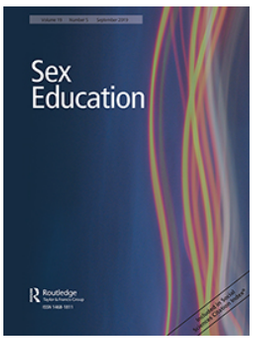

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Sex educators' attitudes and intentions towards using sexually explicit material: an application of the theory of planned behaviour

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ABSTRACT

By means of an online survey, this study investigated factors predicting the intention to use sexually explicit material among 52 sex educators. The online survey was based on the theory of planned behaviour and measured attitudes towards sexually explicit material, subjective norms, perceived behavioural control and the intention to use sexually explicit material when teaching. Multiple linear regression analyses revealed that descriptive norms and absolute obstacles predicted the intention to use sexually explicit material. Multivariate analyses of variance showed that sex educators were more likely to use sexually explicit material in a special education setting than as part of general education. Sex educators who had viewed and discussed sexually explicit material during their professional training had a higher intention to use sexually explicit material than those who had not. These findings may be important elements to consider in the training of sex educators and organising sex education classes.

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Sexually explicit material; use; sexual health professionals; children; sex educators

Introduction

In recent years, there has been increasing interest in the implications of adolescents' exposure to sexually explicit material (Peter and Valkenburg 2010). The term sexually explicit material refers to all kinds of visual representations (videos, pictures, realistic drawings) of nudity including the genitals, or the showing of sexual acts such as anal, oral and vaginal intercourse (Rhoades 2007). Due to sexualisation in the media and in advertisements, young people are increasingly exposed to sexually explicit material (Flood 2007). According to a survey by Puglia and Glowacz (2015), in Belgium 85% of young people between 15 and 19 years old have already seen sexually explicit material, with 20% of them doing so involuntarily (Mitchell, Finkelhor, and Wolak 2001). This high rate of exposure results from the fact that sexually explicit material is easily accessible, affordable and anonymous (Cooper 1998). Whereas before the existence of the Internet encountering sexually explicit material was often a deliberate act of choice, this is no longer the case (Puglia and Glowacz 2015).

Sexual curiosity is a normal part of an adolescents' and young people's development (Braun-Courville and Rojas 2009; Neinstein 2008) and the Internet offers the possibility to

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search for information and images in a private and discreet way (Braun-Courville and Rojas 2009). Next to peers and parents, the Internet is reported to be a main source of information and education on issues relevant to sexual health (Horvath et al. 2013). Around 30% of adolescents in New York (Borzekowski and Rickert 2001), 51% in the UK (Powell 2008) and 68% in Spain (González-Ortega et al. 2015) reportedly use the web for information about sex. The main reasons for looking for sexually explicit material are to satisfy curiosity, obtain information about sexual techniques and find detailed images of the genitalia or of sexual acts (Albury 2014; Bragg 2006; Kubicek et al. 2010). Other motives are to find stimuli for sexual arousal and masturbation (Horvath et al. 2013), to comply to normative gender expectations and to display sexual knowledge to peers (Allen 2011). Men use sexually explicit material more often than women (González-Ortega et al. 2015; Lou et al. 2012).

However, the quality and the adequacy of the information on sexuality that is offered on the Internet is often questionable, misleading or inaccurate. Moreover, the images of sexual activity shown in the media are often unrealistic. As young adults may lack the necessary real-life experience to put these images into perspective, viewing sexually explicit material may lead to the adoption of unrealistic attitudes and expectations or to destructive behaviours (Braun-Courville and Rojas 2009; Ward 2003). It has been demonstrated, for instance, that the frequent viewing of sexually explicit material is associated with more aggressive sexual behaviour (Malamuth and Check 1985), more aggressive views towards women (McKee et al. 2010) and a higher acceptance of the belief that rape victims are partially responsible for being raped (Allen et al. 1995). Viewing sexually explicit material has also been shown to influence women's perceived norms with regard to the grooming of pubic hair (Fitzpatrick 2007) and has been associated with more negative attitudes toward condom use (Wingood et al. 2001), although the latter finding is not always confirmed (Braun-Courville and Rojas 2009; Ybarra, Strasburger, and Mitchell 2014). Alternatively, the excessive viewing of sexually explicit material can lead to habituation or desensitisation and to the banalisation of sexual stereotypes (Duquet 2013). Several authors (e.g. Weaver, Masland, and Zillmann 1984: Peter and Valkenburg 2009) have reported that more frequent exposure to sexually explicit material reduces adolescents' satisfaction with their sex life, negatively influences women's body image (Fitzpatrick 2007), and increased anxiety concerning one's body and physical ability (Marzano and Rozier 2005). On the other hand, there are potential positive effects of sexually explicit material. For instance, greater access to visual information about sexuality and sexual health can diminish anxieties (Brewster and Wylie 2008) or help dispel myths and identify misconceptions (Hawton 1985). These contradictory findings about the effects of viewing sexually explicit material indicate that the relationship between the consumption of sexually explicit material and actual behaviour is not well understood and there is very little research that confirms whether viewing sexually explicit material actually causes consistent changes in sexual beliefs, attitudes or behaviours (Owens et al. 2012; Hald et al. 2013). As people tend to choose media that match their interests, dispositions and experiences (Zillman and Bryant 1985), young people who are interested in sex and who are sexually active may seek out explicit material, while those who are not interested may try to avoid it (Hawk et al. 2006).

Sexually explicit material in sex education

Because it is almost inevitable that young people will encounter sexually explicit material sooner or later, the best way to deal with the potential negative effects may be to put the images and messages into context by integrating them into sex education classes (Allen 2005; Doornwaard et al. 2015). Shoen (2014) suggests that sex education should use the technology that adolescents seek out anyway and use it with an educational purpose. Taking this view further, Christian Graugaard, a sexology professor at Aalborg University, suggested on Danish public television in 2015 that pornography should be shown in schools, arguing that 99% of the boys and 86% of girls in Scandinavia have already seen pornographic material, but lack the skills to view it constructively. By showing porn in class they can become more critical consumers and openly and constructively discussing porn can show them that pornography is not like real sex (Russel 2015).

Sexually explicit material with an educational rather than arousal purpose has existed for several decades, but is not often used (Shoen 2014). Nevertheless, several studies have evaluated the effect of sexually explicit material in sex education and found benefits. Neustifter et al. (2015) found that by showing sexuality-focused entertainment media in sex education, teachers can create an atmosphere for more open discussion about the sorts of questions young people have. Moreover, using sexual media as a basis for discussion and critique can lead to a more comprehensive education. Other studies show that using sexually explicit material makes pupils gain new knowledge, improves their communication skills and raises their awareness (Rhoades 2007). Bragg (2006) found that young people consider media-based materials as more mature and non-patronising than traditional sex education resources. Moreover, the media can show young people different types of naked bodies, which are more natural and inclusive. Showing ordinary, average bodies also provides an alternative for the purely medical, schematic approach to sex education (Moe and Simonsen 2015).

Laws (2013) states that it should be obligatory for schools to provide supportive sex education that actually answers the questions of young people so as to reduce their use of pornography and subsequent risks. But the use of sexually explicit material for educational purposes need not be restricted to schools. One example is the Dokter Corrie Show broadcast on the Dutch NTR channel, which targets a youth audience from 9 years upwards. The show, which was developed with the help of psychologists, sexologists and sexual health workers, takes an open attitude towards sex education and shows real vaginas and penises without taboo, but without being vulgar. The show also talks about the difference between real-life sex and the forms of sexual interaction often shown in pornography (Rutgers n.d.).

While these examples highlight the advantages of using sexually explicit material in sex education, its use remains a controversial issue. Some authors argue that using sexually explicit material may provoke uncomfortable emotional reactions, especially among pupils who had a non-consensual sex experience (Brewster and Wylie 2008; Rhoades 2007). Many questions also remain regarding the circumstances under which sexually explicit material can be used as an educational method. For instance, if sexually explicit material challenges the values and norms of the school in which it is shown, its use may be contested.

Another important issue to be taken into account when using sexually explicit material for sex education is whether the sex educator feels comfortable using such material. Robinson et al. (1996) found that mental health professionals in the USA and the Czech and Slovak Republics generally had a favourable attitude towards sexually explicit material, yet religious conviction was negatively correlated with attitudes towards it. To provide more up-to-date information, the present study takes a closer look at the attitudes towards sexually explicit material and other determinants of the intention to use these materials during sex education classes in Belgium.

Predicting the intention to use sexually explicit material in sex education

To investigate the intention to use sexually explicit material, we drew on the theory of planned behaviour (TPB) (Ajzen 1991). According to this model, the most proximal determinant of a behaviour is the intention of an individual to engage in the behaviour. This intention, in turn, is influenced by three key determinants: (1) the person's attitude towards the behaviour, based on the perceived advantages and disadvantages that lead to a positive or negative evaluation of the behaviour; (2) subjective norms, which refer to the perceived judgement of significant others (e.g. friends, family, colleagues) about the behaviour and the motivation to comply with this norm; and (3) perceived behavioural control, which refers to the perceived ease or difficulty to perform the behaviour, including perceived obstacles or facilitating factors.

The theory of planned behaviour has been successfully applied to predict a variety of behaviours, including participation in health screening, alcohol consumption, condom use, healthy eating and physical activity (Armitage and Conner 2001). The present study investigated whether the key variables included in the theory predict the intention of sex health professionals to use sexually explicit material during a sex education class. It was assumed that, apart from personal attitudes, perceived behavioural control and subjective norms might also influence the intention to use sexually explicit material. In view of the findings of Robinson et al. (1996), we also investigated the impact of religion, age and received education on the intention to use sexually explicit material.

Method

Measures

To assess the intention to use sexually explicit material in sex education and its determinants, a questionnaire was developed based on theory of planned behaviour constructs following the recommendations of Ajzen (1991) and Francis et al. (2004). The questionnaire consisted of 56 items measuring respondents' use of sexually explicit material for sex education purposes, the reactions of pupils to sexually explicit material and the three components of the theory of planned behaviour, as well as demographic and professional characteristics.

The use of different types of sexually explicit material (videos, photos and realistic drawings), the intention to use sexually explicit material, and the pupils' reactions to it were measured via 3 items. One item measured the use of sexually explicit material on a 5-point Likert-scale ranging from 'never' to 'at every intervention' ('have you already

used sexually explicit material during an intervention?'). Intention to use sexually explicit material was measured with 1 item rated on a 5-point Likert-scale ranging from '1 = not at all' to '5 = certainly' ('if you're not using sexually explicit material already, do you intend to do so?/do you intend to continue using sexually explicit material?'). The reaction of pupils to sexually explicit material was assessed via a single item scored via a 5-point Likert scale ranging from 'very negative' to 'very positive'.

Attitudes, subjective norms and perceived behavioural control towards sexually explicit material were measured with 35 items scored on 5-point Likert scales ranging from 1 = 'strongly disagree' to 5 = 'strongly agree' and coded so that high values indicated high levels on the variable of interest.

Attitudes towards sexually explicit material were measured using 9 items assessing perceived advantages (e.g. 'the use of sexually explicit material can lead to an open discussion' and 'the use of sexually explicit material can improve the impression that the youth have of their body') and 4 items assessing perceived disadvantages (e.g. 'the use of sexually explicit material can shock the audience' and 'the use of sexually explicit material can provoke negative reactions by the parents/institution/teachers').

Subjective norms were measured via 7 items, four of which assessed if (in the respondents' opinion) their colleagues, the institution or the pupils' parents found it acceptable to use sexually explicit material (e.g. 'In your opinion, most of your colleagues find it acceptable to use sexually explicit material') and 3 items asking the degree to which it was considered important to take these opinions into account (e.g. 'Regarding your work, what your colleagues think you should do, matters to you').

Perceived behavioural control was measured with 15 items, 10 of which measured perceived barriers (e.g. 'I don't know where to find sexually explicit material', 'using sexually explicit material is not appropriate during the intervention'); 3 items assessed the facilitating factors (e.g. 'Internet with its multiple web sites, facilitates the use of sexually explicit material'); one item assessed self-efficacy ('for me using sexually explicit material is easy'); and 1 item controllability ('the decision to use sexually explicit material is entirely up to me').

Perceived advantages and disadvantages, as well as perceived barriers and facilitating factors, were randomly mixed in the questionnaire to counterbalance potential response bias.

The questionnaire was pre-tested for ease of response and then transferred to an online platform using LimeSurvey. At the end of the questionnaire, participants were given the possibility to write down other perceived advantages, disadvantages, obstacles and facilitating factors that had not been mentioned in the questionnaire.

Participants

In Belgium, responsibility for sex education is situated at the level of the devolved regions. Despite the guidance provided by the government of the Walloon Region and by the Commission of the French Community in the Brussels Capital Region regarding the topics that must be taught, there remains a large degree of freedom in the way the sex education is organised and the materials used (Féderation Wallonie Bruxelles 2014). To take account of these differences, every planned parenthood centre (planning familial) and health promotion centre (centre de promotion de la santé) in the French speaking region of Belgium was contacted by mail, with a description of the study and a link to the online survey. In total, 110 centres were contacted. 52 individuals

completed the survey. The mean age of the participants was 36,13 years (*SD* = 8,48). The majority (86,5%) were women. The sample was mainly composed of psychologists and social workers (30% and 58%); 25% of the participants had a certificate in sexology. With regard to religious affiliation, 34% were Christians, 48% Atheists, 6% Buddhists and 12% others. The main age range of the audience to whom sexually explicit material were shown was between 15 and 16 years old, with 19% being older than 18 years.

Statistical analysis

Data were analysed using SPSS Statistics version 23 (Field 2013). Data were first examined for missing values and outliers. Participants who did not complete the full survey were excluded. Negatively phrased items were recoded.

To verify whether the questionnaire measured the dimensions of the theory of planned behaviour, a principal components analysis was performed on each set of items intended to measure a dimension (Jolliffe 2002). To verify if the data was suitable for a such an analysis, sampling adequacy was measured with the Kaiser-Meyer-Olkin test. Bartlett's test of sphericity was done to check if the data were suitable for a reduction. To decide how many components should be extracted for rotation, eigenvalues greater than 1 and scree test criteria were applied. Following a Varimax rotation, subscales were constructed by assigning items to the rotated component on which they had the highest loading, excluding items with a loading lower than .40 or a small difference between the loading on two or more components.

The internal consistency of the different scales was tested using Cronbach's alpha. The residuals were examined on normality, heteroscedasticity and independence. The normality of the data was verified with a QQ-Plot. Linearity between the predictors and the outcome variable was investigated as well as collinearity between the predictors.

To evaluate if the different scales could predict intention, as presumed by the theory of planned behaviour, multiple regression analyses were conducted. F-tests and t-tests were calculated.

Results

Item analysis

When entering items that were supposed to measure attitudes, two components were retained for rotation, accounting together for 65% of the total variance. No item needed to be excluded. The subscales were labelled 'perceived advantages' ($N = 9$; $\alpha = .92$) and 'perceived disadvantages' ($N = 4$; $\alpha = .78$). The principal components analysis for subjective norms revealed two components: four items loading on 'descriptive norms' ($\alpha = .92$) and three items loading on 'motivation to comply' ($\alpha = .38$) explaining jointly 67% of the total variance. Even after excluding one item, the scale for 'motivation to comply' did not achieve a sufficient level of internal consistency and was therefore not included in the further analyses. For perceived behavioural control, only the item measuring controllability was kept for further analysis. For the items measuring the perceived obstacles and facilitating factors, three components were extracted which together explained 69% of the total variance. Two items loaded on a component

labelled 'perceived facilitating factors' (α = .54), three items referring to obstacles that depended on the circumstances loaded on a component labelled 'occasional obstacles' (α = .58) and four items on a component labelled 'absolute obstacles' (α = .88), which grouped together items that stated the use of sexually explicit material was not appropriate regardless of the circumstances. Only the scale 'occasional obstacles' was kept for further analysis as Cronbach's alpha was too low for the others.

Descriptive findings

Less than half of the participants (40%) had used sexually explicit material during a sex education session. Most of the participants (68%) considered the reaction of the audience as positive to very positive. Only 4% said that the reaction of the audience was very negative to negative. Comparing different types of sexually explicit material (videos, photos and realistic drawings), it appeared that the realistic drawings are most often used (64%), while photos (19%) and videos (16%) are less often used. All participants who used sexually explicit material did so during a sex education session, nobody recommended its use at home. In general, for both groups' (those who had and those who had not used it), own feelings towards sexually explicit material were moderately positive (M = 3.42, SD = 1.13). Approximately 30% of the participants had negative feelings towards sexually explicit material, 15% had neutral feelings, 34% had positive feelings and 19% had very positive feelings.

Predicting the use of sexually explicit material

A multiple linear regression analysis predicting intention to use sexually explicit material during an intervention based on the different scales extracted from the principal components analysis (advantages, disadvantages, descriptive norms, absolute obstacles and controllability) produced a significant regression equation explaining 80% of the variance (R^2 = .80, adj.R^2 = .77, $F(5,46)$ = 36,070, $p < .001$) (Table 1). Descriptive norms (β = .27, p = .037) and absolute obstacles (β = .52, $p < .001$) significantly predicted the intention to use sexually explicit material. The other scales were not significant. The intention to use sexually explicit material could explain 66% of the variance of actually using sexually explicit material (R^2 = .66, adj.R^2 = .65, $F(1,50)$ = 96,120, $p < .001$).

A series of multivariate analyses of variance (MANOVA) and a multivariate analysis of covariance (MANCOVA) were conducted to compare the effect of religion (Catholics versus agnostics), training (psychologists versus social workers), type of education where

Table 1. Multiple regression predicting the intention to use sexually explicit material.

Dependent Variable	β	p
Disadvantages	-,005	,957
Advantages	,179	,136
Descriptive norms	,267	,037
Absolute obstacles	,518	,000
Controllability	,038	,605
R^2	.80	

sex education was taught and sexually explicit material being included in the curriculum of the professionals, on different dependent variables (advantages, disadvantages, descriptive norms, controllability, absolute obstacles, actual behaviour and intention to use sexually explicit material). To account for multiple ANOVAs, alpha correction of the significance level was applied.

The MANCOVA for religion showed no significant difference when controlling for practice (F (6, 43) = 1.322, p = .27; Wilk's Λ = .84, partial η2 = .16). There was also no significant difference between social workers and psychologists regarding the different scales (F (5, 43) = 1.322, p = .39; Wilk's Λ = .88, partial η2 = .12). The different types of education (normal education, special education and professional education) were entered in a multiple regression with the intention to use sexually explicit material as the dependent variable. Only special education showed a significant correlation and afterwards entered in to a MANOVA. There was a statistically significant difference between general education and special education for all scales, F (5, 38) = 1.078, p = .04; Wilk's Λ = 0.79, partial η2 = .21 (Table 2). Participants who give sex education in special education classes had a significant higher intention to use sexually explicit material, perceived more advantages and less disadvantages, were more convinced that their colleagues/institution/the pupils' parents find it acceptable to use sexually explicit material and perceived fewer obstacles compared to those who teach sexual education in general education classes.

A MANOVA comparing those who had never been exposed to sexually explicit material during their professional training and those who had seen and discussed sexually explicit material revealed a significant difference for all scales, F (10, 90) = 4.218, p < .0005; Wilk's Λ = 0.46, partial η2 = .32 (Table 3). Participants who had seen and discussed sexually explicit material during their professional training had a significant higher intention to use sexually explicit material, perceived fewer disadvantages, were more convinced that their colleagues/institution/the pupils' parents find it acceptable to use sexually explicit material and perceived fewer obstacles compared to those who had never encountered sexually explicit material during their training. Age and intention to use sexually explicit material were not statistically significantly correlated (r = .13, p = n.s.). Own emotion towards sexually explicit material significantly predicted the intention to use explicit materials (R^2 = .69, adj.R^2 = .68, F(1,50) = 110,648, p < .001), more positive feelings towards sexually explicit material leading to a higher intention to use sexually explicit material. Gender differences could not be assessed, because the male sample was too small in comparison to the female one.

Table 2. Multivariate analysis of variance for the audience.

	General education			Special education				
		95% Confidence Interval			95% Confidence Interval			
	Mean	Lower Bound	Upper Bound	Mean	Lower Bound	Upper Bound	F	p
Advantages	3.03	2.66	3.41	3.55	3.24	3.87	4.527	.038
Disadvantages	1.93	1.65	2.21	2.55	2.32	2.80	11.396	.001
Descriptive Norms	2.53	2.05	3.02	3.30	2.89	3.71	5.855	.019
Absolute obstacles	2.92	2.48	3.36	3.62	3.25	4.00	5.998	.018
Intention to use sexually explicit material	2.90	2.30	3.52	3.96	3.45	4.49	7.043	.011

Table 3. Multivariate analysis of variance for the exposition to sexually explicit material during the curriculum.

	No exposure			Viewed and discussed				
		95% Confidence Interval			95% Confidence Interval			
	Mean	Lower Bound	Upper Bound	Mean	Lower Bound	Upper Bound	*F*	*p*
Advantages	2.96	2.49	3.42	3.60	3.26	3.93	2.771	.072
Disadvantages	2.08	1.74	2.43	2.62	2.37	2.86	8.180	.001
Descriptive Norms	2.41	1.85	2.96	3.54	3.14	3.94	8.533	.001
Absolute obstacles	2.73	2.21	3.24	3.81	3.44	4.18	7.309	.002
Intention to use sexually explicit material	2.64	1.98	3.30	4.37	3.89	4.84	13.446	.000

Discussion

The purpose of this study was to identify factors that predict the intention of sexual health professionals to use sexually explicit material for sex education purposes, using the theory of planned behaviour. To the best of our knowledge, this is only the second study to investigate factors determining the intention of sexual health professionals to use sexually explicit material during sex education classes and the first to use a theoretical model to identify these determinants.

Our findings indicate that while sexual health professionals in Belgium overall had a positive attitude towards sexually explicit material, only 60% of them had used sexually explicit material for sex education purposes. Participants who provided sex education in special education had a significantly higher intention to use sexually explicit material, perceived more advantages and fewer disadvantages, were more convinced that their colleagues that their institution or the pupils' parents would find it acceptable to use sexually explicit material and perceived less obstacles compared to those who teach sexual education in general education. The different dimensions of the theory of planned behaviour predicted 80% of the variance in the intention to use sexually explicit material. The strongest predictors were practical obstacles, followed by descriptive norms. Advantages, disadvantages and controllability did not significantly influence the intention.

A major obstacle to the use of sexually explicit material is the problem of accessing good quality materials. As mentioned above, young people who want to find reliable educational materials often have trouble accessing them (Smith et al. 2000). In the same way, professionals may also have difficulty finding the right material. While performing this research, we ourselves found it difficult to find material that was still up-to-date. Most videos date from several years or even decades ago and do not correspond to the reality of teenagers' life today. Small features like the kind of clothes that are worn, the type of multimedia used, or the way actors speak, can make teaching materials become outdated. Therefore, better quality materials should be produced both for professionals and for youth. Moreover, while most educational websites for adolescents are explicit with regard to descriptions of sexuality few include sexually explicit visual material in form of videos or photos. Consequently, it is difficult to offer young people alternatives to pornography.

Another obstacle that was mentioned in the qualitative responses to the questionnaire was the fact that sex educators often do not know the group to whom they will give the class and meet the group only once during a particular programme. It is therefore difficult for them to get a sense of group dynamics and sensitivity, which makes it difficult to evaluate whether material is appropriate. It is can be difficult to create an atmosphere of trust in a group that only meets for a short time, whereas an educator needs to feel comfortable with the group to be confident enough to show sexually explicit material.

Descriptive norms were found to be the second most important factor influencing the intention to use sexually explicit material for educational purposes. Professionals were aware that the use of sexually explicit material is not generally accepted, which makes them cautious to use this material. General opinions towards sexual education are not always positive, as parents, teachers or institutions are not always aware of what will be shown and discussed during sex education classes. Although it is generally accepted that the best way to develop a healthy sexual life is to talk openly and honestly and be thoroughly taught about it (World Health Organization 2002), parents sometimes try to 'protect' their children from viewing sexual material for fear that it may be harmful or will trigger premature sexual activity (Janković, Malatestinić, and Benčević Striehl 2013).

In contrast to the findings of Robinson et al. (1996), in this study religion exerted no significant influence on the attitudes of professionals towards sexually explicit material. One possible explanation for this is that our sample was not representative of the general population, but comprised professionals working in the field of sexuality. Another explanation may derive from the fact that only 15% of our sample reported practising a religion. In a similar vein, age was not significantly correlated with the intention to use sexually explicit material, while previous studies (Robinson et al. 1996) found that older participants held more negative attitudes towards sexually explicit material. With an average of 36 years, our sample was quite young, which may explain this lack of difference between age groups. Finally, while previous studies found a difference in attitude towards sexually explicit material between participants according to their level of education (Diamond and Dannemiller 1989), it was not possible to test this hypothesis, as all our participants had at least a higher education degree.

On the other hand, our study showed that type of audience had a major influence on the intention to use sexually explicit material. Mechling (2005) found in her literature review that using instructor-created video programmes when teaching individuals with disabilities was effective, as they were able to acquire certain skills (e.g. social communication, transitioning, grooming, self-determination) through observational learning and the imitation of the observed behaviours. Literature on the use of multimedia material for sex education is scarce, especially for children with disabilities. In one of the few published studies on this topic (Brewster and Wylie 2008) it was found that for children with learning disabilities, clear and unambiguous illustrations of the human body and sexual relationship are needed to help children learn and understand, develop good personal relationships and learn about protective behaviours. Concrete examples in form of videos, photographs or realistic drawings can therefore help to make the content more comprehensible.

A significant difference was found for intention to use sexually explicit material between participants who had seen and discussed sexually explicit material during their training and those who never had seen it. It is possible that those who had never encountered this kind

of material are afraid of the unknown and do not know how to integrate it into the class. This assumption is supported by the responses to qualitative questions of our study, where participants stated that they do not feel sufficiently informed to use explicit material. To tackle this problem, including sexually explicit material in the training of sex educators could diminish these barriers and encourage them to use it. An example of this is provided by Calderwood (1981), who developed SURE, a self-evaluation, unlearning, relearning and exercise. Besides the need to help educators to self-examine knowledge and attitudes, an important aspect of this method is identifying what needs to be 'unlearned'. If an aspiring sex educator finds sexually explicit material offensive, it is important to consider the implications this may have for their way of teaching as the present study showed that own emotion predicted the use of sexually explicit material. In line with the Sexual Attitude Reassessment model (Stayton 1998), sex educators should experience viewing sexually explicit material themselves.

Limitations

While this study shines light on the use of sexually explicit material for educational purposes in Belgium and on the determinants of professionals' intention to use such materials, one should be aware of its limitations. First, the study was limited to one language community in one (small) country. It is therefore difficult to generalise the findings to the broader community of professional sex educators. Moreover, as the content and format of sex education differs from one country to another, it would be interesting to compare intention to use sexually explicit material between professionals from different countries. The sample in this study was predominantly female, which further reduces generalisability. Finally, some of the literature sources on which the study built were relatively old. Given the speed with which Internet use has grown over the past decade, the accessibility of sexually explicit material has changed rapidly in a very short time. In addition, society has become generally more sexualised. As a result, it is difficult to compare the findings of this study with those of previous investigations, which often date back a long time.

Conclusion

Despite the above limitations, this study provides empirical information regarding a controversial topic. Importantly, our findings show that the use of sexually explicit material for sex education depends less on educators' attitudes, which are predominantly positive, or on religious beliefs, but more on concrete obstacles such as the lack of suitable materials or the limited time spent with the group and on perceived social norms. These findings are important to consider in the future training of sex educators and the organisation of sex education classes.

Disclosure statement

No potential conflict of interest was reported by the authors.

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