

APPS-S: A Tool for Measuring the Attitudes Toward Prostitution and Women in Prostitution in the Spanish Population

Violence Against Women

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Abstract

This study was designed with the purpose of testing the psychometric properties of the Spanish version of the Attitudes toward Prostitution and Prostitutes Scale through three studies with different samples. The first one explores the test's dimensional structure or constructs validity through confirmatory factor analysis, as well as internal consistency and test-retest reliability. The second one focuses on discriminant and criteria validity. Finally, the third one examines the scale's convergent validity and its sensitivity to detecting changes. The results support two subscales with an optimal index of internal consistency, structural stability over time, and discriminative power between groups of participants. It is, therefore, an adequate tool for adults as well as young people and teenagers, and for detecting changes in the context of intervention or awareness workshops.

Keywords

prostitution, attitudes, scale, Spain/Spanish population

General Framework of Prostitution

Prostitution is generally defined as the act of providing sexual services in exchange for money (Valor-Segura et al., 2011). Conceptually, prostitution is nowadays approached from multiple perspectives in relation to the legal system and legislation, social welfare

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systems and individual behavior (Levin & Peled, 2011). In relation to the legal system, it is not the same in all the countries of the European Union, while countries such as Germany have regulated sexual services, others such as Sweden have adopted an abolitionist model (Meneses et al., 2018). In Spain, prostitution is not regulated, and adults can buy and sell sex without committing any illegal act although a number of activities related to it are classed as offences (Criminal Code of Spain; Organic Law 10/1995). Article 188 of this Criminal Code classifies it as a crime committed by those who take advantage of prostitution through human trafficking. Recently, the Spanish government, supported by feminist movements, proposed an Organic Law for the Abolition of the Prostitution System whose aim is to abolish paid sex by penalizing clients and to eradicate all forms of pimping. Meanwhile, different institutional and academic reports in Spain have published that (a) it is the country with the highest demand for prostitution in Europe (APRAM, 2017); (b) the range of men who have paid for sex is between 20% and 32.1% (CIS, 2009; Meneses et al., 2018); (c) women in prostitution oscillates between 113,000 and 300,000 (Gómez-Suárez et al., 2015; Malgesini, 2006); and (d) most of the demand is from men (99.7%; CIS, 2009; Martin-Martin & Meneses-Facón, 2020). In addition, several international and national sources point out the prevalence of prostitution and trafficking in women and girls in Spain, as well as the increase in the consumption of paid sex (e.g., Bilbatúa & González, 2022; CEDAW, 2015; CITCO, 2021). In this respect, the Spanish government has also developed the Operational Plan for the Human Rights of Women and Girls who are victims of sex trafficking and exploitation, and women in contexts of prostitution (Ministry of Equality, 2022). This plan encompasses seven main actions, which involve discouraging demand in trafficking, sexual exploitation, and prostitution through education and sensitization actions.

Along the same line, several political and social frameworks in Europe and different sections of feminist movements also endorse different perspectives on the prostitution phenomenon and, specifically, in relation to the conditions of women in prostitution. One is the sex work perspective, which considers prostitution as a legitimate profession or as an employment choice of women (Benoit et al., 2018; Digidiki & Baka, 2017) while the other is the feminist perspective, which considers it the most extreme form of women exploitation and that sex cannot be legally bought or sold (Morán & Farley, 2019; Weitzer, 2010). Some feminist or social movements and individuals in general assume that prostitution is simply a way to engage in sex and consider it to be just like any other job, in which case, there is a need to demand workers' rights for women. What is more, prostitution is mainly female and it is overrepresented by the most discriminated and vulnerable women and girls (Farley, 2004; Herrero-Villoria et al., 2022; Médicos del Mundo, 2020; Meneses-Falcón & Urio, 2021; among others). The evidence shows that not only are all types of gender violence manifested in prostitution, but it is also the ultimate expression of this type of violence (CATW, 2022; Council of Europe, 2011; UNDOC, 2020). All types of prostitution are essentially exploitative, and women suffer several consequences such as physical harm, verbal and sexual violence, and different psychological disorders (e.g., Farley, 2003, 2004, 2018; Gutierrez & Delgado, 2014; Pinedo et al., 2021). Clearly, violence

is the norm in prostitution, and the high degree of violence experienced by women in this situation has compelled researchers to explore attitudes and cultural beliefs to understand the position that society adopts in a system where women are vulnerable to violence perpetrated through the sex industry (Farley et al., 2022; Herrero-Villoria et al., 2022; Litam, 2019; Meneses, 2010; Monto, 2004; Moran & Farley, 2019).

Research on Attitudes Toward Prostitution

Taking all the above into account, it is clear that knowing about attitudes toward prostitution, on an individual level, is an important indicator of personal involvement in this social phenomenon, which affects the future development of gender equality and social movements aimed at establishing a legal system in different countries. In this respect, the assessment of attitudes toward prostitution and women in prostitution, as well as other common beliefs related to buying sex, legal approaches, rape myth acceptance, or morality, has also become a relevant area of study in the literature reviewed (e.g., Bonache et al., 2021; Castro-Calvo et al., 2018; Digidiki & Baka, 2017; Farley et al., 2011; Fitzgerald-Husek et al., 2017; Gómez-Suarez & Verdugo-Martés, 2021; Herrero-Villoria et al., 2022; Levin & Peled, 2011; Litam, 2019; Ma et al., 2018; Martin & Meneses, 2020; Meneses et al., 2018; Moreno et al., 2018; Torrado et al., 2018; Valor-Segura et al., 2011). These studies have highlighted attitudes and beliefs such as voluntary choice, a way to get more money or luxuries, pleasure or enjoyment, or even unacceptable morality in relation to women in prostitution. Other attitudes or beliefs about prostitution have focused on men's need for sexual satisfaction, sexual desires or fantasies, which are frequently used as a justification or excuse by groups of men. However, professionals and volunteers from public and private entities and people aware of the situation of women in prostitution corroborate the physical and psychosocial consequences for these women. Their beliefs and the evidence reported by these groups (health services, social services, and voluntary organizations, among others) include verbal and/or sexual abuse, the racist and poor backgrounds of women in prostitution, their vulnerability, being forced and stigmatized, and dangerous physical and psychological consequences of posttraumatic stress (APRAMP, 2017; Farley, 2003, 2011; Farley et al., 2022; Gutierrez & Delgado, 2014). All of these show the context of poverty, discrimination, and vulnerability where they are also victims of commercial sexual exploitation (APRAMP, 2017; Bilbatúa & González, 2022; CATW, 2022; Gutiérrez & Delgado, 2014; Médicos del Mundo, 2020).

Despite the social impact of this issue, there are not many empirical studies on attitudes toward prostitution in the Spanish population. Even so, some of them present relevant results that indicate the preferences for different legal approaches, ranging from 77% to 50% for decriminalization and 25% to 41% for prohibitionist or abolitionism (Bonache et al., 2021; Torrado et al., 2018). Others which focus on attitudes toward and beliefs about the consumption of prostitution confirm previous results about prostitution and women prostituted (Barahona, 2010; Barahona & Garcia, 2003;

Castro-Calvo et al., 2018; Meneses, 2010; Meneses et al., 2018; Torrado et al., 2018). They also, propose different profiles of sex buyers based on “domination” and “socialization” characteristics (Gómez-Suarez et al., 2015; Szil, 2001) or specific typologies related mainly to motivation to consume prostitution: “personalizers,” “funners,” “thingers,” “couple seekers,” or “riskers” (Meneses et al., 2018). However, most of the studies on prostitution in Spain are theoretical or involve qualitative methodologies, and there is also a lack of reliable instruments to assess attitudes toward prostitution (Bonache et al., 2021; Herrero-Villoria et al., 2022; Meneses et al., 2018; Valor-Segura et al., 2011). Although there are three quantitative scales available to measure attitudes toward prostitution in Spain (Bonache et al., 2021; Herrero-Villoria et al., 2022; Valor-Segura et al., 2011), two of them focus on positions about legal stance or regulation approaches, and the other one is specifically oriented toward sex trafficking. These Spanish scales measure two specific aspects related to prostitution but do not capture the broader range of beliefs or attitudes toward prostitution as a sex industry in general or women in prostitution in particular. The Attitudes toward Prostitution and Women in Prostitution Scale (Levin & Peled, 2011) focuses on these attitudes and encompasses the most popular beliefs reviewed by the original authors according to different theoretical frameworks in this study area. This scale measures attitudes toward prostituted women and the phenomenon of prostitution separately, as they consider that both aspects can be assessed into normative or problem-oriented approaches. Currently, there is no validated scale to assess general attitudes and beliefs about prostitution, especially about women in prostitution in the Spanish population. In this respect, the first step for our future research focuses on the psychosocial factors involved in prostitution consumption and the design of sensitization programs about this issue. Therefore, studying these attitudes toward prostitution and women in prostitution with a validated tool and quantitative methodology is not only of interest but also essential to enabling advances to be made in this research area. In this sense, there has been an increasing interest in using the Levin and Peled Scale of Attitudes toward Prostitution and Women in Prostitution (Levin & Peled, 2011), which is an innovative instrument because it assesses the attitudes toward prostitution using a quantitative methodology (Cavallieri et al., 2022; Digidiki & Baka, 2017; Houston-Kolnik et al., 2016; Hughes et al., 2021; Litam, 2019; Moreno et al., 2018; Pease, 2015).

The Attitudes Toward Prostitution and Women in Prostitution Scale and Its Cultural Adaptation in Spain

Levin and Peled carried out an extensive review of the literature on prostitution and women in prostitution in order to establish a theoretical framework for developing their scale. As a result, they designed a scale that would assess attitudes toward prostituted women and the prostitution phenomenon separately, since they considered that both aspects may be divided into normative and problem-oriented approaches (Levin & Peled, 2011). The normative aspect includes the viewpoint that women and prostitution

are an inherent functional aspect of a “normative society, where prostitution is considered a profession that is freely chosen by independent normative women.” The problem-oriented approach associates women and prostitution with “personal and social deviances, or with abuse and victimization” (Levin & Peled, 2011). Therefore, according to the Levin and Peled (2011) model, attitudes toward women in prostitution, and prostitution itself, should be assessed on two axes, which are continuums: one is Choice (Choosing) to Victimization (Victimized) and the other is Normativeness (Normative) to Deviance (Deviant), resulting in four subcategories or subscales. The final version of the Attitudes toward Prostitution and Prostitutes Scale (APPS; Levin & Peled, 2011) included 29 items and four subscales: (a) Prostitutes as Normative/Deviant (PSND) with eight items, (b) Prostitutes as Choosing/Victimized (PSEV) with six items, (c) Prostitution as Normativeness/Deviance (PNND) with eight items, and (d) Prostitution as Choice/Victimization (PNEV) with seven items. Responses were given on a Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The low and high total scores of the subscales (inverse items calculated) indicate more beliefs or attitudes oriented toward choice/normativeness and victimization/deviance, respectively (Levin & Peled, 2011). The results of the construct validity of the scale showed two dimensions or scales (attitudes toward prostitutes [APS], and attitudes toward prostitution [APN]) and a—four-factor—model representative of the above-mentioned subscales (PSND, PSEV, PNND, and PNEV). Levin and Peled (2011) affirmed that these results support a satisfactory construct validity for a two- or four-factor model, and they showed that internal consistency for the scales and subscales was between 0.73 and 0.86. In addition, the authors demonstrated the scale’s convergent validity with attitudes toward sex trafficking or acceptance of rape myths (Houston-Kolnik et al., 2016; Levin & Peled, 2011; Litam, 2019). All of these results support the Levin and Peled scale as an optimal proposal for assessing attitudes toward prostitution in Spain since it contemplates the coexistence of different beliefs among the general population, and it is also reliable and valid for differentiating the assessment of women in prostitution from the phenomenon of prostitution itself and its consumption.

A cross-cultural adaptation of the Attitudes toward Prostitution and women in Prostitution Scale into Spanish (APPS-S; Brotons et al., 2017) was carried out according to the International Test Commission (2017), and the standardized procedures adapted by Ramada-Rodilla et al. (2013) and Muñiz et al. (2013). Specifically, they proposed the following steps: (a) forward translation: three translations from English into Spanish; (b) expert committee review: three experts synthesized and approved the first version of the APPS-S; (c) back translation: two translations of the APPS-S into English; (d) second expert committee review: they compared this back translation with the original version of the APPS and after further revision, the prefinal version of the 24 APSS-S was agreed on; and (e) feasibility analysis of the APPS-S to pretest the content of all the items and instructions: this was carried out on 16 female and male participants in two groups with different age ranges (19–25 and 45–55 years) and was assessed through the participants’ feedback. Participants did not find any significant problems and considered all items and instructions to be satisfactorily

comprehensible. Finally, the final APPS-S version was approved by the expert committee as suitable for application to Spanish community samples.

Current Study

This study was designed to test the psychometric properties of the APPS-S. Through three studies. In the first one, the test's dimensional structure or construct validity was explored through confirmatory factor analysis, as well as, internal consistency and test-retest reliability. In the second study, discriminant and criteria validity was tested. Finally, in the third study, the scale's convergent validity and its sensitivity to detecting changes were examined. Based on the results of previous studies related to beliefs and evidence reported by different groups (health or social service professionals, voluntary organizations and the general population), the following hypotheses can be proposed: (a) groups of professionals or sensitized people will show significantly more unfavorable attitudes toward prostitution than other community groups, and their abolitionist stance and negative attitudes toward consumption of prostitution will coherently related to the APPS-S items and (b) the APPS-S scale items will show adequate relationships with other constructs researched in the area of prostitution and they will be able to detect changes in beliefs after awareness or interventions programs.

In the following sections, each study will be presented separately with their specific characteristics (samples, questionnaires administered, type of analysis, and results). However, before doing this, we will outline some of the common procedure guidelines and the data analysis followed for all of them. Firstly, the participants of the three studies were recruited by nonprobabilistic convenience: the researchers visited different settings or institutions to present the project and to encourage participation. Individuals in the three studies were informed about the aims and they were invited to take part. Secondly, data about the basic sociodemographic characteristics were collected while maintaining anonymity using a four-number-letter code freely chosen by each participant and indicated in each questionnaire (including pre-post-administration). All participants signed the informed consent and participated voluntarily. They completed the questionnaires in a self-administered paper version or digital version via Google Form provided by a member of the research group. Thirdly, the studies were carried out following the guidelines set by the International Test Commission (2017), the Cosmin Taxonomy of Measurement Properties (Cosmin, 2021) and the recommendations given in the literature (Carvajal et al., 2011; Hernández et al., 2020; Muñoz et al., 2013). The sample was calculated following the minimum criteria required for the different programmed statistical analyses and following the different authors' guidelines. This means: (a) for confirmatory factor analysis with factor loading greater than 0.40 a sample of 200 is adequate (Lloret-Segura et al., 2014; MacCallum et al., 1999); (b) in the multiple regression analysis, 10–20 cases by number of predictors is satisfactory (Montero-Granados, 2016); and (c) in the analysis of differences between groups, a sample > 72 individuals by independent group is sufficient (according to $p = .05$ with $d = 0.50$ and $1 - \beta \geq .95$; Cohen, 1988;

Ledesma et al., 2008). Finally, the statistical analysis was carried out using Jamovi (The Jamovi Project, 2021), which is a free and open-source graphical user interface for R software Version 1.6.7, and the preliminary Kolmogorov-Smirnov test was conducted in all samples. The results did not show normal distributions.

First Study

Sample

The sample consisted of 326 participants (75.4% women) from a community sample. In this study, the age range was 18 to 49 (67.8% between 18 and 20). All participants completed the APPS-S and 196 completed it again 2 weeks later.

Data Analysis

For the data analysis, a confirmatory factor analysis was performed with the diagonally weighted least squares (DWLS) estimation applied for ordinal and nonnormally distributed data. We used the R environment 4.0.1 for statistical computing as well as the Lavaan package (Rosseel, 2012). The model's goodness of fit was determined by using chi-square $> .05$, root mean square error of approximation (RMSEA) ≤ 0.06 , comparative fit index (CFI) ≥ 0.90 and standardized root mean square residual ≤ 0.08 (Brown, 2015; Hooper et al., 2008; Kline, 2010). However, these criteria should be taken with caution since the DWLS method of estimation can overestimate the model fit and yield lower RMSEA values (Xia & Yang, 2019). SRMR is a robust indicator regardless of the estimation method, so more attention was given to the results from this (Shi & Maydeu-Olivares, 2020). In addition, the scales' internal consistency (Cronbach's alpha and McDonald's omega) with a criterion ≥ 0.70 , which is universally used was analyzed (Nunnally & Bernstein, 1994). Wilcoxon Signed Rank was used as an alternative to paired simple t-test for difference analysis, and Spearman's correlation coefficients were used for test-retest reliability.

Results

The first step was to analyze the basic structure of the APPS-S according to the four-subscale model: PSND; PSEV; PNND; and PNEV. This was also done according to the two-subscale model: APS, and APN.

In the first level, neither the confirmatory factor analysis nor the analyses of internal consistency of the subscales and item-test correlation coefficient did not support the four-subscale model. The fit measures for the confirmatory factor analysis were not available since the model did not converge into a parsimonious solution. Moreover, results showed that the internal consistency index of both Prostitutes Subscales (PSND and PSEV) was lower than 0.63, and for the Prostitution Subscales (PNND and PNEV) the lowest α was .59.

In the second level, the two-subscale model was analyzed and five items from the APS subscale (2, 8, 10, 12, 15) and another two items from the APN subscale (9, 25) did not show item–test correlation $\geq .20$. According to Carmimnes and McIver (1981)Q8], nondifferentiating items are not useful for measuring a construct, so these items were removed. All of these items were included in the subscales of normative deviance (PSND and PNND), which showed the lowest Cronbach's alpha. In addition, five of them also had a stigmatizing and prejudiced meaning (*most of prostitutes are drug addicts, or morally corrupt, or ugly, or have AIDS, or are not properly educated*). The rest of them did not seem to reflect the more progressive beliefs in Spanish society today and in the sample of young adults (67.8% between 18 and 20 years old). They are related to the “institution of marriage” and traditional beliefs or a “functionality” perspective of prostitution in society.

Finally, in the third level of the analysis, the internal consistency was checked, and the results showed a satisfactory proposal for the two-dimension model, consisting of the APN subscale (13 items; $\alpha = .84$) and APS subscale (nine items; $\alpha = .74$). Confirmatory factor analysis was performed to verify the goodness of fit of the two-factor model, (Prostitution subscale: items 1, 3, 4, 6, 7, 11, 13, 16, 17, 21, 23, 24, 28; Prostitutes subscale: items 5, 14, 18, 19, 20, 22, 26, 27, 29).

The results showed an inadequate fit of the model as SRMR was higher than 0.08 ($\chi^2 = 618.50$, $p < .001$, CFI = 0.93, TLI = 0.92, RMSEA = 0.08, 90% CI [0.07 ~ 0.09]; SRMR = 0.09).

The parameter estimates of the different items were analyzed, revealing items with parameters lower than 0.30, which were removed from the model. Therefore, another confirmatory factor analysis was conducted, removing items 4, 7, and 23 from the APN subscale, and Item 29 from the APS subscale. In this case, the results showed an adequate fit, with the SRMR values being ($\chi^2 = 357.69$, $p < .001$, CFI = 0.96, TLI = 0.95, RMSEA = 0.07, 90% CI [0.06 ~ 0.08], SRMR = 0.08). The covariance between factors was .88. The estimates for the APN subscale were between 0.37 (Item 28) and 0.79 (Item 17), while for the APS subscale, they were between 0.37 (Item 20) and 0.71 (Item 22).

Since the second confirmatory factor analysis showed a more parsimonious model, it was selected for the following psychometric analysis (Figure 1).

In addition, the results for internal consistency were acceptable in both subscales. Cronbach's α and McDonald's ω were 0.85 and 0.86, respectively for the APN Subscales and 0.74 and 0.75, respectively for the APS subscale.

We performed a correlation and differences analysis with a part of the sample ($n = 196$), who completed the APPS-S to test its reliability. The results indicated a higher correlation between items and total scores in both subscales with a significance level $p < .001$ in all of them. These reliability results were also confirmed by the absence of significant differences between the item mean score and the total mean score in both subscales (Table 1).

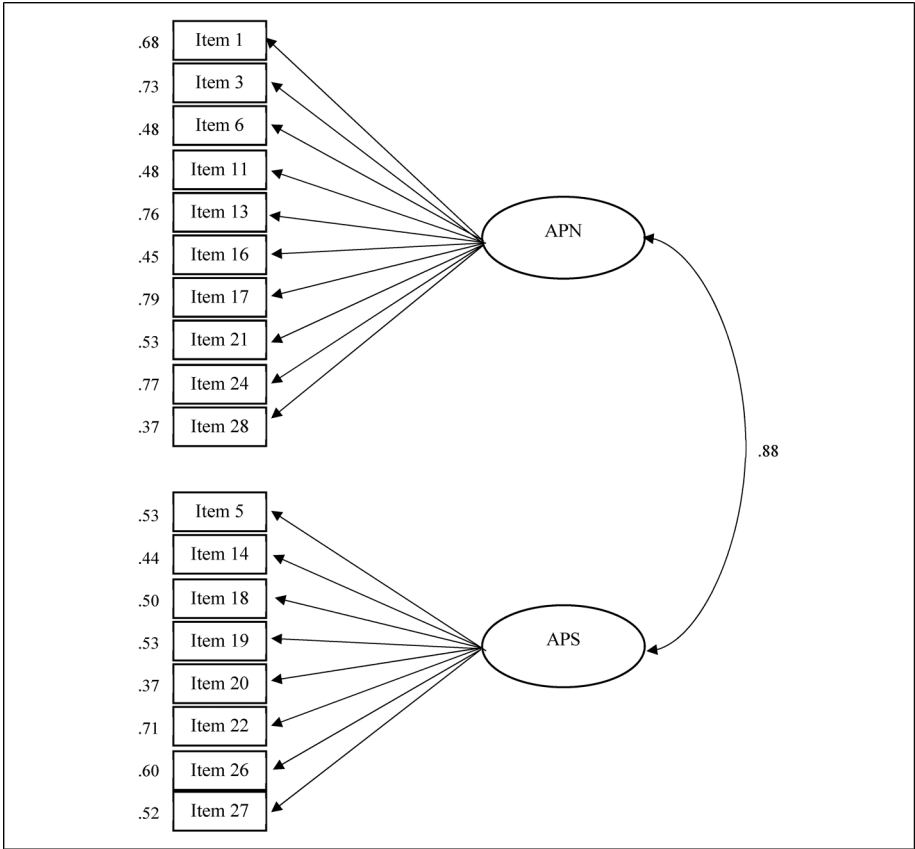


Figure 1. Factor structure of the APPS-S with standardized loadings.
 APPS-S = Attitudes toward Prostitution and women in Prostitution Scale into Spanish.

Second Study

Sample

This study includes of two groups of participants. The first one consisted of 160 participants who were mostly women (75%). They were professionals and volunteers from public and private entities that were sympathetic to the abolitionist perspective, and aware of issues of gender equality, women’s issues, and new masculinities. This sample included people linked to public entities (Councils, Public Prosecutions Office, Security State Forces) and other organizations and nongovernmental organizations (Caritas, Secretariado Diocesano, Oblatas, Associació d’Ajuda a la Dona, Centro Mujer 24 horas; among others). It also includes a group of members from the platform “Paro Internacional de Mujeres de Cartagena” whose aim is to promote equality between men and women through social action. Finally, another group of professional

Table 1. Reliability.

<i>Attitudes toward prostitution (APN) items</i>											
Pre	1	3	6	11	13	16	17	21	24	28	Total
Post (r)	0.71	0.79	0.51	0.64	0.66	0.52	0.72	0.64	0.74	0.54	0.85
Post (w)	1380	1602	659	3368	1855	1694	1149	1199	1990	1687	6362
<i>Attitudes toward prostitutes (APS) items</i>											
Pre	5	14	18	19	20	22	26	27	Total		
Post (r)	0.65	0.51	0.57	0.62	0.42	0.06	0.56	0.54	0.79		
Post (w)	1585	1151	1168	1130	2246	11982	2234	1600	5274		

Note. In all items: (r) or rho Spearman; ($p < .001$) and (w) or Wilcoxon rank (no significant differences).

members who attended the International Congress on Masculinities and Equality, the age range was 18 to 72 (64.6% between 21 and 50). The second group were formed by a community group of undergraduate students ($n = 121$) as a comparison group aged from 18 to 30, and where 82% were women.

Both samples completed the APPS-S scale, and the professional and volunteer group answered an additional three questions: (a) To what extent do you accept or admit the consumption of prostitution? (b) To what extent do you consider that the consumption of prostitution is the same as consuming other services? and (c) Regarding women in prostitution and prostitution in general, what would your legal stance be?. They were asked to specify their opinions on a 7-point Likert scale (1 = completely disagree; 7 = completely agree or 1 = abolition, 7 = regulation/legalization). So, in the case of the third question about legal stance, low scores indicated positions closer to abolitionism and high scores indicated closer to regulation or legalization positions.

Data Analysis

In this second study, the following analyses for discriminant and criterion validity were applied. The U-Mann Whitney test for mean differences between groups was used (Kerby, 2014). Interpretation of the effect size values for nonparametric differences showed: a small effect size (0.10), medium effect size (0.30), and large effect size (0.50; Rosenthal, 1991). A linear regression analysis (Enter method), including a multicollinearity test (VIFs < 10; Kutner et al., 2004; companion to applied regression [R package]; Fox & Weisberg, 2019) was conducted to determine whether the Prostitution and Prostitutes scales are predictors of different issues about legal approaches and the consumption of prostitution. Previous correlation analysis did not show relationships between age and APPS-S subscales in both groups.

Results

Discriminant validity was tested to determine how far the APPS-S distinguishes between groups with different characteristics and settings (Tables 2 and 3). Findings showed that all the APPS-S items showed significant differences between the professional group and the community group, except in *prostitution harms society's morals*,

Table 2. Differences Between Groups. Scores for Attitudes Toward Prostitutes Subscale.

		G.P.	G.C.	U (p)	r_{bis}
		$M \pm SD$	$M \pm SD$		
Item	APN subscale	4.23 \pm 0.6	3.69 \pm 0.7	5,152 (< .001)	.44
1	Prostitution is trafficking of women	4.10 \pm 1.2	3.52 \pm 1.1	6,543 (< .001)	.33
3	Prostitution is forcing undesired sexual behavior	4.19 \pm 1.1	3.57 \pm 1.1	6,398 (< .001)	.34
6	Prostitution allows women who practice it to actualize their sexual fantasies	1.17 \pm 0.6	1.43 \pm 0.7	7,723 (< .001)	.21
11	Prostitution harms society's morals	2.74 \pm 1.5	2.79 \pm 1.1	9,273 n.s.	.04
13	Prostitution is a violation of women's human dignity	4.38 \pm 1.0	3.50 \pm 1.3	5,573 (< .001)	.43
16	Prostitution provides men with stress relief	1.59 \pm 1.0	2.02 \pm 1.1	7,455 (< .001)	.23
17	Prostitution is a form of violence against women	4.52 \pm 1.0	3.58 \pm 1.2	4,982 (< .001)	.49
21	Prostitution is a way for some women to gain power and control	1.46 \pm 0.8	1.89 \pm 0.8	6,745 (< .001)	.31
24	Prostitution is a form of rape in which the victim gets paid	3.93 \pm 1.3	3.29 \pm 1.2	6,591 (< .001)	.32
28	Prostitution is a way to empower economically disadvantaged populations	1.34 \pm 0.7	2.02 \pm 1.1	5,963 (< .001)	.39

Note. M = mean; SD = standard deviation; GC = professional group; GC = community group; U = Wilcoxon value; p = significance level; r_{bis} = rank-biserial correlation; APN = attitudes toward prostitution.

Table 3. Differences Between Groups. Scores for the Attitudes Toward Prostitution Subscale.

		G.P.	G.C.	U (p)	r_{bis}
		$M \pm SD$	$M \pm SD$		
Item	APN subscale	3.96 \pm 0.5	3.61 \pm 0.5	5,688 (< .001)	.38
5	Prostitutes earn a lot of money	1.70 \pm 1.0	2.06 \pm 0.8	7,295 (< .001)	.25
14	Prostitutes enjoy controlling men	1.30 \pm 0.68	1.56 \pm 0.79	7,825 (< .001)	.20
18	Prostitutes like sex	2.20 \pm 1.1	2.72 \pm 0.8	6,826 (< .001)	.29
19	Many prostitutes are students who prefer a convenient, profitable job	1.51 \pm 0.8	1.86 \pm 0.9	7,479 (< .001)	.24
20	Prostitutes are victims of drug abuse	2.90 \pm 1.2	2.81 \pm 0.9	9,229 n.s.	.05
22	Women choose to be prostitutes	1.70 \pm 0.9	2.31 \pm 0.9	5,882 (< .001)	.40
26	Most prostitutes only work as prostitutes for a few years to get financially settled	1.81 \pm 0.90	2.49 \pm 1.0	5,987 (< .001)	.38
27	Prostitutes are unable to get out of the situation they are in	2.91 \pm 1.3	3.07 \pm 1.1	8,920 n.s.	.08

Note. M = mean; SD = standard deviation; GC = professional group; GC = community group; U = Wilcoxon value; p = significance level; r_{bis} = rank-biserial correlation; APN = attitudes toward prostitution.

prostitutes are victims of drug abuse, and prostitutes are unable to get out of the situation they are in.

In the APN subscale, the group of professionals presented more agreement with items such as *prostitution is a form of violence against women* ($U = 4,982, p < .001$); *Prostitution is a violation of women's human dignity* ($U = 5,573, p < .001$), *prostitution is forcing undesired sexual behavior* ($U = 6,398, p < .001$), or *prostitution is the trafficking of women* ($U = 6,543, p < .001$). Most of the items showed a medium effect size for differences between groups ($r_{bis} \geq 0.30$).

Regarding the items from the APS subscale, the professional group indicated more disagreement with items related to *women choose to be prostitutes* ($U = 5,882, p < .001$), *most prostitutes only work as prostitutes for a few years to get financially settled* ($U = 5,987, p < .001$), or *prostitutes earn a lot of money* ($U = 7,295, p < .001$). In addition, item 22 (*women choose to be prostitutes*; $r_{bis} = 0.40$) and item 26 (*most prostitutes only work as prostitutes for a few years to get financially settled*; $r_{bis} = 0.38$) revealed a medium effect size index for differences between groups.

Criterion validity was analyzed through the relation between the APPP-S and other similar concepts measured (Tables 4 and 5). With respect to the professionals and volunteers, most of them (83.7%) showed their agreement with abolitionist approaches toward prostitution. In addition, more than 90% of this group did not agree with the consumption of prostitution, and they thought that it was not like consuming other services. Tables 5 and 6 present the items of the APPS-S that had a coherent predictive power for legal approaches and beliefs in the consumption of prostitution. Abolitionist approaches and disagreement with the consumption of prostitution were predicted by attitudes or beliefs, *such as prostitution is a violation of women's human dignity* ($\beta = -.33, p < .001$; $\beta = -.27, p < .001$; respectively) and *prostitution is a form of violence against women* ($\beta = -.36, p < .001$; $\beta = -.22, p < .001$;

Table 4. Regression Analyses for Legal Stance.

G.P. (N = 162)			
Abolition versus regulation		B	p-value
13.	Prostitution is a violation of women's human dignity	-.33	< .001
17.	Prostitution is a form of violence against women	-.36	< .001
19.	Many prostitutes are students who prefer a convenient, profitable job	.17	.021
22.	Women choose to be prostitutes	.15	.034
26.	Most prostitutes only work as prostitutes for a few years to get financially settled	.14	.036
28.	Prostitution is a way to empower economically disadvantaged populations	.21	.002
% E. V.: 59; F = 29.8 ($p \leq .001$); VIFs < 1.7			
	Attitudes toward prostitution (APN) subscale	-.59	< .001
	Attitudes toward prostitutes (APS) subscale	-.09	.03
% E.V.: 42; F = 39.3 ($p \leq .001$); VIFs < 1.4			

Note. G.P = professional group; B = beta estimate; p = significance level.

Table 5. Regression Analyses for Consumption of Prostitution.

G.P. (N = 162)		
Accepting or admitting the consumption of prostitution	B	p-value
13. Prostitution is a violation of women's human dignity	-.27	< .001
16. Prostitution provides men with stress relief	-.18	< .001
17. Prostitution is a form of violence against women	-.22	.008
22. Women choose to be prostitutes	.16	.027
26. Most prostitutes only work as prostitutes for a few years to get settled financially	.14	.044
27. Prostitutes are unable to get out of the situation they are in	.16	.018
% E. V.: 35; F = 13.2 ($p \leq .001$); VIFs < 1.5		
Attitudes toward prostitution (APN) subscale	-.43	< .001
Attitudes toward prostitutes (APS) subscale	-.17	.05
% E. V.: 30; F = 29.7 (.001); VIFs < 1.4		
Considering prostitution to be like other services		
	B	p-value
5. Prostitutes earn a lot of money	.36	< .001
19. Many prostitutes are students who prefer a convenient, profitable job	.21	.012
22. Women choose to be prostitutes	.20	.008
28. Prostitution is a way to empower economically disadvantaged populations	.23	.003
%V.E.: 23; F = 12.9 ($p \leq .001$); VIFs < 1.5		
Attitudes toward prostitution (APN) subscale	-.21	.02
Attitudes toward prostitutes (APS) subscale	-.20	.03
%E. V.: 12; F=10.7 (.001); VIFs < 1.4;		

Note. G.P = professional group; B = beta estimate; p = significance level.

respectively). In contrast, items like *women choose to be prostitutes* and *most prostitutes only work as prostitutes for a few years to get financially settled*, were predictors of regulation approaches ($\beta = .15, p = .034$; $\beta = .14, p = .036$; respectively) and the agreement to accept the consumption of prostitution ($\beta = .16, p = .027$; $\beta = .14, p = .044$; respectively). In the same way, items such as *many prostitutes are students who prefer a convenient profitable job* or *prostitution is a way to empower economically disadvantaged populations*, predicted the regulation approach ($\beta = .17, p = .021$; $\beta = .21, p = .002$; respectively), and that consumption of prostitution is like other services ($\beta = .21, p = .012$; $\beta = .23, p = .003$; respectively).

Third Study

Sample

Two groups participated in this third study. The first sample consisted of 615 participants; 56.1% were women ($n = 345$) and 43.9% were men ($n = 270$). Their age range was 15 to 20 years old, and the majority of them were aged between 15 and 18 (90.2%). The second sample consisted of 590 individuals (57.8% women and 42.2% men). In this group, ages ranged from 14 to 19 and the majority of them were between 14

Table 6. Motives for Consumption of Prostitution and Attitudes Toward Prostitution Subscale (APN).

	APN	1	3	6	11	13	16	17	21	24	28
1. For fun	-.548	-.220	-.338	.380	-.325	-.423	.341	-.371	.319	-.353	.335
2. Poor social relationships	-.460	-.222	-.279	.329	-.215	-.324	.234	-.278	.304	-.253	.311
3. Unsatisfactory sexual relations with the partner	-.389	-.164	-.225	.294	-.185	-.305	.190	-.278	.252	-.229	.212
4. Possibility to fulfill sexual fantasies	-.554	-.217	-.350	.392	-.338	-.427	.270	-.411	.322	-.386	.298
5. To have sex with other women	-.515	-.215	-.319	.403	-.270	-.385	.306	-.363	.325	-.277	.290
6. To express or assert masculinity	-.314	-.164	-.178	.342	-.082	-.250	.165	-.156	.276	-.145	.142
7. No other possibilities of having sex	-.546	-.215	-.348	.331	-.374	-.427	.286	-.410	.289	-.380	.319
8. It is easier without less commitment or emotional involvement	-.557	-.258	-.309	.359	-.323	-.440	.277	-.388	.303	-.347	.332

Note. PS = total prostitution subscale; APN = attitudes toward prostitution. Significant correlation for all items (** $p < .001$), except items 6-11 (* $p < .01$).

and 18 years old (98.1%). Both samples came from private and state secondary or high schools, or from professional training centers. Participants in the first sample completed the APN subscale v as well as the questionnaire designed for measuring different motives for consumption of prostitution (MCP; Dimitrova et al., 2022). The headline question was: “To what extent do you agree with the consumption of prostitution by men if it is for...?” A list of eight items about motives for the consumption of prostitution was given: *fun, poor social relationships, unsatisfactory sexual relations with their partner, the possibility of fulfilling sexual fantasies, to have sex with other women, to express or assert masculinity, no other possibilities of having sex, and it is easier with less commitment or emotional involvement*. Participants answered on a 5-point Likert scale (1 = completely disagree; 5 = completely agree). Internal consistency was adequate ($\alpha = .71$). The second sample attended two sessions of the awareness workshop called “Women’s Market” designed by ASTI-Alicante (a non-governmental organization) and oriented toward promoting equality in sexual relationships, raising awareness about trafficking and sexual exploitation and violence against women. The APPS-S was administered to all of the participants twice over a period of 2–3 weeks: before starting the awareness workshop (T1) and a week after completing it (T2). ASTI-Alicante contacted the schools for approval of the study by the head of each school and the students’ parents. All of the students who participated in the study had a consent form collected by their teachers or head of school.

Data Analysis

In this third study, convergent validity and sensitivity were analyzed. Spearman’s correlation analysis was carried out to determine the relationships between items from the MCP and the APPS-S, and the paired Wilcoxon was applied to test for mean differences to assess attitude changes after the awareness workshop.

Results

Convergent validity indicated a significant negative correlation ($p < .001$) between all eight items from the MCP, and the total score of the APN subscale was within a range of -0.389 and -0.557 minimum and maximum Spearman’s correlation coefficient. Most of them showed a medium relationship, such as *for fun* ($r = -.548, p < .001$), *possibility to fulfill sexual fantasies* ($r = -.554, p < .001$), *to have sex with other women* ($r = -.515, p < .001$), *no other possibilities of having sex* ($r = -.546, p < .001$) and *it is easier without less commitment or emotional involvement* ($r = -.557, p < .001$). These results show the relationship between agreement with the MCP and considering prostitution to be close to normativeness and choice according to the Levin and Peled (2011) model.

Table 6 reports all the results of Spearman’s association between MCP items and the APN subscale items. The results consistently show higher agreement with the motive *to have sex with other women* when it is related to considering that *prostitution allows the women who practice it to actualize their sexual fantasies* ($r = .403, p < .001$).

In contrast, a low agreement with the motive *possibility to fulfill sexual fantasies* is associated with a higher agreement *than prostitution is a form of violence against women* ($r = -.411, p < .001$).

With respect to the APPS-S's sensitivity to detecting changes in adolescents as a result of the awareness workshop "Women's Market," the findings revealed a statistically significant change following participation in the workshop.

There is a significant difference between the total APN score before (T1; $M = 3.47, SD = 0.61$) and after (T2; $M = 3.87, SD = 0.63$) completing the awareness workshop, $W = 21.0245, p < .001$. There is a large effect size for this analysis ($r_{bis} = .71$). The findings suggest that after the workshop teenagers and young people point to prostitution as victimization or deviance to a greater extent (Table 7). In addition, all the items of the APN subscale showed significant differences between T1 and T2. In T2, adolescents show higher agreement with the following items: Item 1 (*prostitution is trafficking of women*; $r_{bis} = .63$); Item 3 (*prostitution is forcing undesired sexual behavior*; $r_{bis} = .66$); Item 13 (*prostitution is a violation of women's human dignity*; $r_{bis} = .58$); Item 17 (*prostitution is a form of violence against women*; $r_{bis} = .65$); and Item 24 (*prostitution is a form of rape in which the victim gets paid*; $r_{bis} = .54$). All have a large effect size index for differences (Table 7).

Table 7. Difference Between T1 and T2 Scores of the Attitudes Toward Prostitution Subscale.

	T1 $M \pm SD$	T2 $M \pm SD$	(p)	r_{bis}
APN subscale	3.47 (0.61)	3.87 (0.63)	21,024 (<.001)	.71
1. Prostitution is trafficking of women	3.41 (1.14)	4.04 (1.06)	13,790 (<.001)	.63
3. Prostitution is forcing undesired sexual behavior.	3.33 (1.14)	4.00 (1.06)	12,680 (<.001)	.66
6. Prostitution allows the women who practice it to actualize their sexual fantasies	1.85 (0.94)	1.69 (0.91)	24,536 (<.001)	.26
11. Prostitution damages society's moral	3.19 (1.11)	3.43 (1.13)	23,245 (<.001)	.26
13. Prostitution is a violation of women's human dignity	3.52 (1.26)	4.1 (1.10)	13,623 (<.001)	.58
16. Prostitution provides men with stress relief	2.74 (1.13)	2.65 (1.17)	30,786 (.031)	.11
17. Prostitution is a form of violence against women	3.39 (1.16)	4.03 (1.07)	12,325 (<.001)	.65
21. Prostitution is a way for some women to gain power and control	2.12 (0.94)	1.79 (0.89)	39,025 (<.001)	.45
24. Prostitution is a form of rape in which the victim gets paid	3.21 (1.18)	3.79 (1.14)	18,095 (<.001)	.54
28. Prostitution is a way to empower economically disadvantaged populations	2.63 (0.94)	2.51 (1.08)	32,594 (.009)	.14

Note. M = mean; SD = standard deviation; r_{bis} = rank-biserial correlation; p = significance level; APN = attitudes toward prostitution.

Table 8. Difference Between T1 and T2 Scores of Attitudes Toward Prostitutes (APS) Subscale.

	T1 <i>M</i> ± <i>SD</i>	T2 <i>M</i> ± <i>SD</i>	<i>W</i> (<i>p</i>)	<i>r</i> _{bis}
APS subscale	3.36 (0.53)	3.72 (0.58)	21,715 (<.001)	.70
5. Prostitutes earn a lot of money	2.39 (0.96)	2.08 (0.96)	33,919 (<.001)	.63
14. Prostitutes enjoy controlling men	2.12 (0.91)	1.77 (0.89)	36,333 (<.001)	.66
18. Prostitutes like sex	2.88 (0.91)	2.44 (0.90)	39,661 (<.001)	.26
19. Many prostitutes are students who prefer a convenient, profitable job	2.21 (1.03)	1.98 (1.00)	33,257 (<.001)	.26
20. Prostitutes are victims of drug abuse	2.84 (1.01)	2.97 (1.06)	24,422 (.003)	.11
22. Women choose to be prostitutes	2.56 (1.03)	2.13 (0.91)	48,784 (<.001)	.65
26. Most prostitutes only work as prostitutes for a few years to get financially settled	2.77 (0.98)	2.32 (1.02)	33,919 (<.001)	.45
27. Prostitutes are unable to get out of the situation they are in	3.02 (1.08)	3.51 (1.10)	36,333 (<.001)	.54
28. Prostitution is a way to empower economically disadvantaged populations	26.9 (4.21)	29.8 (4.65)	21,715 (<.001)	.14

Note. *M* = Mean; *SD* = Standard Deviation; *r*_{bis} = rank-biserial correlation; *p* = significance level.

A similar pattern of findings emerged for the total APS subscale score. The result of the Wilcoxon Signed Rank test revealed that there is a significant difference between attitudes before ($M = 3.36$, $SD = 0.53$) and after ($M = 3.72$, $SD = 0.58$) completing the awareness workshop ($W = 21,715$, $p < .001$). There is also a large effect size for this analysis ($r_{bis} = .70$). The higher score after the workshop reflects more agreement with the victimized (rather than choosing) and a deviant (rather than normative) view of women in prostitution compared with the score for T1. In addition, all the items from the APS subscale showed significant differences between T1 and T2 (Table 8). Thus, the workshop has a large and significant effect with Item 5 (*prostitutes earn a lot of money*; $r_{bis} = .63$), Item 14 (*prostitutes enjoy controlling men*; $r_{bis} = .66$), Item 22 (*women choose to be prostitutes*; $r_{bis} = .65$) and Item 27 (*prostitutes are unable to get out of the situation they are in*; $r_{bis} = .54$). The effect was medium for Item 26 (*most prostitutes only work as prostitutes for a few years to get financially settled*; $r_{bis} = .45$).

Discussion

This study examined the psychometric properties of the Spanish version of the APPS scale (Levin & Peled, 2011) as a tool for measuring and detecting beliefs that promote the normalization of the prostitution phenomenon. This will enable us to design specific intervention programs to make the population aware of the consequences arising from the prostitution system regarding effective equality between men and women. Three studies were carried out to test the different properties of the

APPS-S, and optimal results were obtained. In the first study, the construct validity was tested by confirmatory analysis and the parsimonious solution supported the two dimensions according to Levin and Peled's (2011) proposals. The APN and APS subscales comprise a combination of items from the original theoretical framework. The subscales include beliefs about prostitution that are close to normalization or as a freely chosen profession, versus other beliefs related to considering prostitution as a phenomenon of social deviation and the victimization of women. All of them are part of a continuum and are represented by the lowest and highest scores of each subscale, respectively. In addition, the APN and APS subscales reached an optimal index of internal consistency, confirming that the items represent the same construct, and test reliability supported the structural stability of the APPS-S over time. Regarding discriminant and criterion validity analyzed in the second study, the use of the APPS-S demonstrated its discriminative power between groups when the attitudes of professionals toward prostitution were compared to the general population. The APPS-S also predicted legal approaches (abolition vs regulation or legalization) and the degree of agreement with the consumption of prostitution. These results confirmed the hypothesis that groups of professionals or sensitized people show significantly more unfavorable attitudes toward prostitution. They describe it as a form of violence or a violation of women's human dignity and also consider that women do not choose this situation. The abolitionist stance of professionals was verified and their negative attitudes toward the consumptions of prostitution is related to items of the APPS-S scale focusing on violence against woman in prostitution. The hypotheses proposed about the relationships between the APPS-S and other associated constructs, and its ability to detect changes in participants' beliefs and attitudes are also confirmed. The administration of the APPS-S to adolescents and young adults also showed that this tool is adequate for these groups. It revealed coherent relationships with the motives that they believe are a justification for consuming prostitution. Finally, the results of APPS-S's sensitivity to detecting changes should be underlined, since it is an important psychometric characteristic of a questionnaire in the context of interventions or awareness workshops.

In this sense, the results have shown the usefulness of the APPS-S for assessing the effectiveness of future awareness workshops or intervention actions in educational settings as a strategy for preventing violence toward women and promoting egalitarian affective sexual relationships between individuals.

Implications

Attitudes toward prostitution are important indicators for knowing how Spanish people as individuals are involved with this social phenomenon that affects the future development of gender equality and the legal system. Therefore, the availability of a quantitative, reliable, and valid tool to measure these beliefs and the changes they produce in the Spanish population takes on a special relevance in the context of this country. The APPS-S has emerged as a very useful tool because it can be used firstly to measure attitudes and public opinion through different groups, secondly to predict

what could be the most likely legal position of the Spanish population according to their attitudes, and finally to assess the changes caused by programs aiming to influence attitudes. Therefore, APPS-S is presented as a reliable and valid tool to assess attitudes toward prostitution and women in this situation in Spain, and future research will confirm its usefulness in understanding and promoting social changes that could improve gender equality and women's rights, including right to live free from violence. Likewise, the efficacy of future campaigns and programs designed to modify attitudes in adult people should be assessed with the APPS-S.

Limitations and Future Research

Regarding the methodological limitations of this article, firstly, this study does not encompass the diversity of groups in prostitution or sex services that can have varied gender and sexual identities (Benoit et al., 2019; Weitzer, 2005). This research focuses on the overrepresentation of females in prostitution according to the literature reviewed and the theoretical background of the APPS scale. This scale is directed at assessing prostitution as a phenomenon and women in prostitution, and its applicability across cultures and its suitability for assessing the sex trade at different levels remains to be tested (Weitzer, 2005). On the other hand, the selection of the convenience led to an underrepresentation of men. So, in the first and second studies, most participants are female while the consumption of prostitution is in fact demanded overall by males. It would be interesting to explore a wider sample of men, consumers and nonconsumers, and also to include other adult groups from a different range of ages or social classes, among other relevant sociodemographic and psychosocial characteristics that can play an important role in attitudes towards prostitution (sexism, prejudice, and racism, morality or ideologies values).

Secondly, the results are based on the current social and legal context in Spain, where opposing feminist movements coexist with the general population, who could feel a certain distance, unawareness, and/or have ambivalent attitudes about the phenomenon of prostitution in general, but even more so toward women in prostitution, and this could explain, in part, some of the low or ambivalent mean scores. These ambivalent attitudes about prostitution and women in prostitution should be investigated in future studies by applying theories of cognitive dissonance (Festinger, 1957) and moral disengagement (Bandura, 1999) to support predictions and attitudinal change probabilities. Thirdly, although the four-scale model proposed by Levin and Peled (2011) could not be confirmed, it would be useful to make a more in-depth review of other specific beliefs of normalization or deviation (especially about women in prostitution) in Spanish people. In addition, we could expand the focus of the attitudinal items of the subscale on women in prostitution by including issues such as female poverty, sexual objectification, stigmatization or the relationship that exists between the consumption of prostitution and sex trafficking of women. In addition, the internet and other technologies are changing the prostitution market, and these new ways of buying sex (forums, platforms, webcam, etc.) and their consequences have to be considered in a new theoretical background, including new beliefs and attitudes that have started to evolve around the sex industry.

Finally, these limitations represent only one part of the complexity of the studies carried out on prostitution and other general methodology problems in the research into prostitution are common. Among these are, the different terms used for women in prostitution (e.g., “prostituted women,” “sex worker,” or “prostitutes”) and the different mental representations evoked by them, in a set of beliefs that coexist and shape stereotypes and prejudices linked to different cultural and social contexts. It is also a challenge to manage the variety and disparity of data provided by different academic and institutional sources about the phenomenon of prostitution, women in this situation, or the rates of trafficking in women for sexual exploitation. In this sense, there is a consensus among authors that research on prostitution can be considered a complex and highly socially sensitive topic. Perhaps future qualitative and quantitative research should focus on new study designs and innovative models, implicit association tests or different tools to measure this controversial issue of prostitution. All of these should be aimed at avoiding methodological problems such as social desirability, lack of male participation or the need to integrate the findings into a more homogeneous and constructive approach.

Appendix

Items of Attitudes Toward Prostitution and Prostitutes—Spanish Version (APPS-S)

Items of attitudes toward prostitution (APN) subscale	
1	Prostitution is trafficking of women (La prostitución es trata de mujeres)
3	Prostitution is forcing undesired sexual behavior (La Prostitución es forzar un comportamiento sexual no deseado)
6*	Prostitution allows the women who practice it to actualize their sexual fantasies (La Prostitución permite a las mujeres que la ejercen hacer realidad fantasías sexuales)
11	Prostitution damages society's morals (La Prostitución daña la moral de la sociedad)
13	Prostitution is a violation of women's human dignity (La Prostitución es una violación de la dignidad de la mujer)
16*	Prostitution provides men with stress relief (La Prostitución permite que los hombres liberen estrés)
17	Prostitution is a form of violence against women (La prostitución es una forma de violencia contra las mujeres)
21*	Prostitution is a way for some women to gain power and control (La Prostitución es para las mujeres es una forma de ganar poder y control)
24	Prostitution is a form of rape in which the victim gets paid (La Prostitución es una violación en la que se paga a la víctima)
28*	Prostitution is a way to empower economically disadvantaged populations (La Prostitución empodera a colectivos económicamente desfavorecidos)
Items of attitudes toward prostitute (APS) subscale	
5*	Prostitutes earn a lot of money (Las Prostitutas ganan mucho dinero)
14*	Prostitutes enjoy controlling men (Las Prostitutas disfrutan controlando a los hombres)
18*	Prostitutes like sex (A las Prostitutas les gusta el sexo)

(continued)

(continued)

Items of attitudes toward prostitution (APN) subscale

- 19 Many prostitutes are students who prefer a convenient, profitable job (Las prostitutas son estudiantes que prefieren un trabajo fácil)
- 20 Prostitutes are victims of drug abuse (Las Prostitutas son víctimas del abuso de drogas)
- 22* Women choose to be prostitutes (Las mujeres eligen ser Prostitutas)
- 26* Most prostitutes only work as prostitutes for a few years to get financially settled (La mayoría de Prostitutas trabajan unos años para establecerse económicamente)
- 27 Prostitutes are unable to get out of the situation they are in (Las Prostitutas son incapaces de salir de la situación que están)

*Inverse item score for calculating total subscale score.

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M. J. Navarro Ríos is an associate professor at the Miguel Hernández University of Elche (UMH; Spain). Master in gender equality. She is, since 2019, director of the Gender Studies Center of the UMH. Since 2014 she has been working on research projects related to the trafficking of women and girls for sexual exploitation. She has organized numerous academic conferences on this topic and is currently involved in several research projects on human trafficking. Since 2020, she has been the principal investigator of the Spain–Colombia project on trafficking in women and girls for sexual exploitation. She teaches on issues of masculinity and sexuality.

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