

# THE GREEK VERSION OF THE PERCEPTIONS OF SEX OFFENDERS SCALE: PRELIMINARY PSYCHOMETRIC EVALUATION AND SOCIODEMOGRAPHIC DIFFERENCES

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## ABSTRACT

This study presents a preliminary psychometric evaluation of the Greek version of the Perceptions of Sex Offenders scale (PSO) in a community sample in Greece and examines the sociodemographic differences in its score. The participants were 452 people between 18 and 74 years old (mean age: 38). There were 141 men (31.27%) and 310 women (68.73%). The results supported a two-factor structure for the Greek PSO (factor I = Sentencing and Management and factor II = Stereotype Endorsement), while the third factor of the original PSO ("Risk Perception") was not supported. These subscales demonstrated good internal consistency (Cronbach's alpha was .88 for the full scale with 18 retained items, .90 for the Sentencing and Management subscale and .83 for the Stereotype Endorsement subscale). There was also preliminary evidence for adequate construct validity. The older participants and those with lower educational levels asked for harsher managing and sentencing of sex offenders and had more stereotypes. The Greek version of the PSO is reliable, easy to administer and can be used for research and clinical purposes in men and women. This highlights the necessity for the cultural adaptation of the PSO in many other languages and countries. Future studies could use the PSO in specific samples like students, social workers, psychologists, correctional or judicial employees, police officers etc. to evaluate the possible differences between these groups.

**Keywords:** sex offenders, perceptions, Greek version, psychometric properties, Greek population

## **INTRODUCTION**

Sexual crimes have been recognized as an “epidemic” during the last decades and the references to the increase in sexual offenses, the possible recidivism of sex offenders and their “special” character often spread fear and cause high punitiveness in the public (American Medical Association, 1995; Nicholls et al., 2012).

There is a wide range of sexual offenses, some of which have been explicitly investigated because of the violence involved or the peculiarity of their nature. In the Western world, sex offenses are defined mainly as sexually oriented violations of other people’s sexual freedom and, more specifically, by lack of consent (e.g., rape or sexual assault), the inability to consent (e.g., the sexual abuse of children), the intention to commit a sexual offense that was not carried out (e.g., sexual grooming or trespassing with intent), the exploitation of vulnerable people for sex and, sometimes, financial gain (e.g., trafficking or child pornography). Other types of offenses, such as sexual activity in a public lavatory, exposure etc., are also included in this category (Nicholls et al., 2012).

A sex offender (sexual offender, sex abuser or sexual abuser) is a person who has been charged with and convicted of illegal sexual behavior (McCartan & Gunnison, 2010). Individuals who engage in sexual offending behavior comprise a heterogeneous population, i.e., differences have been found between those offenders who victimize adults and those who victimize children (Andrade et al., 2006). In Greece, there are about 10,500 prisoners and only a small percentage of them (about 3.48%) are sex offenders (Hellenic Statistical Authority, 2010).

### **Attitudes towards sex offenders**

Attitudes can be defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993). They consist of three components: (1) cognition, or the types of beliefs (i.e., stereotypes) held by an individual about a particular stimulus or entity, (2) affect, or the emotional response to a particular stimulus or entity and (3) behavior, or the ways in which an individual acts within the physical world regarding this particular stimulus or entity (Breckler, 1984). All these components should be considered when measuring attitudes, but it has been proposed that, when studying attitudes towards sex offenders, they are not fully considered (Hogue, 2015). In contrast, stereotypes are conceptualized as prototypical traits associated with a particular social group (Greenwald & Banaji, 1995). Therefore, the key distinction between these concepts is that attitude judgments require affective evaluations of particular subjects, whilst stereotype judgments require knowledge-based evaluations.

The attitudes towards sex offenders are important in the clinical and social contexts and are related to the therapeutic climate, treatment outcomes and risk assessments. They also impact the social reintegration of the offenders, the prevention of their recidivism and the formulation of laws and policies (Mancini & Pickett, 2016).

Studies have shown that the public holds often inaccurate beliefs about sex offenders, the risk of recidivism and effectiveness of rehabilitation. These attitudes constitute a reflection of a fear present in the desire for a more punitive sentence and the implementation of stricter restrictions on release (Levenson et al., 2007). King and Roberts (2017) claim that “when asked about sex offenders, many

are inclined to envision the media-proliferated stereotypical image of a violent, predatory male pedophile", even though the profile of few offenders matches this description (Quinn et al., 2004).

It has been indicated that information about the perpetrator and the offense can significantly affect attitudes and perceptions about sex offenders, such as the age of the perpetrator (older perpetrators are judged more negatively) (Harper, 2012; Sahlstrom & Jeglic, 2008) and the gender of the sex offender (male perpetrators are judged more negatively than female ones) (Gakhal & Brown, 2011).

Women typically express greater fear of and punitiveness for sex offenders (Levenson et al., 2007; Willis et al., 2013). Some studies have also addressed the issue of the participants' background and have found that it is more likely for older, less educated people from lower socioeconomic backgrounds to have negative attitudes towards sex offenders (Willis et al., 2013). In contrast, those from higher educational and socioeconomic backgrounds express fewer negative attitudes (Willis et al., 2013) as well as less support for harsh policies in the management of sex offenders (Comartin et al., 2009).

As far as the victim is concerned, several studies (e.g., Ferguson & Ireland, 2006; Rogers & Ferguson, 2011) have identified negative attitudes towards child sex offenders, and people ask for severe punishment for sexual assault against children (Rogers et al., 2011).

Various studies have found a positive correlation between exposure to sexual offenders in a professional setting and more positive (or less negative) attitudes towards them (Blagden et al., 2016; Gakhal & Brown, 2011). Regarding the exposure to a victim of sexual assault, some studies have shown that personal experience and/or proximity to a victim of sexual abuse did not affect attitudes (Katz-Schiavone et al., 2008; Levenson et al., 2007; Sahlstrom & Jeglic, 2008). On the contrary, other researchers have found that such factors significantly impact attitudes (Ferguson & Ireland, 2006). This happens possibly because these people are affected by the victim's negative experience or their lives are disrupted by the sexual abuse.

On the other hand, the public's attitudes towards the treatment of sex offenders are more punishing than rehabilitative (Levenson et al., 2007).

Maruna and King (2009) defined punitiveness as a general tendency to support harsher criminal justice policies, such as the increased use of long custodial sentences and the curtailment of offenders' fundamental human rights. Some argue that public opinion drives public policy (Frost, 2010). As such, understanding this punitiveness at a deeper level should be a priority for researchers seeking to facilitate better communication between law enforcement agencies, the judiciary and the general public. At its core, the process of assigning an individual to a category (e.g., "sex offender") involves the process of essentializing them (Bastian & Haslam, 2006). Furthermore, Fiske (1998) identified stereotypical thinking as a component of a tripartite theory of discrimination and prejudice. For this reason, it is argued that examining levels of stereotype endorsement concerning sex offenders offers some insight into the causes of discriminatory behavior towards them that is not provided by traditional attitude measures.

### **The Perceptions of Sex Offenders scale (PSO)**

Attitudes towards sex offenders have been measured with a small number of related questionnaires. The most common of them are the Attitudes to Sexual Offenders Scale (ATS) (Hogue, 1993) and the Community Attitudes Toward Sex Offenders (CATSO) (Church et al., 2008).

The CATSO was developed as an alternative to existing scales that had (1) not been validated adequately (e.g., the Attitudes Toward Sex Offender Treatment Scale, Wnuk et al., 2006), (2) used a predominantly qualitative design (e.g., Lea et al., 1999) or (3) been based on measures designed to examine attitudes towards other offender groups (e.g., “prisoners” [Hogue, 1993] or “mentally ill offenders” [Weekes et al., 1995]).

The CATSO has been utilized as either a dependent or control measure in several studies since its inception, with scores being similar (~50) across a range of samples, including counselors working with sexually abusive adolescents (Jones, 2013), criminology undergraduates (Marteache, 2012) and a cohort of the Australian public (Shackley et al., 2013).

The Perceptions of Sex Offenders scale (PSO) constitutes a reconceptualization of the CATSO scale. It seeks to change its original use as an attitude measure to use as an outcome scale, where the changes in the perceptions about sex offenders following public education initiatives can be measured empirically and accurately. It is a 20-item self-report questionnaire designed to measure respondents’ perceptions of sex offenders. It consists of three factors: a) Sentencing and Management (e.g., “People who commit sex offenses should be subject to harsh restrictions on their liberty for the rest of their lives”), b) Risk Perception (e.g., “Some sex offenders should be allowed to work in schools”) and c) Stereotype Endorsement (e.g., “Most sex offenders are unmarried men”). These factors represent distinct, albeit interrelated, aspects of the broader societal discourse about sex offenders and their management. For this reason, each of the factors can be seen to represent a way of understanding respondents’ (1) understanding of who sex offenders are and (2) perceptions about how sex offenders should be sentenced and/ or managed post-conviction. These are the constructs/aspects that the PSO seeks to examine (Harper & Hogue, 2014).

The scores range from 20 to 120, with high scores indicating negative attitudes. In the original validation of the PSO, the 20-item scale produced a Cronbach’s alpha coefficient of .92, indicating excellent internal consistency. Each of the three factors also demonstrated excellent levels of reliability (George & Mallery, 2003): Sentencing and Management with  $\alpha = .93$ , Stereotype Endorsement with  $\alpha = .85$  and Risk Perception with  $\alpha = .81$ .

The PSO provides a new way of examining social cognition about sex offenders and has great potential for use as a tool for scoping sites for sex offender treatment facilities (e.g., communities with lower risk perceptions may be more accepting of plans to open a treatment facility in their area, thus improving the likelihood of its success) or as an outcome measure for evaluating educational programs (e.g., whether a program is effective in breaking down stereotypes associated with sex offenders). For these reasons, the PSO should not be considered a stand-alone measure and should be used as part of a battery of measures (e.g., with the Attitudes to Sexual Offenders Scale or ATS [Hogue, 1993]) for use by researchers looking at community responses to sexual crime and its perpetrators.

## **THE PRESENT STUDY**

Attitudes and public perceptions of sex offenders are neglected research areas in Greece. Moreover, there is not a questionnaire in the Greek language to measure these attitudes and perceptions. To overcome this dearth, this study aimed to translate and culturally adapt the Perceptions of Sex Offenders scale into the Greek language.

This study examined the factor structure and psychometric properties (internal consistency and construct validity) of the Greek version of the Perceptions of Sex Offenders scale. We chose to examine the internal consistency reliability and construct validity because these forms are the most common in a study of the cultural adaptation of a scale (Beaton et al., 2000). The second research goal was to examine the differences in perceptions of sex offenders across various sociodemographic characteristics and experience of sexual crimes.

Based on the literature about attitudes and perceptions of sex offenders and on the validation study of the Perceptions of Sex Offenders scale, it was hypothesized that the Perceptions of Sex Offenders scale consists of three factors (Sentencing and Management, Stereotype Endorsement and Risk Assessment) (Hypothesis 1). Moreover, it was hypothesized that there are significant effects of several demographic characteristics (gender, age and level of education) and of experience of sexual crimes (e.g., a respondent knows a sexual crime victim or a sexual offender) on PSO scores (Hypothesis 2).

### **Design**

A cross-sectional study was conducted, which lasted six months (from September, 2020 to February, 2021). We targeted a sample of 450 participants and the period was adequate to collect this many. As in the original validation of the scale, the participants were self-selected by responding to electronic invitations sent via email and Internet-mediated announcements via social media websites. The invitations sent through email were sent to many prefectures of Greece to ensure a greater representativeness of the sample. The participants were given a brief outline of the study and a link to the survey web page, which was hosted by the Google Forms system for a period of six months. The participants were provided with an introduction to the study and were given a simple definition of the term "sex offender". The presentation order of the scales was the same for all participants (stereotype endorsement measures, sentencing and management measures and then the Perceptions of Sex Offenders scale). This was done to minimize the potential of confounding variables influencing the data.

### **Participants**

Four hundred and fifty-two members of the Greek public (141 men, 310 women and 1 person who declined to provide their gender, along with the following parameters: Mage = 37.59 years, SD = 12.19 years, Min = 18, Max = 74 and Range = 56) comprised the sample of the study. Detailed demographic information and experience of sexual crimes are provided in Table 1.

**Table 1. Sample demographics and experience of sexual crimes**

	Frequency	%
<b>Relationship/marital status</b>		
Single	156	34.5
Married	164	36.3
In a relationship	92	20.4
Separated	10	2.2
Divorced	21	4.6
Widowed	8	1.8
Information not disclosed	1	0.2
<b>Highest qualification</b>		
Secondary school (9 years)	4	0.9
Lyceum (12 years)	59	13.1
Higher education (students)	52	11.5
Higher education (graduates)	188	41.6
MA/MSc holder	127	28.1
PhD holder	20	4.4
Information not disclosed	2	0.4
<b>Occupation</b>		
Housewife	9	2.0
Unemployed	60	13.3
Civil servant	126	27.9
Private employee	145	32.1
Freelancer	57	12.6
Pensioner	14	3.1
Other	40	8.8
Information not disclosed	1	0.2
<b>Parenthood</b>		
Having children	181	40.0

Not having children	271	60.0
<b>Socioeconomic class</b>		
Low	43	9.5
Middle	400	88.5
High	7	1.5
Information not disclosed	2	0.4
<b>Degree of religiousness</b>		
Not at all religious	114	25.2
Somewhat religious	175	38.7
Quite religious	140	31.0
Very religious	22	4.9
Information not disclosed	1	0.2
<b>Source of information about sex offenders</b>		
TV	345	77.4
Internet	402	90.1
Friends	219	49.1
Radio	81	18.2
Newspapers/magazines	170	38.1
Books	150	33.6
Not having information	4	0.9
<b>Knows a sexual crime victim</b>		
Yes	181	40.0
No	271	60.0
<b>Knows a sexual offender</b>		
Yes	104	23.0
No	348	77.0

## **Measures**

There were two parts in the set of questionnaires administered. The first was comprised of sociodemographic questions and questions regarding experience of sexual crimes. The second part included the following measures: (1) stereotype endorsement measures, (2) sentencing and management measures and (3) the Perceptions of Sex Offenders scale.

The stereotype endorsement measures and the sentencing and management measures were used to examine the construct (convergent) validity of the Perceptions of Sex Offenders scale. Since there is no single instrument measuring these concepts in the Greek language, these questionnaires were developed by our research group based on a literature review.

## **Sociodemographic data and experience of sexual crimes**

In the first section, the questions referred to information about the participants' gender, age, marital status, highest obtained qualification, occupation, socioeconomic status and degree of religiousness. In the second section, the participants reported how they were informed about sexual crime (e.g., TV, radio, Internet, friends, newspapers, magazines, books etc.) and their experience of sexual crime (if they know a sex offender or a victim of a sexual crime).

## **Stereotype endorsement measures**

This part was developed based on a literature review and it consists of six items (e.g., "Most sex offenders were abused as children", "All sex offenders are socially deprived men" etc.) (Glasser et al., 2001; Fedoroff, 1997). These items are referred to in other articles and related studies abroad. However, there is not any data on their validity. The participants were asked to rate their agreement with several statements on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree). Item 3 was reverse-scored. The possible score ranges from 6 to 24 and the higher the score, the higher the endorsement of stereotypes about sex offenders. In this study, Cronbach's alpha was equal to .64.

## **Sentencing and management measures**

This part was also developed based on a literature review. Consequently, there is not any data on its validity in this study. It consists of five items (e.g., "I believe in the idea of 'an eye for an eye and a tooth for a tooth'", "The most effective way to cope with sex crimes is stricter punishments" etc.) (Friedemann & Reinhard, 2003; Schlank, 2018). These items examine the phenomenon of punitiveness, which is especially common in the field of sex offenses (Leon & Rollero, 2021). The participants were requested to rate their agreement with several statements on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree). The possible score ranges from 5 to 20 and the higher the score, the higher the desire for harsher sentencing and management of sex offenders. In this study, Cronbach's alpha was equal to .79.



### **Perceptions of Sex Offenders scale**

Each item was answered using a 6-point Likert scale with points ranging from 1 to 6 (from strongly disagree to strongly agree), and questions 1, 4, 5, 9, 13 and 20 were reverse-scored. A constant of 1 was removed from each item score, meaning that the available scoring range for each item was from 0 to 5. The scores for each item were summed to compute whole scale and individual factor scores. High scores point out that the participant has a negative opinion of sex offenders.

### **Additional question**

At the end of the questionnaire, the participants were asked to express/indicate what type of sex offender they had in mind when they completed the questionnaire.

### **Translation of the questionnaire**

First, the authors obtained permission from the scale developers to translate it into the Greek language and validate it on the Greek population. The translation strategy was based on minimal translation criteria and a set of guidelines by the International Test Commission (Brislin, 1986; Van de Vijver & Hambleton, 1996).

The translation was performed using a multiple forward and backward translation protocol. Two independent bilingual professionals translated the questionnaire into Greek (forward translation). The native language of the all translators was Greek, and their level of English was advanced. Then followed the reconciliation report (which aligned the two translations) by a bilingual professional, whose native language was Greek, which allowed for the final agreed version to be extracted. After that, the reconciliated Greek version of the questionnaire was retranslated into English by two native English speakers, blinded to the original version (backward translation).

The last step of the translation procedure was the pretesting of the translated instrument. Fifteen people were randomly assigned to participate in the cognitive debriefing process and confirm that the scale could be easily read and understood. After completing the questionnaire, they were asked for their interpretation of the questions, their general impression of the clarity of the items and to give translation alternatives. Moreover, they were asked about the comprehensiveness of the instructions and their ability to complete the questionnaire on their own. Their comments and suggestions were used to prepare the instructions and ensure that participants had no difficulties understanding the items. The average time for completing the questionnaire was two minutes. There was an attempt to maintain all the key/critical features of the questionnaire during the translation into the Greek language, but all the necessary changes to adjust it to the Greek culture were also conducted. For example, the item "It's not if a sex offender commits another crime, it's when" cannot be easily understood in the Greek language and we added a clarification to it. Furthermore, we changed the item "People who commit sex offenses should lose their civil rights (e.g., voting or privacy)" because voting and privacy are different types of rights in Greece (voting is a political right and privacy is a civil right).

## **Data analysis**

The statistical program SPSS Version 26 was used to analyze the data, namely descriptive statistics, ANOVA and Pearson's correlation. A Confirmatory Factor Analysis (CFA) with the Maximum Likelihood method was carried out to examine the factor structure of the Perceptions of Sex Offenders scale. CFA was performed using the program AMOS 26 (Analysis of Moment Structures; Arbuckle, 2012) and it was used to confirm the original structure of the Perceptions of Sex Offenders scale and the alternative factor structures. Model revisions were done based on assessments of factor loadings, standardized residuals (SRs) and modification indices (MIs). Items with factor loadings < 0.4 were considered for removal.

The suitability of the CFA solution was evaluated using the following model fit indices:  $\chi^2/df$  ratio, CFI, RCFI, TLI, ECVI, AIC and RMSEA. A ratio smaller than  $3 \times \chi^2/df$  is considered acceptable. CFI values > .90 are indicative of a good fit. A good fit is also indicated when the RMSEA value is .10 or lower (Beauducel & Wittmann, 2005). As far as the TLI is concerned, Hu and Bentler (1999) proposed  $\geq .95$  as the cut-off value for a good fit. The ECVI and the Akaike Information Criterion (AIC) are suitable for comparing competing models, and smaller values represent a better fit (Byrne, 2001).

The internal consistency reliability of the instrument was assessed using Cronbach's alpha coefficient. Alpha coefficient values of 0.70 or higher were deemed to indicate good reliability. The construct (convergent) validity was evaluated by examining the correlation between the Perceptions of Sex Offenders scale and the stereotype endorsement as well as sentencing and management measures. The statistical significance level (p-value) was set to 5%.

## **Ethics**

The participants were informed in detail about the purpose of the study and were given assurances of anonymity and confidentiality. They were also assured that the collected data would be used only for the purpose of the study. They read about the aim of the study in an online information sheet and clicked the "Click here to proceed" button to give their consent. Then, they were free to complete the questionnaire. If they wanted to quit, the participants had the option to close the browser, and in this way, they withdrew. All the participants took part voluntarily, without taking any compensation.

## **RESULTS**

The majority of the participants (59.3%) responded that they thought of rapists when they completed the questionnaire. A portion comprised of 30.7% of the participants reported that they had child molesters in mind. Lower rates were recorded for other categories (insult of sexual dignity offender = 5%, child pornography offender = 4.3% and promotion to prostitution offender = 0.7%).

### The structure of the Perceptions of Sex Offenders scale (PSO)

A Confirmatory Factor Analysis was carried out to test the model of three factors as in the original PSO (Harper & Hogue, 2014). However, the fit indices of the three-factor model (Model 1) were not acceptable (see Table 2).

Having in mind the factor loadings as well as the saturations and modification indices, we tested one alternative model. In Model 2, consisting of two factors, items 4 ("People are far too on edge about the risks posed by sex offenders") and 9 ("The prison sentences sex offenders receive are much too long when compared to the sentence lengths for other crimes") were removed and SM (Sentencing and Management) and SE (Stereotype Endorsement) were examined as correlated factors. An inspection of the fit indices suggested that Model 2 had a better fit index when compared to the other two models (see Table 2).

That is, the Greek version of the Perceptions of Sex Offenders scale (PSO) consists of two factors, which correspond with great accuracy to those found in the original validation (Factor I = Sentencing and Management and Factor II = Stereotype Endorsement). The third Factor (Risk Perception) was not supported in this study. The items and factor loadings of Model 2 are presented in Table 3.

**Table 2. Results of Confirmatory Factor Analysis (N = 452)**

Model tested	$\chi^2/df$	CFI	RCFI	TLI	ECVI	AIC	RMSEA
<b>Model 1 Original model by Harper &amp; Hogue (2014)</b>	4.258	.650	.56	.765	4.205	12184.645	.092
<b>Model 2 Alternative 2-factor model (items 4 and 9 removed)</b>	1.854	.89	.90	.91	1.590	4258.422	.041

Note: CFA = Confirmatory Factor Analysis, SM = Sentencing and Management, SE = Stereotype Endorsement, CFI = Comparative Fit Index, RCFI = Robust Comparative Fit Index, TLI = Tucker-Lewis Index, ECVI = Expected Cross-Validation Index, AIC = Akaike Information Criterion and RMSEA = Root Mean Squared Error of Approximation

**Table 3. Items and factor loadings of the Perceptions of Sex Offenders scale (PSO) (N = 452)**

	Item	SM	SE
1	With support and therapy, someone who committed a sexual offense can learn to change their behaviour	.771	–
2	People who commit sex offenses should lose their civil rights (e.g., voting, privacy)	.728	–
3	The death penalty should be reintroduced for sex offenders	.695	–
5	More sex offenders should be given sentences in the community	.412	–
10	People who commit sex offenses should be subject to harsh restrictions on their liberty for the rest of their lives	.833	–
11	Trying to rehabilitate a sex offender is a waste of time	.785	–
12	Sex offenders should wear tracking devices so their location can be pinpointed at any time	.682	–
13	Only a few sex offenders are dangerous	.448	–
15	It's not if a sex offender commits another crime, it's when	.669	–
17	Sex offenders should have all of their details announced to local communities	.669	–
18	Convicted sex offenders should never be released from prison	.798	–
19	Sex offenders will almost always commit further offenses	.710	–
20	Some sex offenders should be allowed to work in schools	.549	–
6	Sex offenders prefer to stay home alone rather than be around lots of people	–	.682
7	Most sex offenders do not have close friends	–	.837
8	Sex offenders have difficulty making friends, even if they try real hard	–	.795
14	Most sex offenders are unmarried men	–	.585
16	Most sex offenders keep to themselves	–	.810

Note: SM = Sentencing and Management, SE = Stereotype Endorsement

### **Internal consistency reliability**

The internal consistency of the Perceptions of Sex Offenders scale subscales was analyzed using Cronbach's alpha coefficient. Its value was .88 for the full scale (18 retained items), .90 for the Sentencing and Management subscale and .83 for the Stereotype Endorsement subscale. These findings show high internal consistency reliability of the Perceptions of Sex Offenders scale and its subscales.

The mean score for the Sentencing and Management subscale was 35.29 (SD = 11.78) and the mean score for the Stereotype Endorsement subscale was 8.89 (SD = 4.33). There was a weak positive correlation between these two subscales ( $r = .162, p = .001$ ).

### Construct validity

The correlations between the Perceptions of Sex Offenders (PSO) subscales and the Stereotype Endorsement and Sentencing and Management measures are presented in Table 4. There was a significant positive correlation of both of the PSO subscales with the Sentencing and Management and Stereotype Endorsement measures. These findings constitute *preliminary evidence* that the Greek version of the Perceptions of Sex Offenders scale has adequate construct (convergent) validity.

**Table 4. Pearson correlations between the PSO subscales and the Sentencing and Management and Stereotype Endorsement measures (N = 452)**

		Sentencing and Management measures	Stereotype Endorsement measures
The Perception of Sex Offenders scale, Sentencing and Management subscale	Pearson correlation	.683**	.608**
The Perception of Sex Offenders scale, Stereotype Endorsement subscale	Pearson correlation	.166**	.363**

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Descriptive statistics and differences between gender, age group, educational level, and experience of sexual crimes on both of the PSO subscales are presented in Table 5. These differences were examined by means of t-tests and ANOVA because the scales presented normal distribution. Multiple comparisons in ANOVA were performed by means of the Bonferroni test.

**Table 5. Descriptive statistics and differences between demographic characteristics and experience of sexual crimes on the PSO subscales (N = 452)**

	Sentencing and Management	<i>p</i>	Stereotype Endorsement	<i>p</i>
<b>Gender</b>				
Men	34.43	NS	8.77	NS
Women	35.65		8.94	
<b>Age groups</b>				
18–30 years of age	33.27	<b>0.025</b>	8.59	<b>.014</b>
31–43 years of age	36.21		8.39	
44–56 years of age	35.84		9.52	
57–69 years of age	41.53		11.67	
70–82 years of age	40.50		9.50	
<b>Highest qualification</b>				
Secondary school (9 years)	49.00	<b>.001</b>	9.50	NS
Lyceum (12 years)	41.33		9.33	
Higher education (students)	34.22		8.65	
Higher education (graduates)	35.78		9.29	
MA/MSc holder	32.52		8.37	
PhD holder	31.47		7.67	
<b>Knows a sexual crime victim</b>				
Yes	33.94	<b>.048</b>	8.25	<b>.010</b>
No	36.22		9.33	
<b>Knows a sexual offender</b>				
Yes	35.22	NS	8.42	NS
No	35.31		9.03	

Note: NS = not significant

No significant differences were found between men and women in the score of the PSO subscales. Moreover, significant differences were found between the age groups (albeit small according to the effect size index) on the Sentencing and Management subscale ( $F[4, 421] = 2.82, p = .025, \eta p^2 = .026$ ) and on the Stereotype Endorsement subscale ( $F[4, 425] = 3.18, p = .014, \eta p^2 = .029$ ). According to the Bonferroni post-hoc test, the participants aged 57–69 years old had a higher

score than those aged 18–30 years old on the Sentencing and Management subscale and on the Stereotype Endorsement subscale (41.53 vs. 33.27 and 11.67 vs. 8.59, respectively).

Significant differences were also found between the educational levels on the Sentencing and Management subscale ( $F[4, 424] = 6.18, p = .001, \eta p^2 = .068$ ). The lyceum graduates (12 years) had a higher score (41.33) than higher education students (34.22) and graduates (35.78), MA/MSc holders (32.52) and PhD holders (31.47).

Furthermore, those who did not know a sexual crime victim had a higher score on both the PSO subscales (Sentencing and Management and Stereotype Endorsement) than those who knew such a victim (Sentencing and Management subscale:  $t = -1.984, df = 430, p = .048$  and Stereotype Endorsement subscale:  $t = -2.593, df = 434, p = .010$ ).

## **DISCUSSION**

This study evaluated the psychometric properties of the Greek version of the Perceptions of Sex Offenders scale (PSO). The primary finding was that the PSO consists of two subscales, reflecting Sentencing and Management and Stereotype Endorsement, and that its reliability is adequate. These two factors correspond with accuracy to the corresponding factors found in the original validation. However, the third factor found in the original validation (Risk Perception) was not supported in this study. This may be partially attributed to the fact that risk assessment of sex offenders is an entirely unknown field in Greece. That is, Hypothesis 1 was not confirmed.

Several minor differences were also noticed, which are presented in the results section. In comparison to the original validation study of the PSO, the following differences were notable: a) items 4 and 9, which loaded in the Risk Perception subscale in the original validation, were removed in this study and b) the rest of the items (5, 13 and 20), which loaded in the Risk Perception subscale in the initial validation, loaded in the Sentencing and Management subscale in this study. The structure of the Stereotype Endorsement subscale was similar to that found in the initial validation of the PSO.

The analyses performed showed that the Greek PSO has adequate internal consistency reliability. Cronbach's alpha coefficient was .88 for the full scale (18 retained items), .90 for the Sentencing and Management subscale and .83 for the Stereotype Endorsement subscale. These findings showed a high internal consistency reliability of the Perceptions of Sex Offenders scale and its subscales. High internal consistency reliability was also found in the initial validation of the PSO ( $\alpha = .92$  for the full scale,  $\alpha = .93$  for the Sentencing and Management subscale,  $\alpha = .85$  for the Stereotype Endorsement subscale and  $\alpha = 0.81$  for the Risk Perception subscale, which was not supported in this study).

The correlation between the two subscales of the PSO was weak and positive ( $r = .162, p = .001$ ). It seems that endorsing stereotypes about sex offenders is associated with support for harsh sentencing and management procedures concerning sex offenders. These findings are consistent with those presented by Harper & Hogue (2014), which argue that the PSO could be used as an outcome measure for respondents' perceptions of sex offenders and issues related to their sentencing and post-conviction management.

Both the Sentencing and Management and the Stereotype Endorsement subscale demonstrated adequate preliminary construct validity. These subscales were positively correlated with the Sentencing and Managing and Stereotype Endorsement measures. The original PSO has also demonstrated adequate construct validity (Harper & Hogue, 2014). However, it is notable that the construct validity of the original PSO was evaluated by other (different) questionnaires.

In the original validation of the PSO, women scored significantly higher (therefore expressing more negative views about sex offenders) on the 20-item scale than men. This pattern was also found on each of the PSO subscales. However, in this study, no significant differences were found between men and women in the score of the PSO subscales. This may be explained by the differences in cultural contexts of the United Kingdom and Greece or by the fact that the vast majority of the sample (68.6%) were women (i.e., the proportions of men and women were not balanced). Nevertheless, this finding needs further examination in future studies.

Moreover, significant differences were found between the age groups on both the Sentencing and Management subscale and the Stereotype Endorsement subscale. Furthermore, significant differences were found between the educational levels only on the Sentencing and Management subscale. This finding is consistent with that found in other studies and indicates that older participants and those with lower educational levels ask for harsher management and sentencing of sex offenders and have more stereotypes, while those from higher educational backgrounds express fewer negative attitudes as well as less support for harsh policies in the management of sex offenders (Comartin et al., 2009; Willis et al., 2013). Similar results were found in the initial validation of the PSO, too.

Finally, significant differences in the PSO score were found between those who knew and those who did not know a sexual crime victim. In contrast, in the original validation of the PSO, no significant differences were found between those who personally knew and those who did not know either a victim or a perpetrator of sexual crime. Consequently, Hypothesis 2 was partially confirmed.

### **Strengths and limitations of the study**

The strengths of this research include its originality for the Greek general population. However, because of the self-selection of our sample, it is highly likely that people who decided to participate in this study have certain attitudes towards sex offenders and this could have skewed the results. Another limitation is that the construct validity of the PSO was tested with measures developed by a literature review. This was due to the lack of related standardized scales in the Greek language. Through this process, we came to *preliminary* conclusions about construct validity and these results should be further examined in future studies. In addition, this study did not examine the divergent validity and test-retest reliability of the PSO subscales. It is noteworthy that this type of reliability was not investigated in the initial validation, either. We also have to point out that, in this study, the respondents were not asked if they themselves were a victim of sexual crime/abuse, and this may have impacted the results.



## CONCLUSION

The present study showed that the Greek version of the PSO consists of two subscales reflecting Sentencing and Management and Stereotype Endorsement. Through the Confirmatory Factor Analysis, we ended with a version of the PSO slightly different than the original. Thus, researchers should have this in mind if they want to compare results from Greece and other countries using the PSO. The Greek version of the PSO is reliable, easy to administer and can be used for research and clinical purposes in men and women. This highlights the necessity for the cultural adaptation of the PSO in many other languages and countries. Its availability will make the systematic investigation of the perceptions of sex offenders in the Greek population easier. An additional psychometric investigation of the PSO will be beneficial. Future studies could use the PSO in specific samples like students, social workers, psychologists, correctional or judicial employees, police officers etc. to evaluate the possible differences between these groups. In addition, the PSO could be used to examine the perceptions of specific groups of sex offenders (e.g., rapists, child molesters etc.).

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# **GRČKA VERZIJA SKALE PERCEPCIJE O POČINITELJIMA SEKSUALNIH KAZNENIH DJELA: PRELIMINARNA PSIHOMETRIJSKA EVALUACIJA I SOCIODEMOGRAFSKE RAZLIKE Togas Constantinos**

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## **SAŽETAK**

Ovo istraživanje prikazuje preliminarnu psihometrijsku evaluaciju grčke verzije Skale percepcije o počiniteljima seksualnih kaznenih djela (PSO) provedene na jednom uzorku grčke populacije te istražuje sociodemografske razlike u rezultatima. U istraživanju su sudjelovale ukupno 452 osobe starosti između 18 i 74 godine (prosječna dob bila je 38 godina), od čega 141 muškarac (31,27%) i 310 žena (68,73%). Rezultati su potvrdili dvofaktorsku strukturu grčke skale PSO (1. faktor = „Kažnjavanje i postupanje“ i 2. faktor = „Prihvatanje stereotipa“), a treći faktor izvorne skale PSO („Percepcija rizika“) nije bio potvrđen. Navedene su podskele pokazale visok stupanj unutarnje konzistentnosti (Cronbachova alfa iznosila je ,88 za cjelokupnu skalu tj. 18 pitanja, ,90 za podskalu Kažnjavanje i upravljanje i ,83 za podskalu Prihvatanje stereotipova). Utvrđeni su i preliminarni dokazi adekvatne konstruktne valjanosti. Stariji sudionici i oni s nižim stupnjem obrazovanja tražili su strože mjere postupanja i sankcioniranja počinitelja seksualnih kaznenih djela te su izražavali više stereotipa. Grčka verzija skale PSO pouzdana je, lako se primjenjuje i može se upotrebljavati za istraživanja te u kliničke svrhe i kod muškaraca i kod žena. To ukazuje na potrebu kulturološke prilagodbe skale PSO na mnoge druge jezike i za druge zemlje. U daljnjim istraživanjima PSO skala bi se mogla upotrijebiti na specifičnim uzorcima kao što su studenti, socijalni radnici, psiholozi, djelatnici korekcijskog i pravosudnog sustava, policijski službenici itd., a u svrhu utvrđivanja mogućih razlika među tim skupinama.

**Ključne riječi:** počinitelji seksualnih kaznenih djela, percepcija, grčka verzija, psihometrijska svojstva, grčko stanovništvo