherent limitations and biases of unstructured clinical judgement, most attempts to assess risk are aided by use of structured measures. Clinicians and researchers working with mainstream populations have over 120 different structured risk assessments available to inform clinical assessment of violent and sexual offending (Singh & Fazel, 2010). Furthermore, numerous meta-analysis have been conducted comparing risk instruments with one another (see the meta-analytic review by Hanson & Morton-Bourgon, 2009) with the aim of guiding clinician's choice of which measure to use in practice.

Knowledge and research regarding risk assessment procedures in the field of intellectual disability (ID) has been considerably slower to develop (Lindsay & Beail, 2004). One implication of the limited research is that professionals are unsure which assessments to use in clinical practice and research. For this reason, clinicians are likely to use measures developed for mainstream populations with unknown reliability and validity. Alternatively, clinicians may be inclined to develop their own idiosyncratic measures or modify established measures to be more in line with the characteristics of adults with ID. As a result, assessing the risk of adults with ID who engage in aggressive behaviour is likely to be inaccurate. The implications of such inaccuracies are costly for adults with ID, those involved in their care and the public. Without the ability to reliably predict who will engage in aggressive behaviour, clinicians may unnecessarily restrict the freedom of adults with ID out of concern for the safety of the individual and the public. Conversely, clinicians may unintentionally underestimate the adult's potential to harm others. A balance between the human

rights and ethical implications of restricting liberty and the need to protect the human rights and safety of the public is paramount, particularly in community settings. Risk assessment measures offer increased transparency and reliability in estimating risk.

This thesis describes two studies that aim to advance the literature in the ID field in order to assist clinicians and researchers in selecting, assessing and managing the risk assessment process. In Chapter 1, a meta-analysis reports on the predictive accuracy of risk assessment measures commonly used with adults with ID. Unlike previous reviews in this area, the present study is the first in the field to offer a meta-analysis in this area. Therefore, the research is more robust and offers greater validity for the performance of risk assessments in this population. The sub-group analysis offers insight into the accuracy of risk assessment measures with different orientations (i.e., static, dynamic and structured professional judgment).

The empirical paper in chapter two assesses the predictive accuracy of two risk assessment measures: the Current Risk of Violence (CuRV; Lofthouse, Lindsay, Totsika, Hastings, & Roberts, 2014) and the Short Dynamic Risk Scale (SDRS; Quinsey, 2004) developed specifically for adults with ID. The study is novel in that it is one of the few in the field to include a community sample. UK policy (Department of Health, 2009) stipulates that adults with ID should receive services in the least restrictive environments, ideally in the community. Therefore, it is important for professionals in community services to be aware of which measures are suitable to use as part of the risk assessment process.

References

Department of Health. (2009). The Bradley Report: Lord Bradley's review of people
   with mental health problems and learning disabilities in the criminal justice
   system. London: Central Office of Information.

Hanson, R. K., & Morton-Bourgon, K. E. (2009). The accuracy of recidivism risk
   assessments for sexual offenders: A meta-analysis of 118 prediction studies.
   Psychological Assessment, 21(1), 1-21.

Lindsay, W. R., & Beail, N. (2004). Risk assessment: Actuarial prediction and clinical
   judgement of offending incidents and behaviour for intellectual disability
   services. *Journal of Applied Research in Intellectual Disabilities*, *17*(4), 229-
   234.

Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., & Roberts, D. (2014b).
   Dynamic risk and violence in individuals with an intellectual disability: tool
   development and initial validation. *The Journal of Forensic Psychiatry &
   Psychology*, *25*(3), 288-306.

Quinsey, V. L. (2004). Risk assessment and management in community settings. In
   W. R. Lindsay, J. L. Taylor, & P. Sturmey (Eds.), *Offenders with
   developmental disabilities* (pp. 131-141). Chichester, UK: John Wiley & Sons
   Ltd.

Singh, J. P., & Fazel, S. (2010). Forensic risk assessment: A metareview. *Criminal
   Justice and Behavior, 37*(9), 965-988.

Chapter 1

How effective are risk assessments/measures for predicting future aggressive behaviour in adults with intellectual disabilities (ID): A systematic review and meta-analysis.

Abstract

Background: Risk assessments assist professionals in the identification and management of risk of aggression. The present study aimed to systematically review evidence on the efficacy of risk assessments for adults with intellectual disabilities (ID).

Methods: Electronic and hand searches identified 14 studies. Standardised mean difference effect sizes Area Under Curve (AUC) were calculated for studies. Random effects subgroup analysis was used to compare different types of risk measures, and prospective vs. catch-up longitudinal study designs.

Results: Overall, evidence of predictive validity was found for risk measures with ID populations: (AUC) = .702, 95% CI [0.639, 0.766]. There was no variation in the performance of different types of risk measures, or different study design.

Conclusions: Risk assessment measures predict the likelihood of aggression in ID population and are comparable to those in mainstream populations. Further meta-analysis is necessary when risk measures are more established in this population.

Key words: violence, aggression, risk assessment, intellectual disability, structured professional judgement, meta-analysis.

Introduction

Aggression directed toward others and the environment is one of the most difficult to manage behaviours in services for adults with intellectual disabilities (ID) (Ali, Hall, Blickwedel, & Hassiotis, 2015). Aggression constitutes one of the main causes of admissions into ID services and the main barrier to discharge (Puddicombe & Lunsky, 2007). There is no universally accepted definition of violence or aggression (Yang, Wong, & Coid, 2010). Examples of verbal aggression may include threatening, hostile, or derogatory comments aimed at others. Physical aggression can encompass a broad range of behaviours varying in severity and intensity, involving acts of physical aggression or force with hostility and intention to hurt or damage someone or something.

Estimates of the prevalence of aggressive behaviour among adults with ID vary widely due to the diversity of studies in this field and variations in the methodology used (Lundqvist, 2013). Context and level of ID are some of the factors that account for ranges in prevalence from 9.2% (Borthwick-Duffy, 1994) to 51% (Crocker et al., 2006). Aggressive behaviour causes a number of significant challenges for services. It threatens the safety and well being of the adult as well as carers and others around him/her. Although relatively low rates of physical injury occur to care staff (Benson & Brooks, 2008) due to aggression, there are serious implications for the emotional and psychological well being of staff (Hastings, 2002; Hastings & Brown, 2002). Research evidence found high levels of stress and burn out among staff in ID services who were exposed to challenging behaviour (Hensel, Lunsky, & Dewa, 2012; Mills & Rose, 2011). For the individual with ID exhibiting aggression, there is an increased likelihood of being excluded from services, a

negative impact on self-esteem, and restriction of the ability to maintain social

networks (Cooper et al., 2009).

Within forensic services, decisions regarding the level of supervision

individuals presenting with aggression require, their suitability for treatment and what

that should entail, are core features of a systematic risk assessment and risk

classification (Bonta, Blais, & Wilson, 2014). Boer and colleagues (1997, p.1) defined

risk assessment as "the process of evaluating individuals to characterise the risk that

they will commit aggression in the future, and to develop interventions to manage or

reduce that risk." Thus, accurate assessment of risk is considered to be essential for

successfully reducing risk (Campbell, French, & Gendreau, 2007).

It is widely proposed within mental health and forensic settings that structured

clinical assessments are the optimal method for systematically assessing risk of

aggression (Monahan et al., 2001). This view is supported by policy and guidelines in

the UK issued by the Department of Health (2009), Royal College of Psychiatrists

(Morgan, 2007) and National Institute for Health and Clinical Excellence guidelines

(NICE, 2015). Surveys conducted in the UK suggest that two thirds of mental health

clinicians regularly use structured risk measures and over 70% in forensic psychiatric

units (Higgins, Watts, Bindman, Slade, & Thornicroft, 2005). Whilst this may seem

promising, it may also suggest that up to a third of mental health clinicians do not

regularly engage in structured assessments of risk. Instead, clinicians may rely on

unaided clinical judgement.

The guiding principles of the Risk, Need, Responsivity (RNR) model outlined

by Andrews and Bonta (2006) are prominent in guiding assessment and treatment and

offering theoretical explanation of risk in the general criminology literature. The

model is grounded in cognitive social learning theory and general personality theory

of criminal behaviour (Andrews & Bonta, 2006). According to the model, the *risk* principle stipulates that the behaviour of interest, such as aggression, can be reliably predicted and that treatment should focus on higher risk individuals. The *need* principle relates to 'criminogenic need' or 'dynamic' risk factors that are psychological or behavioural features of the individual. Andrews and Bonta (2006) recognised that due to the amenability to change, dynamic factors should be the focus of treatment intervention. Other authors refer to dynamic factors as psychologically meaningful risk factors (Mann, Hanson, & Thornton, 2010) or 'psychological predispositions' (Beech & Ward 2004). The *responsivity* principle describes how treatment should be tailored to the individual's motivation, ability and learning style to maximise success. The RNR model is relevant to adults with ID because it recognises that behaviour changes in response to demands in the environment not just due to the factors internal to the individual (e.g., impulsivity). Thus, it avoids blaming the individual and recognises that treatment must focus on changes to environmental factors alongside the individual factors (Carr et al., 2002). The RNR model has influenced the development of many risk assessment measures in ID and non-ID populations.

Risk assessment approaches

Singh and colleagues (2013) suggest that the increased use of risk assessments as opposed to unguided clinical judgement is fuelled by the call for an evidenced based decision-making process that is structured and transparent. This is particularly pertinent when such decisions often centre on the potential deprivation of an individual's freedom and permitting leave or discharge in the community.

The process of risk assessment has evolved over the last 30 years from attempts to make predictions of *dangerousness* to structures that assist in managing and preventing violence. This is reflected in the conceptual and theoretical differences between key risk assessment processes. Actuarial risk estimates use a fixed and explicit procedure, developed a priori, to weight and combine items relating to historical information. The individual's total score is used to predict the probability of reoffending by comparing the individual to a norm-based reference group (Hart & Cooke, 2013). Critics of the predictionist approach to assessing risk argue that such aggregate data might not translate to individual cases (Doyle & Dolan, 2007). Furthermore, actuarial measures rely on a limited number of static risk items which fail to comprehensively capture the individual's circumstances (Hart & Cooke, 2013), limiting the clinical contribution of such measures.

Structured Professional Judgement (SPJ) measures are proposed as useful alternatives to the actuarial approach or as an addition (Hart & Logan, 2011). SPJ measures are clinical guidelines that emphasise risk assessment and management. Such measures typically include historical items that are fixed and dynamic risk factors (e.g., current substance abuse) that are amenable to deliberate intervention or change (risk decrease). The malleable orientation of dynamic risk factors means they are open to influence and change by psychological, social or physiological variables (Wong & Gordon, 2006) and are thus informative for the day-to-day management of risk.

Rather than attempting to make individual risk estimates of the specific probability of future violence, the intention of SPJ and dynamic risk scales is to help evaluators reach decisions about the type of violence an individual may commit,

under what circumstances, and against who (victim). Both SPJ and dynamic risk assessments are therefore a useful way of organising risk related information relevant to the individual's difficulties (Logan, 2014), which is a key feature of risk formulation.

Predictive accuracy of risk assessment measures in the mainstream literature

It is widely accepted in the general offending literature that static and dynamic risk factors are both related to future offending (Singh & Fazel, 2010). Clinicians and researchers are faced with conflicting findings regarding differences in the predictive accuracy of these different approaches to risk assessment. Several studies have demonstrated a significant improvement in predictive accuracy for dynamic measures over static (Eher, Matthes, Schilling, Haubner-MacLean, & Rettenberger, 2011; Hanson, Harris, Scott, & Helmus, 2007). In contrast, Singh and Fazel (2010) and Yang and colleagues (2010) found no significant difference between different methods of prediction (static/dynamic).

Beech and Ward (2004) also offer an alternative method of conceptualising risk to the traditional static/dynamic split. The authors propose that historical factors (static) act as a marker for psychological meaningful risk factors (dynamic). For example, a history of violent behaviour may be indicative of a current anti social attitude. Recent research in the ID field (Lofthouse et al., 2014a) offered empirical support for this conceptualisation of risk. In their analysis of the performance of various static and dynamic risk measures, Lofthouse and colleagues (2014a) found that the two approaches tapped into the same underlying risk. Specifically, dynamic measures can act as 'proxy' for static measures. Based on various factors such as the proximity of dynamic risk factors to the behaviour, the authors suggested that dynamic risk measures may be more appropriate than static measures for assessing

risk. Other authors call (on the basis of conceptual or clinical reasoning) for a convergent approach (Boer, Tough, & Haaven, 2004; Pouls & Jeandarme, 2015). From the convergent perspective, static risk measures are used to establish a 'risk baseline' and inform treatment intensity and supervision levels. Dynamic measures are employed to assess, identify and monitor change in targets for treatment (Pouls & Jeandarme, 2015).

Emerging research in the ID field highlights a link between dynamic risk factors (e.g., lack of structured routine activity and the quality of close relationships) and an increased risk of offending (Wheeler, Clare, & Holland, 2014). In line with the RNR model (Andrews & Bonta, 2006) researchers recognise that due to their unique needs, adults with ID are likely to be more interdependent within services. Therefore, factors relating to the environment (e.g., staff knowledge of the individual) are equally important as those relating to the individual (e.g., historical, dispositional) for a comprehensive and ecologically valid assessment of risk (Boer et al., 2004; Lofthouse et al., 2013). The ID field has seen a steady increase in risk assessment measures developed for this population following this approach (Boer et al., 2004; Lindsay et al., 2008; Lofthouse et al., 2014b; Quinsey, Book, & Skilling, 2004).

Greenhill and Whitehead (2011) suggest that there is a need to uphold the human rights of adults with ID within the assessment and management of risk. One way of achieving this is through the inclusion of adults with ID in assessing their own level of risk. To date, only the Dynamic Risk Assessment Management System (DRAMS; Lindsay et al., 2004) risk measure has included this approach. Employing a human rights based approach enables proportionate and balanced decision-making and is in line with current UK policy and best practice regarding managing risk. Contemporary UK policy (DoH, 2009) stipulates that adults with ID who have

offended or are at risk of offending should receive services in the least restrictive environment. As a result, such individuals are increasingly likely to reside in community forensic LD services. Risk assessment is integral to establishing the appropriate level of risk management and intervention for this group of people. It is, therefore, essential that risk is accurately assessed and managed to maintain the safety of the adult with ID and those around them, and uphold their human rights.

Other approaches to evaluating risk of aggression in adults with ID have involved methods that were not originally developed for this purpose. For example, the Psychopathy Checklist – Revised (PCL-R; Hare, 1991, 2003) was developed as a psychopathy diagnostic instrument. Given the association between psychopathy and anti-social behaviour, the PCL-R is considered relevant to research and practice in forensic settings (Nicholls & Petrila, 2005). Research with a sample of adults with ID found that the PCL-R did not significantly predict aggressive behaviour (Morrissey et al., 2007).

The preponderance of available methods of assessing risk leaves many researchers, policy makers and professionals uncertain which assessment to use in research and clinical practice. In a recent meta-review of over 40 meta-analyses of risk assessment in the general offender population, Singh and Fazel (2010) identified over 120 different risk assessments. Uncertainty surrounding which risk assessments are valid and reliable is also inherent in the ID field, which has received considerably less research attention than non-ID populations.

Predictive accuracy of risk assessments in the ID literature

Over a decade ago, Lindsay and Beail (2004) asserted that professionals in the ID field are duty bound to employ the most up-to-date research when assessing risk. However, the paucity of research and empirically supported risk assessments in this

area, alongside the unique characteristics of people with ID, renders this difficult in practice. This is concerning given the evidence demonstrating that aggression poses a major challenge for service users with ID, their carers and service providers (Cooper et al., 2009). This highlights the significant need for a systematic and comprehensive synthesis of the evidence on the predictive accuracy of existing methods. Because of the lack of knowledge and evidence base, clinicians often develop their own risk assessments based on clinical judgement of relevant risk factors. Whilst such assessments may be convenient and feel intuitively good (Singer et al., 2013), they are not based on a normed sample and have unknown predictive validity. Furthermore, idiosyncratic risk assessments impede communication between services regarding risk, service planning and collaborative research opportunities (Lindsay & Beail, 2004).

With these limitations in mind, and considering the possibility that salient risk factors for individuals with ID may differ from those relevant for mainstream populations, researchers have developed assessment frameworks specifically for individuals with ID. These frameworks include: Dynamic Risk Assessment and Management System (DRAMS; Lindsay et al., 2004); Current Risk of Violence (CuRV; Lofthouse, Lindsay, Totsika, Hastings, and Roberts, 2014b), and Short Dynamic Risk Scale (SDRS; Quinsey, 2004). Recent studies have found that dynamic risk measures have good predictive accuracy in adults with ID (Inett, Wright, Roberts, & Sheeran, 2014; Lindsay et al., 2008; Lofthouse et al., 2014b; Steptoe, Lindsay, Murphy, & Young, 2008). In comparison studies, authors suggest similar findings for actuarial, SPJ and dynamic approaches to assessing risk in adults with ID (Fitzgerald et al., 2013; Gray, Fitzgerald, Taylor, MacCulloch, & Snowden, 2007; Lindsay et al., 2008).

However, the evidence base for dynamic risk assessments is extremely limited at this stage and methodological limitations restrict the conclusions that can be drawn. For example, in relation to DRAMS, Camilleri and Quinsey (2011) reported that risk items were not specific to offenders with ID and the measure was not developed using statistics that identify the most accurate combination of predictors. The CuRV (Lofthouse et al., 2014b) has been subjected to a single predictive accuracy outcome study in which the study authors were also the measure developers. Singh and colleagues (2013) caution against an *authorship effect*, where designers may find more positive significant results during investigations of their own measures.

Within the ID literature, authors have developed guidelines to assist clinicians apply risk assessment measures and processes developed for mainstream populations to those with an ID. Examples include the PCL-R (Morrissey, 2003; Morrissey et al., 2005; Morrissey, Mooney, Hogue, Lindsay, & Taylor, 2007) and the HCR-20 (Boer, Frize, Pappas, Morrissey, & Lindsay, 2010a, 2010b). However, research findings using the HCR-20 suggest that adapting measures in this way may not provide the same level of prediction of aggressive behaviour for individuals with an ID (Verbrugge, Goodman-Delahunty, & Frize, 2011). Currently, there is insufficient evidence to demonstrate the utility in adapting established measures for ID populations. This further demonstrates the need to compare the predictive validity of existing methods to guide clinicians in their selection of valid measures to assess risk.

Previous reviews

Three recent narrative reviews have been conducted (Camilleri & Quinsey, 2011; Hockenhull, n.d.; Pouls & Jeandarme, 2015) with the aim of providing guidance for professionals in the selection and interpretation of risk assessments for

individuals with ID. However, the findings have to be interpreted with caution due to the methodological issues presented the included studies.

Hockenhull (n.d.) conducted a systematic review and assessed the validity of 18 risk assessments to predict violence in adults with ID. Findings suggested good quality evidence for the validity of risk assessment measures in this population. However, the article included studies with retrospective designs, which increases the likelihood of predictor-criterion contamination (Blacker, Beech, Wilcox, & Boer, 2010) and these are considered to be low quality studies that produce less than accurate results (Borenstein, Hedges, & Higgins, 2009). Furthermore, the review omitted a quantitative synthesis of the various studies, and thus, there was no investigation of the methods and sources of statistical heterogeneity (Higgins, Thompson, Deeks, & Altman, 2003). This is important given that many of the primary studies are conducted on a variety of populations of offenders and in many study settings. In addition, a lack of robust quantitative synthesis hampers the confidence that can be placed in the assessment recommendations.

The review conducted by Pouls and Jeandarme (2015) built upon an early article by Camilleri and Quinsey (2011) comparing available risk assessments measures for predicting violent and sexual offending among adults with ID. Both reviews share the same limitations of the Hockenhull (n.d.) review in terms of inclusion of retrospective studies and absence of quantitative synthesis. Furthermore, Pouls and Jeandarme (2015) and Camilleri and Quinsey (2011) included studies where adults had low intelligence (e.g. Quinsey, Harris, Rice & Cormier, 2006; IQ 85 and below), and therefore not an established ID. Limited research in the ID field means that it has yet to be established if risk assessment measures work in a similar

way in adults with an established ID as they do in adults without ID. As such, it is important to focus on adults with an established ID to develop the evidence base.

All three reviews include studies with a combination of general violence and sexual violence outcomes. Research on discovering 'What Works' (Craig, Beech, Cortini, 2013) in offender assessment and treatment demonstrates that different risk factors are relevant for identifying sexual (e.g., sexual deviance) and violent offending (e.g., impulsivity). Personality style and differential rates of substance use have also shown to vary significantly between sexual and non-sexual offenders (Gudjonsson & Sigurdsson, 2000). Therefore, different risk assessments are likely to be appropriate when assessing the different type of recidivism outcome.

The existing reviews concluded that several mainstream risk measures are generalizable to adults with ID, but with caution (Pouls & Jeandarme, 2015). Due to the limited research in this area and methodological limitations (e.g., small sample sizes) the validity of the findings about existing risk assessments are questionable. Drawing firm conclusions about the efficacy of risk assessment measures from the three reviews is difficult due to the methodological limitations outlined above, and this highlights the need for further research evidence.

In summary, the aim of the present study was to provide a systematic review and meta-analysis of existing evidence on the predictive validity of available methods of predicting risk of aggression among individuals with ID. The current study aimed to address limitations in the research evidence so far by: (a) establishing more stringent criteria for ID (e.g., IQ >70) to accurately define the sample, because in ID forensic services, there is a clinical need to understand what works most effectively for adults with ID as a distinct group, (b) focusing on aggression only and not sexual

offences given the evidence for different risk factors relating to different types of offending (Craig et al., 2013), (c) including only prospective studies considered to be higher quality and thus generating more accurate results, and (d) including a meta-analysis to synthesize findings in a summary statistic that is useful to guide clinical decision-making. Meta analysis is considered the most robust method of synthesizing from quantitative research studies.

Method

Review protocol

To ensure consistency, the current review followed the guidance set out in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement (Moher, Liberati, Tetzlaff, & Altman, 2009). In line with this guidance, a systematic review protocol was developed to comprehensively and objectively search the literature (available on request from the first author).

Search strategy

A systematic literature search was conducted using the following databases: PsycINFO, EMBASE, MEDLINE, Web of Science, and Google Scholar. Given the limited research in this area, the search was not restricted by date. Only articles published in English were included. Studies were identified by combining search terms specifying a sample with intellectual disabilities (i.e. intellectual disab*, learning disab*, developmental disab*, mental retard*), terms specifying risk assessment (risk AND assessment, risk AND management, risk AND prediction, risk AND measure, risk AND tool), terms were used to restrict the search to studies with aggression as the outcome variable (Violen*, aggressi*, challenging behavio*; NOT sexual AND violen*, aggressi*) and prospective studies only (NOT retrospective).

Additional empirical studies were identified through review of the reference list of articles collected in the search described above. An email request was also sent to 43 international researchers known to conduct research in the field to obtain any unpublished or in press studies.

Study selection

From this initial search, eligibility for inclusion in the meta-analysis was determined by the following inclusion/exclusion criteria:

Population. Adults (aged 18 years and above) identified as having an intellectual disability or equivalent diagnosis (e.g., learning disability in the UK, mental retardation or developmental delay) using any one of the following criteria: IQ < 70, as assessed with standardised measures; impairments in adaptive behaviour assessed with adaptive behaviour scales; or administratively defined as currently receiving ID services.

Risk Assessment. Risk assessments were defined as structured and standardized measures containing one or more factors considered to be predictive of verbal or physical aggression. Such measures could include: Structured Professional Judgment (SPJ), Actuarial risk assessment, Static risk assessment, Dynamic risk assessment, measures combining one or more of the above approaches, or measures adapted for ID populations such as the HCR-20 ID supplement, measures developed for other purposes such as personality assessments (e.g., PCL-R).

Outcome. The likelihood of verbal, physical aggression or both. There is no universally accepted definition of aggression (Yang et al., 2010). For the purpose of this review, physical aggression is defined as an act of physical violence, aggression, or force with hostility and intention to hurt or damage someone or something

physically or psychologically (Yang et al., 2010). Verbal aggression is defined as having content that is threatening, hostile or derogatory; aimed at a specific individual or individuals and would be perceived as causing offence because of its content and/or severity/intensity. Aggression charges or convictions as well as noncriminal aggression toward persons or environment were included. The decision was taken to exclude self-injurious behaviour and sexual aggression from this review because of the potentially different and complex aetiology of these behaviours. Sexual and non-sexual aggression is commonly thought to have different causes and antecedents (Lim & Howard, 1998). Outcome measures covering a variety of domains were included if the aggression outcome (e.g., sub-scale) was reported separately. Measures of attitudes/beliefs relating to sexual aggression where no physical/verbal aggression was measured were also excluded from the current study.

Study type. Studies were included in this review that were prospective in design and included a minimum follow up period of one day. For example, cohort studies, randomized control trials, case-control studies, experimental case studies. Catch up longitudinal design were included where follow up data could potentially have been collected concurrently to the administration of the risk assessment. This is a common approach in risk assessment research.

Setting. No restrictions were imposed (e.g., community, mental health, forensic).

The study selection process is summarized in Figure 1 using a PRISMA flowchart. The electronic and manual searches resulted in 595 potential hits. All titles and abstracts were reviewed by the first author (RL) using the inclusion/exclusion criteria outlined above. A second person (RF) was available to discuss more ambiguous studies.
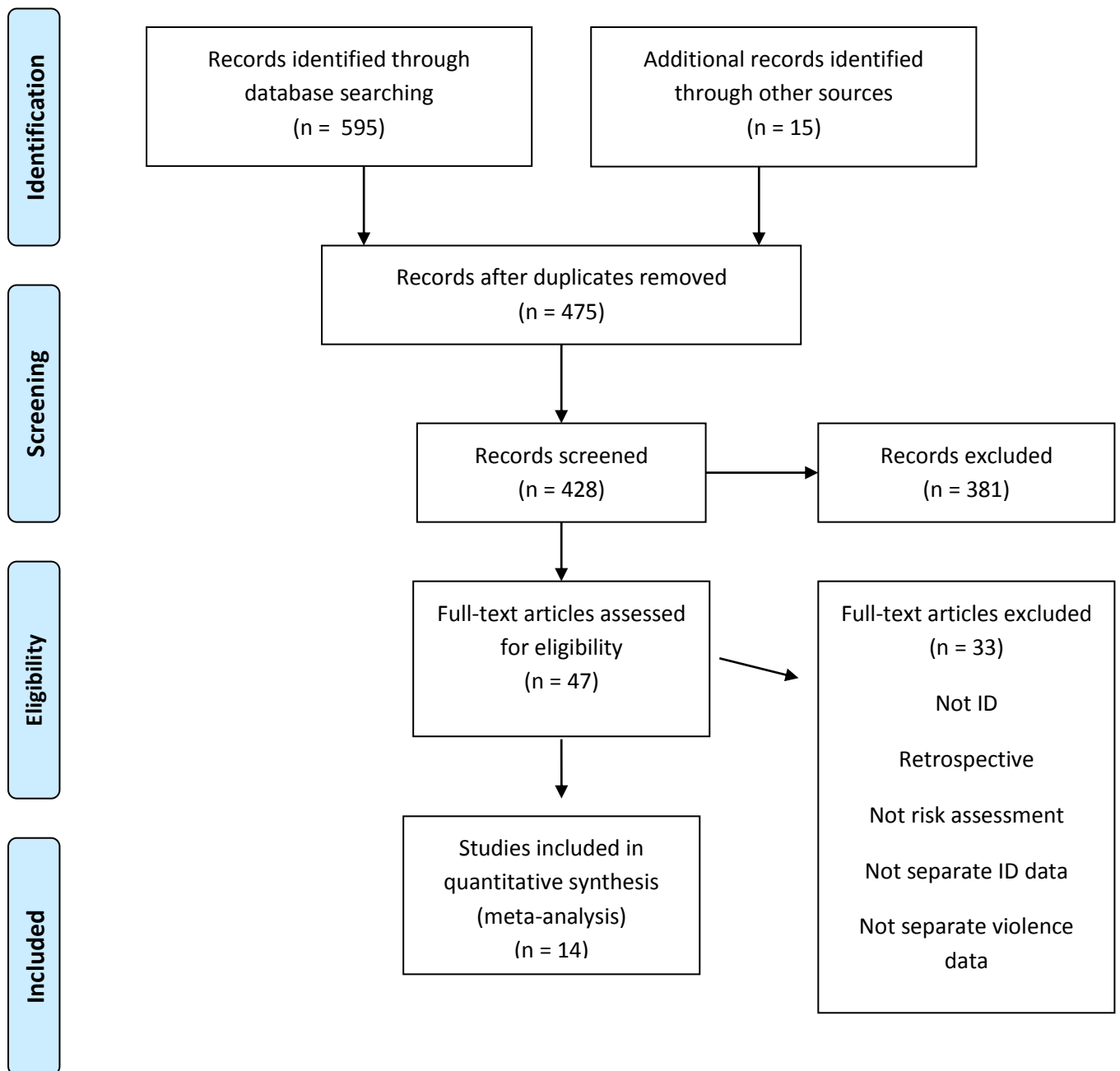
Figure 1. Results of a systematic search conducted to assess the effectiveness of available risk measures for predicting aggression among adults with ID

Quality assessment

Methodological quality of the included studies was assessed using the Critical Appraisal Skills Program Cohort Study Checklist (CASP, 2013). This method comprises a checklist of 9 items. Items were rated on a three-point scale: 2 (criteria present), 1 (partially present), and 0 (absence of the criteria or insufficient information). Two items (confounding variables) were omitted from the assessment because Receiver Operating Characteristic (ROC) Area Under Curve (AUC) analysis does not require a multivariate analysis. Item scores were summed to produce an overall quality score; higher scores (maximum possible score = 18) were indicative of better quality (Table 1). Studies were generally of high quality, within the range 12 – 17, mean = 13.5. Some risk of bias was apparent for four studies due to limited information regarding the method used to recruit participants within study sites and unclear criteria for definition of ID. Furthermore, four studies failed to adequately operationalize the term 'violence/aggression'.

Data extraction

Information for each study was extracted on sample size, participant gender and age, level of ID, and outcome data. Two variables were coded for subsequent subgroup analysis: study design (prospective vs. catch-up longitudinal) and type of measure (static, SPJ, dynamic). Outcome statistics obtained from studies were AUC, standard error (SE), confidence intervals (CI), and correlations.

Statistical analysis

A meta-analysis was undertaken of reported AUCs to produce a single summary AUC estimate, weighted by the inverse of study variance. Rice and Harris (2005) offer the following Cohen's *d* effect size equivalent for AUC: small (.556),

medium (.639) and large (.714). The meta-analysis used AUCs as reported in the primary studies, or if studies reported correlation coefficients, these were converted to AUCs. This conversion followed available guidance from Zhou and colleagues (2002). Where missing in studies, standard errors were obtained from confidence intervals and *p* values (Higgins & Green, 2011). The meta-analysis was conducted using MedCalc® Software (Schoonjans, Zalata, Depuydt, & Comhaire, 1995).

Tests of homogeneity and publication bias

To determine whether all studies were drawn from a population of studies with a common main effect size, we performed a test of homogeneity using the Q-statistic and I^2, utilizing these options in MedCalc® software. These tests were conducted on the whole group of 14 studies. In addition, we assessed potential for publication bias by a funnel plot of the standard error and effect size for each study (Egger, Smith, Schneider, & Minder, 1997).

<div align="center">

Results

</div>

Description of studies

Table 1 outlines the study characteristics of the 14 included studies. A total of 1,390 participants were included across all studies. The average number of participants per study was 99.29 ranging between 23 and 218. The majority of participants were male, with only two studies including female participants. The mean age of participants across studies was 36.39, mean ages across studies ranged from 29.77 to 41.9 years.

For those studies that reported IQ data (n=9), the average IQ was 65.16. Three studies reported classification of ID using the ICD 10 Mental Retardation (F70—F79; Gray et al., 2007; Gray, Taylor, & Snowden, 2011; O'Shea, Picchioni, Mason,

Sugarman, & Dickens, 2015). One study reported that participants had mental retardation (Quinsey et al., 2004), one study administratively defined participants as having an ID by virtue of receiving ID services (Lofthouse et al., 2014b). In one study, level of ID was unspecified (Fitzgerald et al., 2011) and one study reported presence of 'learning disability' (within UK services) ranging from borderline to moderate (Innet et al., 2014).

Eight studies were prospective studies and six were catch-up longitudinal prospective. Where stated, the follow up time in prospective studies ranged from three months to five years. The majority of studies (n =11) were conducted in forensic high or medium settings. The remaining studies (some included multiple settings) were conducted in low secure, rehabilitation, acute or secure mental health settings, prison or community settings following discharge from medium secure settings (n = 9).

The majority of studies included actuarial measures to assess the risk of aggression. Four studies: Quinsey et al. (2004); Gray et al. (2007); Lindsay et al. (2008) and Fitzgerald et al. (2013) included the Violence Risk Appraisal Guide [VRAG]; Quinsey et al., 1998, 2006), Fitzgerald et al. (2011) used the Offender Group Reconviction Scale [OGRS]; two studies: Gray et al. (2007) and Pouls and Jeandarme (2014) used the Psychopathy Checklist – Screening Version [PCL-SV]; Three studies: Morrissey et al. (2005; 2007) Pouls and Jeandarme (2014) used the Psychopathy Checklist-Revised [PCL-R] Hare (2003). In relation to SPJ, four studies: Gray et al. (2007); Lindsay et al. (2008); Fitzgerald et al. (2013); and O'Shea et al. (2015) assessed risk using the Historical Clinical Risk Management – 20 [HCR20] Douglas, Hart, Webster, & Belfrage (2013). The remaining studies assessed risk using dynamic assessments, three studies: Morrissey et al. (2005; 2007) and Lindsay et al. (2008) focused on the Emotional Problem Scale-Behaviour Rating

Scale [EPS-BRS] Prout and Strohmer (1991). The following assessments were all assessed in one study each: Quinsey et al. (2004) used the Problem Identification Checklist [PIC] Quinsey et al. (1997); Quinsey et al. (2004) assessed risk using the Proximal Risk Factor Scale [PRFS] Quinsey, Coleman, Jones, and Altrows (1997); Steptoe et al. (2008) used Dynamic Risk Assessment and Management System [DRAMS] Lindsay et al. (2004); Drieschner, Marrozo, and Regenboog (2013) included Dynamic Risk Outcome Scale [DROS] Drieschner and Hesper (2008); Innet et al. (2014) included Short-Term Assessment of Risk and Treatability [START] Webster, Martin, Brink, Nicholls, and Middleton (2004); Lindsay et al. (2008) used Short Dynamic Risk Scale [SDRS] Quinsey (2004) and Lofthouse et al. (2014b) included the Current Risk of Violence [CuRV] Lofthouse et al. (2014b).

Table 1

Characteristics of studies identified for inclusion (n=14)

Author/year	Country	Design	N	Age (mean)	ID definition	Gender	Setting	Measure	Measure type	Quality Assessment
Quinsey et al. (2004)	Canada	Prospective	58	40.61 years (SD . 10.59, n . 57).	Mental retardation	58 m	Residential institution	VRAG	Act	12
								PIC	Dynamic	
								PRFS		
Gray, et al. (2007)	UK	Catch-up longitudinal	145	30.8	ICD 10 MR (F70—F79). 121 mild, 18 moderate, 5 severe, 1 unspecified	118 m 27 f	Discharged from medium secure psychiatric unit	VRAG, HCR-20, PCL-SV	Act SPJ	13
Morrissey et al. (2005)	UK	Catch-up longitudinal	203	37	Mean IQ 66	203 m	Forensic ID high security hospital	PCLR	Act	14
								EPS-BRS	Dynamic	
Morrissey et al. (2007)	UK	Prospective	73	38	Mean IQ 66.6	73 m	Forensic ID high security hospital	PCLR	Act	17
								EPS-BRS	Dynamic	
Steptoe et al. (2008)	UK	Prospective	23	38.4	Mean IQ 64	23 m	Forensic ID high security hospital	DRAMS	Dynamic	14
Lindsay et al.	UK	Catch-up	212	High 38.7,	High Mean IQ	212 m	High, med/low,	EPS	Dynamic	14

Author/year	Country	Design	N	Age (mean)	ID definition	Gender	Setting	Measure	Measure type	Quality Assessment
(2008)		longitudinal		med/low 39.0, community 34.3	66.6, Med/low Mean IQ 66.7, community Mean IQ 64.7		community	VRAG, HCR20 SDRS	Act, SPJ	
Gray et al. (2011)	UK	Catch-up longitudinal	115	37.7	ICD-10 (F70-79) mental retardation	U	Discharged medium secure psychiatric units	HCR20	SPJ	12
Fitzgerald et al. (2011)	UK	Catch-up longitudinal	85	31.54	Unspecified	U	Discharged from medium secure units	OGRS	Act	15
Drieschner et al. (2013)	Netherlands	Prospective	218	33.8	Mean IQ 70.3	86.4% m	Residential. Forensic & non forensic	Dynamic risk outcome Scale (DROS).	Dynamic	15
Fitzgerald et al. (2013)	UK	Prospective	25	29.77	Mean IQ 64.59	23 m 2 f	Medium secure unit	HCR20 VRAG	SPJ Act	15
Inett et al. (2014)	UK	Prospective	27	39	Learning disability	U	Low secure setting	START	Dynamic	12
Lofthouse et al. (2014)	UK	Prospective	64	41.9	Administratively defined	45 m 19 f	Forensic unit, rehabilitation, acute mental health, residential service, hospital setting	CuRV	Dynamic	12

Author/year	Country	Design	N	Age (mean)	ID definition	Gender	Setting	Measure	Measure type	Quality Assessment
Pouls & Jeandarme (2014)	Belguim	Prospective	52	40	Mean IQ 57	52 m	Forensic unit or prison	PCLR PCL SV	Act	14
O'shea et al. (2015)	UK	Catch-up longitudinal	109	32	ICD-10 MR	70 m 39 f	Secure inpatient mental health setting	HCR20	SPJ	11

VRAG = Violence Risk Appraisal Guide; PIC = SPJ = structured professional judgement; Act = actuarial; U = unspecified ; m= male; f = female; PIC = Problem Identification Checklist (Quinsey et al., 1997); PRFS = Proximal Risk Factor Scale, (Quinsey et al., 1997); DRAMS = Dynamic Risk Assessment and Management System, (Lindsay et al.., 2004); DROS = Dynamic Risk Outcome Scale, (Drieschner & Hesper, 2008); START = Short-Term Assessment of Risk and Treatability, (Webster, Martin, Brink, Nicholls & Middleton, 2004), SDRS = Short Dynamic Risk Scale, (Quinsey 2004); CuRV = Current Risk of Violence, (Lofthouse, Lindsay, Totsika, Hastings, & Roberts, 2014).

Meta-analysis

Homogeneity and publication bias

The Q statistic was statistically significant $Q(14) = 46.53$, $p < .01$, for scores across the studies. The results suggested that there was significant heterogeneity between the studies. We also calculated the between study variance ($I^2 = 72.06$) and these data supported the homogeneity conclusion in that relatively large proportions of variance were explained by between study variance. To address this we used the random effects approach to the calculation of the summary effect size. We attempted to explore sources of heterogeneity through planned subgroup analysis.

We found no statistical or visual evidence of publication bias. Figure 2 shows a funnel plot of standard error against AUC effect size of studies. However, given the limitation of this technique when a small number of studies are included, we cannot exclude publication bias.
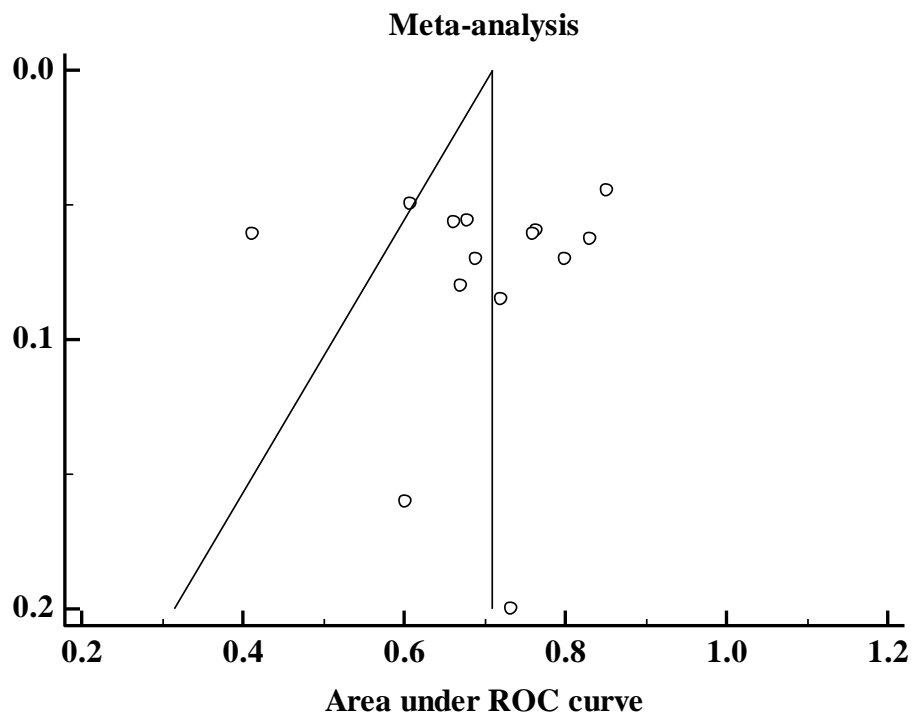
Figure 2. Funnel plot of the effect size against the standard error for 14 studies included in the meta-analysis. The vertical line represents the summary effect size.

Effect size measures

Meta-analysis was conducted using MedCalc® statistical software (Schoonjans et al., 1995). Effect sizes were computed for each individual study. Where more than one relevant AUC was reported in one study, the mean was calculated. The test of homogeneity suggested heterogeneity and for this reason we estimated the summary weighted effect size using a random-effects approach. Rice and Harris (2005) calculated the AUC effect size equivalent for Cohen's *d:* small (AUC=.556), medium (AUC=.639) and large (AUC=.714). The summary weighted effect size from all studies (n=14) suggested a significant medium to large effect size within the confidence intervals (AUC= .702, 95% CI: 0.639, 0.766). See Forrest Plot in Figure 3 for effect size and confidence intervals for the 14 included studies. The

large standard CIs found in the Steptoe et al. (2008) and Morrissey et al. (2005) study may either be because of a non-specific effect or because of measurement variability that might have been caused by the formula conversions when transforming a correlation coefficient to an AUC.

Meta-analysis

Figure 3. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the 14 studies included in the meta-analysis.

Subgroup analyses

Type of risk assessment

The study aimed to explore whether overall effectiveness is likely to be moderated by the type of risk assessment used, i.e., actuarial vs. SJP vs. dynamic, and by study design (catch-up longitudinal vs. prospective). The effect size and 95% CIs for type of risk assessment are shown in Table 2.

Table 2

Effect size and 95% confidence interval for type of risk assessment

Risk assessment type	N	Area Under Curve	95 % Confidence Interval
Actuarial	5	0.796	0.723, 0.869
SPJ	6	0.721	0.654, 0.788
Dynamic	6	0.633	0.552, 0.775

The results suggest that all three types of measures predict aggression at a level significantly better than chance (AUC= 0.5). The Actuarial and SJP risk assessments measures have a large effect size whilst the dynamic risk measures are considered to have a medium effect size. The overlapping confidence intervals for the three methods do not suggest that there are significant differences between the three types of risk assessments. There is an indication that the actuarial and SPJ measures provide adequate prediction according to their effect sizes. See Figures 4 – 6 for Forrest Plots for mean effect size and CIs for studies including actuarial, SPJ and dynamic measures respectively. The same study may appear in different forest plots if multiple measures are used within the study. The AUC reported is the relevant measure in that study (i.e., Actuarial, SPJ, Dynamic).

Figure 4. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the five studies included actuarial measures.

Figure 5. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the six studies included SPJ measures.
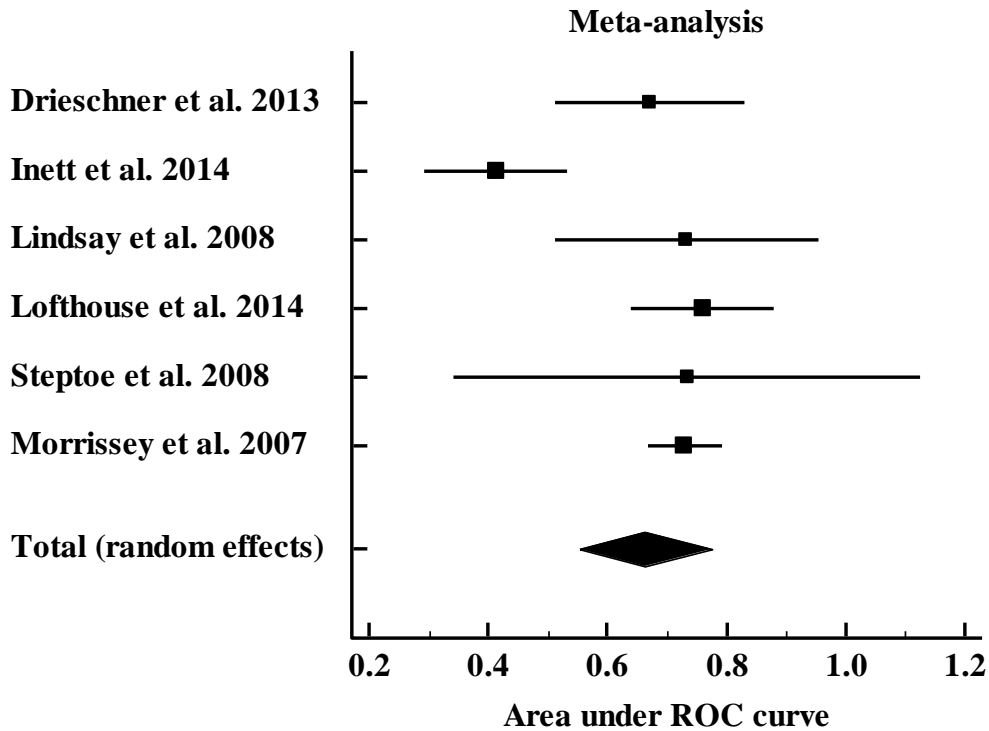
Meta-analysis

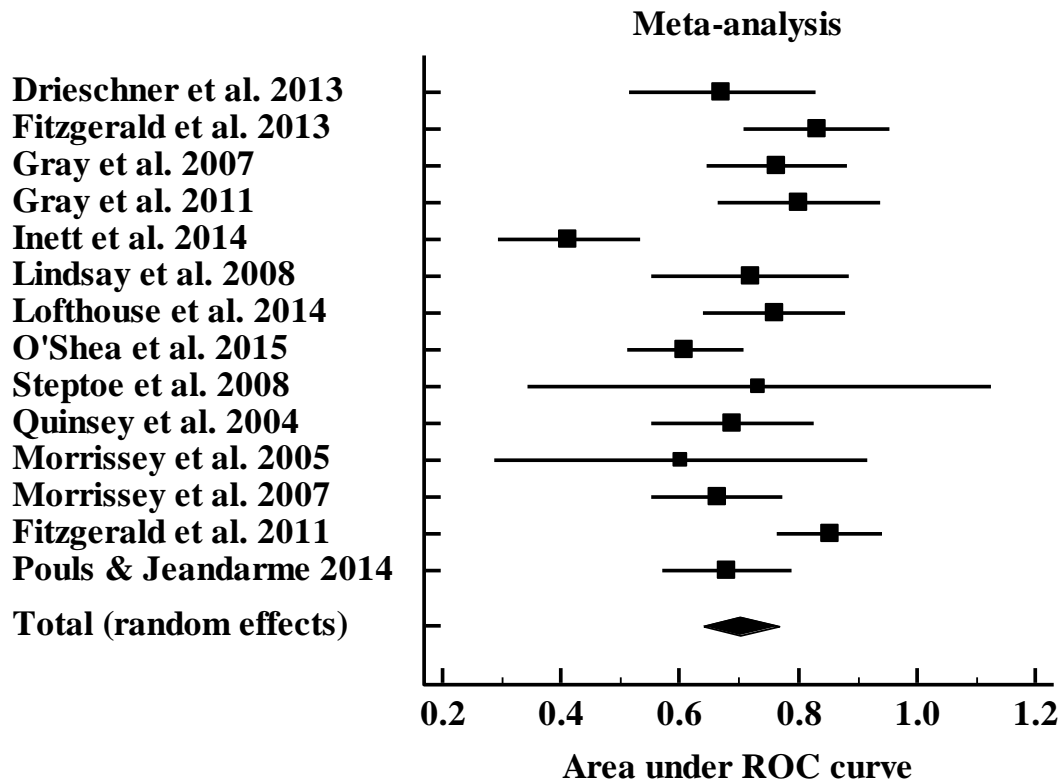*Figure 6*. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the six studies included dynamic measures.

Design of the study

The overall effect size and CIs for design of study is shown in Table 3.

Table 3

Effect size and 95% confidence interval for study design

Study design	N	Area Under Curve	95 % Confidence Interval
Prospective	8	0.675	0.587, 0.762
Catch-up longitudinal	6	0.741	0.661, 0.822

This result suggests that studies that use a catch-up longitudinal design have a large effect size whilst prospective designs have a medium effect size. The confidence

intervals of the two types of studies do not suggest that there are significant differences between the two study designs. See Forrest Plot in Figure 7 for effect size and confidence intervals for the studies using a prospective design and Figure 8 for the studies utilising a catch-up longitudinal design.
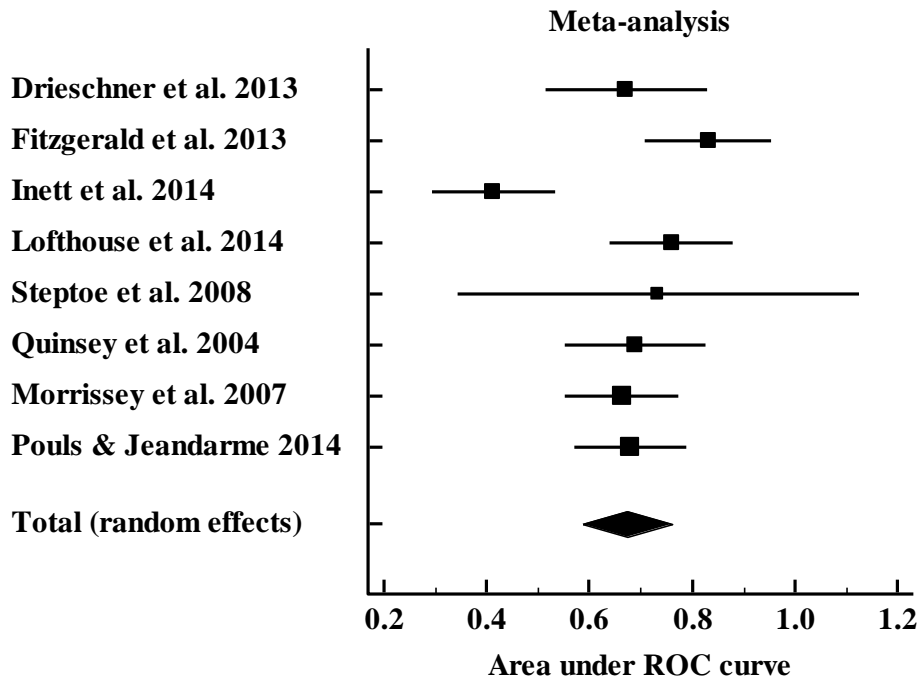
Figure 7. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the eight studies including a prospective design.

Meta-analysis

Gray et al. 2007

Gray et al. 2011

Lindsay et al. 2008

O'Shea et al. 2015

Fitzgerald et al. 2011

Morrissey et al. 2005

Total (random effects)
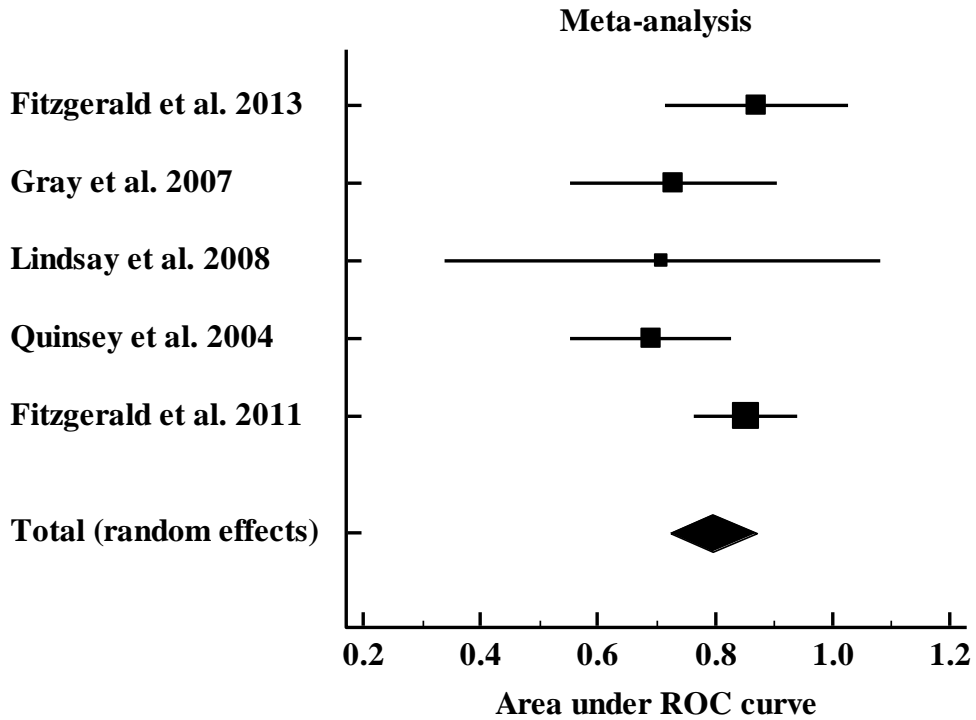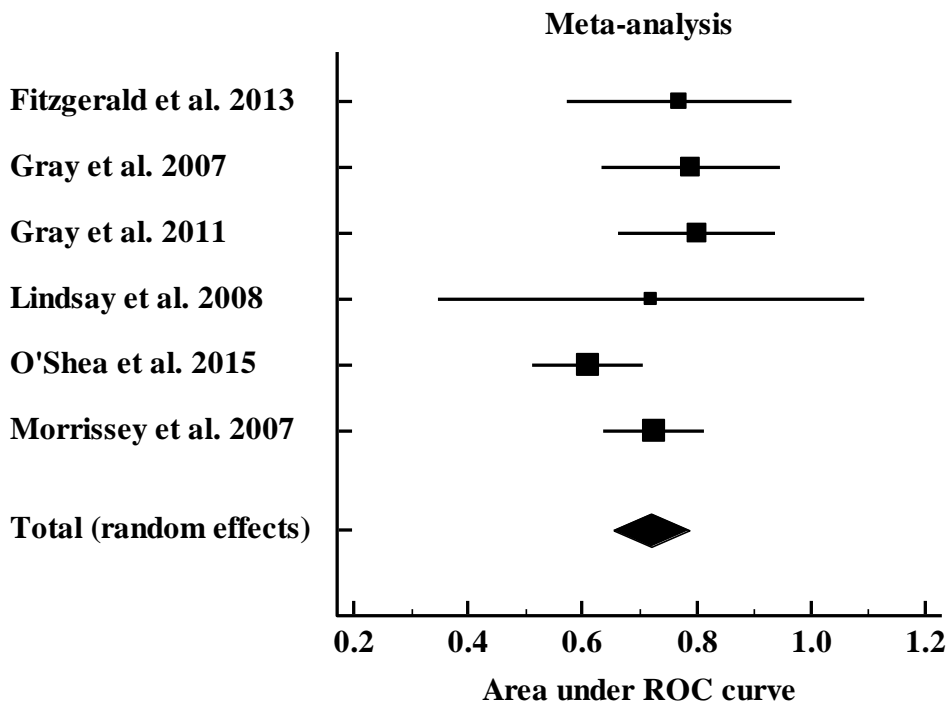
0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

Area under ROC curve
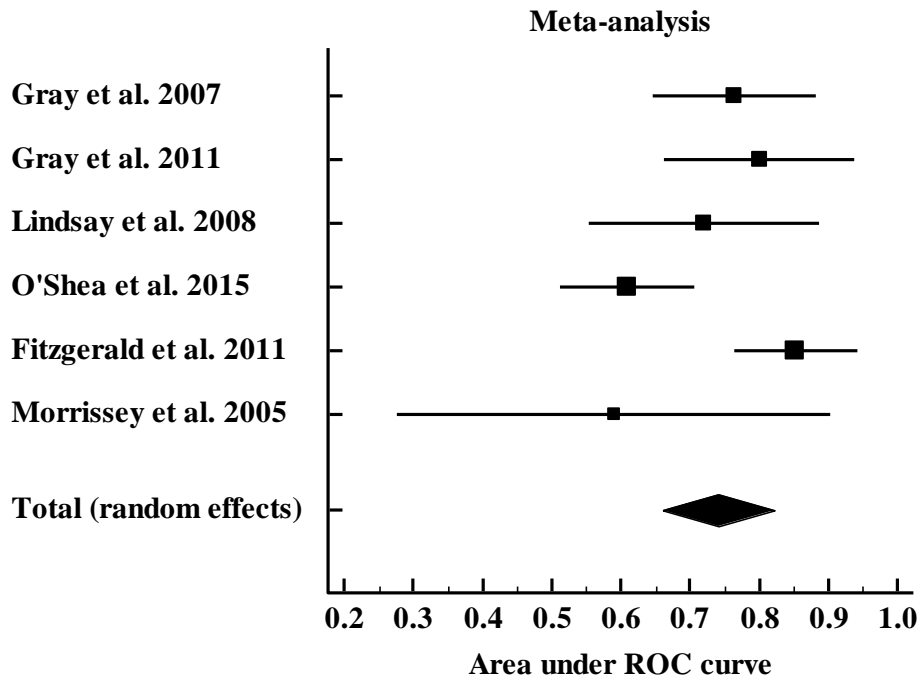
Figure 8. A forrest plot of standardised mean difference effect size and 95% confidence intervals (CIs) for the six studies including a catch-up longitudinal design.

Discussion

The current study aimed to synthesise available evidence relating to the effectiveness of risk assessment measures for predicting risk of aggression in individuals with ID. The summary weighted effect size was moderate and significant, indicating that available risk assessments measures can predict future aggression significantly better than chance. Findings from the current study are in line with previous narrative reviews (Camilleri & Quinsey, 2011; Hockenhull, n.d.; Pouls & Jeandarme, 2015) that found evidence for the predictive validity of several risk assessment measures for males with ID and a history of offending behaviour. The present meta-analysis expands and improves previous studies by conducting a meta-analysis to synthesise findings in a summary statistic that is useful to guide clinical decision making. Unlike the previous systematic and narrative reviews in this area,

the present meta-analysis focused exclusively on risk of aggression and included only prospective studies in an attempt to improve our understanding of specific methods of assessment and minimise biases.

To explore potential moderators of effectiveness, the effect of type of risk assessment measure on predictive accuracy was examined. On the basis of evidence from the current study, and in line with some previous studies in the general offender literature (Singh & Fazel, 2010; Wong et al., 2010) and ID literature (Fitzgerlad et al., 2013; Gray et al., 2007; Lindsay et al., 2008) there does not seem to be a difference in the prediction between the three types of measures. In the present study, based on the magnitude of the effect size, dynamic measures significantly predicted risk, but they did so less well than actuarial and SPJ methods. This finding supports the preponderance of actuarial or SPJ approaches in assessing risk in practice. The caveat, however, is that at this stage, the evidence regarding dynamic measures was not directly comparable with regard to methodological aspects for the other two types of measures. These findings might be due to variation and methodological quality of the scales included within the dynamic measure group. The actuarial and SPJ groups included studies that used only the same scale (i.e. VRAG & HCR 20, for actuarial and SPJ, respectively). These risk measures were developed specifically to measure risk of violence/aggression (albeit among mainstream offenders). However, the dynamic subgroup included a wider variety of measures (CuRV, EPS-BRS, DRAMS, SDRS, DROS, START). Some of the measures in the dynamic subgroup (e.g., EPS-BRS) had not been originally developed with the intention of assessing risk in any population. Other measures have not been subjected to extensive research evaluation and therefore do not have established psychometric properties. For example, the study by Lofthouse and colleagues (2014b) included in the present meta-analysis, was the

only piece of research assessing the efficacy of the CuRV dynamic risk measure. The heterogeneity and diversity of dynamic measures currently being used within ID settings is likely due to the unavailability of measures given that the research in this area is at the early stage of development. Researchers and clinicians hampered by the lack of measures commonly produce their own (e.g., CuRV & DRAMS) informed by their own clinical experience and research evidence. Whereas other studies have included measures frequently used within their clinical practice (EPS-BRS).

The present study also explored the potential moderating effect of study design. Findings suggested there was no difference in the prediction of risk between the two study designs. This finding does not support the common perception that catch-up longitudinal studies limit reliability and validity because they preclude optimal measurement procedures. Although preliminary, the findings suggest this design may be a reasonable (and perhaps economically efficient) alternative to a true prospective design, providing raters are blind (Douglas, Ogloff, & Hart, 2003).

Clinical Implications

Findings from the current study offer support for the argument that until empirical research indicates otherwise, professionals in the ID field are justified in using the VRAG and/or HCR-20 to assess risk of aggression (Camilleri & Quinsey, 2011; Pouls & Jeandarme, 2015) with a good level of accuracy. As research develops in the ID field and dynamic scales are developed with established psychometric properties, a future comparison is needed to indicate whether or not well-developed actuarial, SPJ and dynamic measures differ in their predictive ability.

Whilst there is extensive research comparing actuarial and SPJ approaches and staunch advocates for each method (Hanson & Morton-Bourgon, 2009; Hart & Cooke, 2013), several authors advocate a convergent approach that focuses on risk

formulation (Boer, 2004; Singer et al. 2013). Using this approach, Singer and colleagues (2013) recommend assessors use a variety of measures that "converge" on the target behaviour to establish the pertinent risk issues and the appropriate level to intervene and manage risk. This would seem a sensible solution to ensure that pertinent case specific factors are accommodated in a comprehensive risk assessment.

It is proposed that the relationship between dynamic risk factors and offending behaviour is worthy of continued research attention in ID populations. Findings from mainstream offending literature demonstrate a well-established evidence base for dynamic approaches to assessing risk in this population, a pattern that is starting to emerge in the ID field. To date, where primary research has directly compared the two types of measures, it has concluded that dynamic risk variables may be as good as or better than static variables in predicting violent and sexual incidents in offenders with ID (Blacker, et al. 2010; Lindsay et al. 2008; Lofthouse et al., 2013).

The inclusion of studies using the PCL-R (Hare, 2003) as a measure of risk is worthy of note for several reasons. The PCL-R was designed to measure the clinical concept of psychopathy, not to assess risk of violence, general offending (Hare, 2006) or treatment outcome. Therefore, the PCL-R should not be used within research or clinical practice to assess risk. Use of the measure for risk assessment purposes is based on the assumption that there is an inherent link between psychopathy and violence, which contributes to or increases the presence of risk. This assumption and the use of the PCL-R as a risk assessment tool is much debated within the mainstream literature. Furthermore, the validity and reliability of the construct of psychopathy as measured by the PCL-R is also widely contested. Authors argue that Hare's conceptualization of psychopathy is tautological (Ellaerd, 1988) and subjective. Other studies have found that the evaluators' personality can bias the judgments he or she

make regarding whether an individual meets the criteria for a psychopathy label (Miller, Rufino, Boccaccini, Jackson & Murrie, 2011).

The concept of psychopathy raises pertinent clinical and ethical concerns. Receiving a diagnosis of 'psychopathy' is stigmatising and commonly leads to the assumption that the individual is untreatable (Gendreau, Goggin, & Smith, 2002). Adults who are diagnosed with severe personality disorders are likely to be detained in secure hospitals under the mental health act (1983). Attracting a label of 'psychopath' is particularly harmful for adults with ID who are already at increased risk of stigmatisation, marginalisation and restrictions on their lives by virtue of their disability.

The present study was the first attempt to quantify the effectiveness of risk assessment measures for predicting aggression in adults with ID. A particular strength of this study was the inclusion of prospective studies only, which provided more robust evidence than retrospective studies (Hanson, 2009). This is in line with the epidemiological definition of risk as taking place before the outcome (Kraemer et al., 1997). The quality of included studies was considered (using the CASP tool) in addition to the AUCs weighted by sample size, when drawing conclusions regarding the effectiveness of the three types of measures and study design.

Despite the promising findings for the performance of risk assessments for predicting risk of aggression with individuals with ID, the present study contained only 14 studies. Primarily, this is because compared with the general offender literature, the research in this area is limited. A further limitation of the present study was the absence of inter-rater reliability at the study identification and quality assessment rating stages.

Future research

Future studies should include broader search terms and replicate the analysis for sexual and general offending behaviours to explore whether or not the pattern of findings from the current study are replicated with other types of aggression. Future research can measure how individual assessments perform across gender, ethnic group and level of ID. The research field can also move on from comparing instruments with one another to understand how far into the future prediction is optimal with different measures. To measure whether risk assessment measures perform equally well when predicting risk in the short (e.g., one month), medium (e.g., three months) and longer term (e.g., six months). Recent studies by Lofthouse and colleagues (Lofthouse et al., 2014b; Lofthouse, 2016) found evidence that dynamic risk measures when used in a community sample predicted aggression with greater accuracy over a one-month period, whereas, in secure settings, optimal prediction occurred over three months.

In summary, the current study was a first endeavour to synthesise evidence from prospective studies on the prediction of aggression in individuals with ID. The studies included in this review demonstrate that existing risk assessment methods significantly predict the risk for aggression among adults with ID, with no type of instrument outperforming the other at this stage. These findings help clinicians make informed, evidence based decisions when selecting measures for assessing risk for adults with ID. It is recommended that a new meta-analysis is conducted when dynamic measures for this population reach the same level of methodological quality as existing actuarial and SPJ methods.

References

Ali, A., Hall, I., Blickwedel, J., & Hassiotis, A. (2015). Behavioural and
cognitive- behavioural interventions for outwardly- directed aggressive
behaviour in people with intellectual disabilities. *The Cochrane Library*.

Anderson, G. (2005). People with intellectual disabilities who offend or are at risk of
offending: Assessing need and risk. In J. Hogg & A. Langa (Eds.), *Assessing
adults with intellectual disabilities: A service provider's guide* (pp. 192 206).
Malden: Blackwell.

Andrews, D. A. & Bonta, J. (2006). *The psychology of criminal conduct* (4th ed.).
Newark, NJ: LexisNexis.

Beech, A. R., & Ward, T. (2004). The integration of etiology and risk in sexual
offenders: A theoretical framework. *Aggression and Violent Behavior,* **10**, 31-
63.

Benson, B. A., & Brooks, W. T. (2008). Aggressive challenging behaviour and
intellectual disability. Current Opinion in Psychiatry, 21(5), 454–458.

Blacker, J., Beech, A. R., Wilcox, D. T., & Boer, D. P. (2010). The assessment of
dynamic risk and recidivism in a sample of special needs sexual offenders.
Psychology, Crime and Law, 17, 75-92.

Boer, D. P., Tough, S., & Haaven, J. (2004). Assessment of risk manageability of
intellectual disabled sex offenders. *Journal of Applied Research in Intellectual
Disabilities, 17,* 275-283.

Boer, D. P., Frize, M., Pappas, R., Morrissey, C., & Lindsay, W. R. (2010a).
Suggested adaptations to the HCR-20 for offenders with intellectual
disabilities. In L. A. Craig, W. R. Lindsay & K. D. Browne (Eds),

Assessment and treatment of sexual offenders with intellectual disabilities: A handbook (pp. 177-192*).* Wiley-Blackwell.

Boer, D. P., Frize, M., Pappas, R., Morrissey, C. & Lindsay, W. R. (2010b). Suggested adaptations to the SVR-20 for offenders with intellectual disabilities. In L. A. Craig, W. R. Lindsay & K. D. Browne (Eds), *Assessment and treatment of sexual offenders with intellectual disabilities: A handbook* (pp. 193-209). Oxford, UK: Wiley-Blackwell.

Boer, D. P., Hart, S. D., Kropp, P. R., & Webster, C. D. (1997). *Manual for the Sexual Violence Risk- 20: Professional guidelines for assessing risk of sexual violence*. Burnaby, BC: The Mental Health, Law & Policy Institute.

Borenstein, M., Hedges, L. V., & Higgins, J. P. T. (2009). *Introduction to Meta-Analysis (2).* Hoboken, GB: Wiley.

Borthwick-Duffy, S. A. (1994). Epidemiology and prevalence of psychopathology in people with mental-retardation. *Journal of Consulting and Clinical Psychology, 62*(1).

Bonta, J., Blais, J., & Wilson, H. A. (2014). A theoretically informed meta-analysis of the risk for general and violent recidivism for mentally disordered offenders. *Aggression and violent behavior*, *19*(3), 278-287.

Camilleri, J. A., & Quinsey, V. L. (2011). Appraising the risk of sexual and violent recidivism among intellectually disabled offenders. *Psychology Crime & Law, 17*(1), 59-74.

Campbell, M. A., French, S., & Gendreau, P. (2007). *Assessing the utility of risk assessment tools and personality measures in the prediction of violent recidivism for adult offenders*. Ottawa, ON: Public Safety Canada.

Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., Sailor, W., ... & Fox, L. (2002). Positive behavior support evolution of an applied science. *Journal of positive behavior interventions*, *4*(1), 4-16.

CASP. (2013). Critical Appraisal Skills Programme Cohort Study Checklist. In *http://www.casp-uk.net/wp-content/uploads/2011/11/CASP-Cohort-Study-Checklist-31.05.13.pdf* (Vol. 2013).

Higgins, J. P. T, & Green, S. (2011). *Cochrane Handbook for Systematic Reviews of Interventions,* Version 5.1.0. *The Cochrane Collaboration, 2011.* Available from www.cochrane-handbook.org.

Cooper, S. A., Smiley, E., Jackson, A., Finlayson, J., Allan, L., Mantry, D., & Morrison, J. (2009). Adults with intellectual disabilities: prevalence, incidence and remission of aggressive behaviour and related factors. *Journal of Intellectual Disability Research*, *53*(3), 217-232.

Craig, L. A., Beech, A. R, Cortini, F. (2013). What works in assessing risk in sexual and violent offenders, in Craig, L. A., Dixon, L. & Gannon, T.A. (Eds.) *What Works in Offender Rehabilitation: An Evidence-Based Approach to Assessment and Treatment,* Chichester: Wiley-Blackwell.

Crocker, A. G., Mercier, C., Lachapelle, Y., Brunet, A., Morin, D., & Roy, M. E. (2006). Prevalence and types of aggressive behaviour among adults with intellectual disabilities. *Journal of Intellectual Disability Research, 50*(9), 652–661.

Department of Health. (2009). The Bradley Report: Lord Bradley's review of people with mental health problems and learning disabilities in the criminal justice system. London: Central Office of Information.

Douglas, K. S., Hart, S. D., Webster, C. D., & Belfrage, H. (2013). *HCR-20V3:*

Assessing risk of violence – User guide. Burnaby, Canada: Mental Health, Law, & Policy Institute, Simon Fraser University.

Douglas, K. S., Ogloff, J. R., & Hart, S. D. (2003). Evaluation of a model of violence risk assessment among forensic psychiatric patients. *Psychiatric Services: A Journal of the American Psychiatric Association, 54*(10), 1372-1379.

Dolan, M., & Doyle, M. (2007). Psychopathy: Diagnosis and implications for treatment. *Psychiatry*, *6*(10), 404-408.

Drieschner, K. H., Marrozos, I., & Regenboog, M. (2013). Prevalence and risk factors of inpatient aggression by adults with intellectual disabilities and severe challenging behaviour: A long-term prospective study in two Dutch treatment facilities. *Research in Developmental Disabilities*, *34*(8), 2407-2418.

Drieschner, K. H., & Hesper, B. L. (2008). Dynamic risk outcome scales. Boschoord, NL: Trajectum.

Egger, M., Smith, G., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple graphical test. British Medical Journal, 315, 629–634.

Eher, R., Matthes, A., Schilling, F., Haubner-MacLean, T., & Rettenberger, M. (2011). Dynamic risk assessment in sexual offenders using STABLE-2000 and the STABLE-2007: An investigation of predictive and incremental validity. *Sexual Abuse: A Journal of Research and Treatment*, 24(1), 5-28.

Fitzgerald, S., Gray, N. S., Alexander, R. T., Bagshaw, R., Chesterman, P., Huckle, P., . . . Snowden, R. J. (2013). Predicting institutional violence in offenders with intellectual disabilities: The predictive efficacy of the VRAG and the HCR-20. *Journal of Applied Research in Intellectual Disabilities, 26*(5), 384-

393.

Fitzgerald, S., Gray, N., Taylor, J., Snowden, R., Fitzgerald, S., Gray, N. S., . . .
Snowden, R. J. (2011). Risk factors for recidivism in offenders with
intellectual disabilities. *Psychology, Crime & Law, 17*(1), 43-58.

Gray, N. S., Fitzgerald, S., Taylor, J., MacCulloch, M. J., & Snowden, R. J. (2007).
Predicting future reconviction in offenders with intellectual disabilities: The
predictive efficacy of VRAG, PCL-SV, & the HCR-20. *Psychological
Assessment, 19*(4), 474-479.

Gray ,N. S, Taylor, J., & Snowden, R. J. (2011). Predicting violence using structured
professional judgment in patients with different mental and behavioral
disorders. *Psychiatry Research, 187*(1-2), 248-253

Greenhill, B., & Whitehead, R. (2011). Promoting service user inclusion in risk
assessment and management: A pilot project developing a human rights-based
approach. *British Journal of Learning Disabilities, 39*(4), 277-283.

Grove, W. M., & Lloyd, M. (2006). Meehl's contribution to clinical versus statistical
prediction. *Journal of Abnormal Psychology*, *115*(2), 192-203.

Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical
versus mechanical prediction: A meta-analysis. *Psychological Assessment, 12*,
19-30.

Gudjonsson, G. H., & Sigurdsson, J. F. (2000). Differences and similarities between
violent offenders and sex offenders. *Child Abuse & Neglect, 24*(3), 363-372.

Hart, S. D., & Cooke, D. J. (2013). Another Look at the (Im-)Precision of Individual

    Risk Estimates Made Using Actuarial Risk Assessment Instruments.

    Behavioral Sciences & The Law, *31*(1), 81-102.

Hart, S. D., & Logan, C. (2011). Formulation of violence risk using evidence-based

    assessments: The structured professional judgment approach. In P. Sturmey &

    M. McMurran (Eds.), *Forensic case formulation* (pp. 83–106). Chichester,

    UK: Wiley-Blackwell.

Hanson, R. K. (2009). The psychological assessment of risk for crime and violence.

    Canadian Psychology-Psychologie Canadienne, 50(3), 172-182.

Hanson, R. K., Harris, A. J. R., Scott, T. L., & Helmus, L. (2007). *Assessing the risk*

    of sexual offenders on community supervision: The Dynamic Supervision

    Project (Corrections Research User Report No. 2007-05). Ottawa, Ontario,

    Canada: Public Safety Canada.

Hanson, R. K., & Morton-Bourgon, K. E. (2009). The accuracy of recidivism risk

    assessments for sexual offenders: A meta-analysis of 118 prediction studies.

    Psychological Assessment, 21(1), 1-21.

Hart, S. D., & Cooke, D. J. (2013). Another look at the precision of individual risk

    estimates made using actuarial risk assessment instruments. *Behavioral*

    Sciences & the Law, *31*(1), 81-102.

Hare R. D. (1991) *The Hare Psychopathy Checklist-Revised*, Toronto, Ontario: Multi-

    Health Systems.

Hare R. D. (2003) *The Hare Psychopathy Checklist-Revised* (2nd ed.). Toronto,

    Ontario: Multi-Health Systems.

Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? Issues of causality and mechanism. *American Journal on Mental Retardation, 107*(6), 455-467.

Hastings, R. P., & Brown, T. (2002). Coping strategies and the impact of challenging behaviors on special educators' burnout. *Mental Retardation, 40*(2), 148-156.

Hensel, J. M., Lunsky, Y., & Dewa, C. S. (2012). Exposure to client aggression and burnout among community staff who support adults with intellectual disabilities in Ontario. Canada. *Journal of Intellectual Disability Research, 56(9),* 910–915.

Higgins, N., Watts, D., Bindman, J., Slade, M., & Thornicroft, G. (2005). Assessing violence risk in general adult psychiatry. *The Psychiatrist*, *29*(4), 131-133.

Higgins, J. P., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *British Medical Journal, 327*(7414), 557-560.

Hockenhull, J. (n.d.). The structured assessment of violence risk in adults with intellectual disability: A systematic review. Liverpool Reviews and Implementations Group

Inett, A., Wright, G., Roberts, L., & Sheeran, A. (2014). Predictive validity of the START with intellectually disabled offenders. *Journal of Forensic Practice*, *16*(1), 78-88.

Kraemer, H. C., Kazdin, A. E., Offord, D. R., Kessler, R. C., Jensen, P. S., & Kupler D. J. (1997). Coming to terms with the terms of risk. *Archives of General Psychiatry, 54,* 337–343.

Lim, S., & Howard, R. (1998). Antecedents of sexual and non-sexual aggression in young Singaporean men. *Personality and Individual Differences*, *25*(6), 1163-1182.

Lindsay, W. R., & Beail, N. (2004). Risk assessment: Actuarial prediction and clinical

judgement of offending incidents and behaviour for intellectual disability

services. *Journal of Applied Research in Intellectual Disabilities*, *17*(4), 229-

234.

Lindsay, W. R., Murphy, L., Smith, G., Murphy, D., Edwards, Z., Chittock, C., . . .

Young, S. J. (2004). The dynamic risk assessment and management system:

An assessment of immediate risk of violence for individuals with offending

and challenging behaviour. *Journal of Applied Research in Intellectual*

Disabilities, 17(4), 267-274.

Lindsay, W. R., Hogue, T. E., Taylor, J. L., Steptoe, L., Mooney, P., O'Brien, G., . . .

Smith, A. H. W. (2008). Risk assessment in offenders with intellectual

disability. A comparison across three levels of security. *International Journal*

of Offender Therapy and Comparative Criminology, 52(1), 90-111.

Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., Boer, D. P., & Haaven,

J. L. (2013). Prospective dynamic assessment of risk of sexual reoffending in

individuals with an intellectual disability and a history of sexual offending

behaviour. *Journal of Applied Research in Intellectual Disabilities*, *26*(5),

394-403.

Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., & Roberts, D. (2014b).

Dynamic risk and violence in individuals with an intellectual disability: tool

development and initial validation. *The Journal of Forensic Psychiatry &*

Psychology, *25*(3), 288-306.

Lofthouse, R. E., Totsika, V., Hastings, R. P., Lindsay, W. R., Hogue, T. E., &

Taylor, J. L. (2014a). How do static and dynamic risk factors work together to

predict violent behaviour among offenders with an intellectual disability?.

Journal of Intellectual Disability Research, *58*(2), 125-133.

Lofthouse, R. E. (2016). *Assessing and managing risk with adults with intellectual disabilities.* (Unpublished doctoral dissertation). University of Liverpool, UK.

Logan, C. (2014). The HCR-20 Version 3: A Case Study in Risk Formulation, *International Journal of Forensic Mental Health, 13*:2, 172-180.

Lundqvist, L. O. (2013). Prevalence and risk markers of behavior problems among adults with intellectual disabilities: a total population study in Örebro County, Sweden. *Research in developmental disabilities*, *34*(4), 1346-1356.

Mann, R. E., Hanson, R. K., & Thornton, D. (2010). Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sexual Abuse: A Journal of Research and Treatment, 22*(2), 191-217.

MedCalc Statistical Software version 16.4.3 (MedCalc Software bvba, Ostend, Belgium; https://www.medcalc.org; 2016).

Meehl, P. E. (1954). Clinical versus statistical prediction: A theoretical analysis and a review of the evidence. Minneapolis: University of Minnesota.

Miller, K., Rufino, K. A., Boccaccini, M. T., Jackson, R. L., & Murrie, D. C. (2011). "On individual differences in person perception: Raters' personality traits relate to their Psychopathy Checklist-Revised scoring tendencies." *Assessment 18,* 253-260.

Mills, S., & Rose, J. (2011). The relationship between challenging behaviour, burnout and cognitive variables in staff working with people who have intellectual disabilities. *Journal of Intellectual Disability Research, 55(*9), 844–857.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of Internal Medicine*, *151*(4), 264-269.

Monahan, J., Steadman, H., Silver, E., Appelbaum, P., Robbins, P., Mulvey, …, & Banks, S. (2001). *Rethinking Risk Assessment: The MacArthur Study of Mental Disorder and Violence*. New York: Oxford University Press.

Morgan, J. F. (2007). *Giving up the Culture of Blame: Risk assessment and risk management in psychiatric practice*. London: Royal College of Psychiatrists.

Morrissey, C. (2003). The use of the PCL-R in forensic populations with learning disability. *British Journal of Forensic Practice, 5*, 20–4.

Morrissey, C., Hogue, T., Mooney, P., Allen, C., Johnston, S., Hollin, C.,…Taylor, J. L. (2007). The predictive validity of the PCL-R in offenders with ID in a high secure hospital setting: *Institutional aggression. Journal of Forensic Psychiatry & Psychology, 18*, 1–15.

Morrissey, C., Hogue, T., Mooney, P., Lindsay, W. R., Steptoe, L., Taylor, J. & Johnston, S. (2005). Applicability, reliability, and validity of the psychopathy checklist-revised in offenders with intellectual disabilities: Some initial findings. *International Journal of Forensic Mental Health, 4,* 207–20.

National Institute for Health and Clinical Excellence (NICE). (2015). Violence and aggression: short-term management in mental health, health and community settings. Retrieved from https://www.nice.org.uk/guidance/ng10

Nicholls, T. L., & Petrila, J. (2005). Gender and psychopathy: An overview of important issues and introduction to the special issue. *Behavioral Sciences & the Law*, *23*(6), 729-741.

O'Shea, L. E., Picchioni, M. M., Mason, F. L., Sugarman, P. A., & Dickens, G. L. (2014). Differential predictive validity of the Historical, Clinical and Risk Management Scales (HCR–20) for inpatient aggression. *Psychiatry Research*, *220*(1), 669-678.

Pouls, C., & Jeandarme, I. (2014). Psychopathy in Offenders with Intellectual Disabilities: A Comparison of the PCL-R and PCL: SV. *International Journal of Forensic Mental Health*, *13*(3), 207-216.

Pouls, C., & Jeandarme, I. (2015). Risk assessment and risk management in offenders with intellectual disabilities: Are we there yet? *Journal of Mental Health Research in Intellectual Disabilities, 8*(3-4), 213-236.

Prout, T. H., & Strohmer, D. C. (1991). *Emotional Problems Scales*. Lutz, FL: Psychological Assessment Resources.

Puddicombe, J., & Lunsky, Y. (2007). Aggression and dual diagnosis: Implications for Ontario's developmental services. *Journal on Developmental Disabilities, 13,*191–196.

Quinsey, V. L. (2004). Risk assessment and management in community settings. In W. R. Lindsay, J. L. Taylor, & P. Sturmey (Eds.), *Offenders with developmental disabilities* (pp. 131-141). Chichester, UK: John Wiley & Sons Ltd.

Quinsey, V. L., Book, A. B., & Skilling, T. A. (2004). A Follow-up of deinstitutionalized men with intellectual disabilities and histories of antisocial behaviour. *Journal of Applied Research in Intellectual Disabilities, 17*, 243-253.

Quinsey, V. L., Coleman, G., Jones, B., & Altrows, I. F. (1997). Proximal antecedents

of eloping and reoffending among supervised mentally disordered offenders.

Journal of Interpersonal Violence, *12*(6), 794-813.

Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). *Violent

offenders: Appraising and Managing Risk (1st edition).* Washington, DC;

American Psychological Association.

Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (2006). *Violent

offenders: Appraising and managing risk (2nd ed.).* Washington, DC, US:

American Psychological Association.

Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies:

ROC area, Cohen's d, and r. *Law and Human Behavior, 29*(5), 615-620.

Schoonjans, F., Zalata, A., Depuydt, C. E., Comhaire, F. H. (1995). MedCalc: A new

computer program for medical statistics. *Computer Methods and Programs in

Biomedicine, 48*(3), 257.

Singh, J. P., & Fazel, S. (2010). Forensic risk assessment: A metareview. *Criminal

Justice and Behavior, 37*(9), 965-988.

Singh, J. P., Grann, M., & Fazel, S. (2013). Authorship bias in violence risk

assessment? A systematic review and meta-analysis. *PLoS ONE 8*(9): e72484.

Singer, J. C., Boer, D. P., & Rettenberger, M. A Convergent Approach to Sex

Offender Risk Assessment. In K. Harrison & B Rainey (Eds.), *The Wiley-

Blackwell Handbook of Legal and Ethical Aspects of Sex Offender Treatment

and Management* (pp. 339-355). Chichester, UK: John Wiley & Sons.

Steptoe, L. R., Lindsay, W. R., Murphy, L., & Young, S. J. (2008). Construct validity,

reliability and predictive validity of the dynamic risk assessment and

management system (DRAMS) in offenders with intellectual disability. *Legal and Criminological Psychology, 13*, 309-321.

Verbrugge, H. M., Goodman-Delahunty, J., & Frize, M. C. J. (2011). Risk assessment in intellectually disabled offenders: Validation of the suggested ID supplement to the HCR-20. *International Journal of Forensic Mental Health, 10*(2), 83-91.

Webster, C. D., Martin, M. L., Brink, J., Nicholls, T. L., & Middleton, C. (2004). Manual for the Short-Term Assessment of Risk and Treatability (START), Version 1.0. St. Joseph's Healthcare Hamilton: Ontario, Canada–Forensic Psychiatric Services Commission: Port Coquitlam. *British Columbia, Canada*.

Wheeler, J. R., Clare, I. C. H., Holland, A. J. (2014). What can social and environmental factors tell us about the risk of offending by people with intellectual disabilities? *Psychology, Crime & Law, 20*(7), 635-658.

Wong, S. C. P., & Gordon, A. (2006). The validity and reliability of the violence risk scale - A treatment-friendly violence risk assessment tool. *Psychology Public Policy and Law, 12*(3), 279-309.

Yang, M., Wong, S. C. P., & Coid, J. (2010). The efficacy of violence prediction: A meta-analytic comparison of nine risk assessment tools. *Psychological Bulletin, 136*(5), 740-767.

Zhou, X. H., Obuchowski, N. A., McClish, D. K. (2002). Statistical methods in diagnostic medicine. Wiley-Interscience.

Chapter 2

Predicting aggression in adults with ID: The predictive efficacy of the CuRV and the SDRS.[1]

---

[1] Paper to be submitted to the Journal of Forensic Psychiatry & Psychology. See Appendix A for author guidelines.

Abstract

Background: Structured assessments have been shown to assist professionals to evaluate the risk of aggression in secure services for general offender populations and more recently among adults with intellectual disabilities (ID). There is a need to develop ID sensitive measures for predicting risk of aggression in community samples.

Method: The study prospectively followed 28 participants for up to two months to test whether the Current Risk of Violence (CuRV) and Short Dynamic Risk Scale (SDRS) were able to predict verbal and physical aggression in a community sample of adults with ID.

Results: CuRV and SDRS ratings significantly predicted verbal and physical aggression over a two-month period.

Conclusions: The current study provides validation research for use of the CuRV with adults with ID living in community settings. The CuRV and SDRS are worthy of future development and evaluation in independent investigations.

Key words: Risk assessment and management, intellectual disability, community learning disability services, dynamic risk factors.

Introduction

Aggression is one of the most prevalent forms of challenging behaviour among adults with intellectual disability (ID; Emerson et al., 2001). The point at which a 'challenging behaviour' such as aggression toward others, or the environment, becomes 'offending' behaviour is often ambiguous (McBrien & Murphy, 2006) and difficult to establish. Within the research literature, methodological limitations such as inconsistency in operationalizing the terms 'ID' and 'offending' behaviour (Holland, Clare, & Mukhopadhyay, 2002; Loucks, 2007) preclude a clear understanding of the extent to which adults with ID offend and whether patterns or severity of offending differs from non ID adults (Murphy & Clare, 2012).

Issues of definition and operationalizing behaviour are complicated in ID community services. Direct care staff working with adults with ID and risky behaviour, such as aggression, are often unsure whether to report potentially illegal acts to the police. Such judgments centre on issues of intent (mens rea), responsibility, or the lack of (Holland et al., 2002) and are influenced by many factors including the service culture and staff attitudes (McBrien & Murphy, 2006). Consequently, there may be under-reporting of potential offending behaviour by services and when reporting does occur, the offence not may not be considered a crime or investigated (Murphy & Clare, 2012).

Within the ID literature, typically adults with a severe/profound ID are more likely to be considered to engage in 'challenging behaviour' and do not enter the Criminal Justice System (CJS). With this group, behaviours are considered to be caused or exacerbated by a range of risk variables and processes including social

deprivation, psychiatric symptoms or disorders, exposure to negative life events, and inadvertent reinforcement by carers and others (Hastings et al., 2013). Adults with a mild/moderate ID who are not referred to the CJS, or have involvement but are not convicted, are likely to be considered as engaging in 'anti social' or 'risky' behaviour. Those adults with ID who are convicted now, or in the past, through the CJS, are typically categorized as 'offenders' (Wheeler et al., 2009).

Theoretical models offer an explanatory and predictive account of offending by adults with ID. The Good Lives Model (GLM) proposes that it is a human function to strive to attain basic goods and satisfy values and needs (Ward & Stewart, 2003). It is suggested that adults who engage in aggressive behaviour, lack the internal (e.g. skills, attitudes & beliefs) and external (e.g. resources) conditions required to satisfy these needs pro-socially (Ward & Stewart, 2003). Therefore, an individual may behave aggressively in an attempt to create a fulfilling life (Lindsay, 2009). It follows that, by promoting the internal and external conditions to help individuals develop pro-social methods of achieving their human needs and values, this will reduce the likelihood of aggression.

Risky and offending and behaviour by adults with ID

Adults with ID that engage in risky or offending behaviour within community settings became the focus of research interest in the UK following the transition of care from large institutions to community-based services in the 1990s. Philosophies of person centred care, normalization and inclusion (O'Brien, 1987; Wolfensberger, 1972) were influential on this shift and subsequent UK policy aimed at promoting community care for those who have offended or are at risk of offending (Department of Health [DoH]/Home Office, 1992; DoH, 2007). More recently, authors have

advocated that the core human rights principles underpinning the Human Rights Act (Human Rights Act [HRA], 1998) should inform best practice within ID services, and are an essential component of the assessment and management of risk (Greenhill & Whitehead, 2010).

In line with this, recent UK policy has called for a more consistent approach to dealing with potential offending behaviour that reflects the vulnerability and disadvantage adults with ID face at all stages of the CJS (Lindsay, Hastings, & Beech, 2011). Difficulty comprehending their basic rights, coupled with increased susceptibility to suggestibility and acquiescence, leave adults with ID significantly vulnerable to deceit, coercion and intimidation (Mercier & Crocker, 2011). This inevitably compromises their human rights.

Where sufficient evidence of an offence exists, and it is considered in the public's best interest, UK guidance endorses that the behaviour is brought to the attention of the CJS (DoH, 2009). This needs to happen whilst also upholding the rights of the adult with ID (Murphy & Clare, 2012) and ensure that necessary support and adaptations are implemented to protect against vulnerability. Prior to deinstitutionalization, offenders with ID would have been diverted at an early stage of the CJS into secure services or hospitals. If adults with ID were discharged from such services and reoffended, it is likely that they would have been readmitted to hospital (Lindsay, 2002).

As large institutions now cease to exist, and contemporary policy stipulates that where possible, adults with ID should be diverted out of the CJS into alternative service structures, a range of pathways into services has evolved (Carson et al., 2010). These include processing and diversion at different stages of the CJS, entry into

statutory and private services, or community ID services (Carson et al., 2010). In line with UK policy, care and support strategies should be delivered in the least restrictive environment (DoH, 2009; Jacobson, 2008), ideally provided in the community, with multi-disciplinary team involvement, and close to the adult's home (Murphy & Clare, 2012).

Consequently, a larger number of adults with ID who have offended are likely to be referred to or remain in community services under conditions of probation or other community court disposal options. Research suggests that whilst up to a quarter of adults known to community ID services are acknowledged as having engaged in illegal activity (McBrien, Hodgetts, & Gregory, 2003), only a third have had contact with the CJS (McBrien et al., 2003; Wheeler et al., 2009). Therefore, although aggressive behaviours may have the potential to attract legal consequences, they may not be dealt with through the legal system.

From a values viewpoint, community living is essential for ensuring social inclusion and reducing discrimination against adults with ID. However, adults with ID and a history of or current aggressive behaviour present significant challenges to community health and social care services. The environment and infrastructure in community settings differs significantly to secure services. Within community services, risks are likely to be managed through relational and procedural policies and procedures rather than physical security. Under provision of the Mental Health Act 1983 (Amended 1995 & 2007), secure services are likely to rely on containment strategies to reduce and manage aggression. These include seclusion, restraint, higher staff-to-service user ratios and observation of service users. In comparison to secure services, the environment in community services is less controlled, more fragmented and dispersed which means access to information is not as readily available and easily

shared (National Institute for Health and Clinical Excellence [NICE], 2015). It could

be argued that conducting risk assessment in a community setting is more challenging

than in secure services. This is due to the increased risk associated with greater access

to the general public and lower staffing levels which mean less monitoring and greater

isolation from the support of other staff (NICE, 2015).

As a result of these differences, it is likely that dynamic risk factors (amenable

to change) might present differently and at different rates in community services.

Therefore, risk assessment and management strategies that are employed within

secure services may not be appropriate, feasible or effective at promoting the safety in

community settings.

Risk assessment and ID

A necessary feature of risk assessment is the identification of factors that

precipitate and maintain the challenging behaviour (Campbell, French, & Gendreau,

2007). Research to date suggests that there are inconsistent findings relating to the

characteristics of adults with ID who offend or are at risk of offending. Some studies

report characteristics broadly in keeping with non-ID offenders, including young,

male, and high rates of substance misuse (Lindsay, Steele, Smith, Quinn, & Allan,

2006). More recently, Wheeler and colleagues (2009) found contrary evidence

pointing towards lower IQ, an increased prevalence of older adults, and reduced

substance misuse. Furthermore, Lund (1990) suggested that, following

deinstitutionalization, adults with ID living in the community are likely to be

intellectually more able, and therefore have increased capacity for offending.

The process of structured risk assessment is an established part of routine

clinical practice in secure services for adults with ID. However, the extent to which

structured risk assessment takes place in community settings is sporadic (Yacoub & Latham, 2012). Previous studies suggest that the absence of policy and protocol specific to managing risk, difficulty with cross agency liaison and ownership of management plans, and a lack of standardized risk measures for this population (Boer, Tough, & Haaven, 2004; Lindsay, 2002; Lindsay & Beail, 2004) are barriers to conducting risk assessment in community settings. Although assessing risk is difficult for all services (Campbell et al., 2007) accurate assessment of risk in the community is vital for ensuring appropriate, safe and effective treatment and support for adults with ID (Wheeler, Clare, & Holland, 2013).

There is a well-established practice of assessing risk among offenders within mainstream (non-ID) populations. This is reflected in the development of over 120 different risk assessment tools for this population (Singh, Grann, & Fazel, 2011). Research attention assessing the effectiveness of some of these risk measures with adults with ID is starting to emerge. However, the validity of this approach is unknown (Johnston, 2002). The majority of ID studies have occurred in high, medium and low secure forensic settings (Drieschner, Marrozos, & Regenboog, 2013; Fitzgerald et al., 2011; Fitzgerald et al., 2013; Innett, Wright, Roberts, & Sheeran, 2014; Lofthouse, Lindsay, Totsika, Hastings, & Roberts, 2014; Morrissey et al., 2005; Morrisey et al., 2007; O'Shea, Picchioni, Mason, Sugarman, & Dickens, 2014; Pouls & Jeandarme, 2014; Quinsey, Book, & Skilling, 2004; Steptoe, Lindsay, Murphy, & Young, 2008) with a few extending to community ID populations (Gray, Fitzgerald, Taylor, MacCulloch, & Snowden, 2007; Gray, Taylor, & Snowden, 2011; Lindsay et al., 2008; Lofthouse, et al. 2014; Verbrugge, Goodman-Delahunty, & Frize, 2011).

Despite the recent increase in research interest in the area of risk assessment, uncertainty and lack of confidence in assessing risk for individuals with ID remains

(Blacker, Beech, Wilcox, & Boer, 2010; Lofthouse et al., 2014). For assessments of risk to be accurate and useful for clinicians, empirically validated structured risk assessments are required. Guidance in the UK, recommends that the assessment and review of risk of harm to others should be flexible and continuous to reflect the changeable nature of risk (NICE, 2015). Structured professional judgment measures, such as the Historical Clinical Risk Management-20 (HCR-20; Douglas, Hart, Webster, & Belfrage, 2013) are recommended when assessing risk of violence in mental health settings (NICE, 2015).

A proposed advantage of the HCR-20 is the inclusion of dynamic risk factors that are amenable to change (Harris & Hanson, 2010). Conversely, one of the disadvantages of conducting risk assessment using the HCR-20 is that it requires a trained professional to administer and can be time-intensive (Gray et al., 2011). Thus, the HCR-20 may be most suitable for administering on a bi-annual basis or to inform decisions at transitional stages such as discharge from services or child protection cases (Gray et al., 2011).

Arguably, if one of the aims of risk assessment is to inform risk formulation and management, it should contribute to the day-day management and care plans of adults with a history of aggression. This can be achieved by alerting clinicians to pertinent risk factors and areas of need that require increased monitoring or intervention. Furthermore, rather than being used as a reactive response to risky behaviours, risk assessments can be used in a proactive manner to assess the effect of treatment and management (Grey et al., 2011) and thus ameliorate the individual's risk of engaging in future aggressive behaviour.

Why it is important to look at aggression

Recent changes in UK policy have undoubtedly changed the nature and admission criteria of health services for adults with ID who offend and potentially improved attitudes toward this group (Lindsay et al., 2013). Research is needed to investigate the impact of these changes on risk presentation within this population. There is a clear need to accurately assess risk of aggression in community ID services not only for the well-being of adults with ID, but also those involved in their care and the public. Existing research shows that aggression presented by adults with ID has negative implications for the psychological well being of care staff, in particular relating to elevated stress levels and burnout (Chung & Harding 2009; Hastings 2002; Hastings & Brown 2002; Hensel, Lunsky, & Dewa, 2012; Howard, Rose, & Levenson, 2009; Mills & Rose 2011). Crocker and colleagues (2006) found that verbal aggression was the most prevalent form of challenging behaviour in community ID services. Verbal aggression often takes the form of abuse, shouting, threats, racism and generalised anger (Stewart & Bowers, 2013). Frequent verbal aggression can be a burden on staff and carers. It can have a profound psychological impact (Stone, McMillan, & Hazleton, 2010), affect job performance and functioning, and are associated with low staff morale (Bowers et al., 2009; Sprigg, Armitage, & Hollis, 2007).

There is little doubt that community services are preferable to secure settings and are more likely to promote quality of life, the human rights of adults with ID and community integration. However, presenting with aggressive behaviour in the community has implications for the adult with ID in terms of social, vocational, and educational integration (Crocker et al. 2006). Displaying aggression in community settings also increases the likelihood of the adult with ID being referred into secure

services (Carson et al., 2010). Furthermore, aggression is often bound up with moral and ethical concerns and causes concern and worry among the public (Bowen & Lovell, 2013), perpetuating fear and exclusion of adults with ID.

Recently, Lindsay and colleagues (2010) argued that pathways in to community service provision are related to the level of assessed risk. In the absence of a valid and reliable risk measure, care staff make informal evaluations and decisions about risk on the basis of dynamic factors that may or may not be related to risk. The result is likely to be an inaccurate assessment of risk that may attract unnecessary restrictions on the adult's freedom or increase the potential risk to others. Research is needed to predict and prevent aggression through identification of reliable and valid risk measures. Dynamic risk factors lend themselves to the challenge of assessing the changeable nature of risk and play an important role in the emergence and maintenance of aggressive behaviour (Crocker, Mercier, Allaire, & Roy, 2007). In relation to clinical practice, dynamic risk assessments enable professionals to be better informed about *when* to intervene to reduce risk, *how much* individuals respond to treatment and whether modification to supervision levels is required (Douglas & Skeem, 2005).

Within the UK, a small number of risk assessments measures have been developed specifically for adults with ID, composed of dynamic risk factors. Measures focus on predicting sexual violence (e.g., Assessment of Risk and Manageability for Individuals who Offend Sexually [ARMIDILO-S], Boer, et al., 2011, 2004; Treatment Intervention and Progress Scale for Sexual Abusers with ID [TIPS-ID], McGrath, Livingston, & Falk, 2007) and physical violence (Dynamic Risk Appraisal and Management System [DRAMS], Lindsay et al., 2004; Current Risk of Violence [CuRV], Lofthouse et al. 2014; Short Dynamic Risk Scale [SDRS],

Quinsey, 2004). Evidence demonstrating the predictive accuracy of these measures is limited. Narrative and systematic reviews (Camilleri & Quinsey, 2011; Hockenhull n.d.; Pouls & Jeandarme, 2015) in the field have attempted to provide an overview of the validity of risk assessments in this area. A recent meta-analysis (Lofthouse, 2016) compares the efficacy of assessments to predict risk of aggression in prospective studies.

A paucity of research on the effectiveness of measures to assess risk in a community setting is an ongoing concern. Whilst community service provision for adults with ID have developed over recent years, inadequacies remain. This is concerning considering that the majority of adults with ID who offend or are considered risky live in community settings. There are two important functions for risk prediction in community ID provision: 1: To predict offending behaviour (as with any other population and setting), and 2: To prevent aggressive behaviour from escalating into offending behaviour through better assessment and management.

Preventing aggression is desirable not only for adult's well being, but also for averting psychological and physical harm to carers and other potential victims. It helps adults with ID to maintain the community placement or to progress to community living without putting themselves at risk and increases self esteem (Cooper et al., 2009) and independence. Accurate assessment and management of the risk posed should lead to a reduction in aggressive behaviour and eliminate the need for placement in secure services and the associated costs (NICE, 2015). In turn, this would positively impact on promoting inclusion and reducing discrimination against adults with ID.

The current study aims to explore whether the CuRV (Lofthouse et al., 2014) performs equally well with community populations, where the external environment is different and therefore dynamic risk factors might be present in different form and at different rates. Within the current community sample, participants are a combination of adults who have been discharged from secure settings and those whose behaviours have been managed long term in the community. Some of the adults may be at risk of becoming offenders if the behaviour was brought to the attention of the CJS.

A further aim of the current study is to assess the convergent validity of the CuRV through administering the SDRS (Quinsey, 2004). Due to the limited availability of ID specific validated risk assessment for predicting aggression, the CuRV was compared to another measure in the field.

Method

Participants and Settings

Participants were a sample of 28 adults with ID, they lived in a variety of community settings in England and Scotland. Three participants were female, 25 were male. One participant identified as Pakistani, one black British and 25 white British. Mean age for the sample was 33, range 18 – 52 (n=21). Mean IQ was 62, range 53-69 (n=17) missing data (n=8). Where IQ score was unavailable, four participants were considered to have a mild ID, the remaining participants were administratively defined as requiring ID services.

Setting one: is a community home in the North of England for people with ID and additional mental health or complex care needs such as epilepsy and sensory

needs. Adults currently present with behaviours that challenge services in addition to having a history of such behaviour that necessitated treatment in secure settings. Nursing and support worker staff provide 24-hour support. Adults receive services from psychology and occupational therapy on a needs led basis.

Setting two: Is a registered charity in the North of England that provides support services in the community for adults with ID. Prior to the community placement, some service users have resided in secure settings as a result of their aggression, whilst others have been consistently managed in community settings. In the community, service users have their own tenancies, shared tenancies with other adults with ID or live with partners, parents or carers. Level of service intervention varies in relation to service user need, ranging from 24-hour support worker input to outreach support for those living with family/alone. The service supports adults into employment and other meaningful activities. Clinical psychology input is provided on an individual needs basis.

Setting three: Provides inpatient (10 bed open unit), outpatient, and day-patient treatment and assessment within the unit and the community. Most service users engage in treatment whilst living in the community. The service covers all service users in geographical area in Scotland.

Measures

Current Risk of Violence (CuRV; Lofthouse et al. 2014)

The aim of the CuRV (see Appendix B) is to provide a brief assessment of aggression in adults who fall in the mild to borderline range of intellectual disability, and have a history of aggressive behaviour.

The first stage in developing the CuRV was to create a detailed conception of the construct and theoretical context of aggression in individuals with ID (Clark & Watson, 1995). To achieve this, the authors conducted a comprehensive literature review to clarify the nature and range of the content of the items (Lindsay & Beail, 2004; Quinsey, 2004; Quinsey et al., 2004; Quinsey, Coleman, Jones, & Altrows, 1997; Steptoe et al., 2008). Creation of the initial item pool included data derived from a number of sources: Interviews with allied health professionals and service users with an ID; relevant literature, secondary analysis of existing risk assessment datasets. This process culminated in the pooling of 34 risk items. The CuRV includes a wide range of dynamic risk factors relating to the individual, staff and the environment (Boer et al., 2004). Items are scored on a dichotomous 'yes' and 'no' format (see Lofthouse et al., 2014) for a detailed description of the scale's construction). In the initial validation study (Lofthouse et al., 2014) the risk of aggression was assessed among 64 participants in medium secure settings in the UK. Results demonstrated that the CuRV could significantly predict physical aggression over five months (AUC = .76, 95% Confidence Interval [CI] = .64, .88). Internal consistency (Kuder Richardson coefficient) for the total CuRV risk score in the preliminary study was high (.91, $SE = .06$).

Short Dynamic Risk Scale (SDRS; Quinsey, 2004)

The SDRS (see Appendix C) is an eight-item measure assessing the individual's presentation over the previous month. The measure contains a range of dynamic variables: accepting responsibility for behaviour, coping skills, anger expression, anxiety/frustration, hostile behaviour toward others, lack of consideration for others, poor house keeping or cooking, and poor self care/hygiene. Items are rated on a scale of 0 – 4 (no problem to severe problem). In a field study, changes in SDRS

scores were prospectively related to risk of aggression and antisocial behaviour (Quinsey, 2004). The SDRS demonstrated significant predictive value (AUC = .72, p = .000) for violent incidents in a study of adults with ID across high secure settings, medium or low, and community (Lindsay et al., 2008).

Outcome variable

Incidents of verbal and physical aggression were recorded over a two-month period using available clinical notes. Incidents of physical and verbal aggression are recorded as part of routine clinical practice in most services, independent of the study. To be included in the present study, aggressive incidents had to meet the study's operational definition of physical or verbal aggression.

Physical aggression: was defined as an act of physical violence, aggression, or force with hostility and intention to hurt or damage someone or something physically or psychologically (Yang, Wong, & Coid, 2010). Aggression may be directed at others or the environment. Attempts to hit someone or something would be considered an act of physical aggression regardless of whether a physical connection was made with the intended target and may also include the use of weapons/dangerous items. Examples of physical aggression include hitting, punching, hair-pulling, scratching, biting, grabbing, nipping, and kicking. Damage to property or aggression directed toward the environment includes upturning furniture, throwing objects, pulling curtains down etc. Aggression that resulted in charges or convictions were included as well as noncriminal aggression.

Verbal aggression: was defined as verbal behaviour where the content is threatening, hostile or derogatory, aimed at specific individuals that would be perceived as causing

offence because of its content and/or severity/intensity. Examples include provocation, name-calling, intimidation, threats to hit, ridiculing others and abusive comments (regarding gender, race, culture etc.), screaming and swearing directed at another individual and menacing gestures.

Procedure

Favourable ethical approval for the study was gained from the National Health Service (NHS) Research Ethics Committee. In addition, the study was reviewed and approved by University of Liverpool Doctorate in Clinical Psychology's Research Review Committee and sponsorship granted by the University of Liverpool (see Appendix D for approval documentation). Site-specific permissions to conduct the research were gained at each setting. A number of services were approached throughout England and Scotland to participate in the study. This included six National Health Service (NHS) Trusts responsible for the provision of community ID services, and several independent and private sector service providers.

Within each service setting that agreed to participate in the study (see above), managers of clinical services for adults with ID were contacted and provided with the rationale for the project and study criteria. Staff were asked to identify potential participants within their service who met the following inclusion criteria:

- Diagnosis of ID (meeting at least one of the following four criteria):
    1. IQ < 70, as assessed with standardised tools
    2. Significant impairments in adaptive behaviour assessed with adaptive behaviour scales
    3. Standardised assessment of IQ & adaptive functioning indicative of an ID diagnosis

4. Administratively defined ID: currently receiving ID services

- Aged 18 and above

- In receipt of ID service in a community setting

- History of verbal or physical aggression

- Likely to be able to independently provide informed consent to participate

Once potential participants were identified, assessments were conducted with regard to capacity to independently consent to study participation. Capacity to consent was informed by an ID specific protocol developed by Arscott, Dagnan, and Kroese (1998). Each potential participant was provided with a written and verbal outline of the study using a participant information sheet (see Appendix E). Following Mental Capacity Act (2005) guidance, this process established whether the individual could adequately understand the information presented, retain it, and use it to make a decision whether to participate in the study.

Where capacity was established, formal written consent was gained (see Appendix F) consistent with relevant professional practice guidelines (British Psychological Society [BPS], 2009). Participants were able to withdraw from the study up until the point that data had been anonymised and added to the database. Consent included permission to access records held within the service to extract demographic information and incident data relating to verbal and physical aggression. One potential participant was excluded from the study at site two because the level of IQ was too high.

A member of direct care staff who had known the individual for a minimum of three months completed the CuRV and the SDRS.

Data collection

A member of the clinical team at each site scored the CuRV and SDRS assessment for each participant and collected the demographic information (age, gender, level of ID). A range of staff undertook this process including: Clinical Nurse Specialist, Assistant Psychologist, Ward Manager and Support Worker. The remainder of the direct care staff team were blind to the results of the assessments and there were no intentional changes to care plans over the follow up period.

The same member of staff that completed the initial CuRV and SDRS assessments collected the follow up data over a two-month period. Data related to incidents of aggression and was recorded in clinical notes as part of routine practice. Each incident that met the criteria outlined above was coded as "aggression present" for the participant. If no incidents of verbal or physical aggression were recorded, the code was "aggression absent." A member of staff at the site collected the outcome data, independent to the administration of the CuRV and the SDRS, guided by the definitions described above. The definitions of aggression were used in the previous study (Lofthouse et al., 2014) where inter-rater reliability in the previous study was good (Cohen's Kappa =.73).

Results

Measurement of the predictive efficacy of the CuRV and the SDRS

Predictive accuracy of the CuRV and the SDRS was assessed using receiver operating characteristic (ROC) analyses and the area under the curve (AUC) statistic. This approach is the preferred measure for predictive accuracy in forensic psychology (Rice & Harris, 2005) and frequently used in the mainstream and ID literature

(Blacker et al., 2010; Gray et al., 2007; Lindsay et al., 2008; Lofthouse et al., 2014).

The CuRV and SDRS total scores alone were used to predict aggression. Accuracy of

the AUC can be understood as follows: AUC equal to .5 indicates chance, between .5

and 1 indicates better than chance to perfect prediction. Rice and Harris (2005) offer

the effect size equivalent for Cohen's *d* small (.2) medium (.5) and large (.8) is AUC

small (.556), medium (.639) and large (.714). All analyses were conducted in

MedCalc® Software (Schoonjans, Zalata, Depuydt, & Comhaire, 1995). Table 1

provides a description of the CuRV and SDRS scores for all participants.

Table 1

Participant scores for the CuRV and SDRS assessment

	N	Minimum score	Maximum score	*Mean (SD)*
CuRV	28	00	22	9 (6.9)
SDRS	28	00	30	10 (8.5)

Predictive Validity

A total of 18 participants were verbally or physically aggressive at least once

in the two-month period following assessment using the CuRV and SDRS. Ten

participants displayed no verbal or physical aggression over the two-month period.

Sixteen males were aggressive, and two females were aggressive on at least one

occasion. ROC – curves and AUCs were calculated using the CuRV and SDRS total

score (see Tables 2 & 3).

Table 2

ROC analysis of the CuRV over a two-month period

| *Follow up month*	*Area Under Curve*	*95 % Confidence Interval*	*Total number of participants who were aggressive within the month*
One	.88	.70, .97	14 (50%)
Two	.80	.60, .92	15 (53%)
Cumulative (both months)	.86	.67, .96	18 (64%)

Table 3

ROC analysis of the SDRS over a two-month period

Follow up month	*Area Under Curve*	*95 % Confidence Interval*	*Total number of participants who were aggressive within the month*
One	.85	.67, .96	14
Two	.77	.58, .91	15
Cumulative (both months)	.78	.59, .91	18

Six AUCs were used to investigate the relationship of the CuRV and SDRS with aggressive and non-aggressive behaviour for each of the two months after the assessments were completed. For example, the analysis for month two focused on whether or not participants had an aggressive incident in month two specifically and not whether there had been an aggressive incident up to and including month two. A final AUC analysis investigated the relationship of the CuRV and SDRS with aggressive and non-aggressive behaviour at *any time* over the two-month period (See Figures 1 & 2).
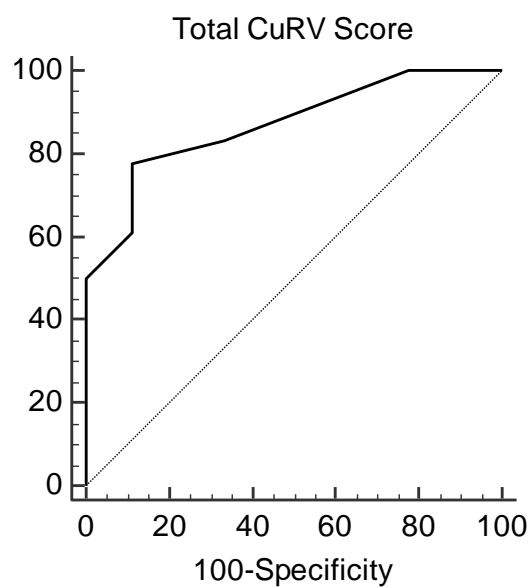
Figure 1. Receiver Operating Characteristic (ROC) Curve: Original CuRV (34 items) for aggression at any time over a 2 month period
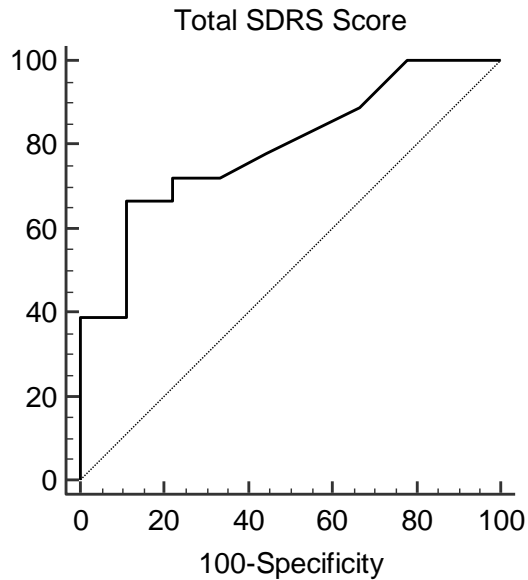
Figure 2. Receiver Operating Characteristic (ROC) Curve: Original SDRS (8 items) for aggression at any time over a 2 month period

Overall, the CuRV produced large AUCs although confidence intervals included some small to medium AUCs: month one .88, 95% CI [.70, .97] month two: .80, 95% CI [.60 .92] for each of the two months in the follow up period and the cumulative analysis over the two-month period .86, 95% CI [67, 96]. The findings suggest that the CuRV resulted in a prediction of future aggression at a level significantly better than chance. The highest predictive accuracy was found for one month following completion of the CuRV.

The SDRS also produced large AUCs although more consistently included small to medium AUCs within the confidence intervals: month one .85, 95% CI [.67, .96] month two: .77, 95% CI [.58 .91] for each of the two months in the follow up period and the cumulative analysis over the two-month period .78, 95% CI [.59, 91]. The findings suggest that the SDRS resulted in a prediction of future aggression at a

level significantly better than chance. The highest predictive accuracy was also found for one month following completion of the SDRS.

Correlation of the CuRV and the SDRS

The CuRV total score was strongly correlated with the SDRS total score $r = 0.94$, $p < .01$, $n = 28$.

<div align="center">

Discussion

</div>

The present study examined the predictive validity of the CuRV and the SDRS using a sample of adults with ID residing in community settings. The findings demonstrated that it is possible to predict, with a reasonable degree of accuracy, verbal and physical aggression at a level significantly better than chance when using the CuRV and the SDRS. The study provides further psychometric assessment of the CuRV; a scale that has shown promising results in secure environments (Lofthouse et al., 2014). Results from secure settings suggested that the CuRV performed with greater accuracy over three and five-month period. In the community service, the most accurate prediction was found over one month. Findings can be understood in the context of this being a community sample. It may be that the findings reflect the changeable and less controlled nature of community services in comparison to secure, where dynamic risk factors are likely to fluctuate and change more rapidly. As such, it would seem that for optimal risk assessment in community settings, assessments in the short term (e.g., monthly) may be effective although more research directly comparing accuracy over different time periods is needed. Other demographic differences between inpatient and community settings may account for the different findings. For example, adults in the community are likely to have more independence and freedom, which may lead to increased access to potential destabilisers such as

relationships with others, alcohol, and increased personal responsibility and autonomy.

A strength of the CuRV is that it can be used frequently and reliably by most members of the care team, without lengthy training or incurring costs to the service. The brevity of the CuRV (typically completed in 10-15 minutes) means regular assessment of risk can occur without being an administrative burden to staff and without reliance on historical notes. This is particularly salient in community settings where information relating to service users is less readily available and shared and staff often work in isolation (NICE, 2015). This in turn contributes toward effective risk management which is vital for reducing and preventing harm to the adult and others (DoH, 2007).

The results of the current study further support not only the predictive validity of the CuRV but also the potential use of the measure to guide the provision of appropriate support in the community (Wheeler, et al., 2014). A significant correlation between the CuRV and SDRS total score and similarities in the predictive accuracy of the CuRV and the SDRS suggest both measures are worthy further research. It is argued that the CuRV provides a more comprehensive measure of dynamic risk factors relevant to the environment and social context of the lives of adults with ID. The CuRV, therefore, generates clinically useful data for the day-day management of aggression. Items within the CuRV that are found to be relevant to the adult with ID can be useful in clinical practice for formulating and developing an individual risk management strategy (Yacoub & Latham, 2012) and care plan. Focusing attention on the salient internal and environmental dynamic factors is likely to assist the adult with ID to develop more pro-social methods of achieving their

needs, including reduced aggression, and is in line with the Good Lives Model (Ward & Stewart, 2003) model of offending behaviour.

Based on feedback from clinicians consulted during the CuRV developmental process (Lofthouse et al., 2014), it was the intention of the current study to separate the analysis for severity of behaviour (verbal & physical aggression). However, the limited sample size and low levels of physical aggression precluded such analysis. Higher rates of verbal aggression found in the current study are consistent with Crocker and colleagues' (2006) finding that verbal aggression is the most common form of aggression in community ID services. A finding that suggests verbal aggression should be a priority for risk management plans (Inett et al., 2014). Therefore, the ability of the CuRV to predict predominantly verbal aggression is a welcome finding. Information relating to the likelihood of verbal aggression is useful in the day-day management of individuals with ID in the community because it provides an opportunity for diversion and de-escalation of difficult behaviour. Increased insight also provides an opportunity to prevent an escalating behaviour pattern culminating in physical aggression.

The ability to accurately assess risk is an important feature in the provision of safe and effective community services (Wheeler et al., 2014). If services do not accurately assess risk, they may assume incorrectly or prematurely that the adult is a risk and may enforce informal sanctions (Murphy & Clare, 2012). Adults with ID will experience numerous negative consequences as a result including restrictions on their liberty, increased medication use and reduced social networks (NICE, 2015). In contrast, services may underestimate the risk the adult poses thus, putting other people at risk of physical harm, stress, or cause them to withdraw from the adult with ID. High levels of aggression necessitate high levels of relational security or a return

to secure services. Both of which have an impact on health and social care economy (costs of secure care) and the economy in general (staff sickness absence; NICE, 2015). It may be that improved detection of aggression can reduce the economic burden that such behaviours have the potential to cause.

Limitations

Recruiting adults with ID within the community proved to be extremely difficult in the current study. This was despite ethical and local approval from six NHS Trusts, three county councils and several independent service providers throughout the UK. The most frequently given explanation for the inability to identify potential participants was lack of time, limited resources, and existing pressure on services. This is concerning given that people with an ID often do not have their voices heard and rely on others, including staff and carers, to advocate on their behalf or support to get their needs met.

Difficulties in recruiting participants may be attributable to staff concerns about capacity in the context of risk. Although adults were excluded from the current study if they did not have capacity to consent, inevitably limiting participation to those with a mild or borderline ID, there appeared to be a reluctance to approach adults with ID if there was any doubt about their ability to consent. This is in conflict with a human rights based approach and Mental Capacity Act guidance to assume the adult has capacity until proven otherwise (Greenhill & Whitehead, 2010). Time and resource limitations may be a feasible alternative explanation for recruitment difficulties. Services may also be 'gate keeping' through a desire to protect individuals with ID (paternalistic) or a need to protect others from adults with ID

(Greenhill & Whitehead, 2010). Although this may be motivated by genuine concern for adults with ID, it may also restrict opportunities, control and choice.

There are some power limitations imposed by the small sample size in the present study, which impacts on the generalizability of the findings to other community settings. In particular, no conclusions can be drawn regarding female adults with ID based on two female participants who displayed aggressive behaviour. The proportion of females in the current study does not reflect the high percentage of females referred to community services (40%) in recent research (Wheeler et al. 2009). Further studies are needed to replicate the current findings with a larger, more representative community sample. A further limitation of the present study is the absence of inter-rater reliability of CuRV and SDRS scoring and reliability of coding aggression from files/systems within services. Staff within community services may not comprehensively record acts of aggression, which has implications for the reliability of the follow up data in this study. This is particularly pertinent for verbal aggression. Community staff may become desensitised to verbal aggression when faced with it on a regular basis. They may also be skilled at deescalating verbal aggression before it increases to physical aggression and view it as less serious than physical aggression. In either case, the staff may be less likely to record the incident in clinical notes.

A drawback of the CuRV in its current format is the exclusion of the adult with ID in the process of assessing his or her own level of risk. There is evidence that adults with ID have the capacity and desire to be involved in the process of their own risk assessments (Hall & Duperouzel, 2011; Kilcommons, Withers, Moreno-Lopez, 2012). Moreover, inclusion in the process ensures adults are afforded their human rights and should be considered best practice (Greenhill & Whitehead, 2010). The

CuRV is currently being refined; an important part of this process will be to develop a service user informed version.

A strength of the current study is the inclusion of three distinct services throughout the UK and Scotland that is in contrast to much of the localized and service specific research in the field (Wheeler et al., 2009). Because there is limited research assessing risk assessment in community services, the present findings are notable. In particular, the high frequency of verbal aggression in community services. Furthermore, the prospective design of the current study is a methodological strength, such designs are considered to offer higher quality and produce more accurate results (Borenstein, Hedges, & Higginns, 2009).

There is currently no threshold at which a decision/action should be taken on the CuRV. Feedback from services participating in the current study suggests that in the current form, the CuRV is helpful for augmenting clinical judgments of risk presentation. It has utility in alerting staff to specific areas of need that require attention, intervention or increased monitoring. If assessing dynamic risk factors using the CuRV leads to improvement in the functioning of the adult with ID, it may help the individual to maintain their community placement. This is line with current recommendations to provide care in least restrictive settings and ameliorate offending (DoH, 2009).

Further research

If the CuRV is to become a commonly used tool for aggression risk assessment in the ID field, further research is needed by independent researchers, and with a larger sample size. Independent validation of the CuRV is a crucial step in validating the efficacy of the measure and developing the evidence base. Further

research should address the psychometric properties of the measure including construct validity and internal consistency. Future development of the CuRV and other risk assessment measures should focus on examining the extent to which changes on risk factors targeted in management programs are associated with subsequent recidivism (Mann, Hanson, & Thornton, 2012). Further comprehensive testing is required at multiple time points with a longitudinal design (Wheeler et al. 2014).

References

Arscott, K., Dagnan, D., & Kroese, B. S. (1998). Consent to psychological research by people with an intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, *11*(1), 77-83.

Blacker, J., Beech, A. R., Wilcox, D. T., & Boer, D. P. (2010). The assessment of dynamic risk and recidivism in a sample of special needs sexual offenders. *Psychology, Crime and Law, 17*, 75-92.

Boer, D. P., Haaven, J., Lambrick, F., Lindsay, W. R., McVilly, K. R., Sakdalan, J. A., & Frize, C. M. J. (2011). *The Assessment of Risk and Manageability of Individuals with Developmental and Intellectual Limitations who Offend - Sexually: User Manual*.

Boer, D. P., Tough, S., & Haaven, J. (2004). Assessment of risk manageability of intellectual disabled sex offenders. *Journal of Applied Research in Intellectual Disabilities, 17,* 275-283.

Borenstein, M., Hedges, L. V., & Higgins, J. P. T. (2009). Introduction to Meta-Analysis (2). Hoboken, GB: Wiley.

Bowen, M., & Lovell, A. (2013). Presentations of mental health disorders in print media. *British Journal of Mental Health Nursing, 2*, 198-202.

Bowers, L., Allan, T., Simpson, A., Jones, J., Van Der Merwe, M., & Jeffery, D. (2009). Identifying key factors associated with aggression on acute inpatient psychiatric wards. *Issues in Mental Health Nursing. 30*, 260-71.

British Psychological Society (BPS) Ethics Committee. (2009). *Code of Ethics and Conduct*. Leicester.

Camilleri, J. A., & Quinsey, V. L. (2011). Appraising the risk of sexual and violent recidivism among intellectually disabled offenders. *Psychology Crime & Law, 17*(1), 59-74.

Campbell, M., French, S., Gendreau, P. (2007). The prediction of violence in adult offenders: A meta-analytic comparison of instruments and methods of assessment. *Criminal Justice and Behavior: An International Journal, 36*(6), 567-590.

Carson, D., Lindsay, W. R., O'Brien, G., Holland, A. J., Taylor, J. T., Wheeler, J. R.,… Johnston, S. (2010). Referrals into services for offenders with intellectual disabilities: variables predicting community or secure provision. *Criminal Behaviour and Mental Health, 20*, 39–50.

Chung, M. C., & Harding, C. (2009). Investigating burnout and psychological well-being of staff working with people with intellectual disabilities and challenging behaviour: the role of personality. *Journal of Applied Research in Intellectual Disabilities 22,* 549–60.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological assessment, 7*(3), 309.

Cooper, S. A., Smiley, E., Jackson, A., Finlayson, J., Allan, L., Mantry, D., & Morrison, J. (2009). Adults with intellectual disabilities: prevalence, incidence and remission of aggressive behaviour and related factors. *Journal of Intellectual Disability Research*, *53*(3), 217-232.

Crocker, A. G., Mercier, C., Allaire, J. F., & Roy, M. E. (2007). Profiles and correlates of aggressive behaviour among adults with intellectual disabilities.

Journal of Intellectual Disability Research, 51(10), 786–801.

Crocker, A. G., Mercier, C., Lachapelle, Y., Brunet, A., Morin, D., & Roy, M. E. (2006). Prevalence and types of aggressive behaviour among adults with intellectual disabilities. *Journal of Intellectual Disability Research, 50*(9), 652–661.

Department of Health and Home Office. (1992). Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services: Final Summary Report. London: Her Majesty's Stationery Office.

Department of Health. (2007). Best Practice in Managing Risk: principles and guidance for best practice in the assessment and management of risk to self and others in mental health services. London: Department of Health.

Department of Health. (2009a). The Bradley Report: Lord Bradley's review of people with mental health problems and learning disabilities in the criminal justice system. London: Central Office of Information.

Douglas, K. S., & Skeem, J. L. (2005). Violence risk assessment - getting specific about being dynamic. *Psychology Public Policy and Law, 11*(3), 347-383.

Douglas, K. S., Hart, S. D., Webster, C. D., & Belfrage, H. (2013). *HCR-20V3: Assessing risk of violence – User guide*. Burnaby, Canada: Mental Health, Law, and Policy Institute, Simon Fraser University.

Drieschner, K. H., Marrozos, I., & Regenboog, M. (2013). Prevalence and risk factors of inpatient aggression by adults with intellectual disabilities and severe challenging behaviour: A long-term prospective study in two Dutch treatment facilities. *Research in Developmental Disabilities*, *34*(8), 2407-2418.

Emerson, E., Kiernan, C., Alborz, A., Reeves, D., Mason, H., Swarbrick, R., . . .
  Hatton, C. (2001). The prevalence of challenging behaviors: A total
  population study. *Research in Developmental Disabilities, 22*(1), 77-93.

Fitzgerald, S., Gray, N. S., Alexander, R. T., Bagshaw, R., Chesterman, P., Huckle,
  P., . . . Snowden, R.J. (2013). Predicting institutional violence in offenders
  with intellectual disabilities: The predictive efficacy of the VRAG and the
  HCR-20. *Journal of Applied Research in Intellectual Disabilities, 26*(5), 384-
  393.

Fitzgerald, S., Gray, N., Taylor, J., Snowden, R., Fitzgerald, S., Gray, N. S., . . .
  Snowden, R. J. (2011). Risk factors for recidivism in offenders with
  intellectual disabilities. *Psychology, Crime & Law, 17*(1), 43-58.

Gray, N. S., Fitzgerald, S., Taylor, J., MacCulloch, M. J., & Snowden, R. J. (2007).
  Predicting future reconviction in offenders with intellectual disabilities: The
  predictive efficacy of VRAG, PCL-SV, and the HCR-20. *Psychological
  Assessment, 19*, 474-479.

Gray N. S., Taylor, J., & Snowden, R. J. (2011). Predicting violence using structured
  professional judgment in patients with different mental and behavioral
  disorders. *Psychiatry Research, 187*(1-2), 248-253.

Greenhill, B., & Whitehead, R. (2011). Promoting service user inclusion in risk
  assessment and management: A pilot project developing a human rights-based
  approach. *British Journal of Learning Disabilities, 39*(4), 277-283.

Hall, S., & Duperouzel, H. (2011). "We know about our risks, so we should be
  asked." A tool to support service user involvement in the risk assessment

process in forensic services for people with intellectual disabilities. *Journal of Learning Disabilities and Offending Behaviour*, *2*(3), 122-126.

Harris, A. J. R., & Hanson, R. K. (2010). Clinical, actuarial and dynamic risk assessment of sexual offenders: Why do things keep changing?. *Journal of Sexual Aggression*, *16*(3), 296-310.

Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? Issues of causality and mechanism. *American Journal of Mental Retardation 107,* 455– 67.

Hastings, R. P., Allen, D., Baker, P., Gore, N. J., Hughes, J. C., McGill, P., … & Toogood, S. (2013). A conceptual framework for understanding why challenging behaviours occur in people with developmental disabilities. *International Journal of Positive Behavioural Support*, *3*(2), 5-13.

Hastings, R. P., & Brown, T. (2002). Coping strategies and the impact of challenging behaviors on special educators' burnout. *Mental Retardation 40,* 148–56.

Hensel, J. M., Lunsky, Y., & Dewa, C. S. (2012). Exposure to client aggression and burnout among community staff who support adults with intellectual disabilities in Ontario, Canada. *Journal Of Intellectual Disability Research*, *56*(9), 910-915.

Holland, T., Clare, I. C. H., & Mukhopadhyay, T. (2002). Prevalence of criminal offending by men and women with intellectual disability and the characteristics of offenders: Implications for research and service development. *Journal of Intellectual Disability Research, 46*(1), 6–20.

Howard, R., Rose, J., & Levenson, V. (2009). The psychological impact of violence

on staff working with adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, *22*(6), 538-548.

Human Rights Act (1998) Available from: http://www.opsi.gov.uk/acts/acts1998/ukpga_19980042_en_1.

Inett, A., Wright, G., Roberts, L., & Sheeran, A. (2014). Predictive validity of the START with intellectually disabled offenders. *Journal of Forensic Practice*, *16*(1), 78-88.

Jacobson, J. (2008). *No One Knows: Police responses to suspects with learning disabilities and learning difficulties: a review of policy and practice*. London: Prison Reform Trust.

Johnston, S. J. (2002). Risk assessment in offenders with intellectual disability: the evidence base. *Journal of Intellectual Disability Research*, *46*(1), 47-56.

Kilcommons, A. M., Withers, P., & Moreno- Lopez, Á. (2012). Do service users with intellectual disabilities want to be involved in the risk management process? A thematic analysis. *Journal of Applied Research in Intellectual Disabilities*, *25*(5), 433-444.

Lindsay, W. R. (2002). Research and literature on sex offenders with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, *46*(1), 74-85.

Lindsay, W. R. (2009). *The treatment of sex offenders with developmental disabilities: A practice workbook*. Chichester, England: John Wiley & Sons.

Lindsay, W. R., & Beail, N. (2004). Risk assessment: Actuarial prediction and clinical

judgement of offending incidents and behaviour for intellectual disability

services. *Journal of Applied Research in Intellectual Disabilities*, *17*(4), 229-
234.

Lindsay, W. R., Hastings, R. P., & Beech, A. R. (2011). Forensic research in

offenders with intellectual & developmental disabilities 1: prevalence and risk

assessment. *Psychology, Crime & Law*, *17*(1), 3-7.

Lindsay, W. R., Hogue, T. E., Taylor, J. L., Steptoe, L., Mooney, P., O'Brien, G., ...

Smith, A. H. W. (2008). Risk assessment in offenders with intellectual

disability: A comparison across three levels of security. *International Journal

of Offender Therapy & Comparative Criminology, 52*, 90-111.

Lindsay, W. R., Holland, A. J., Carson, D., Taylor, J. L., O'Brien, G., Steptoe, L., &

Wheeler, J. (2013). Responsivity to criminogenic need in forensic intellectual

disability services. *Journal of Intellectual Disability Research*, *57*(2), 172-181.

Lindsay, W. R., Murphy, L., Smith, G., Murphy, D., Edwards, Z., & Chittock, C.

(2004). The Dynamic Risk Assessment and Management System: An

assessment of immediate risk of violence for individuals with offending and

challenging behaviour. *Journal of Applied Research in Intellectual

Disabilities, 17*, 267-274.

Lindsay, W. R., O'Brien, G., Carson, D., Holland, A. J., Taylor, J. L., Wheeler, J. R.,

... & Johnston, S. (2010). Pathways Into Services for Offenders with

Intellectual Disabilities Childhood Experiences, Diagnostic Information, and

Offense Variables. Criminal justice and behavior, 37(6), 678-694.

Lindsay, W. R., Steele, L., Smith, A. H. W., Quinn, K., & Allan, R. (2006). A

community forensic intellectual disability service: Twelve year follow up of

referrals, analysis of referral patterns and assessment of harm reduction. *Legal and Criminological Psychology, 11*, 113–30.

Lofthouse, R. E. (2016). *Assessing and managing risk with adults with intellectual disabilities.* (Unpublished doctoral dissertation). University of Liverpool, UK.

Lofthouse, R. E., Lindsay, W. R., Totsika, V., Hastings, R. P., & Roberts, D. (2014). Dynamic risk and violence in individuals with an intellectual disability: tool development and initial validation. *The Journal of Forensic Psychiatry & Psychology*, *25*(3), 288-306.

Loucks, N. (2007). No One Knows: offenders with learning difficulties and learning disabilities: review of prevalence and associated needs. London: Prison Reform Trust.

Lund, J. (1990). Mentally retarded criminal offenders in Denmark. *British Journal of Psychiatry*, *156*, 726- 731.

Mann, R. E., Hanson, R. K., & Thornton, D. (2010). Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sexual Abuse-a Journal of Research and Treatment, 22*(2), 191-217.

McBrien, J., Hodgetts, A., & Gregory, J. (2003). Offending and risky behaviour in community services for people with intellectual disabilities in one local authority. *Journal of Forensic Psychiatry & Psychology*, *14*(2), 280-297.

McBrien, J., & Murphy, G. H. (2006). Police and carers' views on reporting of alleged offences by people with intellectual disabilities. *Psychology, Crime and Law, 12*, 127–44.

McGrath, R. J., Livingston, J. A., & Falk, G. (2007). A structured method of assessing dynamic risk factors among sexual abusers with intellectual disabilities. *American Journal of Mental Retardation, 112*, 221-9.

MedCalc Statistical Software version 16.4.3 (MedCalc Software bvba, Ostend,

    Belgium; https://www.medcalc.org; 2016).

Mental Capacity Act (England and Wales) 2005. London: The Stationery Office.

Mental Health Act (1983) Mental Health Act 1983 as amended by the Mental Health

    Act 2007. (3 November 2008).

    http://www.opsi.gov.uk/si/si2008/uksi_20082561_en_1.

Mercier, C., & Crocker, A. G. (2011). The first critical steps through the criminal

    justice system for persons with intellectual disabilities. *British Journal Of*

    Learning Disabilities, *39*(2), 130-138.

Mills, S., & Rose, J. (2011). The relationship between challenging behaviour, burnout

    and cognitive variables in staff working with people who have intellectual

    disabilities. *Journal of Intellectual Disability Research, 55*(9), 844–857.

Morrissey, C., Hogue, T., Mooney, P., Allen, C., Johnston, S., Hollin, C.,…Taylor, J.

    L. (2007). The predictive validity of the PCL-R in offenders with ID in a high

    secure hospital setting: *Institutional aggression. Journal of Forensic*

    Psychiatry and Psychology, 18, 1–15.

Morrissey, C., Hogue, T., Mooney, P., Lindsay, W. R., Steptoe, L., Taylor, J., &

    Johnston, S. (2005). Applicability, reliability, and validity of the psychopathy

    checklist-revised in offenders with intellectual disabilities: Some initial

    findings. *International Journal of Forensic Mental Health, 4,* 207–20.

Murphy, G. H., & Clare, I. C. H. (2012). Working with offenders or alleged offenders

    with intellectual disabilities. In E. Emerson, C. Hatton, K. Dickson, R. Gone,

    A. Caine & J Bromley (Eds.), *Clinical Psychology and People with*

    Intellectual Disabilities Second Edition (pp. 235-271). Chichester, UK: John

    Wiley & Sons, Ltd.

National Institute for Health and Clinical Excellence (NICE). (2015). Violence and

aggression: short-term management in mental health, health and community

settings. Retrieved from https://www.nice.org.uk/guidance/ng10

O'Brien, J. (1987). A guide to lifestyle planning. In B. Wilcox & T. Bellamy. (Eds.),

A comprehensive guide to the activities catalogue. Baltimore, USA: Paul

Brookes Publishing.

O'Shea, L. E., Picchioni, M. M., Mason, F. L., Sugarman, P. A., & Dickens, G. L.

(2014). Differential predictive validity of the Historical, Clinical and Risk

Management Scales (HCR–20) for inpatient aggression. *Psychiatry research*,

220(1), 669-678.

Pouls, C., & Jeandarme, I. (2014). Psychopathy in Offenders with Intellectual

Disabilities: A Comparison of the PCL-R and PCL: SV. *International Journal

of Forensic Mental Health*, *13*(3), 207-216.

Pouls, C., & Jeandarme, I. (2015). Risk assessment and risk management in offenders

with intellectual disabilities: Are we nearly there yet*? Journal of Mental

Health Research in Intellectual Disabilities, 8*(3-4), 213-236

Quinsey, V. L. (2004). Risk assessment and management in community settings. In

W. R. Lindsay, J. L. Taylor & P. Sturmey (Eds.), *Offenders with

developmental disabilities* (pp. 131-141). Chichester, UK: John Wiley & Sons

Ltd.

Quinsey, V. L., Book, A. B., & Skilling, T. A. (2004). A Follow-up of

deinstitutionalized men with intellectual disabilities and histories of antisocial

behaviour. *Journal of Applied Research in Intellectual Disabilities, 17*, 243-

253.

Quinsey, V. L., Coleman, G., Jones, B., & Altrows, I. F. (1997). Proximal antecedents of eloping and reoffending among supervised mentally disordered offenders. *Journal of Interpersonal Violence, 12*(6), 794-813.

Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies: ROC Area, Cohen's d, and r. *Law and human behavior*, *29*(5), 615.

Schoonjans, F., Zalata, A., Depuydt, C. E., & Comhaire, F. H. (1995). MedCalc: a new computer program for medical statistics. *Computer methods and programs in biomedicine*, *48*(3), 257-262.

Singh, J. P., Grann, M., & Fazel, S. (2011). A comparative study of violence risk assessment tools: A systematic review and metaregression analysis of 68 studies involving 25, 980 participants. *Clinical Psychology Review, 31,* 499-513.

Sprigg, C. A, Armitage, C. J., Hollis, K. (2007).Verbal abuse in the National Health Service: impressions of the prevalence, perceived reasons for and relationships with staff psychological well-being. *Emergency Medicine Journal, 24,* 281-82.

Steptoe, L. R., Lindsay, W. R., Murphy, L., & Young, S. J. (2008). Construct validity, reliability and predictive validity of the dynamic risk assessment and management system (DRAMS) in offenders with intellectual disability. *Legal and Criminological Psychology, 13*, 309-321.

Stewart, D., Bowers, L. (2013). Inpatient verbal aggression: content, targets and patient characteristics. *Journal of Psychiatric and Mental Health Nursing. 20*, 236-43.

Stone, T., McMillan, M., Hazelton, M. (2010). Swearing: Its prevalence in healthcare settings and impact on nursing practice. *Journal of Psychiatric and Mental Health Nursing. 17,* 528-34.

Verbrugge, H. M., Goodman-Delahunty, J., & Frize, M. C. J. (2011). Risk assessment in intellectually disabled offenders: Validation of the suggested ID supplement to the HCR-20. *International Journal of Forensic Mental Health, 10*(2), 83-91.

Ward, T., & Stewart, C. A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research and Practice*, *34*(4), 353.

Wheeler, J. R., Clare, I. H., & Holland, A. J. (2013). Offending by people with intellectual disabilities in community settings: A preliminary examination of contextual factors. *Journal Of Applied Research In Intellectual Disabilities*, *26*(5), 370-383.

Wheeler, J. R., Clare, I. C. H., Holland, A. J. (2014). What can social and environmental factors tell us about the risk of offending by people with intellectual disabilities? *Psychology, Crime & Law, 20*(7), 635-658.

Wheeler, J. R., Holland, A. J., Bambrick, M., Lindsay, W. R., Carson, D., Steptoe, L.,… O'Brien, G. (2009). Community services and people with intellectual disabilities who engage in anti-social or offending behaviour: referral rates, characteristics, and care pathways. *Journal of Forensic Psychiatry & Psychology, 20*, 717–740.

Wolfensberger, W. (1972). The principle of normalisation in human management services. *Toronto: National Institute of Mental Retardation*.

Yacoub, E., & Latham, R. (2012). Assessing risk in services for people with
intellectual disability. *Advances in Mental Health and Intellectual Disabilities*,
6(6), 301-307.

Yang, M., Wong, S. C. P., & Coid, J. (2010). The efficacy of violence prediction: A
meta-analytic comparison of nine risk assessment tools. *Psychological
Bulletin, 136*(5), 740-767.

Appendix A

Author Guidelines: The Journal of Forensic Psychiatry & Psychology
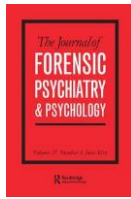
The Journal of Forensic Psychiatry & Psychology

Instructions for authors

This journal uses ScholarOne Manuscripts (previously Manuscript Central) to peer review manuscript submissions. Please read the guide for ScholarOne authors before making a submission. Complete guidelines for preparing and submitting your manuscript to this journal are provided below.

ScholarOne Guide End

Use these instructions if you are preparing a manuscript to submit to *The Journal of Forensic Psychiatry and Psychology*. To explore our journals portfolio, visit http://www.tandfonline.com, and for more author resources, visit our Author Services website.

The Journal of Forensic Psychiatry and Psychology considers all manuscripts on the strict condition that the manuscript is your own original work, and does not duplicate any other previously published work, including your own previously published work. the manuscript has been submitted only to *The Journal of Forensic Psychiatry and Psychology*; it is not under consideration or peer review or accepted for publication or in press or published elsewhere.the manuscript contains nothing that is abusive, defamatory, libellous, obscene, fraudulent, or illegal.

Please note that *The Journal of Forensic Psychiatry and Psychology* uses

CrossCheck™ software to screen manuscripts for unoriginal material. By submitting your manuscript to *The Journal of Forensic Psychiatry and Psychology* you are agreeing to any necessary originality checks your manuscript may have to undergo during the peer-reviewand production processes.

Any author who fails to adhere to the above conditions will be charged with costs which *The Journal of Forensic Psychiatry and Psychology* incurs for their manuscript at the discretion of *The Journal of Forensic Psychiatry and Psychology*'s Editors and Taylor & Francis, and their manuscript will be rejected.

This journal is compliant with the Research Councils UK OA policy. Please see the licence options and embargo periods

Contents List

Manuscript preparation

Manuscript preparation

1. General guidelines

Manuscripts are accepted only in English. Any consistent spelling style may be used. Please use single quotation marks, except where 'a quotation is "within" a quotation'. Long quotations of 40 words or more should be indented without quotation marks. Always use the minimum number of figures in page numbers, dates etc., e.g. pp. 24-4, 105-6 (but using 112-13 for 'teen numbers) and 1968-9.

A typical manuscript will not exceed 5,000 words not including

references. Manuscripts that greatly exceed this will be critically reviewed with respect to length. Authors should include a word count with their manuscript. Review papers (e.g. systematic reviews, meta-analyses, law reviews) and some empirical studies may require greater length and the Editors are happy to receive longer papers. We encourage brevity in reporting research. Brief reports should be no more than 2,000 words in length, including references. Normally, there should be a maximum of one table.

Manuscripts should be compiled in the following order: title page (including Acknowledgements as well as Funding and grant-awarding bodies); abstract; keywords; main text; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figure caption(s) (as a list).

Please supply all details required by any funding and grant-awarding bodies as an acknowledgement in a separate Funding paragraph as follows:

Abstracts of 150 words are required for all manuscripts submitted. Each manuscript should have 3 to 6 keywords .

Search engine optimization (SEO) is a means of making your article more visible to anyone who might be looking for it. Please consult our guidance here.

Section headings should be concise.

All authors of a manuscript should include their full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page of the manuscript. One author should be identified as the corresponding author. Please give the affiliation where the research was conducted. If any of the named co-authors moves affiliation during the peer review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after the manuscript is accepted. Please note that the email address of the corresponding author will normally be displayed in the article PDF (depending on the journal style) and the online article.

All persons who have a reasonable claim to authorship must be named in the manuscript as co-authors; the corresponding author must be authorized by all co-authors to act as an agent on their behalf in all matters pertaining to publication of the manuscript, and the order of names should be agreed by all authors.

Biographical notes on contributors are not required for this journal.Authors must also incorporate a Disclosure Statementwhich will acknowledge any financial interest or benefit they have arising from the direct applications of their research.

For all manuscripts non-discriminatory language is mandatory. Sexist or racist terms must not be used.

Authors must adhere to SI units. Units are not italicised.

When using a word which is or is asserted to be a proprietary term

or trade mark, authors must use the symbol ® or TM.

Books for review should be sent to the Book Review Editor, Dr Mary Whittle, John Howard Centre, 12 Kenworthy Road, London, E9 5TD, UK.

Case reports should be accompanied by the written consent of the subject. If a subject is not competent to give consent the report should be accompanied by the written consent of an authorized person.

2. Style guidelines

Description of the Journal's article style.

Description of the Journal's reference style.
Guide to using mathematical symbols and equations .
Word templates are available for this journal. If you are not able to use the template via the links or if you have any other template queries, please contact authortemplate@tandf.co.uk .

3. Figures

Please provide the highest quality figure format possible. Please be sure that all imported scanned material is scanned at the appropriate resolution: 1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour.

Figures must be saved separate to text. Please do not embed figures in the manuscript file.

Files should be saved as one of the following formats: TIFF (tagged image file format), PostScript or EPS (encapsulated PostScript), and should contain all the necessary font information and the source file of the application (e.g. CorelDraw/Mac, CorelDraw/PC).

All figures must be numbered in the order in which they appear in the manuscript (e.g. Figure 1, Figure 2). In multi-part figures, each part should be labelled (e.g. Figure 1(a), Figure 1(b)).

Figure captions must be saved separately, as part of the file containing the complete text of the manuscript, and numbered correspondingly.

The filename for a graphic should be descriptive of the graphic, e.g. Figure1, Figure2a.

4. Publication charges

Submission fee

There is no submission fee for *The Journal of Forensic Psychiatry and Psychology*.

Page charges

There are no page charges for *The Journal of Forensic Psychiatry and Psychology*.

Colour charges

Colour figures will be reproduced in colour in the online edition of the journal free of charge. If it is necessary for the figures to be reproduced in colour in the print version, a charge will apply. Charges for colour figures in print are £250 per figure ($395 US Dollars; $385 Australian Dollars; 315 Euros). For more than 4 colour figures, figures 5 and above will be charged at £50 per figure ($80 US

Dollars; $75 Australian Dollars; 63 Euros).

Depending on your location, these charges may be subject to Value Added Tax.

5. Reproduction of copyright materials

If you wish to include any material in your manuscript in which you do not hold copyright, you must obtain written permission from the copyright owner, prior to submission. Such material may be in the form of text, data, table, illustration, photograph, line drawing, audio clip, video clip, film still, and screenshot, and any supplemental material you propose to include. This applies to direct (verbatim or facsimile) reproduction as well as "derivative reproduction" (where you have created a new figure or table which derives substantially from a copyrighted source).

You must ensure appropriate acknowledgement is given to the permission granted to you for reuse by the copyright holder in each figure or table caption. You are solely responsible for any fees which the copyright holder may charge for reuse.

The reproduction of short extracts of text, excluding poetry and song lyrics, for the purposes of criticism may be possible without formal permission on the basis that the quotation is reproduced accurately and full attribution is given.

For further information and FAQs on the reproduction of copyright material, please consult our Guide .

6. Supplemental online material

Authors are encouraged to submit animations, movie files, sound files or any additional information for online publication.

Information about supplemental online material

Manuscript submission

All submissions should be made online at *The Journal of Forensic Psychiatry and Psychology* ScholarOne Manuscripts site. New users should first create an account. Once logged on to the site, submissions should be made via the Author Centre. Online user guides and access to a helpdesk are available on this website.

Manuscripts may be submitted in any standard format, including Word and EndNote. These files will be automatically converted into a PDF file for the review process.

Click here for information regarding anonymous peer review.

Copyright and authors' rights

To assure the integrity, dissemination, and protection against copyright infringement of published articles, you will be asked to assign us, via a Publishing Agreement, the copyright in your article. Your Article is defined as the final, definitive, and citable Version of Record, and includes: (a) the accepted manuscript in its final form, including the abstract, text, bibliography, and all

accompanying tables, illustrations, data; and (b) any supplemental material hosted by Taylor & Francis. Our Publishing Agreement with you will constitute the entire agreement and the sole understanding between you and us; no amendment, addendum, or other communication will be taken into account when interpreting your and our rights and obligations under this Agreement.

Copyright policy is explained in detail here.

Free article access

As an author, you will receive free access to your article on Taylor & Francis Online. You will be given access to the *My authored works* section of Taylor & Francis Online, which shows you all your published articles. You can easily view, read, and download your published articles from there. In addition, if someone has cited your article, you will be able to see this information. We are committed to promoting and increasing the visibility of your article and have provided guidance on how you can help. Also within *My authored works*, author eprints allow you as an author to quickly and easily give anyone free access to the electronic version of your article so that your friends and contacts can read and download your published article for free. This applies to all authors (not just the corresponding author).

Reprints and journal copies

Article reprints can be ordered through Rightslink® when you receive your proofs. If you have any queries about reprints, please contact the Taylor & Francis Author Services team at reprints@tandf.co.uk. To order a copy of the issue containing your article, please contact our Customer Services team at Adhoc@tandf.co.uk.

Open access

Taylor & Francis Open Select provides authors or their research sponsors and funders with the option of paying a publishing fee and thereby making an article permanently available for free online access – *open access* – immediately on publication to anyone, anywhere, at any time. This option is made available once an article has been accepted in peer review.

Appendix B

The CuRV risk assessment measure

Current Risk of Violence – CuRV

Overview

The aim of the CuRV is to provide a brief assessment (10 minutes) of aggression in adults aged 18 upward who fall in the mild to borderline range of intellectual disability, and have a history of aggressive behaviour.

The CuRV has minimal costs in terms of time and resources. Specific training is not needed to complete the CuRV but staff should have substantial direct experience of the person being rated and of working with other individuals with a mild – borderline intellectual disability.

Administration

The measure includes 34 dynamic items relating to the individual and their environment. The CuRV can be used by staff working directly with the individual, including support workers, keyworkers, nurses, clinical nurse specialists, speech and language therapists, psychologists, and other clinical staff. The CuRV can be used by a single rater or by multi-disciplinary team. The member of staff must be familiar with the individual and have known and worked regularly with him/her for at least **three months**. The CuRV is designed to assess risk in the short term (weeks – three month). Therefore, frequent repeated assessments should be conducted (at least monthly).

Completing the CuRV

Record the demographic information on the following page in the space provided. Then turn to page 4, read the first item and decide whether or not that statement describes your client's behaviour during the past month. Base your answer on how the client compares to other clients and adults with mild – borderline intellectual disability. Consider both your own observations and the reports of colleagues and informed others over the **past month**. Consider his/her general behaviour and interpersonal behaviour towards others. You are asked to respond to the question in blue. More detailed item descriptions are in black, and they are examples of possible behaviours to think about. The client you are rating does not

have to have demonstrated this particular example behaviour, but behaviours that you think are similar and related to this theme should be rated.

In the box provided next to the item, tick '**yes'** if the behaviour described is applicable to your client over the past month and 'no' if not applicable. Repeat the procedure for all items in the CuRV. Please do not leave any items without a Yes or No response. Unless you are clear that you have evidence yourself, or reports from others, that the behaviour described has been present in the past month, you should select a **No** response.

In order to further develop and refine the CuRV we would like to hear your thoughts about it. For example, what was good and not so good about completing the CuRV? Space is provided on the final page for your comments.

Scoring/ interpretation

The CuRV is currently under development at present it is not possible to specify a cut-off score.

As with other risk assessment tools, it is reasonable to assume that a higher number of risk factors indicates a higher risk for violence. Assessors should bear in mind that this is unlikely to be a linear relationship and the specific combination of risk factors is equally important (Webster, Douglas, Eaves, & Hart, 1997). Depending upon the individual, a single risk factor may indicate a person is a high risk for aggression. The setting in which the client lives (e.g., community or secure setting) will impact upon the level of risk.

At this stage, the CuRV can be used in the process of gathering information for use in team discussions and decision making regarding the management of risk.

[N.B. Assessors should be aware that item 25 is reverse scored]

Demographic Information

Participant number	
Male or Female (please circle)	
Name of service/service setting	
Name and job title of person completing the risk assessment	
Date of rating	
Ethnic group **(Please tick)**	White
	Black/African/Caribbean/black British
	Asian/Asian British
	Indian
	Pakistani
	Mixed
	Other

1.General impulsivity	
In the past month, did the individual appear to react to situations without thinking? *The individual may have acted without planning or thinking about the consequences of their actions, acting on the spur of the moment.*	**Yes**
	No

2.Anger	
In the past month, did the individual appear to be frustrated often or lose their temper easily? *The individual may have visibly lost their temper or seemed to become frustrated more easily than usual. They may have reported feeling offended or wronged, or appeared tense and agitated.*	**Yes**
	No

3.Irrational beliefs	
In the past month, did the individual talk out loud about irrational thoughts or engage in unusual behaviours? *Individuals may have reported strange or peculiar experiences or talked out loud irrational thoughts about people or situations. They could have appeared confused or disorientated.*	**Yes**
	No

4. Lack of insight	
In the past month, did the individual appear unaware of the consequences of their actions? *It might seem that the individual did not have a clear understanding of expectations, boundaries, and consequences of their behaviour. For example, they may not have insight into their own behavioural problems and did not recognise when they needed help.*	**Yes**
	No

5.Lack of responsibility	
In the past month, did the individual show a lack of responsibility for their own behaviour? *The individual might have demonstrated a lack of responsibility for their own behaviour, or minimised the seriousness of their behaviour. They may have tried to blame other people for their problems or behaviour.*	**Yes**
	No

6.Feeling aggrieved	
In the past month, did the individual talk or act as though they felt aggrieved or were resentful about something? *Individuals may have felt there was lack of equality or fairness in some aspect of their life. For example, the individual may have felt upset that they did not have the same amount of free time as others, or that other people were progressing through the system quicker than they were.*	**Yes** **No**

7.Withdrawal	
In the past month, did the individual reduce their level of interaction with others? *The individual may have started to spend increasing amounts of time alone, which is not typical behaviour for them. Alternatively, there may have been subtle changes in engagement with professionals and ward staff. For example, the dialogue they engaged in with staff might not have been as deep/detailed as usual. They may have been attempting to sabotage relationships with staff in order to withdraw.*	**Yes** **No**

8.Poor coping ability	
In the past month, has there been an obvious change in the client's coping ability? *The individual may have seemed unable to deal with internal or external demands recently (e.g. coping with other people, problem solving, an increase in responsibility or choices) and may have felt overwhelmed. The individual may have developed maladaptive coping strategies or tried to avoid situations rather than actively coping with them.*	**Yes** **No**

9.Signs of dependence	
In the past month, did the individual appear to be more dependent on others? *Individuals may have seemed increasingly insecure and more dependent on others. For example, seeking help or assistance with things they can usually do on their own. There may have been an increase in reassurance seeking behaviours.*	**Yes** **No**

10.Self esteem	
In the past month, did the individual seem to have low self-esteem? *Individuals may have made negative evaluations about themselves and their abilities and generally felt bad about themselves. They may have exhibited low self-esteem because they felt like they were not making progress, they believed people did not like them, or they were unsure of themselves.*	**Yes** **No**

11.Low mood	

In the past month, has the individual's mood been low or fluctuating? *There may have been obvious changes or inappropriate displays of mood/emotion recently. The individual may have appeared sad, hopeless, they may not have been able to enjoy things they usually find pleasurable, or have little interest in activities or events. Physical signs include tiredness, loss of energy.*	**Yes**
	No

12.Demand avoidance

In the past month, did the individual feel under pressure or try to avoid demands? *The individual may have been attempting to avoid everyday demands (e.g. encouragement to comply with personal hygiene). They may have felt pressured to live up to others expectations (e.g. from external sources to move on when they are not ready).*	**Yes**
	No

13.Physical aggression

In the past month, has the individual been physically aggressive? *The individual may have been 'acting out' recently. Examples may include slamming doors, throwing furniture, causing damage to property or being physically aggressive toward other people (e.g. punching, kicking).*	**Yes**
	No

14. Verbal aggression

In the past month, has the individual has been aggressive verbally? *The client may have been bullying or provoking others. Examples may include shouting, making derogatory or inappropriate comments about people.*	**Yes**
	No

15.Pro offending attitude

In the past month, did the individual talk/act as though violence is acceptable? *The way the individual has been talking or behaving recently might suggest they think aggression is a good thing. For instance, they may have been boasting about times they have been violent or take pleasure from violence on TV/films. The client may think being aggressive leads to status and kudos.*	**Yes**
	No

16. Lack of Compliance	
In the past month, did the individual appear to be non-compliant or oppositional in some aspect of their life? *The individual may have been acting in a noncompliant, rebellious, stubborn or uncooperative manner. This could relate to any aspects of their life including supervision, management, treatment, medication and compliance with Mental Health Act (MHA) restrictions.*	**Yes** **No**

17. Somatic concern	
In the past month, has there been an increase in complaints about physical health or attempts to seek medical attention? *The individual may have complained about their health frequently and made excessive requests to see the doctor or nurse. They may have pseudo seizures (i.e., non-genuine) to access medical attention.*	**Yes** **No**

18. Substance abuse problems	
In the past month, did the individual access or attempt to access drugs/alcohol? *There may have been an increase in the use or a misuse of alcohol, illicit drugs, or prescription medication. The individual may have made attempts to get intoxicants into the unit/home.*	**Yes** **No**

19. Anti-social behaviour	
In the past month, has the individual been acting in an antisocial manner? *There might have been a change in attitude and/or behaviours that suggested a lack of consideration for others. The individual might have been more rowdy, noisy or threatening than usual. Other clients may have felt unsafe as a result of this individual's behaviour.*	**Yes** **No**

20. Medical Complaints	
In the past month, has the individual had health complaints? *This item includes genuine health complaints that caused distress for the individual such as constipation, tooth or ear ache, etc.*	**Yes** **No**

21.Communication and consistency	
In the past month, has the approach to this individual been inconsistent? *There may have been a lack of regular, open and clear communication amongst the multi-disciplinary team regarding the individual. The team approach may have been inconsistent, or failed to include clear boundaries for this individual. The team might have felt they have had inadequate training, poor supervision, leadership or organisation.*	**Yes** **No**
22.Changes in staff team	
In the past month, have there been changes in the individual's core staff team? *There may have been a change to the regular staff team, including familiar staff leaving, new staff arriving, or a high turnover of staff.*	**Yes** **No**
23.Individual difficulties	
In the past month, did staff find it difficult to work with this individual? *Relationships between staff and the individual may have been problematic recently. Staff might have found it difficult to work with the individual.*	**Yes** **No**
24.Allowances made by staff	
In the past month, did staff make allowances for the individual? *Staff may have made allowances for the individual recently or have been lenient or complacent. This could include allowing the individual to be late for therapy sessions or missing appointments.*	**Yes** **No**
25. Knowledge of the individual	
In the past month, did staff working with the individual feel they knew the client well and were aware of his/her behavioural or risk indicators? *This item refers to direct care/support staff having adequate knowledge and understanding of the individual. This knowledge is gained from previous incidents and an established rapport with the individual. Staff may have felt that they lacked insight into the individual's behaviour patterns, or risk indicators.*	**Yes** **No**
26.Change in intimate relationships	

In the past month, has the individual experienced a breakdown in a relationship or had trouble maintaining a relationship? *The individual may have been struggling to maintain, or has experienced a disruption to, an intimate relationship with a significant other (not family).*	**Yes**
	No

27. Relationships with peers

In the past month, did the individual seem unable to get along with people? *The individual may have had trouble getting on with people recently (not including intimate relationships). They may have been complaining about peers, bullying, antagonising others or they may have been on the receiving end of such behaviours. The individual could have been involving themselves in other clients' business, or engaging in surreptitious (secretive) conversations with peers.*	**Yes**
	No

28. Family problems/dynamics

In the past month, did the individual appear apprehensive about a situation involving their family? *An approaching meeting with a family member may have caused anxiety or distress due to a difficult relationship. Alternatively, the individual may have been frustrated at the lack of contact with their family or lack of proximity to family. The client may have felt unsupported by their family.*	**Yes**
	No

29. Lifestyle regulation

In the past month, has there been disruption to normal routine, or a lack of structure in the client's life? *There may have been a lack of structure and stability in the individual's life recently. They might have experienced a chaotic lifestyle. The client might have experienced a recent change or a disruption to a normal sleep pattern, for example.*	**Yes**
	No

30. Meaningful activity

In the past month, has the individual stopped or reduced the amount of meaningful activity they usually do? *The individual may have chosen not to engage in meaningful activities such as day service sessions, social activities, although they were available (not stopped/reduced due to illness).*	**Yes**
	No

31.Recent setback	
In the past month, did the client experience a setback or feel frustrated? *There might have been behaviour changes as a result of a perceived setback or disappointment (e.g. an arranged outing being cancelled, staff sickness, or a gradual increase in one disappointment after another, service providers or commissioners failing to deliver promises). It may also be that the case that the individual felt their needs and demands were not being met (things being delayed, expectations not met).*	**Yes** **No**
32.Physical environment	
In the past month, did the individual appear distressed by or have a problem with the environment they live in? *Living in close proximity to other service users could have been a cause of frustration. For example, the ward environment could be particularly noisy or too quiet for the individual. A peer may have been experiencing mental health problems or exhibiting challenging behaviours that the individual has been affected by.*	**Yes** **No**
33.Restrictions in the environment	
In the past month, did the individual appear unhappy with restrictions in their environment? *The individual may have felt they were unfairly denied access to tangibles such as cigarettes. They may have seemed unhappy with current restrictions or regimes for access to their room, or free time. This may have resulted in feelings of frustration and resentment that could be made worse by a lack of physical space to escape to.*	**Yes** **No**
34.Significant future event	
In the past month, did the individual seem concerned about a future event? *Individuals might have become stressed or over stimulated due to anticipation of a significant life event. Such situations could include, for example CPA (Care Programme Approach), MAPPA (Multi Agency Public Protection Arrangements) meetings, tribunals, anniversary of a death, a major change or something the individual perceives as important to their progress within the next year, such as a probation review.*	**Yes** **No**

Comments:

Appendix C

The SDRS

Short Dynamic Risk Scale

For each of the eight items, circle the *one* number that best describes the client's presentation *over the past MONTH*. If the problem area does not apply to this client because the client has not had the opportunity to show the behaviors concerned or if insufficient information is available to make a judgement, circle "999" for N/A or Unknown. If you are able to say that the client has *not* had the particular problem at *any* time during the past month, record 0 for No Problem. If the problem has existed *at any time in the past month*, circle 1, 2, 3, or 4 as appropriate.

****

1. In the past month, takes no responsibility for behavior: Tries to blame others or circumstances for his/her acts or problems. Sees him/herself, inappropriately, as a victim.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

2. In the past month, exhibits few positive coping skills: Deals inappropriately with anger, i.e. reacts aggressively rather than assertively. Does not deal with stressful or upsetting events in a constructive way, i.e. aggressive or self-defeating.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

3. Anxiety or anger or frustration in the last month.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

4. Anger in the past month: Inappropriate displays of losing temper. If the anger expressed is minor, then an isolated instance can be ignored.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

5. Insulting, teasing, and obnoxious verbal behavior: This must be beyond good-natured play and is not just an isolated incident.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

6. Lack of consideration for others: Callousness, little empathy—anything that shows an attitude of thinking only about their own concerns and never of the thoughts, feelings of, or consequences for, other clients or staff.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

7. Poor housekeeping or cooking: Sleeping area is a mess. Leaves a mess in kitchen or common areas. Does not pick up after himself.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

8. Poor self-care and personal hygiene: Does not wash or washes infrequently.

0	1	2	3	4	999
No problem		Moderate problem		Severe problem	N/A or Unknown

Figure 7.1   Short dynamic risk scale

Appendix D

Study Approval documents

East of Scotland Research Ethics Service *(EoSRES)*

TAyside medical Science Centre
Residency Block Level 3
George Pirie Way
Ninewells Hospital and Medical School
Dundee DD1 9SY

Dr Laura Golding
Department of Clinical Psychology
University of Liverpool,
Whelan Building,
The Quadrangle, Brownlow Hill,
Liverpool
L69 3GB

Date:	28 April 2015
Your Ref:	
Our Ref:	LR/15/ES/0043
Enquiries to:	Mrs Lorraine Reilly
Direct Line:	01382 383878
Email:	eosres.tayside@nhs.net

Dear Dr Golding

Study title:	**Dynamic risk and violence in individuals with an intellectual disability (ID): Psychometric evaluation of the Current Risk of Violence (CuRV) measure**
REC reference:	**15/ES/0043**
Protocol number:	**UoL001104**
IRAS project ID:	**171641**

Thank you for your letter of 20 April 2015, responding to the Proportionate Review Sub-Committee's request for changes to the documentation for the above study.

The revised documentation has been reviewed and approved by the sub-committee.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact the REC Manager Mrs Lorraine Reilly, eosres.tayside@nhs.net. Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

UNIVERSITY OF
LIVERPOOL

Rachael Lofthouse
Trainee Clinical Psychologist
Doctorate of Clinical Psychology Programme
University of Liverpool
L69 3GB

24/10/2014

Dear *Rachael*,

RE: Dynamic risk and violence in individuals with an intellectual disability (ID): Psychometric evaluation of the Current Risk of Violence (CuRV) measure

Thank you for our response to the reviewers' comments of your research proposal submitted to the Chair of the D.Clin.Psychol. Research Review Committee (*dated 22/10/2014*).

I can now confirm that your amended proposal (*dated 22/10/2014*) meet the requirements of the committee and have been approved by the Committee Chair.

Please take this Chairs Action decision as *final* approval from the committee.

You may now progress to the next stages of your research.

I wish you well with your research project.

Dr Peter Taylor
Vice-Chair D.Clin.Psychol. Research Review Committee

Appendix E

Participant Information Sheet

We invite you to take part in a research study

This leaflet is about some **research**.

Research is a way of finding out the answers to questions.

A researcher asks people questions or collects information to understand something better.

Then they can tell other people about it.

This helps more people to understand it.

This research is called:

Using the CuRV to assess risk

My name is Rachael Lofthouse

I'm a **Trainee Clinical Psychologist**

This means I am learning to be a **Clinical Psychologist.**

What we want to understand better

We want to look at what happens when people become aggressive and how we can stop this happening.

As you probably know, each service user has their own file with information in.

Inside are things like reports and assessments that staff fill in.

To help us with our research, and only if you say it is ok, we would like to have a look at some information in your file.

We would like to know:

Your scores on 2 assessments staff have completed called CuRV & SDRS. And

- your date of birth

- your ethnic group

- how long you have lived here

- if you have any incidents in the next 3 months

Why we want to know

Like everyone, people with learning disabilities sometimes can be aggressive.

We have made a new tool. We think it will help us to know when people are likely to be aggressive.

We are testing it out in this research.

If it works, we hope staff will use it so they

can help people stop before they become aggressive.

Who can join in?

Anyone who has a learning disability, over 18.

You have been asked because you live in a community home.

We want to ask about 80 men and women to join in.

How to join in

If you want to join in we will ask for your **consent**.

Consent means **you can say yes or no** to join in the research.

If you want to join in, we will ask you to sign a consent form.

It is OK to say no if you do not want to join in.

You can stop taking part in the research at any time

You don't need to tell me why.

This will not affect the way you are treated now or in the future.

You or your staff can contact me to tell me you don't want to be involved anymore.

If you say yes to join in, this will happen:

You do not need to do anything. I am asking to look at some information in your notes.

I'll collect the information we talked about

from your file.

I will put the information on a computer, with a password. Your name will not be in this information.

Who has reviewed the study?

The East of Scotland Research Ethics committee Service REC 2 has looked at the study. Their job is to look at all ideas for research. They are happy that this is a good research study and is not harmful in anyway.

As part of this research your research notes and relevant medical records must be available for monitors from Lancashire Care to look at. It is their job to make sure the research is being done properly and your rights are being looked after.

What happens next?

I will write about all the information I get from people.

Other people will read my work.

This will help others learn from the research.

Thank you for letting me talk to you about my research.

Do you want to ask me anything?

If you are unhappy about the research, you can tell Laura Golding my supervisor. Her number is **0151 794 5534**

Or you can tell **PALS** instead if you want to.

PALS telephone number is **0800 073 1106**

If you believe that you have been harmed in any way by taking part in this study, you have the right to make a complaint and get compensation through Liverpool University. You can get details about this from the research team.

Also, as a patient of the NHS, you have the right to make a complaint through the usual NHS process. To do so, you can write to the Patient Liaison Manager, Complaints Office:

Complaints Department

Lancashire Care NHS Foundation Trust

Sceptre Point

Sceptre Way

Walton Summit

Bamber Bridge

Preston

PR5 6AW

Telephone:01772 695315

If someone acting without care harms you, you may take legal action against NHS Lancashire Care but you may have to pay your legal costs

Contact details for Rachael:

Rachael Lofthouse

Trainee Clinical Psychologist

e-mail: r.lofthouse@liverpool.ac.uk

Tel: 0151 794 5877

Appendix F

Consent Form

Consent Form

Consent means you can **say yes or no** to join in the research.

Tick if you say yes ✔

I read the participant information sheet or someone helped me read it.

I have been able to ask questions if I wanted

I know I do not have to take part.

I can say no at anytime, I don't need to say why.

I am happy for staff to look at my notes and my information to be included in the research.

My name is

_____

My signature

_____

The date today is

_____

Verbal consent

Witnessed by:

Staff name	
Signature	
Position	
Date	