



Pornography Consumption Among Young People: An Assessment of Parents' and Teachers' Training Needs

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Abstract

Introduction In Spain and Italy, it is estimated that childrens' first contact with pornography can occur before the age of 10 years. Minors in this position lack the emotional tools necessary to analyze pornographic content critically. However, many adolescents do not discuss issues related to sexuality with their parents or teachers because they feel embarrassed or perceive those figures as insufficiently knowledgeable. This study analyzed the knowledge, attitudes, and awareness of parents and teachers regarding young people's internet usage and pornography consumption and their preparedness to discuss sexuality and pornography with their children or pupils.

Methods The participants ($N = 142$) included 74 parents (52.1%) and 68 teachers (47.9%) who were from Spain (51.7%) or Italy (48.3%). Two ad hoc questionnaires were used in this research.

Results Compared to parents, teachers attributed higher levels of pornography consumption to young people. Parents and teachers expressed similar views regarding the adverse effects of pornography consumption. Discussing pornography with children was identified as challenging by parents (more than 1/3 of whom had never discussed this topic) and especially by teachers (half of whom had never discussed this issue). Few parents and teachers had received training in these issues; this lack was especially notable among Italian teachers.

Conclusions These results highlight the need to increase the training provided to parents and teachers in these areas to improve children's satisfaction with sexuality education programs.

Policy Implications It is necessary to develop child-focused sexuality education programs that involve parents and teachers and range beyond an adult-centered agenda.

Keywords Young people · Sexuality education · Pornography consumption · Teachers · Parents · Parent–child sexual communication

Introduction

Access to pornography in the contemporary world is easy, fast, free, and abundant, even for children and adolescents. The review conducted by Peter and Valkenburg (2016) indicates that while prevalence rates vary significantly across

studies from 7 to 98%, there remains good evidence that adolescents are likely to view pornography as they mature.

Pornography is an industry that normalizes violent and abusive attitudes toward women and “eroticises inequality” with respect to gender, reproducing stereotypical gender roles for both men and women (Bridges, et al., 2010; Carrotte et al., 2020; Crabbe & Corlett, 2011; Willis et al., 2022). Pornography, however, cannot be analyzed in isolation as it is embedded in a specific social context, and thus, can be framed as a continuum of other media such as video games, music videos, or advertisings (Albury, 2014). Among young people, an important risk of pornography is that consent is not included in the sexual acts it depicts, and thus, it fails to provide education regarding consent (Save the Children, 2020). Existing research has provided

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evidence that adolescents' pornography use is related to more permissive sexual attitudes, less progressive sexual beliefs, and higher likelihood to engage in sexual aggression as well as to experience it (especially among female adolescents) (Peter & Valkenburg, 2016). However, Peter and Valkenburg (2016) found in their review that some of these associations present small effect sizes and, more importantly, that little is known about the moderators of these associations. As Attwood et al. (2018) highlight, to further explore the dynamics between pornography consumption and violence, it is crucial to consider that this consumption occurs within a specific social context and, particularly, that it is often encountered by adolescents who generally lack comprehensive sexual education.

In Spain, it is estimated that children's first contact with pornography occurs at the age of 8–9 years in 17.5% of cases, while the average age at first access is 12 years (Ballester et al., 2022); these estimations also indicate a pattern of habitual consumption by age 14 (Ballester et al., 2019). Similarly, in Italy, the age of first contact with pornography can occur before the age of 10 years for some children, in general, males start to watch pornography earlier than females (Capurso et al., 2020; Romito & Beltramini, 2011). Frequently, children and adolescents lack the emotional tools necessary to analyze pornographic content critically, though some studies suggest that these resources increase with age (Vertongen et al., 2022).

Consequently, myths and misinformation tend to prevail during this developmental stage (Fernández-Rouco et al., 2019). In Spain, research has shown that boys are twice as likely as girls to engage in sexual coercion, and girls are twice as likely as boys to engage in unwanted sexual behavior (Fernández-Fuertes, et al., 2018; INJUVE, 2020). In Italy, a recent report produced by Save the Children (Antonucci et al., 2024) showed that nearly half of the adolescents participating in the study indicated that it was difficult for them to say “no” in the context of sexual relations (61% of males vs. 42% of females). More than one-third of participants agreed that in an intimate relationship, the partner should always accept engaging in a sexual relationship (42% of men vs. 36% of women) (Antonucci et al., 2024). These statistics highlight the lack of consideration of consensual relationships and the gendered nature of sexual behavior.

Despite the fact that parents and teachers remain the main agents involved in the education of these individuals, many adolescents nevertheless do not discuss issues related to sexuality with these figures because they feel embarrassed or perceive their parents and teachers as insufficiently knowledgeable (Astle et al., 2021; Sex Education Forum, 2023; Widman et al., 2021); these findings have been reported in both the Italian (Alloni et al., 2017; Brunelli et al., 2022) and Spanish (Biota et al., 2022) contexts. This situation highlights the risk that pornography

could serve as a sex educator for these adolescents (Ballester et al., 2019; Rasmussen & Bierman, 2016; Save the Children, 2020) who do not have access to education which would provide them with skills to navigate their sexual learning processes ethically and safely (Albury, 2014). Consequently, the provision of training to teachers and parents is crucial (Bóthe et al., 2020) with regard to the development of better sexuality education programs that involve both educative agents (parents and teachers). Furthermore, preliminary evidence suggests that parental communication about sexuality can reduce permissive sexual attitudes and gender-stereotypical beliefs associated with pornography use (Peter & Valkenburg, 2016).

In this context, previous research on the broader topic of sexuality education has shown that parents tend to feel embarrassed with regard to discussing sexuality education and believe that they are insufficiently prepared (i.e., that they lack the necessary skills or knowledge) (Flores & Barroso, 2017; Malacane & Beckmeyer, 2016; Walker, 2001, 2004; Walker & Milton, 2006). Parental gender appear to play a significant role in this context, with mothers emerging as the primary educators for both sons and daughters (Evans et al., 2020; Walker, 2004). Furthermore, parents' own past experiences with sex education influence their readiness to educate their sons/daughters (Walker, 2001). Other factors related to the family structure and family ethos have also been found to influence sexual education in the home (Walker, 2004). Factors that promote parent–child communication concerning sex include access to sex education resources and effective communication with the school regarding the sex education curriculum (Walker, 2001). Pariera and Brody (2018) showed that, according to emerging adults' perceptions, parents should discuss sex frequently, at an early stage, and with respect to a wide variety of topics. The primary obstacles faced by teachers with regard to sexual education are their lack of self-confidence with respect to this topic and their limited access to resources (Johnson et al., 2014).

This study focuses on Spain and Italy. There is limited research investigating the knowledge, attitudes, awareness, and readiness of parents and teachers regarding young people's internet usage and the associated risks, including pornography consumption. This study aims to fill this research gap by addressing the following research questions: (1) What are the perceptions of Spanish and Italian parents and teachers regarding their children's or pupils' internet usage and the potential risks it poses? (2) What do Spanish and Italian parents and teachers know or believe about their children's or pupils' consumption of pornography? (3) Do Spanish and Italian parents and teachers feel prepared to engage in discussions concerning pornography and sexuality with their children or pupils? What are their training needs in this regard?

Methods

Participants

The participants ($N = 142$) in this study included 74 parents (non-dyads; 52.1%) and 68 teachers (47.9%) who were from Spain (51.7%) or Italy (48.3%). Parents were aged between 40 and 60 years ($M = 47.22$; $SD = 4.98$), were mostly females (83.8%), were heterosexual (98.6%), and had only one child (77.03%). Teachers were aged between 24 and 72 years old ($M = 43.28$; $SD = 11.05$), and most of them were females (77.9%) or heterosexual (91.2%). Participants' years of teaching experience ranged from 1 to 40 years ($M = 14.86$; $SD = 10.42$). Additionally, parents were asked to respond to the items included in their study by focusing on one of their children, while teachers were asked to consider pupils of a specific age. The ages of the minors selected by parents ($M = 12.24$) and teachers ($M = 13.79$) were slightly different. With regard to the two countries on which this research focused, similar distributions were obtained for both parents and teachers, although most teachers were from Spain. The criterion for eligibility was to be a parent or teacher of children aged 10–16 years.

Measures

The instruments used in this study were two ad hoc questionnaires that were designed to assess two dimensions: internet use and pornography consumption among young people (including sexuality education/communication). Both ad hoc questionnaires were designed and developed by the expert research team, based on the Joint Research Center's (JRC), of the European Commission, guidelines for the assessment of key competences (Sousa Lourenço et al., 2016). These competences were included transversally across all study dimensions as follows: knowledge (e.g., "Which of the following online prevention tools for minors do you know?", "I think that the amount of time my child spends online (video games, social networks, internet) per day is"), attitudes (e.g., "I think that as a parent/teacher is very important to be aware of new trends, webpages and social networks related to sexuality and/or pornography that youngsters consume"), awareness (e.g., "Pornography use may promote violent or abusive sexual behaviour"), and readiness (e.g., "I feel prepared to discuss about online pornography with my pupil/child", "I have taken previous courses/training on affective-sexual education with youngsters"). Also, to ensure content validity, the items were designed based on the results of the mapping study of pornography consumption in adolescents in the Spanish context (Ballester et al., 2022). Additionally, insights from the national youth report (INJUVE, 2020) were also included, ensuring that the questionnaire items

accurately reflect the current youth context and pertinent socio-cultural factors within Spain.

The internet use ad hoc questionnaire included the following variables: internet use by minors¹ (h/day), online safety among minors, online dangers (e.g., sharing images or videos in social networks, accessing to adult content, password safety, malware or phishing links, cyberbullying, contacting strangers), online content that most promotes gender stereotypes (e.g., videogames, social network, music), online negative experiences (only for parents), knowledge of prevention tools, the most valuable functions of known prevention tools, readiness (preparedness degree to discuss online safety), and previous training in online safety.

The pornography consumption ad hoc questionnaire assessed the following topics: minors using pornography (yes/no), types of sexual images that minors consume, starting age and frequency of pornography consumption among minors, negative effects of pornography consumption, concerns regarding pornography use, adult-minor communication concerning sexuality and pornography, adult coping with pornography, readiness (preparedness degree to discuss online pornography), and previous training in affective-sexual education.

In addition, the sociodemographic variables presented in Table 1 were also measured.

Design and Procedure

Employing a cross-sectional survey design (Goodwin & Goodwin, 2016), the knowledge, concerns, and needs of both parents and teachers were assessed. To control for the effect of the age of the minors, at the beginning of the questionnaire, parents and teachers in both countries referred to the specific age of the child/pupil on whom they were focusing while completing the study. Regarding ethical considerations, all participants were informed of the anonymity, confidentiality, and voluntary nature of their participation, and all participants provided informed consent in accordance with Regulation (EU) 2016/679 (General Data Protection Regulation). This research was approved by the URL Ethics Committee (URL_2021_2022_016).

Data Collection and Analysis

The data were obtained using snowball sampling (Hibberts et al., 2012), as the survey's form was disseminated through social networks, such as LinkedIn and WhatsApp. The ad hoc questionnaire was administered online via the *Survey-Monkey* platform. Both descriptive and comparative

¹ This variable was based on the adults' perceptions of internet use by minors.

Table 1 Sociodemographic information regarding the sample

		Parents (<i>n</i> = 74)		Teachers (<i>n</i> = 68)	
Age	M (<i>SD</i>) [R]	47.22 (4.98) [40–60]		43.28 (11.05) [24–72]	
Age of minor (child/pupil) selected	M (<i>SD</i>) [R]	12.24 (1.71) [10–16]		13.79 (2.17) [10–16]	
		<i>n</i>	(%)	<i>n</i>	(%)
Gender	Feminine	62	(83.8)	53	(77.9)
	Masculine	12	(16.2)	15	(22.1)
Sexual orientation	Heterosexual	73	(98.6)	62	(91.2)
	Homosexual	0	(0)	3	(4.4)
	Bisexual	1	(1.4)	3	(4.4)
Country	Spain	33	(44.6)	40	(58.8)
	Italy	41	(55.4)	28	(41.2)
Educational center	Public	53	(71.6)	38	(55.9)
	Private	7	(9.5)	2	(2.9)
	Charter	14	(18.9)	28	(41.2)
Gender of child selected	Feminine	29	(39.2)	-	-
	Masculine	44	(59.5)	-	-
	Nonbinary	1	(1.3)	-	-

analyses were conducted using the *SPSS Statistics* program, v.29 (IBM Corporation, 2023). Mann–Whitney U tests for between-group comparisons were used to analyze differences between parents and teachers as well as those between countries. Finally, a chi-square test was performed to analyze proportional differences according to children’s age (10–13 years old vs. 14–16 years old) based on parents’ and teachers’ reports.

Results

Internet Use and Online Safety

In terms of participants’ perceptions of minors’ internet use (h/day), significant differences ($p = 0.002^{**}$) were observed between Spanish and Italian parents. Overall, 31.6% of Spanish parents believed their child spent more than 2 h per day on the internet, while 68.1% of Italian parents expressed this belief. Both Spanish and Italian teachers reported that the children spent “more than 2 h” on the internet (ES: 84.1%; IT: 82.4%). See Table 2 for a description of these results.

Additionally, with regard to the online safety of minors, on the one hand, both parents (ES: 55.3%; IT: 53.2%) and teachers (ES: 70.7%; IT: 79.4%) reported that minors need tools and resources that can inform them about how to identify online risks. On the other hand, more parents (ES: 39.5%; IT: 38.3%) than teachers (ES: 27.3%; IT: 20.6%) believed that minors need adult supervision or control, as they are insufficiently mature. The findings revealed that significantly more teachers than parents (p

0.013*) emphasized minors’ responsibility and knowledge, whereas more parents than teachers ($p = 0.075$) referred to adult monitoring.

In terms of online dangers, parents and teachers differed in terms of their beliefs regarding the main risk of the internet. Therefore, parents (ES: 28.9%; IT: 36.2%) identified accessing inappropriate/adult content as the main such risk, while teachers (ES: 34.1%; IT: 32.3%) selected sharing images or videos on social networks as the main risk. However, only a nonsignificant difference was observed between these groups ($p > 0.05$). Regarding the internet content that promotes gender stereotypes the most heavily, both parents (ES: 74%, IT: 81%) and teachers (ES: 68%, IT: 88%) referred to social media such as *Instagram*, *Facebook*, or *TikTok* rather than games, music, or video platforms. Regarding children’s negative online experiences, both Spanish and Italian parents referred to “encountering potentially harmful content, such as violence” (ES: 42.1%; IT: 44.7%) and “watching pornography or receiving sexual images” (ES: 21.1%; IT: 14.8%).

With respect to knowledge of prevention tools, most parents (ES: 78.9%; IT: 65.9%) and teachers (ES: 52.3%; IT: 58.8%) were aware of at least one of the following tools: *Safekids*, *Family Time*, *Familia Segura*, *Qustodio*, *Google Family Link*, *Google Safe Search*, *YouTube Safe Search*, *Facebook Messenger Kids*, *Securekids*, *Net Nanny*, and *Bark*. Additionally, the most valuable functionality of the known prevention tools was identified as the ability to “block inappropriate contents, search results and applications” by both parents (ES: 50%; IT: 38%) and teachers (ES: 36.4%; IT: 50%).

Table 2 Descriptive information (%) regarding internet use, pornography, readiness, and training needs

	Parents (n = 74)		Teachers (n = 68)	
	Spain (n = 33)	Italy (n = 41)	Spain (n = 40)	Italy (n = 28)
<i>Internet use and online safety</i>				
Minor's online use < 2 h/day	68.4	31.9	15.9	17.6
Minor's online use > 2 h/day	31.6	68.1	84.1	82.4
Minors need adult supervision	39.5	38.3	27.3	20.6
Minors need tools and resources to identify online risks	55.3	53.2	70.7	79.4
Accessing adult/pornographic content as the main online risk	28.9	36.2	25.0	29.4
Sharing images or videos on social networks as the main online risk	15.8	31.9	34.1	32.3
Social media promotes gender stereotypes	73.7	80.9	68.2	88.2
Awareness and knowledge of new tendencies/apps/social media among minors	94.7	100	97.7	100
Knowledge of parental tools	78.9	65.9	52.3	58.8
Blocking inappropriate content as the best function offered by parental tools	50.0	38.3	36.4	50.0
<i>Pornography</i>				
Pornography consumption by minors	34.2	23.9	86.4	85.3
Daily consumption of pornography by minors	3.8	0	16.3	9.7
My child/pupil consumes softcore or mediumcore sexual content	50	57.1	13.9	28.1
Pornography use can be detrimental to healthy and pleasurable sexuality	82.0	76.0	95.4	88.2
Pornography use may promote violent or abusive sexual behavior	87.0	78.3	93.2	85.3
Concern regarding minors' consumption of pornography	65.8	36.9	84.1	41.2

Table 2 (continued)

	Parents (<i>n</i> = 74)		Teachers (<i>n</i> = 68)	
	Spain (<i>n</i> = 33)	Italy (<i>n</i> = 41)	Spain (<i>n</i> = 40)	Italy (<i>n</i> = 28)
Adults' positive responses to minors' use of pornography	71.0	63.0	81.8	82.4
Communication about pornography	71.1	61.0	56.8	50
Readiness				
Readiness to discuss online safety	92.0	91.5	65.9	85.2
Readiness to discuss pornography	73.7	56.6	52.3	47.1
Previous training				
Online safety	36.1	31.8	40.9	31.3
Affective-sexual education	38.9	31.8	45.5	21.9
Training needs				
Need for tools to discuss online pornography	84.2	84.8	95.5	97
Need for affective-sexual education and sexual consent in the context of intimate relationships	58.3	75.6	62.5	57.1

Pornography Consumption

In terms of pornography, a significant difference ($p=0.001^{***}$) was observed between the perceptions of parents and teachers regarding the consumption of pornography by minors. The majority of parents (ES: 65.8%, IT: 76.1%) believed that their child did not watch pornography, while most teachers (ES: 86.4%, IT: 85.3%) reported that their pupils did consume such media. In this context, a chi-square analysis indicated a significant difference ($p=0.05^*$) between children who were 10–13 years old (25.9%) and those who were 14–16 years old (66.7%) in terms of pornography consumption according to the report of Spanish parents. Similarly, the data regarding Spanish teachers revealed a significant difference ($p=0.016^*$) between pupils who were 10–13 years old (66.6%) and those who were 14–16 years old (100%) in terms of pornography consumption. No significant differences ($p>0.05$) were observed between these age groups of children in the reports of either Italian parents (10–13 years old = 17.3%; 14–16 years old = 41.6%) or teachers (10–13 years old = 80.0%, 14–16 years old = 88.8%).

Additionally, the kind of sexual images that minors consumed were associated with significant differences ($p\leq 0.001$) between parents and teachers, as among parents who believed that their child consumed pornography, most (ES: 50.0%, IT: 57.1%) referred to softcore (which involves no genitalia or explicit sexual intercourse) or mediumcore (which involves full nudity but no explicit sex acts) sexual content. In contrast, a remarkably lower proportion of teachers (ES: 13.9%, IT: 28.1%) referred to that kind of sexual content. Thus, teachers were more aware of the hardcore (i.e., involving genitalia and explicit sex acts) and crude (i.e., involving physical and verbal violence, aberrations, or dominance-submission) sexual content consumed by minors. These outcomes were similar between the two countries included in this research. Regarding the frequency of minors' consumption of pornography, more teachers (ES: 16.3%, IT: 9.7%) than parents (ES: 3.8%, IT: 0%) reported the belief that their child or pupils consumed pornography daily, with a statistically significant difference being observed between the groups ($p=0.046^*$). Additionally, according to the data concerning Italian teachers, chi-square comparison of pupils' ages revealed a significant difference ($p=0.018^*$) in the "less than one time per month" group in terms of the frequency of the consumption of pornography among minors (10–13 years old = 55.6%, 14–16 years old = 0%).

Perceptions of the age of the onset of pornography consumption differed slightly between boys and girls. With regard to boys, the mean ages reported by parents ($M_{ES}=10.66$; $M_{IT}=11.26$) and teachers ($M_{ES}=9.89$; $M_{IT}=10.74$) were similar. Girls' reported starting ages of

pornography consumption were also similar between parents ($M_{ES}=11.16$; $M_{IT}=11.20$) and teachers ($M_{ES}=11.07$; $M_{IT}=11.24$). Thus, boys were considered by both parents and teachers (in ES and IT) to begin using pornography earlier than girls.

In terms of the negative effects of pornography consumption and the associated concerns, both parents (ES: 82%; IT: 76%) and teachers (ES: 95.4%; IT: 88.2%) agreed or strongly agreed with the claim that "Pornography use can be detrimental to healthy and pleasurable sexuality." In addition, the claim that "Pornography use may promote violent or abusive sexual behavior" was supported by both parents (ES: 87%; IT: 78.3%) and teachers (ES: 93.2%; IT: 85.3%). Both comparison groups (parents-teachers and Spanish-Italian) exhibited similar beliefs ($p>0.05$) concerning the negative effects of pornography. Concerns regarding pornography consumption among minors differed between these two countries, as both parents (ES: 65.8%; IT: 36.9%) and teachers (ES: 84.1%; IT: 41.2%) reported being very or fairly concerned with this issue. In this way, significant differences were obtained between the concerns expressed by Spanish and Italian parents ($p=0.025^*$) and teachers ($p=0.001^{***}$). Although this difference was not significant ($p>0.05$), in Spain, a higher proportion of teachers than parents were concerned with this issue, while in Italy, both groups exhibited similar rates of concern. Additionally, chi-square analysis of the data pertaining to Spanish teachers revealed a significant difference pertaining to children's age groups. Thus, statistically differentiated ($p=0.009^{**}$) percentages of "little" concern were obtained between the groups of pupils who were 10–13 years old (33.3%) and the group of pupils who were 14–16 years old (0%). No significant differences ($p>0.05$) were found between these age groups in the reports of either Italian parents/teachers or Spanish parents. Interestingly, noteworthy percentages of parents (ES: 28.9%, IT: 39.1%) and teachers (ES: 43.2%, IT: 50%) had never discussed pornography with their children or students. No significant differences were observed with regard to any of the parent-teacher comparison groups ($p>0.05$).

Finally, regarding adult coping with pornography, the majority of parents (ES: 71%, IT: 63%) and teachers (ES: 81.8%, IT: 82.4%) indicated that if they found a pornographic site on the web browser of a device used by their child or pupil, they "would use this as an excuse to talk to him or her about pornography and sexuality, bearing in mind that it is normal for them to explore and be curious" instead of selecting options such as "Install a parental filter and talk to him or her" or "Punish him or her."

Readiness

Participants' levels of readiness with regard to discussing online safety and pornography were assessed. First, more

parents (ES: 92%; IT: 91.5%) than teachers (ES: 65.9%; IT: 85.2%) felt that they were very or fairly prepared to discuss responsible internet use with their child or pupil, although this difference was not significant ($p > 0.05$). In terms of countries, Spanish parents reported being significantly more prepared than Spanish teachers ($p = 0.008^{**}$), while in Italy, no significant differences were observed between both groups. Participants' levels of readiness to discuss pornography were significantly lower than their levels of readiness to discuss responsible internet use. Namely, both parents (ES: 73.7%, IT: 56.6%) and teachers (ES: 52.3%, IT: 47.1%) reported feeling very or fairly prepared to discuss online pornography with their child or students. Between-groups comparison demonstrated that both parents ($p = 0.004^{**}$) and teachers ($p = 0.001^{***}$) felt that they were more prepared to discuss responsible internet use than to discuss online pornography. More concisely, of those Spanish parents who feel ready to talk about porn, nearly one third (32.0%) reported that sexuality should not be addressed neither in school nor at home. In Italy, only 4.2% of parents reported the same information. With regards to teachers who feel prepared to discuss online pornography with their pupils, a vast majority in Spain (65.2%) thought that sexuality should not be discussed either at school or at home. A smaller proportion of Italian teachers reported the same (14.3%). In the same line, for the total sample, a remarkable proportion of Spanish parents (33.3%) and teachers (45.0%) reported that sexuality should not be addressed either at school or at home. By contrast, only 2.4% of Italian parents and 7.1% of Italian teachers reported so.

Previous Training

Similarly, the majority of parents (ES: 63.9%; IT: 68.2%) and teachers (ES: 59.1%; IT: 68.7%) had never participated in previous courses/training concerning secure network access with regard to minors. Overall, a small minority of parents (ES: 13.9%; IT: 6.8%) and teachers (ES: 11.4%; IT: 6.3%) reported having received useful online safety training. Similarly, most parents (ES: 61.1%; IT: 68.2%) and teachers (ES: 54.5%; IT: 78.1%) had never participated in previous courses/training in affective-sexual education. Parents in both countries had received similar levels of previous training, but Italian teachers had received less affective-sexual education than had teachers in Spain. In fact, a significant difference was observed between both countries ($p = 0.045^*$).

Training Needs

With regard to pornography training needs, virtually identical percentages of agreement were observed between countries regarding the need for tools to discuss online

pornography (dangers, critical aspects, myths, and realities) according to both parents (ES: 84.2%; IT: 84.8%) and teachers (ES: 95.5%; IT: 97%). Furthermore, with regard to the specific needs of affective-sexual education, both parents (ES: 58.3%; IT: 75.6%) and teachers (ES: 62.5%; IT: 57.1%) identified “emotional, relational and affective aspects of sexuality and intimacy” and “sexual consent in intimate relationships” as the main topics in which they needed to improve their knowledge. Finally, the results of the chi-square test regarding the children's age groups with regard to the need for early and age-adapted affective-sexual education were significant. In this sense, significantly different proportions were obtained in terms of participants' total agreement with this need according to the data concerning Spanish parents (10–13 years old = 59.3%, 14–16 years old = 16.7%; $p = 0.049^*$) and Italian teachers (10–13 years old = 100%, 14–16 years old = 38.9%; $p = 0.007^{**}$).

Discussion

The objective of this study was to assess the knowledge, attitudes, awareness, and readiness exhibited by parents and teachers concerning young people's internet usage and the related risks, including pornography consumption, as well as the readiness of these adults to discuss these topics with their children or pupils.

The results of our study showed that Italian parents either claim to believe or actually believe that their children devote more time to internet usage than do Spanish parents. Furthermore, teachers in these two countries perceive that their students spend more time online than the assumptions reported by their parents. Both parents and teachers recognize children's access to inappropriate or adult content as a primary concern in this context. Additionally, both Italian and Spanish parents indicate that their children have been exposed to violence and pornography or sexual images. Consequently, these figures exhibit a good level of awareness of the internet habits of minors and the associated risks. Nevertheless, diverse approaches to these risks are reported. Teachers tend to emphasize minors' responsibility, while parents generally favor a strategy that involves increased adult supervision and monitoring.

The teachers in this study stated higher levels of young people's pornography consumption than did the parents. This included early exposure, the nature of the pornographic material typically accessed by young people (which is often violent and includes dominance-submission scenes), and the frequency of consumption. Several possible explanations may account for this result. One of the reasons for the different results between parents and teachers could be that the age of the selected child (or children group) differed slightly between parents ($M = 12.2$) and teachers ($M = 13.8$).

Another possible explanation is that teachers could over-generalize risky behavior from one student to all students, which would explain their higher scores. Alternatively, parents may underestimate the extent to which their children are exposed to and learn from pornography. A finding supported by Wright and colleagues (2022) study in which parents underestimated their child's exposure to pornography.

Both parents and teachers perceived boys as becoming involved in pornography consumption at an earlier age than girls. In both countries, parents and teachers expressed similar views regarding the adverse effects of pornography consumption, linking this practice to negative impacts on healthy sexuality and the promotion of violence. These findings are in line with prior research that has shown that boys tend to consume pornography at an earlier age than girls and that early exposure to pornography can have certain impacts on children (Bridges et al., 2010; Orte et al., 2020; Save the Children, 2020; Stoner & Hughes, 2014). Interestingly, Spanish adults expressed more concern about children's pornography consumption; nevertheless, more than one-third of parents and roughly half of teachers in both countries had never engaged in discussions about pornography with children. As noted in previous research, feelings of embarrassment may hinder parents from discussing these topics with their children (Flores & Barroso, 2017; Malacane & Beckmeyer, 2016; Walker, 2001; Walker & Milton, 2006).

Discussing pornography remains challenging, especially for teachers in both countries. Surprisingly, many parents in Spain feel that they are somewhat prepared to discuss this topic, which is not the case in Italy. Although in both countries similar proportions of parents and teachers reported feeling prepared to discuss online pornography, one third of parents and two thirds of teachers in Spain stated that sexuality should not be addressed either in school or at home, whereas nearly any Italian parents or teachers reported the same. Thus, more awareness about the importance of addressing sexuality in school and at home is a differential need identified for Spanish adults. It would also be important to further explore parents' and teachers' reasons for why sexuality should not be addressed at school or home and how they think it should be discussed. Furthermore, it is crucial to acknowledge the cultural taboos that prevent parents and teachers from taking advantage of these opportunities and developing their roles (Walker & Milton, 2006), since such taboos are still common in both countries. For example, previous research has shown that Italian students perceive sexuality to be taboo and that both parents and teachers try to avoid engaging in in-depth discussions about sexual matters and do not fully recognize sex as part of their teens' lives (Alloni et al., 2017). Moreover, the low number of parents and teachers who have received training in online security for minors and/or in affective-sexual education for young people can also be challenging and prevent these adults from

feeling ready to discuss these issues with their children or pupils.

This situation is especially relevant for Italian teachers, only a few of whom have received previous training in sexuality education for their pupils. This finding reflects the differences between the two countries; unlike in most European countries, sex education in Italy is not compulsory in the school curriculum. A review conducted in Italy revealed that 12 of 20 regions stipulated at least one sex education program, and geographical differences in the topics and quality of those interventions were observed among the northern, central, and northern regions of Italy (Lo Moro et al., 2023). According to a new national report produced by Save the Children, 32% of boys and girls request emotional and sexual education in lower secondary schools in Italy (Antoniucci et al., 2024). In Spain, sexuality education and the inclusion of gender equality education within teachers' initial teachers training and teacher education were introduced in 2004 with Organic Law 1/2004 of 28 December on Comprehensive Protection Measures against Gender Violence, although in practice, such education has not yet been implemented equally in the country. Further efforts should be made to equip families and teachers with the skills and knowledge necessary to discuss issues related to sexuality education both at home and at school, as these skills and knowledge are still the primarily preferred source of dialogue according to young people (Antoniucci et al., 2024).

Moreover, with regard to pornography, the law that has been in place since 2021, "Ley Orgánica 8/2021, de 4 de junio, de protección integral a la infancia y la adolescencia frente a la violencia" (BOE, 2004), aims to protect children and adolescents from sexual violence. The objective of this law is to promote the responsible and safe use of the internet and to raise awareness of the risks associated with inappropriate internet use that can lead to sexual violence against children and adolescents, such as the consumption of pornography among minors. In this context, the law emphasizes the promotion of education and awareness-raising activities targeted at both minors and relevant adults (BOE, 2004).

Incorporating social, emotional, and relational aspects of sex, such as consent, pleasure, self-care, and communication, into sexuality education and thus moving beyond the discussion of sexual-related risks is crucial for young people (Astle et al., 2021; Evans et al., 2020; Fields & Tolman, 2006; Hancock & Barker, 2018; Waling et al., 2020). Both the parents and teachers included in our study highlighted the need for training in these areas. Enhancing the capacity of parents and teachers to address these topics is vital for the task of promoting healthy and egalitarian relationships among young people. Specialized teachers who are comfortable discussing these matters are a recurring request from adolescents (Astle et al., 2021; Sex Education Forum, 2023). Effective communication concerning sexual topics

is also enhanced when young people perceive their parents to be knowledgeable (Turnbull et al., 2008, 2013). Importantly, uncertainty and embarrassment may emerge when adults attempt to engage in these discussions with children or pupils since the role of a sexual educator often involves the exploration of new territories (Walker & Milton, 2006). Nevertheless, it is necessary to enhance the sexuality education provided to young people to prevent them from engaging in nonconsensual relationships in the future (Ballester et al., 2020). Finally, as discussed by Albury (2014), it is crucial that other areas of the school curriculum challenge gender inequality; if this is not incorporated transversally, it is unlikely that a sexuality education program will promote significant change.

Limitations and Future Directions

Regarding the limitations of this research, importantly, the sample size is not representative of the parents and teachers in the countries assessed. However, this difficulty with regard to obtaining data may be the result of the sensitivity and taboo effect associated with these topics in the contexts under investigation. Also, it is important to mention that adults' perceptions do not necessarily reflect the youth's realities. Thus, further research is needed, that includes information from youth, to compare both adults' and minors' perceptions, following the actor-partner interdependence model (APIM) method. Additionally, the higher female participation obtained in the sample on which this research relies conditioned the comparisons by gender, which is typical for most studies concerning attempts to raise such issues. Simultaneously, this characteristic may be a clear indicator of the fact that this issue is more relevant for female parents and/or teachers than for male parents and/or teachers, a situation which in turn perpetuates gender stereotypes. In addition, the use of an ad hoc questionnaire may also represent a limitation of this research, although this issue could be due to the lack of validated instruments for assessing these topics. In this sense, we hope that our study can promote further research on cross-cultural differences and inspire more extensive mapping of the specific needs of the adult population in terms of their knowledge, attitudes, awareness, and readiness to address the topics under investigation.

Conclusions

Several conclusions and policy implications can be derived from our results. First, our study highlights the significance of assessing the needs, challenges, and readiness of parents and teachers with the goal of enhancing their ability to engage in discussions about sexuality with their pupils and

children. This approach is critical, as prior research has consistently reported that children are dissatisfied with the sexuality education programs in which they have participated (Astle et al., 2021; Biota et al., 2022; Drago et al., 2016). Second, it is important for sexuality education programs to be based on co-production approaches that allow knowledge regarding gender, sex, and relationships to be integrated by young people more meaningfully (Sell et al., 2023). Finally, we concur with Walker and Milton (2006) regarding the necessity of developing child-focused sexuality education programs that involve both parents and teachers and that extend beyond an adult-centered agenda.

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Author Contribution BVC conceptualized the study and obtained funding for the study development; BVC, JGM, ELLLS, and LB collected the data; JGM analyzed the data, and wrote the methods and results section of the manuscript; BVC and ELLLS wrote the introduction and discussion sections; BAM, JLS, LB, and AP reviewed the manuscript; BVC prepared the final manuscript.

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Data Availability Not applicable.

Code Availability Not applicable.

Declarations

Ethics Approval This research was approved by the Ramon Llull University Ethical Committee, approval number: CER URL_2021_2022_016.

Consent to Participate All participants in this research signed an informed consent form and were informed about the study objectives, design, and publishing actions.

Consent for Publication All participants in this study gave consent to the publication of anonymized data obtained in this project.

Competing Interests The authors declare no competing interests.

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