Routledge
Taylor & Francis Group

Journal of Sexual Aggression

An international, interdisciplinary forum for research, theory and practice

ISSN: 1355-2600 (Print) 1742-6545 (Online) Journal homepage: www.tandfonline.com/journals/tjsa20

# Differences in Risk for Sexual Violence Protocol (RSVP) risk factors among older and adult men who have sexually offended

Bea Raymond, Melanie Simmons & Troy E. McEwan

**To cite this article:** Bea Raymond, Melanie Simmons & Troy E. McEwan (2026) Differences in Risk for Sexual Violence Protocol (RSVP) risk factors among older and adult men who have sexually offended, Journal of Sexual Aggression, 32:1, 117-133, DOI: 10.1080/13552600.2024.2409160

**To link to this article:** https://doi.org/10.1080/13552600.2024.2409160

JOURNAL OF SEXUAL AGGRESSION
2026, VOL. 32, NO. 1, 117–133
https://doi.org/10.1080/13552600.2024.2409160



# Differences in Risk for Sexual Violence Protocol (RSVP) risk factors among older and adult men who have sexually offended

Bea Raymond[a,b], Melanie Simmons[a,c] and Troy E. McEwan[a,d]

[a]Centre for Forensic Behavioural Science, Swinburne University of Technology and Forensicare, Melbourne, Australia; [b]Vicpsychplus, Melbourne, Australia; [c]Department of Justice and Community Safety, Melbourne, Australia; [d]Centre for Research and Education in Forensic Psychology, The University of Kent, Kent, UK

## ABSTRACT

Ageing has a protective impact on recidivism risk, including for those who offend sexually. Are civilly detained and committed sexually violent persons released after age 60 low risk? *Criminal Justice and Behavior*, *48*(7), 981–998; Doren, D. M. (2006). What do we know about the effect of aging on recidivism risk for sexual offenders? Sexual Abuse: A Journal of Research and Treatment, *18*; Harris, G. T., & Rice, M. E. (2007). Adjusting actuarial violence risk assessments based on aging or the passage of time. *Criminal Justice and Behavior*, 34(3), 297–313). Recent research of the Risk for Sexual Violence Protocol (RSVP) suggests increased age may affect the validity of this guideline, with good predictive performance in samples of men mostly aged under 50 (Davis, M. R., Woods, M., Raymond, B., Ogloff, J. R. P., & McEwan, T. E. (in submission). Does it work? Convergent and predictive validity of the Risk for Sexual Violence Protocol (RSVP) in an Australian Community Forensic Mental Health Setting. Manuscript submitted for publication; Vargen, L. M., Jackson, K. J., & Hart, S. D. (2020). Interrater reliability, concurrent validity, and predictive validity of the Risk for Sexual Violence Protocol. *Law and Human Behavior*, *44*(1), 37–50), but poor predictive performance in a sample aged over 50 (Raymond, B. C., Davis, M. R., Ogloff, J. R. P., & McEwan, T. E. (in submission). Convergent and predictive validity of the sexual violence risk-20 and risk for sexual violence protocol with older sexual offenders. Manuscript submitted for publication). This study investigated possible reasons for these contrasting results by investigating age-related differences in risk factor endorsement and the relationships between risk factors. RSVP risk factors in two samples of men with prior sexual offending, older adults aged between 50 and 78 ($n = 95$) and adults aged between 18 and 46 ($n = 139$). Few differences were identified in risk factor endorsement or the relationship between risk factors. The younger adult sample were observed to have more risk factors present.

## PRACTICE IMPACT STATEMENT

This research adds to the literature regarding older men who offend sexually. It is anticipated that further research into factors that are

## ARTICLE HISTORY

Received 26 September 2023
Revised 8 September 2024
Accepted 12 September 2024

## KEYWORDS

RSVP; older sex offenders; older adults; risk factors; risk assessment; recidivism

CONTACT Bea Raymond bea.raymond@hotmail.com; bea@vicpsychplus.com

Supplemental data for this article can be accessed online at https://doi.org/10.1080/13552600.2024.2409160.
This article was originally published with errors, which have now been corrected in the online version. Please see Correction (http://dx.doi.org/10.1080/13552600.2024.2432741)

associated with this age group, may encourage future research of gerontological literature in a forensic arena. Until more reliable evidence is available, the current risk assessment tools may require a level of caution when used with older men.

The Risk for Sexual Violence Protocol (RSVP) is a commonly used structured professional judgement (SPJ) guideline that specifically assesses the risk of sexual violence recidivism (Hart et al., 2003; Hart & Boer, 2021). The RSVP organises empirically and theoretically derived risk factors relevant to reoffending sexually (Hart & Boer, 2009). Users are expected to have a working knowledge of the research and theory of sexual offending behaviour (Hart et al., 2003; Sea & Hart, 2021), and use this knowledge to contextualise their application of the guidelines. Based on that knowledge, and specific information about the person being assessed, the relevance of RSVP risk factors is synthesised by the assessor and used to inform judgements about the potential and nature of further harmful sexual behaviour (Hart et al., 2003; Hart & Boer, 2021).

The RSVP has been subject to limited validation research, relying until recently, on validation studies of similar guidelines, the Sexual Violence Protocol 20 (SVR-20; Boer et al., 1997; Hart & Boer, 2009). Studies have shown that there is a strong relationship between the SVR-20 and RSVP ($r = .97$; Hart & Boer, 2009; Raymond et al., in submission) and research that has been conducted using the SVR-20, is often applied to the RSVP (Hart & Boer, 2021; Sea & Hart, 2021). Risk judgments made using the SVR-20 have been shown to meaningfully relate to further sexual offending in several jurisdictions across multiple settings (Barbaree et al., 2008; de Vogel et al., 2004; Kanters et al., 2017; Rettenberger et al., 2011). Darjee et al. (2016) conducted a field study that assessed inter-rater reliability and predictive validity of the RSVP. The results indicated that the RSVP was not able to differentiate between recidivists and non-recidivists to a significant statistical level ($n = 109$, AUC = .59, 95% CI [.48, .71]) with a follow up of .08 years to 7.15 years. More recently, the validity of the RSVP has been examined in two peer-reviewed studies. Vargen et al. (2020) demonstrated that case prioritisation decisions made using the RSVP were meaningfully associated with future sexual offending in a Canadian forensic psychiatric sample of 100 men followed up using "new police contact for sexual violence" over 10 years. Similar results were reported by Davis et al. (in submission), who examined the predictive validity of the RSVP in a sample 115 men assessed in an Australian community forensic mental health setting (AUC = .73). As in Vargen and colleagues' study, in the Australian study higher levels of case prioritisation were associated with increased likelihood of sexual reoffending measured using subsequent offending over an average follow-up time of 8.08 years.

### *The validity of existing sexual offending risk assessment tools with older adults*

The classification of "aged" or "older adult" has changed over time and in the general community, these terms usually refers to those 60–65 years and older (Hultsch et al., 2002; Zapater-Fajari et al., 2021). Research into ageing in correctional populations has found that those who are or have been incarcerated age more quickly, likely due to more arduous physical conditions, health concerns and other life experiences of this population. Therefore, a male over 50 who has been in the prison system experiences similar age-related changes to a 60 year old in the community (Dawes, 2009; Fazel et al., 2001; Maschi et al., 2011; Williams et al., 2012). In the current research, the term "older adult" will be used to refer to men over the age of 50 who have been convicted of offending sexually.

The RSVP guidelines specify that it can be used with men 18 years and over (Hart et al., 2003). In Hart and Boer (2021) it was noted that non-contact offences including the consumption, production and distribution of child abuse material, are considered sexual violence, and the SVR-20

and RSVP can be used with these offenders. At present the content of the RSVP does not reflect the growing literature indicating that older age has important effects on a person's potential for harmful sexual behaviour (Ambroziak et al., 2020; Hirtenlehner & Baier, 2019). Rather, it is expected that assessors will understand and incorporate potential effects of being an older adult as they would any other individual attributes and consider this when drawing conclusions about risk of sexual recidivism (Darjee & Russell, 2012). A new version of the RSVP has recently been published (Hart et al., 2022) that provides greater guidance about how to incorporate individual factors, including age, into consideration of potential for further harmful sexual behaviour. Age-related change in sexual function is explicitly mentioned in justification for the RSVP$^{v2}$ Sexual Deviance risk factor, though does not translate into the definition of the factor. The RSVP$^{v2}$ still largely relies on the user's knowledge of age-related changes and their potential relevance when developing risk formulations and judgements. This is compounded by the fact that the two existing peer-reviewed evaluations of the first version of the RSVP have wholly or predominantly involved men who would not be considered older adults. In Vargen and colleagues' (2020) sample, two-thirds were aged 53 or below (mean age 41, $SD = 12.41$), while Davis and colleagues' sample of 115 men were all aged under 45.

Raymond et al. (in submission) drew on a sample of 95 older adult men who had sexually offended. They investigated the reliability and validity of RSVP and SVR-20 case prioritisation judgements for further sexual offending over an average follow-up time of 8.83 years (controlling for death). The results showed good levels of interrater reliability, and high convergent validity ($r = .92$, $p < .01$). This study also evaluated predictive validity over time (5, 10 and 15 years). In contrast with the results of Davis et al. (in submission) in the sample of younger adults, RSVP case prioritisation judgements did not differentiate between those with and without future sexual offending in the older sample (AUC = .57). The difference in performance of the RSVP in the two studies was unexpected, given the samples were drawn from the same location over the same time period and differentiated only by age. This suggested that specific elements or steps in the development of the RSVP case prioritisation judgement might have somehow negatively affected the performance of the assessment for the older group. Case prioritisation judgements are based on the presence of risk factors, how they are thought to relate to each other and to harmful sexual behaviour, and other case-related information. Therefore, one hypothesis for the different results in Raymond et al. (in submission) and Davis et al. (in submission) is that there are underlying differences in how risk factors present, and how they might present amongst those who reoffend, that affect the overall validity of judgements made using the RSVP.

The inconsistent performance of the RSVP in the two age-differentiated Australian samples was particularly unexpected given two other commonly used sexual offending risk assessment tools, the Static-99 (Harris et al., 2003) and Static-99R (Phenix et al., 2016), had shown few age-related differences in performance in a larger sample drawn from the same setting. Reeves et al. (2017) examined the predictive performance of the Static tools among 621 men aged 18–78 over an average follow-up period of 12.16 years. Both Static tools performed consistently with past international research, showing moderate effects in discriminating between those with and without subsequent sexual offending (Goncalves et al., 2019; Helmus et al., 2012; Sanbukt et al., 2020). Reeves et al. (2017) took the subsample of 118 men aged over 50 from Reeves' and colleagues study and showed that the performance of the Static tools did not differ markedly in this group. This suggests that the combination of historical risk factors in the Static tools (regardless of age-related score adjustments in the Static-99R) continue to predict future sexual offending.

As a SPJ guideline, the RSVP intentionally includes a range of dynamic risk factors thought to be relevant to future sexual violence. While the RSVP validation studies conducted by Raymond et al. (in submission) and Davis et al. (in submission) require replication, their contrasting results suggest that there may be age-related differences in the performance of the RSVP. Given the recognised effects of ageing on sexuality, sexual behaviour, social and intimate relationships, and other areas of

functioning, it may be that age related differences affects the performance of the RSVP, particularly through their effects on dynamic risk factors. Therefore, this study aimed to investigate in greater detail than is possible in a pure validation study, whether there were differences in risk factor endorsement in the adult sample reported in Davis et al., (in submission) and the older adult sample reported in Raymond et al., (in submission).

### *The potential effect of age on sexual offending risk factors*

The RSVP risk factors are rated according to their presence in the past (more than a year prior to assessment) and recently (within 12 months of assessment), meaning each risk factor can be considered in both a static form and a more dynamic form. The risk factors are organised into five domains: History of Sexual Violence[1] includes static risk markers based on past behaviour that are predictively related to sexual offending; the Psychological Adjustment[2] domain captures psychological characteristics thought to affect decisions about engage in inappropriate sexual behaviour; the Mental Disorder[3] domain includes various diagnostic groups or indicators of mental disorder that may be associated with perpetration of sexual violence; Social Adjustment[4] incorporates indicators of relationship problems, employment problems, and problems with non-sexual criminality; while the Manageability[5] domain incorporates risk factors related to individual's engagement and participation in treatment, goal setting or planning and compliance with supervision. Each of these domains captures a broad concept that has been theoretically associated with harmful sexual behaviour (Hart et al., 2003).

Issues associated with ageing may affect the presence and relationship of RSVP risk factors across each domain so that they are more or less likely to be present. For example, as an older adult, a man may experience physical and psychological changes that are protective because they reduce access to victim groups. This potentially reduces the recent presence of risk factors such as Physical Coercion. Age-related life change might also mean there are fewer opportunities for evidence of recent problems with Social Adjustment, such as problems with relationships, employment and non-sexual criminality. Age could also have an inverse effect on some risk factors such as those contained in the Manageability domain related to planning, treatment and supervision. The factors within this domain are likely to be coded as not present due to the offender's age and assessed low risk (Bows & Westmarland, 2018), cognitive elasticity (Varangis et al., 2022), as well as mobility and psychological issues (Richard's et al., 2021; Varangis et al., 2022) that are associated with the ageing process.

The meaning of RSVP factors may change when applied to older adults (Craig, 2011; Seto, 2019; Zapater-Fajari et al., 2021) and not mirror the scope of the factor as intended by the developers. For example, the RSVP factor Problems with Employment encompasses a number of psychological constructs including self-esteem and prosocial adjustment (Hart & Boer, 2021), and aims to assess stability, capacity to remain on task, and sense of meaningfulness. For older adults, who are perhaps less likely to be employed (Abrams et al., 2016; Flower et al., 2019), these constructs are impacted by issues such as mobility or lack thereof (Hirtenlehner & Baier, 2019) and gradual decline of cognitive flexibility (Richard's et al., 2021).

The effects of ageing on risk factors for offending has generally been acknowledged by framing increased age as protective (Crookes et al., 2022; Wilpert et al., 2018). In the specific area of sexual offending risk, the impact of reduced testosterone production and loss of desire for sexual activity has been highlighted as potentially relevant (Smith et al., 2007). Even beyond biological changes, increased age is associated with changes in the role of sexuality and intimacy in people's lives that could be relevant to harmful sexual behaviour (Srinivasan et al., 2019). Psychological changes have an influence on interpersonal desires that are exacerbated by impending mortality, cognitive changes and chronic illness (Wielinga et al., 2021). More exploration of how these normal age-related changes might be relevant to harmful sexual behaviour among men with a history of sexual offending is needed. However, for the purposes of risk assessment, understanding how adult and older adult men differ in the presence of particular risk factors is an important first step to understanding how these tools might function similarly or differently over the lifespan.

### The current research

This exploratory research sought to further investigate potential reasons for the differences in the performance of the RSVP in two prior age-differentiated samples that were collected in the same location over the same time period (Davis et al., in submission; Raymond et al., in submission). Where those studies focussed on predictive validity, the current research focussed on whether there were any evident differences in the presence of risk factors and how risk factors relate to each other in older and younger men. Underlying differences in risk factors may help to explain why RSVP risk judgements performed differently in the two prior studies of their predictive validity.

Using substantially similar age-differentiated samples to Davis et al. (in submission) and Raymond et al. (in submission), this research aimed to explore whether there were differences in (a) the frequency of RSVP risk factor endorsement and (b) the relationships between risk factors (i.e. which more frequently co-occur). We also explored these same two questions in the samples overall and in the sub-samples of adult and older adult men who engaged in further sexual offending, given it is possible that differences specific to the recidivist could explain why there were differences in predictive validity of risk judgements made using the RSVP.

We hoped to identify whether there were any underlying age-related differences that could be observed in the presence of risk factors, and the combinations of risk factors that present together, which could help to inform why decisions made using the RSVP might have different predictive effects in the two age-related groups. The goal of this research was to provide information about the potential meaning of risk factors at a more granular level than is possible in a study of predictive validity. Ultimately, this study sought to provide information that could inform future use of the RSVP with older men.

## Method

### Participants

Two age-differentiated samples were identified from a larger dataset of 653 men who presented for assessment of sexual offending risk at a community forensic mental health service in Melbourne, Australia, between 1984 and 2011 (also see Raymond et al., 2020; Reeves et al., 2017). The selection of participants was completed by the primary researcher who investigated the data, selecting 124 male older adults 50 or over at time of the original assessment, 95 (76.60%) had sufficient file information available to retrospectively score the RSVP. The nature and timing of the index offences were not part of the criteria for selecting this sample. At a separate subsequent time, a random sample of 150 men aged under 50 were then selected from the larger dataset and the RSVP coded in the 139 cases where there was sufficient information available. A larger sample was selected as this would be beneficial for the multi-dimensional scaling analysis (see below) and unequal sample sizes do not present a problem for between groups analysis when using the non-parametric $\chi^2$ test.

The mean age of the older adult group was 59.98 years ($SD = 7.08$), with the oldest participant being 78 at the time of assessment, while the mean age of the adult sample was 27.75 years ($SD = 6.68$). The older adult sample is the same as the sample used in Raymond et al., (in submission), while the adult sample is similar to that used by Davis et al. (in submission) but including an additional 24 cases.

Initial observations of the index offending and victimology showed some differences between the two age-defined samples. The older adult sample had a significantly greater likelihood of contact sexual offending[6] leading to the original assessment (89.47% versus 58.27% in the adult sample; $\chi^2(1, n = 95) = 26.65$, $p < .001$). The older adult sample were predominantly child sexual offenders (86.32%) whereas only 18% of men in the adult sample had offended against children. While sizeable, this difference was not significant ($\chi^2(1, n = 117) = 3.37$, $p < .07$). The age groups were similar in the proportion of offences against females ($n_{aged} = 61$, 64.20%; $n_{adult} = 83$, 60.10%) and the proportion who had been convicted of prior sexual offences ($n_{aged} = 47$, 49.50% and $n_{adult} = 59$, 42.80%).

## Measures

### Risk for Sexual Violence Protocol (RSVP)

The RSVP comprises 22 risk factors across five domains, each rated using a three-point ordinal scale (N = *no evidence*,? = *possible/partial evidence* and Y = *definite presence*). Reflecting the scoring instructions, each factor was coded twice to account for "past presence" in the participant's life up until 12 months prior to the original assessment date, as well as "recent presence", accounting for the 12 months prior to that date. Risk factor ratings were converted to a numerical scale (N = 0,? = 1 and Y = 2) for the purpose of analysis. Due to the file review nature of the assessment, it was deemed inappropriate to attempt to score the psychopathy item as this required greater detail of information that was not available from the files sourced for this study. In earlier files assessment of psychopathy was not routine and novel assessment of psychopathy from file review only was deemed inappropriate. In the few files where the original assessor completed the RSVP, there was no evidence of psychopathy. For consistency this item was removed from all analysis and only 21 of the 22 factors were used for all judgements and analyses. Limitations associated with this are discussed at the end of this paper. While judgements about severity and imminence were not formulated, case prioritisation judgements were made based on the totality of information available, including risk scenarios, and coded as 0 = *Low*, 1 = *Moderate*, 2 = *High*.

## Procedure

File reviews and RSVP rating for both samples took place between January 2018 and December 2019. File information included details of offending, victim data, family history and demographic information. The primary researcher is an experienced forensic psychologist who has engaged in training and been using these tools in private practice. The cases were collated and coded by the primary researcher who was blind to the original assessing clinician's RSVP findings, and the results of any other risk assessment (e. g., Static-99) at the time of coding. Inter-rater reliability was assessed by comparing the primary researcher's item-level and case prioritisation judgements with those of the original assessing clinician in 37 cases where an existing RSVP was available.

Offending follow-up used conviction for a further sexual offence and controlled for time incarcerated and death (see Reeves et al., 2017, for details), and ranged from one month to 27.6 years, with a mean follow up time of 8.57 years (SD = 5.60, Mdn = 8.84, IQR = 3.36–27.6). Human research ethics approval was granted by the Swinburne University Human Research Ethics Committee.

## Statistical analysis

Analyses were conducted using the Statistical Package for the Social Sciences (SPSS), version 28 (IBM Corp, 2021). Inter-rater reliability (IRR) analyses used intraclass correlation coefficients ($ICC_2$; two-way, random effects model, single ratings, absolute agreement method; McHugh, 2012; Hallgren, 2012). Fleiss (1981) posited that for a single measure ICC, values of .75 and above can be considered "excellent", .60 to .74 "good", .40 to .59 "moderate," and below .40 "poor". Risk factor endorsement for both samples as well as for the recidivist subsamples, sample were compared using chi-square and Cramer's *V* as measure of effect size. As the data was not normally distributed, the differences between the two age groups were assessed using Mann–Whitney U and the same analysis was used with the recidivist subsamples. The data used for this analysis was the total score for each factor and for each individual.

Multidimensional scaling (MDS) was used to observe the relationships between risk factors for all samples. MDS represents variables as points in Euclidean space, with the distances between points corresponding to the magnitude of the variables' interrelations. The visual representation takes the form of a radex circular disk, with the centre containing variables with the strongest average relations with all other variables, while those that are more infrequently related to others appear

towards the outer edges of the radex (Busing et al., 1997; Nanayakkara et al., 2020). Interpretation of MDS plots is primarily qualitative, which was appropriate for the exploratory analysis of relationships between different risk factors in each age group. Observation of the plots allowed exploration of the overall samples in each age group, recidivist samples in each age group. While it is not appropriate or possible to compare the outcomes of separate MDS plots statistically, the structure of the MDS plots can be used to infer features about each of the samples, and observed similarities and differences between these features form the basis of the Discussion.

To conduct the MDS the three-point ordinal item-level data was transformed into dichotomous variables by combining the factors scored as partially present with those scored as present (0 = *not present*, 1 = *possibly or definitely present*). The PROXSCAL function was used to create a spatial representation of the relationships between risk factors for each age group, and for only recidivists within each age group. By using the MDS with both samples, the placement of factors in relation to one another for each of the factors can be observed. These are not used for comparison, rather they illustrate placement of factors in the Euclidian area. Goodness of fit for the MDS solution was assessed using normalised raw stress scores. As stated by Kruskal and Wish (1978) scores of zero indicate a perfect fit while 1 refers to no fit. Scores below .10 are considered to mean that the data fits the model well.

## Results

### *Inter-rater reliability*

A total of 37 cases ($n = 11$, 11.58% of the older adult sample; and $n = 26$, 18.71% of the adult sample) had an RSVP by the original assessing clinician. Individual analysis of each of the 21 RSVP factors (excluding psychopathy) indicated good to excellent IRR for both the older adult and adult samples ($ICC_2$ ranged between .76 and 1; adult $ICC_2$ ranged between .70 and .91). Inter-rater reliability (IRR) was excellent for the RSVP Case Prioritisation judgement in the older adult sample` ($ICC_2 = 1.00$), with 100% agreement between raters. Inter-rater reliability of Case Prioritisation in the adult sample also achieved excellent IRR results ($ICC_2 = .90$, 95% CI [.81, .94]).

### *Case prioritisation and age*

While the aim of the paper was to examine age-related differences in risk factors, case prioritisation judgements were collected to observe differences in the allocation to risk categories between both age samples and the recidivist subsamples. Table 1 reports the proportion of each sample that was assessed as Low, Moderate or High. A non-parametric chi square was used to calculate independence between the older adult and adult samples for each risk category. The proportion between older adult and adult samples are broadly similar, though adult men were more likely to be categorised as high risk than older adult men ($\chi^2(1, n = 85) = 6.22$, $p = .01$). Although there were relatively large differences in the proportion of recidivists in each risk category, small sample sizes meant that these differences were not significant or could not be calculated due to zero cell count.

Table 2 provides the abbreviations used for each factor to provide the reader.

**Table 1.** Case prioritisation proportions.

| Case prioritisation | Older adult | Adult | | Recidivist older adult | Recidivist adult | |
|---|---|---|---|---|---|---|
| | *n (%)* | *n (%)* | $\chi^2$ | *n (%)* | *n (%)* | $\chi^2$ |
| Low | 21 (22.10) | 19 (13.70) | .10 | 3 (18.80) | - | - |
| Moderate | 43 (45.30) | 66 (47.50) | 4.85 | 6 (37.50) | 12 (44) | 2.00 |
| High | 31 (32.60) | 54 (38.80) | 6.22* | 7 (43.80) | 15 (55.60) | 2.91 |

*$p$ =.01.

**Table 2.** RSVP risk factor legend.

| RSVP Risk Factor Title | Abbreviation |
|---|---|
| Chronicity of Sexual Violence | C |
| Diversity of Sexual Violence | Di |
| Escalation of Sexual Violence | E |
| Physical Coercion in Sexual Violence | Ph |
| Psychological Coercion in Sexual Violence | Ps |
| Extreme Minimisation or Denial of Sexual Violence | De |
| Attitudes that Support or Condone Sexual Violence | A |
| Problems with Self-Awareness | SA |
| Problems with Stress or Coping | St |
| Problems Resulting From Child Abuse | CA |
| Sexual Deviance | Dev |
| Major Mental Illness | M |
| Problems with Substance Use | Sub |
| Violent or Suicidal Ideation | V |
| Problems with Intimate Relationships | I |
| Problems with Non-Intimate Relationships | NI |
| Problems with Employment | Emp |
| Non-Sexual Criminality | Cr |
| Problems with Planning | P |
| Problems with Treatment | T |
| Problems with Supervision | Sup |

### *Risk factors in each age sample*

Table 3 shows the proportion of participants who were identified as having possible or definite evidence of each risk factor, recently and in the past, as well as tests of differences in rates of risk factor endorsement between the older adult and adult samples. There were similar rates of past and recent risk factor endorsement between the older adult and adult samples for most risk factors. Differences emerged mostly in the Social Adjustment and Manageability domains, with risk factors generally less often present in the older adult sample (with the perhaps predictable exception of past chronicity of sexual violence, which was more commonly present in the older adult sample who had obviously lived for a longer time and so had greater opportunity for chronic sexual violence). Reflecting this, the summed scores for both past and recent ratings were calculated and the older adult group had a significantly lower past (older adult $Mdn_{total} = 9$, adult $Mdn_{total} = 10$, $U = 4956.5$, $p < .001$) and recent rating (older adult $Mdn_{total} = 8$, adult = 11, $U = 4822.5$, $p < .001$).

The MDS plots (Figures 1 and 2) were generated to visually explore patterns of co-occurrence of RSVP recent ratings of risk factors in each age-based sample. Separate MDS plots were developed for past ratings and current ratings in each age group, but visual inspection showed no differences in the past and current plots with each age group, so past plots are included only in supplemental material given the greater interest in dynamic risk factors (Appendix A in supplementary material). Across MDS plots, normalised raw stress figures indicated adequate goodness of fit (ranging between .02 to .03).

### *Observations of MDS plots for both total samples*

Close to the centre of each plot are a group of risk factors that commonly co-occur. In the older adult sample, factor prevalence in this main cluster ranged from 53.20% – 80%; in the adult sample from 51.80% – 88.50%. In both groups, risk factors in the centre of the plot included Problems with Stress and Coping, and Problems with Self-Awareness, which were endorsed for the majority of both samples, suggesting the RSVP domain of poor psychological adjustment was common to both samples.

Factors at the outermost area of MDS plots tend to occur less commonly in the sample overall, giving them greater distance from one another, however groupings are still apparent in both age

**Table 3.** Comparisons of the prevalence of RSVP risk factor endorsement in each age group.

| RSVP Factors | Factor Abbrev[7] | Past Presence[8] Older adult *n* (95) *n* (%) | Past Presence Adult *n* (139) *n* (%) | $\chi^2$ | *V* | Recent Presence *Older adult* *n* (95) *n* (%) | Recent Presence Adult *n* (139) *n* (%) | *χ2* | *V* |
|---|---|---|---|---|---|---|---|---|---|
| Chronicity of Sexual Violence | C | 76 (80) | 85 (61.20) | **9.34**** | **.2**** | 65 (68.4) | 82 (59) | 2.15 | .96 |
| Diversity of Sexual Violence | Di | 22 (23.20) | 26 (18.70) | 0.69 | .05 | 21 (22.100) | 27 (19.40) | 0.25 | .03 |
| Escalation of Sexual Violence | E | 14 (14.70) | 34 (24.50) | 3.27 | .12 | 12 (12.60) | 33 (23.70) | **4.48*** | **.14*** |
| Physical Coercion in Sexual Violence | Ph | 12 (12.60) | 27 (19.40) | 1.88 | .09 | 8 (8.40) | 25 (18) | **4.26*** | **.14*** |
| Psychological Coercion in Sexual Violence | Ps | 29 (30.50) | 33 (23.70) | 1.33 | .08 | 24 (25.30) | 31 ( 22.30) | 0.28 | .03 |
| Extreme Minimisation or Denial of Sexual Violence | De | 62 (65.30) | 76 (54.70) | 2.61 | .11 | 51 (53.20) | 76 (54.70) | 0.02 | .01 |
| Attitudes that Support or Condone Sexual Violence | A | 65 (68.40) | 95 (68.30) | 0 | .00 | 57 (60) | 90 (64.70) | 0.55 | .05 |
| Problems with Self-Awareness | SA | 77 (81.10) | 115 (82.70) | 0.11 | .02 | 68 (71.60) | 107 (77) | 0.87 | .06 |
| Problems with Stress or Coping | St | 81 (85.30) | 126 (90.60) | 1.60 | .08 | 76 (80) | 123 (88.50) | 3.20 | .12 |
| Problems Resulting From Child Abuse | CA | 41 (43.20) | 52 (37.40) | 0.78 | .06 | 40 (42.10) | 54 (38.80) | 0.25 | .03 |
| Sexual Deviance | Dev | 67 (70.50) | 88 (63.30) | 1.31 | .08 | 68 (71.60) | 88 (63.30) | 1.74 | .09 |
| Major Mental Illness | M | 34 (35.80) | 70 (50.40) | **4.85*** | **.14*** | 30 (31.60) | 64 (46) | **4.91*** | **.15*** |
| Problems with Substance Use | Sub | 26 (27.40) | 55 (39.60) | 3.71 | .13 | 17 (17.90) | 45 (32.40) | **6.08*** | **.16*** |
| Violent or Suicidal Ideation | V | 20 (21.10) | 37 (26.60) | 0.95 | .06 | 14 (14.70) | 23 (16.50) | 0.14 | .24 |
| Problems with Intimate Relationships | I | 57 (60) | 107 (77) | **7.76*** | **.18*** | 58 (61.10) | 103 (74.10) | **4.5*** | **.14*** |
| Problems with Non-Intimate Relationships | NI | 48 (50.50) | 109 (78.40) | **19.88**** | **.29**** | 50 (52.60) | 107 (77) | **15.15**** | **.25**** |
| Problems with Employment | Emp | 31 (32.60) | 88 (63.30) | **21.25**** | **.3**** | 32 (33.70) | 88 (63.30) | **19.82**** | **.29**** |
| Non-Sexual Criminality | Cr | 13 (13.70) | 38 (27.30) | **6.17*** | **.16*** | 14 (14.70) | 39 (28.10) | **5.72*** | **.16*** |
| Problems with Planning | P | 28 (29.50) | 73 (52.50) | **12.22**** | **.23**** | 29 (30.50) | 72 (51.80) | **10.41**** | **.21**** |
| Problems with Treatment | T | 44 (46.30) | 78 (56.10) | 2.17 | .10 | 41 (43.20) | 71 (51.10) | 1.42 | .08 |
| Problems with Supervision | Sup | 16 (16.80) | 60 (43.20) | **17.83**** | **.28**** | 17 (17.90) | 57 (41) | **13.94**** | **.24**** |

** p <.001, *p < .05. [7]To enable interpretation of the MDS plots, the RSVP factors were abbreviated. [8] Presence refers to the factors being endorsed (score 1) or not endorsed (score 0).

samples. For example, in the older adult sample (Figure 1a), Substance Use and Non-Sexual Criminality were less commonly rated as present but were in closer proximity to one another, meaning that when one occurs, it is more likely the other will occur. It was clear that in some cases, risk factors from the same RSVP domain were more strongly related to each other, even when being less strongly related and occurring more infrequently than other risk factors. For example, Problems

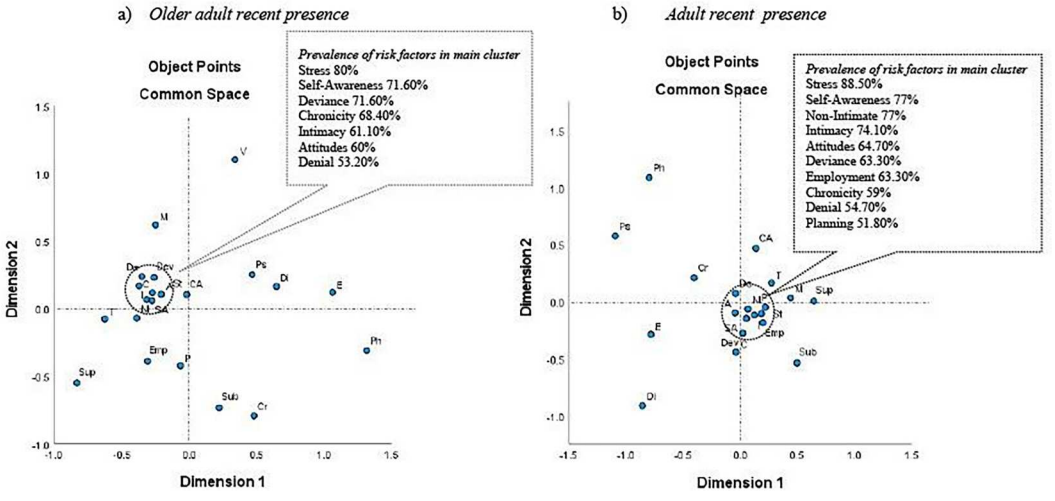


**Figure 1.** MDS representation of recent factor endorsement for older adult and adult samples.

with Supervision, Problems with Planning and Problems with Treatment are in the Manageability domain and for the older adult MDS plot, these three factors are located together in the bottom left quadrant.

In the adult sample, higher overall rates of endorsement of risk factors mean that there are more risk factors in the central cluster and more frequent co-occurrence of risk factors. There appeared to be some differences between age groups in the relationships between risk factors outside of the central cluster, for example, Problems with Treatment, Major Mental Illness and Problems with Supervision were more closely related to the central cluster, and to each other, in the adult sample than in the older adult sample, where Major Mental Illness did not appear to be as strongly related to the Manageability factors.

### *Risk factor endorsement and relationships among older adult and adult recidivists*

The relationships between risk factor endorsement were explored among those in the older adult and adult samples who had reoffended sexually ($n = 16$ and $n = 27$). This group was of particular interest given how central recidivism is to measuring predictive validity. The differences in predictive validity observed in Davis et al. (in submission) and Raymond et al. (in submission) could be specifically due to differences in how risk factors relate to recidivism in the reoffending group.

The small sample sizes mean that interpretation of these findings must be cautious. Table A4 describes the proportion of endorsed risk factors and whether they significantly differed between older adult and adult samples. There were similar rates of past and recent risk factor endorsement between the older adult and adult recidivist samples for most risk factors, with fewer differences in these recidivist samples than in the two age-related samples overall (though this is likely also due to more limited power to detect differences because of small sample sizes). When total scores were calculated using either past or recent ratings, the older adult group had a significantly lower past (older adult $Mdn_{total} = 9$, adult $Mdn_{total} = 13$, $U = 104.5$, $p < .01$) and recent (older adult $Mdn_{total} = 10$, adult $Mdn_{total} = 12$, $U = 116.5$, $p < .01$) total score. As in Table 3 the factor abbreviations that are used in the subsequent MDS plot represent the risk factors in Table 4.

The MDS plots (Figure 2) visually represents the relationship between recent ratings of risk factors in each aged-based sample. As noted above, the MDS plots representing the past timeframe can be viewed in supplemental material.

**Table 4.** Comparisons of the prevalence of RSVP risk factor endorsement in each age recidivist group.

| RSVP Factors | Factor Abbrev | Past Presence | | | | Recent Presence | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Older adult *N* (16) | Adult *N* (27) | | | Older adult *N* (16) | Adult *N* (27) | | |
| | | *n* (%) | *n* (%) | $\chi^2$ | *V* | *n* (%) | *n* (%) | *χ2* | *V* |
| Chronicity of Sexual Violence | C | 14 (87.50) | 20 (74.10) | 1.10 | .16 | 13 (81.30) | 21 (77.80) | 0.07 | .04 |
| Diversity of Sexual Violence | Di | 4 (25) | 9 (33.30) | 0.33 | .09 | 6 (37.50) | 9 (33.30) | 0.08 | .04 |
| Escalation of Sexual Violence | E | 2 (12.50) | 8 (29.60) | 1.65 | .20 | 2 (12.50) | 9 (33.30) | 2.29 | .23 |
| Physical Coercion in Sexual Violence | Ph | 2 (12.50) | 5 (18.50) | 0.27 | .08 | 2 (12.50) | 5 (18.50) | 0.27 | .08 |
| Psychological Coercion in Sexual Violence | Ps | 5 (31.30) | 7 (25.90) | 0.14 | .06 | 5 (31.30) | 7 (25.90) | 0.14 | .06 |
| Extreme Minimisation or Denial of Sexual Violence | De | 12 (75) | 16 (59.30) | 1.10 | .16 | 10 (62.50) | 15 (55.60) | 0.20 | .07 |
| Attitudes that Support or Condone Sexual Violence | A | 10 (62.50) | 25 (92.60) | **6.00*** | **.37*** | 10 (62.50) | 24 (88.90) | **4.23*** | **.31*** |
| Problems with Self-Awareness | SA | 14 (87.50) | 27 (100) | 3.54 | .29 | 15 (93.80) | 26 (96.30) | 0.15 | .06 |
| Problems with Stress or Coping | St | 16 (100) | 26 (96.30) | 0.61 | .12 | 15 (93.80) | 26 (96.30) | 0.15 | .06 |
| Problems Resulting From Child Abuse | CA | 8 (50) | 9 (33.30) | 1.17 | .17 | 8 (50) | 9 (33.30) | 1.17 | .17 |
| Sexual Deviance | Dev | 12 (75) | 25 (92.60) | 2.60 | .25 | 13 (81.30) | 25 (92.60) | 1.26 | .17 |
| Major Mental Illness | M | 7 (43.80) | 17 (63) | 1.50 | .19 | 6 (37.50) | 16 (59.30) | 1.90 | .21 |
| Problems with Substance Use | Sub | 4 (25) | 16 (59.30) | **4.74*** | **0.33*** | 6 (18.80) | 15 (55.60) | **5.60*** | **.36*** |
| Violent or Suicidal Ideation | V | 3 (18.80) | 11 (40.70) | 2.21 | .23 | 2 (12.50) | 6 (22.20) | 0.63 | .12 |
| Problems with Intimate Relationships | I | 9 (56.30) | 22 (81.50) | 3.18 | .27 | 10 (62.50) | 22 (81.50) | 1.90 | .21 |
| Problems with Non-Intimate Relationships | NI | 8 (50) | 23 (85.20) | **6.18*** | **.38*** | 9 (56.30) | 22 (81.50) | 3.18 | .27 |
| Problems with Employment | Emp | 8 (50) | 23 (85.20) | **6.18*** | **.38*** | 8 (50) | 22 (81.50) | **4.72*** | **.33*** |
| Non-Sexual Criminality | Cr | 3 (18.80) | 13 (48.10) | 3.72 | .29 | 3 (18.80) | 13 (48.10) | 3.72 | .29 |
| Problems with Planning | P | 7 (43.80) | 19 (70.40) | 2.98 | .26 | 8 (50) | 19 (70.40) | 1.78 | .20 |
| Problems with Treatment | T | 10 (62.50) | 20 (74.10) | 0.64 | .12 | 10 (62.50) | 18 (66.70) | 0.08 | .04 |
| Problems with Supervision | Sup | 3 (18.80) | 13 (48.10) | 3.72 | .29 | 4 (25) | 12 (44.40) | 1.63 | .19 |

** p <.001, *p < .05. [10] To enable interpretation of the MDS plots, the RSVP factors were abbreviated

## *Observations of MDS plots for recidivist samples*

The greater observed distances between risk factors in the older adult recidivist sample is likely to be the result of the size of the recidivist sample rather than reflecting anything particularly meaningful. For this sample of older adult recidivists, the most commonly endorsed factors with the strongest relationships to each other appeared to reflect current problems with sexual interests and behaviour, as well as recent difficulties with stress, coping and self-awareness. Problems with Intimate Relationships and Non-Intimate Relationships were relatively closely aligned with these factors, along with Problems with Attitudes and Problems with Planning, even though they are less commonly endorsed (occurring in between 40% and 60% of cases, respectively). Interestingly, although recent Extreme Minimisation or Denial was common in the older adult sample (75% present), it did not form part of the central cluster, suggesting it did not share a strong relationship with other common risk factors.

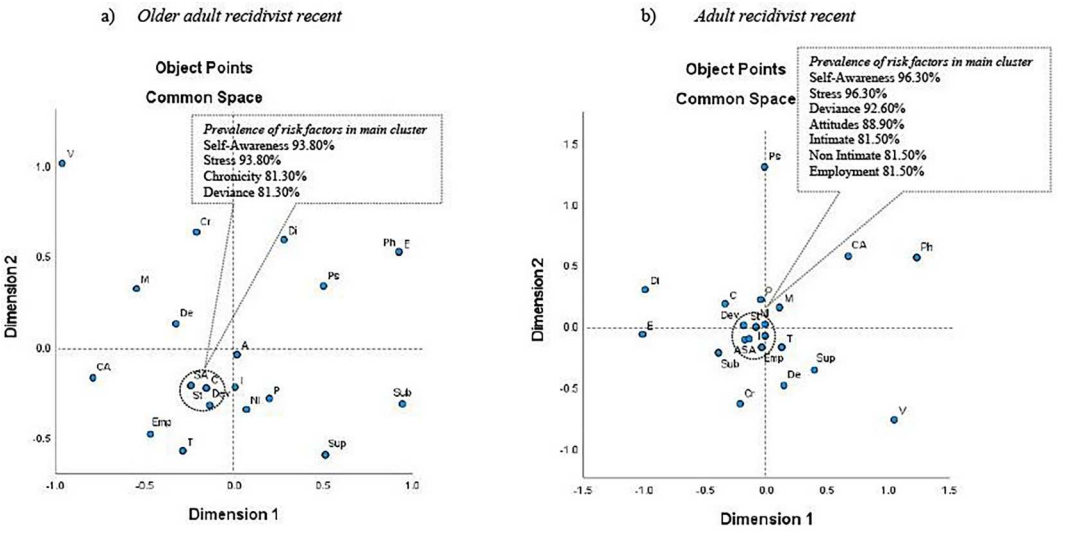


**Figure 2.** Multidimensional Analysis of recent recidivist for older adult and adult samples.

The adult recidivist sample had more recent risk factors present, and so more risk factors co-occurring in the cluster as well as more factors in close proximity to the cluster. Notably, and different to the older adult sample, Chronicity of Sexual Violence did not form part of the central cluster but was in close proximity and most closely related to Sexual Deviance. The Manageability domain factors are sufficiently close to each other to indicate they are related. Notably, while Sexual Deviance, Problems with Self-Awareness and Problems with Stress and Coping all appeared in the central cluster in the adult sample, so did a range of criminogenic needs such as recent Problems with Employment, Problems with Intimate Relationships and Problems with Non-Intimate Relationships. This was not true of the older adult sample, where these criminogenic needs were not commonly occurring and did not appear closely related to each other.

## Discussion

The aim of this study was to explore the frequency with which risk factors for sexual offending present among adult and older adult men, and the relationships between risk factors in these two samples. We sought to understand whether differences in the presence of and relationships between risk factors might help to explain unexpected differences in prior investigations of the predictive validity of the RSVP in two samples that were largely the same as those used in the current study (Davis et al., in submission; Raymond et al., in submission). If there were observable differences in the presence and relationships between risk factors, this could help to explain why risk judgements made using them performed so difference in the age-differentiated samples.

The analyses broadly showed more similarities than differences between age groups in the presence and co-occurrence of sexual offending risk factors measured by the RSVP. Where differences were apparent, adults were significantly more likely than older adults to have past and recent problems with risk factors in the Social Adjustment and Manageability domains. Even among recidivists, adults were significantly more likely to have attitudes supporting or condoning sexual violence, employment, and substance use rated as present in the past and recently (though the two former risk factors were not uncommon among older adults). Older adults had significantly fewer risk factors present overall, relative to adult men. When considering the relationships between different risk factors, among the adult recidivists, the presence of general criminogenic needs (as evidenced through Social Adjustment risk factors) were more closely related to recent problems with

relationships, stress, self-awareness and sexual deviance. In the older adult recidivist sample stress, self-awareness and sexual deviance were less closely linked to wider problems with Social Adjustment. Despite these small differences, overall, there was little to suggest that the difference in the predictive performance of the case prioritisation judgements in Davis et al. (in submission) and Raymond et al. (submission) was due to differences in the types of risk factors present in the two groups or how those risk factors related to each other.

There are several potential explanations for these results. The RSVP risk factors are based on research and theory focussed on men in young and middle adulthood. The constructs they capture have been, to varying degrees, linked with subsequent harmful sexual behaviour in these groups (Booth, 2016; Hultsch et al., 2002). It may be that while the same risk factors are present in two samples, their relationship with further harmful sexual behaviour is different in the older sample, undermining the validity of the overall case prioritisation judgement that is based on them. For example, ageing is associated with several specific stressors (e.g. health changes, bereavement, financial status) that are often outside of older adults' control and so should be associated with increased reported stress (Rubio et al., 2016). Despite this, older people generally self-report less stress than younger people (Cohen & Janicki-Deverts, 2012) and the stress response (both physiological and psychological) reduces with age (Mikneviciute et al., 2023). There is also a body of literature suggesting that coping strategies change with age, with more cognitive and less behavioural strategies used (Rubio et al., 2016). These very basic age-related differences may have important implications for how "problems" with stress and coping present in older men, and how and whether such problems actually translate into changes in sexual recidivism risk. It is possible that gerontological changes may undermine the relationship between some risk factors and harmful sexual behaviour, so even when the risk factor is present, the import for overall risk is different.

Another compelling explanation for the current results is the fact that the number of risk factors present is markedly lower in the older adult sample (as evidenced by a significantly lower total RSVP score), and this is particularly evident in relation to the recent presentation of risk factors. Generally, when applying offending risk assessment instruments, the more risk factors that are present, the higher the overall level of risk. Even when applying SPJ guidelines like the RSVP, where a few or even one key risk factor could place an individual at a high level of risk, the tendency across groups is for risk to be higher in cases where there are more risk factors present (Douglas & Ogloff, 2003; Ogloff & Davis, 2005). Therefore, reflecting the fact that they had generally fewer risk factors, older adult participants were judged to have a low overall case prioritisation, both in the total sample and among recidivists. It may be that the overall lower number of risk factors led the assessor to underestimate risk in the older adult sample in some cases.

The translation of this study into practice implications must be cautious given its exploratory nature and the small sample size and unique nature of the sample limiting generalisability. However, our results suggest that when assessing older men who have sexually offended, it may be reasonable to expect that they will present with relatively fewer risk factors (particularly recent risk factors) than their younger counterparts. In this sample, the greatest differences were in the Social Adjustment and Manageability domains, where younger adults tend to have higher levels of risk factor endorsement. However, the results of Raymond and colleagues' (in submission) suggested that the lower overall number of risk factors and so lower apparent case priority did not necessarily translate into substantially lower relative risk in that sample. Fourteen per cent of both the low and moderate case prioritisation categories reoffended sexually in that study (compared to 22% of the high priority category).

When considered in conjunction with the current findings, it seems possible that reoffending by some (though not the majority of) older adult men may be less closely related to the risk factors assessed using the RSVP, and instead to other situational or age-related factors that are not captured by this guideline. This suggests that particular attention will need to be paid to the *relevance* of risk factors that are present, and their pattern and potential significance for that individual when coming to an overall case prioritisation judgement (Logan, 2016). However, it also points to the need to be cognisant of a wider array of potential causal influences when formulating older men's future sexual

offending behaviour, and to thoroughly consider literature on ageing and sexual behaviour when developing risk management plans.

### *Limitations and future research*

This exploratory study has multiple limitations, not least the retrospective nature of data collection and the fact that psychopathy was excluded from the RSVP results. Psychopathy is obviously a key risk factor for sexual reoffending (Hawes et al., 2013). It is also possible or even likely that psychopathy relates to other risk factors in meaningful ways as suggested by Darjee et al. (2016). The results of this study must be interpreted with this substantial limitation in mind, and future research investigating psychopathy in an aged sample of men who have sexually offended is needed.

A further limitation relates to the selection of a sample of men who were referred from other correctional services to a specialist forensic treatment service in the community because of their perceived risk and problematic behaviour. Both the sample size and the location of collection likely affect the generalisability of these results meaning replication is even more important. The high levels of sexual deviance in this sample, likely reflects the particular context of the clinic that until 1999 was one of the only referral services available who addressed sexual offending. It is likely the participants represented a higher risk than what would be expected in other settings. It is also possible that the field nature of the study means that men who were identified as being at higher risk may have received additional risk management, confounding the relationship between risk factors and recidivism and so the second set of analyses in this study in particular. Unfortunately, we did not have access to the nature of supervision or interventions that men in these samples were subject to.

Men perpetrate sexual offences for a variety of reasons, one of which is deviant patterns of sexual arousal, and it may be that these results are not generalisable to less sexually deviant samples. Further research into the relationship between RSVP risk factors and subsequent sexual offending among older males is clearly required to clarify whether the results are unique to this particular sample and method. The current research was only able to use file material making it difficult to comply with the structured process of the RSVP guidelines to make clinical case formulation, opinions on treatment or management.

The impact of not distinguishing between historical and recent offenders as well as not including victimology, is a limitation for this study and future research would benefit from their inclusion. Future research could use qualitative approaches (e.g. offence process modelling or similar) to explore why older adult men sexually offend and continue to offend. Review of situational characteristics associated with sexual offending may also provide further information to inform risk assessment in this cohort. Further research focused specifically on the needs and behaviour of older men will become more important as the general and forensically-involved population ages over coming years.

### *Conclusion*

Previous studies have suggested that the RSVP may perform differently among older and younger adults who have sexually offended. This study suggested that any differences in the validity of case prioritisation judgements reached using the RSVP are not due to underlying differences in the frequency with which individual risk factors present, nor in the relationships between risk factors, between older and younger adult males. Further research into harmful sexual behaviour by older men is needed to understand whether and how ageing affects both harmful sexual behaviour, and how the risk of such behaviour can be accurately assessed.

## Notes

1. Sexual Violence History includes Chronicity of Sexual Violence, Diversity of Sexual Violence, Escalation of Sexual Violence, Physical Coercion in Sexual Violence and Psychological Coercion in Sexual Violence.

2. Psychological Adjustment includes Extreme Minimisation or Denial of Sexual Violence, Attitudes that Support or Condone Sexual Violence, Problems with Self-Awareness, Problems with Stress or Coping, and Problems Resulting from Child Abuse.
3. Mental Disorder includes Sexual Deviance, Psychopathic Personality Disorder, Major Mental Illness, Problems with Substance Use and Violent or Suicidal Ideation.
4. Social Adjustment includes Problems with Intimate Relationships, Problems with Non-Intimate Relationships, Problems with Employment and Non-Sexual Criminality.
5. Manageability includes Problems with Planning, Problems with Treatment and Problems with Supervision.
6. Contact offences included Incest, Indecent Act, Sexual Penetration, Rape, Indecent Assault and Gross Indecency (*Crimes Act, 1958*)

## Acknowledgements

The authors acknowledge the input of Dr Michael R. Davis in earlier versions of this article.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Ethical approval

This article does not contain any studies with human participants or animals performed by any of the authors.

## References

Abrams, D., Swift, H. J., & Drury, L. (2016). Old and unemployable? How age-based stereotypes affect willingness to hire job candidates. *Journal of Social Issues*, *72*(1), 105–121. https://doi.org/10.1111/josi.12158

Ambroziak, G., Kahn, R. E., Mundt, J. C., Keiser, K. L., & Thornton, D. (2020). Are civilly detained and committed sexually violent persons released after age 60 low risk? *Criminal Justice and Behavior*, *48*(7), 981–998. https://doi.org/10.1177/0093854820972448

Barbaree, H. E., Langton, C. M., Blanchard, R., & Boer, D. P. (2008). Predicting recidivism in sex offenders using the SVR-20: The contribution of age-at-release. *International Journal of Forensic Mental Health*, *7*(1), 47–64. https://doi.org/10.1080/14999013.2008.9914403

Boer, D., Hart, S., Kropp, P., & Webster, C. (1997). *Manual for the sexual violence risk-20*. The British Columbia Institute Against Family Violence, co-published with the Mental Health, Law, and Policy Institute at Simon Fraser University.

Booth, B. D. (2016). Elderly sexual offenders. *Current Psychiatry Report*, *18*, 1–7. https://doi.org/10.1007/s11920-016-0678-1

Bows, H., & Westmarland, N. (2018). Older sex offenders – managing risk in the community from a policing perspective. *Policing and Society*, *28*(1), 62–74. https://doi.org/10.1080/10439463.2016.1138476

Busing, F. M. T. A., Commandeur, J., & Heiser, W. (1997). PROXSCAL: A multidimensional scaling program for individual differences scaling with constraints. In W. Bandilla, & F. Faulbaum (Eds.), *Softstat'97: Advances in statistical software* (pp. 67–74). Softstat.

Cohen, S., & Janicki-Deverts, D. E. N. I. S. E. (2012). Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006, and 2009. *Journal of Applied Social Psychology*, *42*(6), 1320–1334. https://doi.org/10.1111/j.1559-1816.2012.00900.x

Craig, L. A. (2011). The effect of age on sexual and violent reconviction. *International Journal of Offender Therapy and Comparative Criminology*, *55*(1), 75–97. https://doi.org/10.1177/0306624X09353290

Crookes, R. L., Tramontano, C., Brown, S. J., Walker, K., & Wright, H. (2022). Older individuals convicted of sexual offenses: A literature review. *Sexual Abuse*, *34*(3), 341–371. https://doi.org/10.1177/10790632211024244

Darjee, R., & Russell, K. (2012). What clinicians need to know before assessing risk in sexual offenders. *Advances in Psychiatric Treatment*, *18*, 467–478. https://doi.org/10.1192/apt.bp.110.008094

Darjee, R., Russell, K., Forrest, L., Milton, E., Savoie, V., Baron, E., Kirkland, J., & Stobie, S. (2016). Risk for sexual violence protocol (RSVP): A real world study of the reliability, validity and utility of a structured professional judgement instrument in the assessment and management of sexual offenders in South East Scotland. *Risk Management Authority and NHS Scotland Forensic Network*. https://www.rma.scot/risk-of-sexual-violence-protocol-rsvp-study-published/

Davis, M. R., Woods, M., Raymond, B., Ogloff, J. R. P., & McEwan, T. E. (in submission). Does it work? Convergent and predictive validity of the Risk for Sexual Violence Protocol (RSVP) in an Australian Community Forensic Mental Health Setting, Manuscript submitted for publication.

Dawes, J. (2009). Ageing prisoners: Issues for social work. *Australian Social Work*, *62*, 258–271. https://doi.org/10.1080/03124070902803475

de Vogel, V., de Ruiter, C., van Bee, D., & Mead, G. (2004). Predictive validity of the SVR-20 and Static-99 in a Dutch sample of treated sex offenders. *Law and Human Behavior*, *28*, 235–251. https://doi.org/10.1023/B:LAHU.0000029137.41974.eb

Doren, D. M. (2006). What do we know about the effect of aging on recidivism risk for sexual offenders? *Sexual Abuse: A Journal of Research and Treatment*, *18*, 137–157. https://doi.org/10.1007/s11194-006-9008-1

Douglas, K. S., & Ogloff, J. R. P. (2003). Multiple facets of risk for violence: The impact of judgmental specificity on structured decisions about violence risk. *International Journal of Forensic Mental Health*, *2*(1), 19–34. https://doi.org/10.1080/14999013.2003.10471176

Fazel, S., Hope, T., O'Donnell, I., Piper, M., & Jacoby, R. (2001). Health of elderly male prisoners: Worse than the general population, worse than younger prisoners. *Age and Ageing*, *30*, 403–407. https://doi.org/10.1093/ageing/30.5.403

Fleiss, J. L. (1981). Balanced incomplete block designs for inter-rater reliability studies. *Applied Psychological Measurement*, *5*(1), 105–112. https://doi.org/10.1177/014662168100500115

Flower, D. J. C., Tipton, M. J., & Milligan, G. S. (2019). Considerations for physical employment standards in the aging workforce. *Work*, *63*(4), 509–519. https://doi.org/10.3233/WOR-192962

Goncalves, L. C., Gerth, J., Rossegger, A., Noll, T., & Endrass, J. (2019). Predictive validity of the static-99 and static-99R in Switzerland. *Sexual Abuse*, January, 1–17. https://doi.org/10.1177/1079063218821117

Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, *8*(1), 23–34. https://doi.org/10.20982/tqmp.08.1.p023

Harris, A., Phenix, A., Hanson, R. K., & Thornton, D. (2003). Static-99 coding rules revised-2003. https://amyphenix.com/wp-content/uploads/2016/02/Static-99_Coding_Rules.pdf.

Harris, G. T., & Rice, M. E. (2007). Adjusting actuarial violence risk assessments based on aging or the passage of time. *Criminal Justice and Behavior*, *34*(3), 297–313. https://doi.org/10.1177/0093854806293486

Hart, S. D., & Boer, D. P. (2009). Structured professional judgment guidelines for sexual violence risk assessment: The sexual violence risk-20 (SVR-20) and Risk for Sexual Violence Protocol (RSVP). In R. K. Otto, & K. S. Douglas (Eds.), *Handbook of violence risk assessment* (pp. 269–294). Routledge.

Hart, S. D., & Boer, D. P. (2021). Structured professional judgement guidelines for sexual violence risk assessment: The sexual violence risk-20 (SVR-20) versions 1 and 2 and Risk for Sexual Violence Protocol (RSVP). In K. S. Douglas, & R. K. Otto (Eds.), *Handbook of violence risk assessment* (pp. 322–358). Routledge/Taylor & Francis Group.

Hart, S., Kropp, P., Laws, D., Klaver, J., Logan, C., & Watt, K. (2003). *The Risk for Sexual Violence Protocol (RSVP): structured professional guidelines for assessing risk of sexual violence*. Mental Health, Law, and Policy Institute at Simon Fraser University.

Hart, S., Kropp, P., Watt, K., with Darjee, R., Davis, M. R., Klaver, J., Laws, D. R., & Logan, C. (2022). *RSVP-V2 Version 2 of the Risk for Sexual Violence Protocol: Structured professional guidelines for assessing and managing risk for sexual violence*. Protect International $^{TM/MC}$.

Hawes, S. W., Boccaccini, M. T., & Murrie, D. C. (2013). Psychopathy and the combination of psychopathy and sexual deviance as predictors of sexual recidivism: Meta-analytic findings using the psychopathy checklist—revised. *Psychological Assessment*, *25*(1), 233–243. https://doi.org/10.1037/a0030391

Helmus, L., Thornton, D., Hanson, R. K., & Babchishin, K. M. (2012). Improving the predictive accuracy of Static-99 and Static-2002 with older sex offenders: Revised age weights. *Sexual Abuse: A Journal of Research and Treatment*, *24*, 64–101. https://doi.org/10.1177/1079063211409951

Hirtenlehner, H., & Baier, D. (2019). Self-control and offending in late adulthood. Investigating self-control's interaction with opportunities and criminal associations in advanced age. *Journal of Criminal Justice*, *60*, 117–129. https://doi.org/10.1016/j.jcrimjus.2018.09.002

Hultsch, D. F., MacDonald, S. W. S., Hunter, M. A., Maitland, S. B., & Dixon, R. A. (2002). Sampling and generalisability in developmental research: Comparison of random and convenience samples of older adults. *International Journal of Behavioral Development*, *26*(4), 345–359. https://doi.org/10.1080/01650250143000247

IBM Corp. (2021). *IBM SPSS Statistics for Windows* (Version 28) [Computer software]. IBM Corp.

Kanters, T., Homsveld, R. H. J., Nunes, K. L., Zwets, A. J., Muris, P., & van Marle, H. J. C. (2017). The Sexual Violence Risk-20: Factor structure and psychometric properties. *The Journal of Forensic Psychiatry & Psychology*, *28*(3), 368–387. https://doi.org/10.1080/14789949.2017.1284887

Kruskal, J. B., & Wish, J. (1978). *Multidimensional scaling*. Sage Publications.

Logan, C. (2016). Structured professional judgment: Applications to sexual offender risk assessment and management. In A. Phenix, & H. M. Hoberman (Eds.), *Sexual offending: Predisposing antecedents, assessments and management* (pp. 571–588). New York: Springer. https://doi.org/10.1007/978-1-4939-2416-5_26

Maschi, T., Dennis, K. S., Gibson, S., MacMillan, T., Sternberg, S., & Hom, M. (2011). Trauma and stress among older adults in the criminal justice system: A review of the literature with implications for social work. *Journal of Gerontological Social Work*, *54*, 390–424. https://doi.org/10.1080/01634372.2011.552099

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276–282. https://doi.org/10.11613/BM.2012.031

Mikneviciute, G., Ballhausen, N., Rimmele, U., & Kliegel, M. (2023). Does older adults' cognition particularly suffer from stress? A systematic review of acute stress effects on cognition in older age. *Neuroscience and Biobehavioral Reviews*, *132*, 583–602. https://doi.org/10.1016/j.neubiorev.2021.12.009

Nanayakkara, V., Ogloff, J. R. P., Davis, M. R., & McEwan, T. E. (2020). Gender-based types of firesetting: Clinical, behavioural and motivational differences among female and male firesetters. *The Journal of Forensic Psychiatry & Psychology*, *31*(2), 273–291. https://doi.org/10.1080/14789949.2020.1720266

Ogloff, J. R. P., & Davis, M. R. (2005). Assessing risk for violence in the Australian context. In D. Chappell, & P. Wilson (Eds.), *Crime and justice in the New millennium* (pp. 301–338). Lexis Nexis Butterworths.

Phenix, A., Fernandez, Y., Harris, A. J. R., Helmus, M., Hanson, R. K., & Thornton, D. (2016). Static-99R coding rules revised – 2016. http://static99.org/pdfdocs/Coding_manual_2016.

Raymond, B. C., Davis, M. R., Ogloff, J. R. P., & McEwan, T. E. (in submission). Convergent and Predictive Validity of the Sexual Violence Risk-20 and Risk for Sexual Violence Protocol with Older Sexual Offenders. Manuscript submitted for publication.

Raymond, B. C., McEwan, T. E., Davis, M. R., Reeves, S., & Ogloff, J. R. P. (2020). Investigating the predictive validity of the Static-99/99R with older sexual offenders. *Psychiatry, Psychology and Law*, 1–15. https://doi.org/10.1080/13218719.2020.1767714

Reeves, S. G., Ogloff, J. R. P., & Simmons, M. (2017). The predictive validity of the Static-99, Static-99R, and Static-2002/R: Which one to use? Sexual abuse. *A Journal of Research and Treatment*, *30*, 1–21. https://doi.org/10.1177/1079063217712216

Rettenberger, M., Boer, D. P., & Eher, R. (2011). The predictive accuracy of risk factors in the Sexual Violence Risk-20 (SVR-20). *Criminal Justice and Behavior*, *38*(10), 1009–1027. https://doi.org/10.1177/0093854811416908

Richard's, M. M., Drzemien, D., Valentina, V., Vernucci, S., Zamora, E. V., Comesana, A., Coni, A. G., & Introzzi, I. (2021). Cognitive flexibility in adulthood and advanced age: Evidence of internal and external validity. *Applied Neuropsychology: Adult*, *28*(4), 464–478. https://doi.org/10.1080/23279095.2019.1652176

Rubio, L., Dumitrache, C., Cordon-Pozo, E., & Rubio-Herrera, R. (2016). Coping: Impact of gender and stressful life events in middle and in old age. *Clinical Gerontologist*, *39*(5), 468–488. https://doi.org/10.1080/07317115.2015.1132290

Sanbukt, I. J., Dkardhamar, T., Kristoffersen, R., & Friestad, C. (2020). Testing the Static-99R as a global screen for risk of sex crime recidivism in a Norwegian routine sample. *Sexual Abuse*, *33*(6), 725–742. https://doi.org/10.1177/1079063220951194

Sea, J., & Hart, S. D. (2021). Interrater reliability and concurrent validity of the Risk for Sexual Violence Protocol for Korean sexual offenders: A field study. *International Journal of Offender Therapy and Comparative Criminology*, *65*(13-14), 1423–1445. https://doi.org/10.1177/0306624X20967969

Seto, M. C. (2019). The motivation-facilitation model of sexual offending. *Sexual Abuse*, *31*(1), 3–24. https://doi.org/10.1177/1079063217720919

Smith, L. J., Mulhall, J. P., Deveci, S., Monaghan, N., & Reid, M. C. (2007). Sex after seventy: A pilot study of sexual function in older persons. *Journal of Sexual Medicine*, *4*, 1247–1253. https://doi.org/10.1111/j.1743-6109.2007.00568.x

Srinivasan, S., Glover, J., Tampi, R. R., Tampi, D. J., & Sewell, D. D. (2019). Sexuality and the older adult. *Current Psychiatry Reports*, *21*(97), 1–9. https://doi.org/10.1007/s11920-019-1090-4

Varangis, E., Qi, W., Stern, Y., & Lee, S. (2022). The role of neural flexibility in cognitive aging. *NeuroImage*, *247*, 1–14. https://doi.org/10.1016/j.neuroimage.2021.118784

Vargen, L. M., Jackson, K. J., & Hart, S. D. (2020). Interrater reliability, concurrent validity, and predictive validity of the Risk for Sexual Violence Protocol. *Law and Human Behavior*, *44*(1), 37–50. https://doi.org/10.1037/lhb0000353

Wielinga, F., Margeottes, K., & Olver, M. E. (2021). Clinical and risk relevance of intimacy and loneliness in a treated sample of men who have offended sexually. *Journal of Sexual Aggression*, *27*(1), 35–51. https://doi.org/10.1080/13552600.2019.1698778

Williams, B. A., Stern, M. F., Mellow, J., Safer, M., & Greifinger, R. B. (2012). Aging in correctional custody: Setting a policy agenda for older prisoner health care. *American Journal of Public Health*, *102*, 1475–1481. https://doi.org/10.2105/AJPH.2012.300704

Wilpert, J., van Horn, J. E., & Boonmann, C. (2018). Comparing the central eight risk factors: Do they differ across age groups of sex offenders? *International Journal of Offender Therapy and Comparative Criminology*, *62*(13), 4278–4294. https://doi.org/10.1177/0306624X18758899

Zapater-Fajari, M., Crespo-Sanmiguel, I., Pulopulos, M. M., Hidalgo, V., & Salvador, A. (2021). Resilience and psychobiological response to stress in older people: The mediating role of coping strategies. *Frontiers in Aging Neuroscience*, 1–15. https://doi.org/10.3389/fnagi.2021.632141