

# Validating the Perception of Sex Offenders Scale (PSO) Among Norwegian Students in Health, Social Work, and Police Education

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## Abstract

Reliable instruments are essential for studying perceptions of individuals convicted of sexual offences across cultural contexts. This study evaluates the psychometric properties of the Perceptions of Sex Offenders Scale (PSO) among Norwegian students in nursing, social education, social work, and police education ( $N = 282$ ). Using confirmatory factor analysis, we tested the fit of the PSO's original three-factor structure. The model showed mixed fit (RMSEA = .072; SRMR = .072; CFI = .86; TLI = .84). Internal consistency was satisfactory for Sentencing and Management and Stereotype Endorsement ( $\alpha = .82$  and  $.70$ ), but low for Risk Perception ( $\alpha = .53$ ). Internal validity indices were uneven: composite reliability was acceptable for Sentencing and Management and Stereotype Endorsement (CR = .89 and  $.71$ ), but not for Risk Perception (CR =  $.58$ ), and AVE values were below recommended thresholds across factors, particularly for Risk Perception (AVE =  $.227$ ). Free-text responses indicated that participants primarily had rape and child sexual abuse in mind when responding to the PSO. Overall, the PSO shows promise in a Norwegian student context, but the Risk Perception dimension appears to require refinement before the scale can be used confidently for research and educational purposes.

## Keywords

PSO, psychometric validation, sexual offences, stigma, professional education, Norway



Attitudes toward individuals convicted of sexual offences have long been dominated by negative stereotypes and stigma, which in turn influence public policy, media narratives, and professional practices (Shackley et al., 2013; Harper et al., 2017). Stigma may limit access to reintegration opportunities and influence how welfare and justice professionals interact with this population. Understanding and measuring such attitudes is therefore crucial, particularly among future professionals tasked with supporting or managing this group (Harper, Hogue & Bartels, 2017; Imhoff, 2022).

Internationally, several psychometric tools have been developed to assess such attitudes, including the Attitudes to Sexual Offenders scale (Hogue, 1993), the Community Attitudes Towards Sex Offenders scale (Church et al., 2008), and the Perceptions of Sex Offenders Scale (PSO; Harper & Hogue, 2014). Among these, the PSO has gained attention for its multidimensional structure and focus on cognitive, affective, and behavioral dimensions. However, research on the psychometric robustness of the PSO in non-English-speaking and culturally distinct contexts remains limited (Harper et al., 2017). The PSO was developed by Harper and Hogue (2014) as a refinement of earlier measures such as the CATSO, with the aim of capturing distinct dimensions of how people think about and respond to individuals with sexual convictions. Its three subscales, Sentencing and Management, Stereotype Endorsement, and Risk Perception, were designed to reflect, respectively, support for punitive and control-oriented responses, endorsement of negative generalizations, and perceived dangerousness and likelihood of reoffending. The items were constructed on the basis of previous attitudinal research and theory, and subsequent studies have applied the PSO in both community and professional samples.

While Friestad et al. (2021) applied the PSO to a Norwegian sample of prison officer students, no studies to date have validated the scale's psychometric properties in a broader student population. The present study does not aim to measure attitudes as such, but to validate the PSO in a cultural context that differs from the more punitive settings in which it was developed. The validation undertaken here applies specifically to students in health, social work, and police education, as the PSO is intended for use within these professional domains in Norway. Establishing the validity and reliability of this instrument is essential before it can be used to explore public or professional perceptions in a meaningful way. Norway's penal system, often cited as part of the "Scandinavian exceptionalism" (Pratt, 2007), represents a less punitive approach, in sharp contrast to the more retributive systems found elsewhere. Such contrasts make it important to examine whether instruments designed in harsher penal climates perform equally well in more rehabilitative contexts. At the same time, growing media attention to sexual crimes and rising conviction rates may contribute to shifts in public attitudes in a more stigmatizing direction, underscoring the need for robust tools to capture these dynamics across cultural settings.

Validating the PSO in a Norwegian context also has broader theoretical implications. If the factor structure identified in previous studies does not replicate in this setting, this

would suggest that the underlying dimensions of attitudes toward individuals convicted of sexual offences are shaped, at least in part, by cultural norms, penal philosophies, and prevailing public narratives. A divergent structure may indicate that constructs such as risk perception or sentencing attitudes are interpreted differently in rehabilitative versus punitive environments, or that some dimensions lack coherence when applied outside the context in which the instrument was originally developed. Conversely, if the original measurement model is upheld, this would point to a degree of conceptual stability in how such attitudes are organized, supporting the PSO as a cross-culturally robust instrument. In either case, examining the scale's performance in Norway contributes to understanding whether the PSO captures universally relevant constructs or whether certain dimensions are context-dependent and may require refinement.

In this paper, we use the term "individuals convicted of sexual offences" rather than "sex offenders," in alignment with person-first language, to reflect contemporary ethical standards and avoid reinforcing stigma.

## The Norwegian Context

Norway is often cited for its rehabilitative approach to criminal justice, characterized by low incarceration rates and humane prison conditions (Pratt, 2007). In May 2025, a total of 3044 individuals were incarcerated in Norway, including 756 in pre-trial detention. By June 3, sexual offences accounted for 23.6% of sentenced prisoners, which was the joint largest category together with drug-related offences (also 23.6%). Violent offences made up 21.5%, while property crimes constituted 9.5% of the total (The Norwegian Correctional Service, personal communication, June 5, 2025). Statistics Norway data (2025) show an increase in reported sexual offences from 6,756 cases in 2019 to 7,396 cases in 2022, followed by a slight decrease to 7,221 cases in 2024. This sustained increase, alongside the growing attention to sexual crimes in media and public discourse, underscores the crucial need for valid, context-sensitive instruments such as the PSO. Ensuring its reliability in a Norwegian setting is essential, as shifting reporting and social attitudes may influence how such offences are perceived and assessed. The Norwegian Correctional Service operates based on three principles: the Principle of Normality, the Import Model, and the Principle of Progression (St.meld.nr 37 2007–2008). The Principle of Normality states that life inside prison should resemble life outside as much as possible. The Import Model ensures that welfare services such as health care and education are delivered by external public agencies, rather than by the correctional service. The Principle of Progression emphasises gradual movement toward increased autonomy and reintegration as individuals serve their sentences.

## Previous Research

Previous studies have applied the PSO to student and professional samples, but findings remain limited and occasionally inconsistent. For example, [Friestad et al. \(2021\)](#) used the PSO among Norwegian prison officer students and found that although punitiveness declined during training, stereotypical beliefs persisted or even increased. [Corăbian et al. \(2023\)](#) similarly found strong affective responses and reluctance toward engagement with this population among university students. Cross-cultural research also reveals instability in the PSO's factor structure, for instance, [Togas et al. \(2022\)](#) validated the Greek version of the PSO and confirmed a two-factor solution with reliable Sentencing and Management and Stereotype Endorsement subscales, while the Risk Perception dimension did not hold. [Harper and Hicks \(2022\)](#) demonstrated that more negative attitudes toward individuals with sexual convictions were significantly associated with higher perceived risk, an effect consistent across both student and professional groups.

Additional research on related attitudinal measures supports the need for cultural validation. [Rawson \(2024\)](#) examined the internal construct validity of the Attitudes Toward Sex Offenders (ATS) scale in a Norwegian sample, finding that although the scale demonstrated acceptable psychometric properties, item functioning and factor structure showed notable differences compared to studies in more punitive cultural contexts. Similarly, [Imhoff \(2022\)](#) conducted a large-scale study exploring public perceptions of sexual offenders across multiple countries, reporting substantial cross-cultural variation in punitive attitudes and stereotyping. These findings reinforce the importance of testing whether instruments developed in more punitive settings are psychometrically sound when applied in more rehabilitative cultural contexts such as Norway.

## Aims

Although the PSO has previously been used in studies involving Norwegian students, no research has systematically examined its psychometric properties in a cultural setting that differs substantially from the more punitive contexts in which the instrument was developed. The present study therefore has two aims: the primary aim is to test the PSO's factor structure and reliability among a sample of Norwegian students in health, social work, and police education ( $N = 282$ ); the secondary aim is to assess whether refinements are needed to improve the scale's contextual fit.

## Method

### Sample and Recruitment

The sample comprised 282 bachelor students from nursing, social education, social work, and police education programs, representing about 31% of the total student population

in these programs at three Norwegian higher education institutions (see [Table 1](#)). This convenience sample reflects the target population for which the PSO is being validated, namely students in health, social work, and police education programs who represent future professionals expected to work with individuals convicted of sexual offences. Participants were recruited during scheduled teaching sessions and informed that participation was voluntary and anonymous. No incentives were provided. The first author was present during questionnaire administration to address any concerns, but care was taken to minimize potential power imbalances or perceptions of coercion. No students were directly supervised or assessed by the researchers in a grading capacity. The PSO was administered as a standalone instrument, followed only by a brief set of demographic questions; no additional psychological scales were included in the same session, reducing the risk that responses were primed by other attitudinal measures.

**Table 1**

*Sample Characteristics by Study Program and Gender (N = 282)*

Bachelor study					
Gender	Police officer	Nurse	Social educator	Social worker	Total
Female	7	62	97	57	223
Male	3	15	32	9	59
Total	10	77	129	66	282

## Instrument and Procedure

The Norwegian version of the PSO translated and used by [Friestad et al. \(2021\)](#) was employed in this study. The wording of all 20 items was taken directly from that version; any minor differences in how items appear in [Table 2](#) reflect editorial shortening for publication and not changes to the administered instrument. Items are rated on a 6-point Likert scale ranging from 1 (“strongly disagree”) to 6 (“strongly agree”). Participants were instructed to respond to each item in relation to “people who have been convicted of a sexual offence”, using the standard PSO item stem (“Please indicate how much you agree or disagree with the following statements”). In addition, a free-text question asked participants which type(s) of sexual offence they had in mind when completing the questionnaire.

**Table 2***Descriptive Statistics*

Item	N	Mean	Median	Std. deviation
1. With support and therapy, someone who committed a sexual offence can learn to change their behaviour (R).	281	2.61	3.00	1.154
2. People who commit sex offences should lose their civil rights (e.g. voting, privacy).	280	3.91	4.00	1.391
3. The death penalty should be reintroduced for sex offenders.	281	5.09	6.00	1.31
4. People are far too on edge about the risks posed by sex offenders (R).	275	4.37	4.00	1.516
5. More sex offenders should be given sentences in the community (R).	278	3.87	4.00	1.791
6. Sex offenders prefer to stay home alone rather than be around lots of people.	269	3.7	4.00	.989
7. Most sex offenders do not have close friends.	276	3.61	3.50	1.209
8. Sex offenders have difficulty making friends, even if they try real hard.	276	3.09	3.00	1.194
9. The prison sentences sex offenders receive are much too long when compared to the sentence lengths of other crimes (R).	278	5.38	1.00	1.168
10. People who commit sex offences should be subject to harsh restrictions on their liberty for the rest of their lives.	278	3.67	4.00	1.356
11. Trying to rehabilitate a sex offender is a waste of time.	277	4.68	5.00	1.074
12. Sex offenders should wear tracking devices so their location can be pinpointed at any time.	277	4.43	5.00	1.322
13. Only a few sex offenders are dangerous (R).	271	3.1	4.00	1.171
14. Most sex offenders are unmarried men.	275	3.85	4.00	1.194
15. It's not if a sex offender commits another crime, it's when.	272	3.46	3.00	1.193
16. Most sex offenders keep to themselves.	273	3.74	4.00	1.029
17. Sex offenders should have all their details announced to local communities.	275	3.93	4.00	1.468
18. Convicted sex offenders should never be released from prison.	274	4.55	5.00	1.228
19. Sex offenders will almost always commit further offences.	273	3.44	3.00	1.045
20. Some sex offenders should be allowed to work in schools (R).	275	5.32	1.00	1.187
Valid cases for descriptive statistics (listwise deletion):	250			

## Ethical Considerations

All ethical guidelines for voluntary and anonymous participation were followed. Participants were informed of their right to withdraw at any time. Institutional review board approval was deemed unnecessary under Norwegian regulations for anonymized survey

studies with adult students. A declaration of no conflict of interest and no external funding is also included.

## Statistical Analysis

Confirmatory factor analysis (CFA) was used to examine whether the theoretical three-factor structure of the Perceptions of Sex Offenders Scale (PSO) (Harper & Hogue, 2014) fit the data in this sample. Because the PSO has an established structure, we did not conduct an exploratory factor analysis. Missing data was handled using full information maximum likelihood (FIML), which retains all available observations under the assumption that data are missing at random and avoids the case loss associated with listwise deletion.

Given that several PSO items showed moderate skewness, the CFA was estimated using a robust maximum likelihood estimator (MLR), which provides standard errors and model fit indices that are robust to violations of normality. Items were treated as continuous, consistent with prior validation studies using six-point Likert response formats.

Reliability was assessed using both Cronbach's alpha and composite reliability (CR). Alpha is reported for comparability with earlier PSO studies, while CR provides a more robust estimate based on factor loadings. Convergent validity was evaluated using Average Variance Extracted (AVE), and discriminant validity was assessed using the Fornell–Larcker criterion, following established guidelines for psychometric evaluation. These indices were used to assess internal construct validity rather than relationships with external measures.

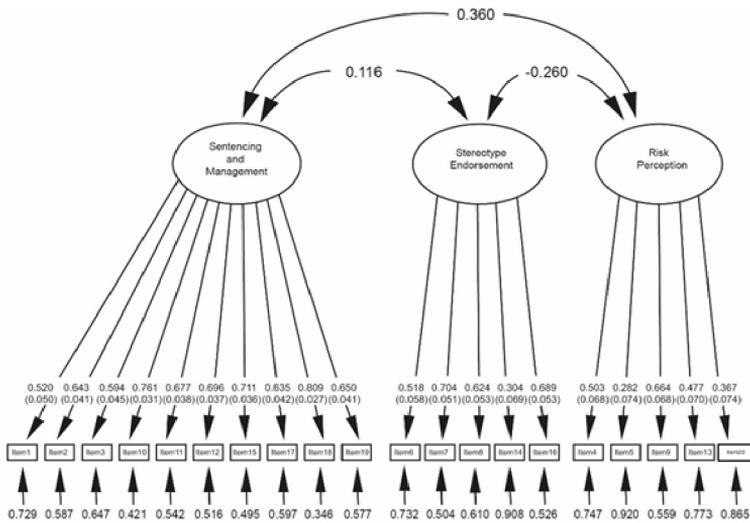
Free-text responses identifying which types of sexual offences participants had in mind when completing the scale were analysed descriptively by categorizing responses (e.g., rape, child sexual abuse, other offences) and reporting their frequencies.

## Results

This section presents descriptive statistics for all variables (Table 2), the CFA results including model fit indices, the reliability and validity analyses, and the findings from the free-text question. Figure 1 illustrates the relations between the latent factors and their observed indicators.

**Figure 1**

*Factor Loading (Standard Errors) and Unique Variances for the Items Measuring Perception of Individuals Convicted of Sexual Offences*



As shown in Table 2, response distributions varied across items. For instance, some items (e.g., item 3, concerning the death penalty) showed strong skew, while others (e.g., item 1, regarding rehabilitation potential) demonstrated moderate variability. These patterns may reflect both cultural context and item salience, and they illustrate the importance of examining item-level functioning when validating instruments across settings. Notably, several items evoked highly consistent responses, which may have implications for scale refinement.

### Confirmatory Factor Analysis

The results of the confirmatory factor analysis (CFA) indicated that the three-factor PSO model showed mixed global fit in this sample. The fit indices were RMSEA = .072, SRMR = .072, CFI = .86, and TLI = .84 (Kenny et al., 2015). While RMSEA and SRMR were within commonly used thresholds for acceptable fit, the CFI and TLI values indicate that the overall model fit was suboptimal and should be interpreted with caution. Modification indices were inspected to evaluate whether theoretically defensible refinements (e.g., residual covariances or cross-loadings) could improve model fit. Although some indices suggested potential modifications, none were theoretically justified and none resulted in meaningful improvements in global fit. The original three-factor model was therefore retained.

## Description of the Factor Structure

The three factors proposed by the PSO (Harper & Hogue, 2014), Sentencing and Management, Stereotype Endorsement, and Risk Perception, showed varying standardized factor loadings ( $\lambda$ ) across items (see Figure 1). Factor loadings differed both within and across factors, indicating that items varied in how strongly they were associated with their respective latent constructs. Sentencing and Management and Stereotype Endorsement showed generally moderate to strong loadings across several items, whereas Risk Perception displayed a weaker and more heterogeneous pattern of loadings. This variability indicates uneven measurement strength across the scale and suggests that the Risk Perception factor is less coherently operationalized than the other two dimensions.

## Convergent and Discriminant Validity

Fit indices provide an overall assessment of model adequacy. For the three-factor structure, the CFA produced the following values: RMSEA = .072, SRMR = .072, CFI = .86, and TLI = .84. Taken together, these indices reflect a mixed pattern, with some values approaching commonly accepted thresholds and others indicating areas where the model does not fit the data optimally. Because global model fit alone does not ensure that each latent construct is well defined, we further examined convergent and discriminant validity using Average Variance Extracted (AVE), Composite Reliability (CR), and the Fornell–Larcker criterion (Fornell & Larcker, 1981; Hair et al., 2022).

For convergent validity, Sentencing and Management (AVE = .454, CR = .89) and Stereotype Endorsement (AVE = .344, CR = .71) reached acceptable levels of composite reliability ( $> .70$ ), whereas Risk Perception did not (AVE = .227, CR = .58). None of the three constructs achieved the recommended AVE threshold of .50, indicating that less than half of the variance in the items was explained by their underlying factors. This points to limited convergent validity, with particularly weak evidence for Risk Perception.

For discriminant validity, the Fornell-Larcker test showed that the square roots of AVE for Sentencing and Management and for Stereotype Endorsement exceeded the squared correlations with other constructs, supporting their distinctiveness. In contrast, Risk Perception again fell short, as its AVE was low relative to its correlation with Sentencing and Management ( $r = .36$ ). The inter-factor correlations were otherwise modest ( $r = .12$  between Sentencing and Management and Stereotype Endorsement;  $r = -.26$  between Stereotype Endorsement and Risk Perception), further supporting discriminant validity for those comparisons.

Taken together, the findings indicate that although the overall model demonstrates an acceptable global fit, the measurement quality of the constructs is uneven. In particular, the Risk Perception factor shows poor convergent validity and limited discriminant

validity, suggesting that its operationalization requires refinement before stronger claims about internal construct validity can be made.

## Free Text Supplement to the Questionnaire

As recommended by Harper et al. (2017), a free-text item was included to identify which type of sexual offence students had in mind when completing the PSO. Of the 211 students who provided a response, 53 explicitly referred to rape, 36 referred to sexual abuse of children or paedophilia, and 104 mentioned both rape and sexual abuse of children together as a combined category. Ten students referred to specific cases they were familiar with, all involving either rape or sexual abuse of children. The remaining eight responses were more nuanced, stating that the offence type “depends” or varies. Overall, these patterns indicate that most respondents focused on a narrow subset of sexual offences, primarily rape and offences involving children, when interpreting the PSO items.

## Discussion

The analyses provided partial support for the three-factor structure of the PSO. Overall model fit was mixed, and factor loadings varied considerably across items, with the Risk Perception factor showing the weakest indicator strength and the lowest internal consistency. Convergent and discriminant validity were limited for all three factors. The free-text responses further indicated that most students anchored their answers in a narrow subset of sexual offences, primarily rape and offences involving children.

The primary objective of this study was to evaluate the psychometric properties of the PSO in a Norwegian context. Specifically, the study aimed to test the scale’s factor structure and internal consistency among students in health, social work, and police education, in order to assess its suitability for use in research and professional training in Norway. Ensuring that such tools are valid and reliable across cultural and institutional settings is crucial if they are to be used in research, policy development, or professional training.

## PSO in a Norwegian Context

In a context where the penal system is rehabilitative but media coverage of sexual crime is intense, students’ perceptions of risk may be influenced by affectively salient associations with specific offender types, although this cannot be determined directly from the present data. Our findings align partly with Friestad et al. (2021), who reported high reliability for Sentencing and Management ( $\alpha = .85-.90$ ) and acceptable reliability for Stereotype Endorsement ( $\alpha = .73-.81$ ) among Norwegian prison officer students, but considerably weaker reliability for Risk Perception ( $\alpha = .52-.64$ ). While their study did

not aim to validate the PSO, the consistency of this pattern across samples suggests that the Risk Perception factor shows limited reliability and weak indicator performance in the Norwegian context. Our findings also resonate with [Togas et al. \(2022\)](#), who conducted a CFA of the Greek version of the PSO in a community sample ( $N = 452$ ). While Sentencing and Management ( $\alpha = .90$ ) and Stereotype Endorsement ( $\alpha = .83$ ) showed good reliability, the Risk Perception factor was not supported at all. Items originally loading on this factor either failed to reach acceptable loadings or migrated to other factors, leading the authors to retain a two-factor solution. This strengthens the concern that the Risk Perception factor may lack robust internal construct validity across different samples and settings, as indicated by consistently low reliability and unstable factor loadings reported in both the present study and previous validation efforts. Although the present study focused on evaluating the originally proposed three-factor model, emerging findings from other contexts, including the two-factor solution identified by [Togas et al. \(2022\)](#), suggest that alternative structures may warrant examination in future research. We did not test alternative models here because the aim was to validate the established PSO structure rather than undertake model development, and the sample size limits the stability of more extensive model comparisons. Future studies with larger and more diverse samples would be better suited for systematically comparing alternative factor structures. Together, these results call into question whether the PSO adequately captures the complexity of students' perceptions across different samples and contexts. For future research, testing measurement invariance across professional groups will be crucial, as police, nursing, and social work students may draw on different knowledge bases when forming their attitudes.

In addition, our tests of convergent and discriminant validity provide further evidence that the PSO performs unevenly in the Norwegian context. While the global model fit was acceptable, only Sentencing and Management and Stereotype Endorsement reached satisfactory composite reliability, and none of the factors achieved the recommended AVE threshold of .50. The Fornell–Larcker test indicated adequate discriminant validity for most factor comparisons, but Risk Perception again failed to meet the criterion. These findings underscore that the Risk Perception subscale is not only less reliable but also lacks convergent validity and displays weak discriminant validity. In other words, the factor does not appear to capture a sufficiently coherent construct in this setting, which is consistent with earlier research pointing to its fragility across cultural contexts ([Friestad et al., 2021](#); [Togas et al., 2022](#)).

A further point concerns the small negative correlation observed between Stereotype Endorsement and Risk Perception ( $r = -.26$ ). Because this study aimed to examine the psychometric properties of the PSO rather than to analyse substantive attitudinal patterns, this correlation is not interpreted as a meaningful empirical finding. Instead, we consider it an artefact of the psychometric weaknesses of the Risk Perception factor, which demonstrated low internal consistency, low AVE, and limited discriminant validity.

ty. The presence of several reverse-worded items may also have introduced response noise, further reducing the reliability of the covariance estimates. In the context of validation, the negative correlation therefore does not challenge any theoretical expectation but reinforces the conclusion that the Risk Perception subscale functions inconsistently and requires refinement in future research.

One explanation may lie in how participants understand and emotionally relate to the risk dimension. In our sample, most respondents associated the term “sex offender” primarily with rape and child sexual abuse, as indicated in their free-text responses (193 out of 211). A similar pattern was observed in the Greek study by [Togas et al. \(2022\)](#), where participants overwhelmingly imagined either rapists or child molesters.

The narrow focus on rape and child sexual abuse may have shaped how participants interpreted the risk-related items. We cannot determine whether emotional reactions played a role, but the strong salience of these offense types may contribute to variability in how risk is understood. This is consistent with previous research showing that people often rely on morally charged associations when forming judgments about sexual offences ([Imhoff, 2022](#)). However, because we did not measure affective responses directly, any such interpretation remains speculative. While sentencing attitudes and stereotypes are likely to reflect more stable and cognitively accessible beliefs, perceptions of risk may depend more heavily on visceral reactions, media narratives, and professional familiarity with recidivism. When respondents associate sexual offences almost exclusively with child abuse and rape, affective responses can dominate and create interpretive variability. This is consistent with findings by [Imhoff \(2022\)](#), who showed that moral outrage and affective reactions can override more deliberative assessments when evaluating sexual offenders. This offers one possible explanation for the lower reliability observed in this dimension, but the present data do not allow causal inferences about the underlying mechanisms. Similar validity concerns have been raised in other attitudinal measures, such as the ATS, where certain subscales demonstrated instability across cultural contexts ([Rawson, 2024](#)). Narrative framing has been shown in previous studies to influence attitudes toward individuals convicted of sexual offences ([Harper et al., 2018](#)). Whether similar processes occurred in our sample cannot be concluded from the present data. Nonetheless, given the interpretive variability observed in the Risk Perception items, future development of the PSO may benefit from clearer operationalisation of this dimension.

Another factor that may have shaped item interpretation is the composition of the sample. The respondents were predominantly women and largely drawn from health and social work programmes, with only a small number of police students. These educational groups may enter the questionnaire with different forms of professional knowledge, exposure to sexual offending, and expectations about rehabilitation or risk. Such differences could contribute to variation in how items are interpreted, particularly those

relating to danger, recidivism, and perceived threat. This may partly explain why the Risk Perception factor showed weaker and more heterogeneous loadings in this study.

Additionally, the broader context, where sexual crimes receive frequent media coverage in Norway, may contribute to heightened emotional responses, though we caution against speculating on media influence without more direct evidence. Nonetheless, the fact that so many students interpreted the term "sex offender" in narrow and emotionally charged terms suggests that the PSO may benefit from refinement to better account for emotional and cognitive biases in perception.

Given that the sample included students from nursing, social work, and policing programs, future research should investigate whether the PSO functions equivalently across these groups. Testing for measurement invariance, such as configural, metric, and scalar invariance, would help establish whether the instrument captures the same constructs in a comparable way across professional orientations. This would strengthen its use in interdisciplinary education and research addressing stigma toward individuals convicted of sexual offences.

## Toward Further Development of the PSO

Harper et al. (2017) have noted that the PSO is a relatively new instrument, still in development. Our findings support the utility of the PSO in a Norwegian context, particularly in its ability to capture attitudes related to punishment and stereotypes. However, like previous studies, our results call into question the robustness of the Risk Perception factor. Harper and Hicks (2022) similarly noted that certain PSO subscales may be particularly sensitive to cultural framing and sample composition, underscoring the need for context-specific validation. The reason for this remains unclear, and future research should explore whether this stems from cultural differences in how risk is conceptualized, from gaps in professional knowledge (e.g., risk assessment competence), or from broader emotional or cognitive framing effects.

Based on our findings and qualitative data, future research may explore whether incorporating a dimension that more explicitly captures participants' subjective reactions could strengthen the conceptual clarity of the scale. Furthermore, future research should explore measurement invariance across educational subgroups, such as students in policing, nursing, and social work, to determine whether the scale operates consistently across different professional orientations. This would be an important step in assessing both the robustness of the instrument and how professional role identity may shape perceptions.

## Limitations

This study was exploratory in validating a previously translated instrument in a Norwegian educational context. The sample was non-random and drawn from three insti-

tutions, with recruitment limited to specific professional programs, which constrains the generalizability of the findings. While the overall response rate (31%) is acceptable, more detailed background information about participants would have allowed for richer interpretation. One notable limitation is the uneven distribution across educational tracks: only 10 participants were drawn from police education, compared to substantially larger numbers from nursing, social education, and social work. This imbalance may have limited the ability to assess whether the PSO functions equivalently across different professional orientations and may have skewed the psychometric results toward attitudes and interpretations more typical of health and welfare students. The predominance of female participants (223 out of 282) may also have shaped responses in ways that limit the generalizability of the findings. Lastly, the presence of the first author during questionnaire administration, though intended to provide clarification, may have introduced some degree of social desirability bias. Taken together, these factors mean that the findings should be interpreted strictly within the context of the student groups included in this study and are not intended to be generalised to broader professional or community populations.

## Conclusions

This study contributes to the validation of the Perceptions of Sex Offenders Scale (PSO) in a Norwegian context, using a sample of students from health, social work, and policing education. The findings support the reliability of two of the scale's three original factors but also highlight consistent weaknesses in the Risk Perception dimension, in line with previous research. These results underscore the importance of testing psychometric tools across different cultural and institutional settings before applying them in research or practice.

In addition to mixed global model fit, our analyses of convergent and discriminant validity showed that Sentencing and Management and Stereotype Endorsement displayed satisfactory composite reliability, whereas Risk Perception did not. None of the three factors reached the recommended AVE threshold, and the Fornell–Larcker test indicated that discriminant validity was only partially met. These results indicate that the weaknesses observed in the Risk Perception factor are not limited to reliability but also extend to its internal construct validity as assessed through AVE and discriminant validity indices.

Our analysis suggests that participants' responses may be influenced by salient and affectively laden associations with specific offender types, as hinted at in their qualitative comments. However, the present data do not allow us to determine the role of emotional processes directly. Any potential emotional dimension should therefore be regarded as a topic for future research rather than a conclusion drawn from this study. Furthermore, given the differences between educational tracks, future research should examine whether the scale performs consistently across professional subgroups.

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