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Detection and reporting potential child and youth victimization cases from school: The role of knowledge

Ana M. Greco*, Noemí Pereda, Georgina Guilera

Universitat de Barcelona, Spain

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ABSTRACT

Knowledge of child victimization among school staff is believed to affect the detection and reporting of potential cases in the school environment, but the current evidence is scarce and contradictory. We assessed the link between knowledge of victimization and other relevant reporter characteristics in detecting and reporting children suspected to be victims of violence in a sample of 184 school staff members from Spain (84.02% females, $M = 43.40$, $SD = 10.37$). We compared participants who had never detected nor reported any cases (i.e., non-detectors) with participants who had detected but not reported outside school (i.e., inconsistent reporters) and participants who had detected and reported at least one potential case (i.e., consistent reporters). Knowledge about the reporting procedures varied significantly across groups. Years of experience was the only variable to significantly predict having detected at least one case across job experience. Knowing whether a report can be made anonymously or without the principal's consent was significant to predict the likelihood of being a consistent reporter, along with hours spent daily in contact with students. Trainings for school staff should be aware of what specific aspects of knowledge tend to increase detection and reporting. Interventions should include more specific guidelines and ways of recreating experience (e.g., role-playing, virtual scenarios) as an effective strategy to respond to cases of potential victimization encountered at school.

1. Introduction

1.1. Detection and reporting victimization from school

Childhood victimization, defined by Finkelhor (2008, p. 23) as "harm that comes to individuals because other human actors have behaved in ways that violate social norms" affects a large proportion of our population (Hillis et al., 2016). It may have devastating effects in terms of development delay, affecting school performance (Veltman & Browne, 2001) but also in mental health, as it has been linked to psychiatric disorders such as anxiety or post-traumatic stress disorder (Carvalho et al., 2016). Long-lasting consequences for victims' health have also been reported (Gilbert et al., 2008), such as an increased risk of developing diabetes (Widom et al., 2012). Children who suffered violence are also more likely to experience other types of violence over the course of the lifespan (Finkelhor et al., 2007), making it hard for them to integrate into the community (Turner et al., 2006).

However, studies conducted in different countries (see Finkelhor, Ormrod, Turner, & Holt, 2009), and reports by official agencies (World Health Organization, 2013) warn that between 80% and 90% of cases of child and youth victimization are not reported to the public services and authorities tasked with helping victims. This situation prevents children and adolescents at risk from receiving the support they need, extends the victimization they are currently experiencing, and increases the risk that they will be subjected to further victimization in the future (Finkelhor et al., 2009).

Schools are ideal environments for providing children and youth victims with a source of support (Gilbert et al., 2008), mainly because most children and adolescents spend an important part of their lives at school. Besides, the structure of the school institution gives adults in this context multiple opportunities to observe indicators of exposure to violence such as sudden poor performance on a standardized test, absenteeism (Fry et al., 2018) or aggressive interactions towards peers or teachers (Becker et al., 2014). This is why school staff in several countries are mandated to report any situations of potential risk of violence (including being physically maltreated, neglected, or sexually assaulted by adults or peers in any context) to the immediate authorities. This duty is difficult to fulfill since most children tend not to disclose instances of victimization to adults during their childhood, because of a lack of trust in adults or authorities, a sense of loyalty

* Corresponding author at: Departament de Psicologia Social i Quantitativa, Facultat de Psicologia, Universitat de Barcelona, Passeig Vall d'Hebron, 171, 08035 Barcelona, Spain.
E-mail address: anmgreco@ub.edu (A.M. Greco).

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toward their abuser, fear of being disbelieved, hopelessness, self-blame or the normalization of the violence experienced (Jernbro et al., 2017). However, in a study of 2500 adults, over 45% of the participants who had suffered some kind of victimization declared having disclosed it to a teacher, a counselor, or a member of the school health staff (Cater et al., 2016). In another study, adult victims expressed regret that their teachers did not reach out for them more (Buckley et al., 2007).

The percentage of potential victimization cases that are reported to child welfare services from the educational context seems to mirror the challenge that educators face when confronted with suspected victimization and their duty to report. In the US, 16.5% of cases reported come from the school setting, and in Australia, 15% (Goebbels, Nicholson, Walsh, & De Vries, 2008). In European countries like Spain (Cerezo and Pons-Salvador, 2004), Greece (Bibou-Nakou and Markos, 2017), and the UK (Cleaver & Walker, 2004) these rates are also between 10% and 18%. In countries where reporting rates from school are higher, such as Canada (36%, King & Scott, 2014) or Belgium (38%, Brussel Vertrouwenscentrum Kindermishandeling, 2016), there is usually a problem of substantiation (Kesner & Robinson, 2002). Even when not all suspected cases are expected to reach an external agency outside school, the proportion of cases that go underreported seems concerning, especially among educators in charge of young children (Choo, Walsh, Chinna, & Tey, 2013; Dinehart & Kenny, 2015; Feng, Huang, & Wang, 2010). A matter of particular concern this year is that agencies are seeing a dramatic reduction in reporting since the closure of schools due to COVID-19 (Baron et al., 2020).

Considering the complex dynamics that intervene in children and youth victimization and the tendency of victims to remain silent about these experiences (Jernbro et al., 2017) it is very hard for school staff members to effectively detect and report potential cases. These difficulties may have two consequences: a) students who are experiencing or at risk of victimization may not be effectively identified; or b) these concerns may not be reported to any service or authority, even though they suspect that victimization may occur. Some studies have found that most school staff never detected a potential case (e.g., 85% out of 2017 pre-school teachers in Svensson et al., 2015), while others found that over half of their respondents had detected and consistently reported at least one case over the course of their career (e.g., 55% out of 353 elementary school teachers in Goebbels et al., 2008). Finally, there is also evidence that a considerable proportion fail to make a report even when they are concerned about a student (e.g., 11% in Feng et al., 2010).

1.2. The role of knowledge

As suggested by previous studies, both detection and reporting potential victims of violence may be influenced by school staff members' knowledge of victimization (Álvarez, Kenny, Donohue, & Carpin, 2004). A recent review (Alazri and Hanna, 2020) found that insufficient knowledge about specific types of victimization, such as the signs for correctly identifying neglect or emotional abuse, prevented school personnel from making reports. A lack of familiarity with reporting procedures in terms of the consequences for the reporter (van Bergeijk & Sarmiento, 2006) and for the child has also been consistently cited as a barrier to reporting (Dinehart & Kenny, 2015; Feng et al., 2010). Another common reason for not reporting which is mentioned by school staff is their unawareness of the child protection system procedures or concern about its possible interventions (Bibou-Nakou & Markos, 2017; Hurtado, Katz, Ciro, & Guttfreund, 2013).

Most studies of school staff members' knowledge of different types of child victimization, such as physical abuse and/or neglect (Walsh & Farrell, 2008), sexual abuse (Márquez et al., 2016) and peer victimization (Edwards et al, 2019) have found low levels of knowledge that may explain their problems in detection and reporting. These deficiencies have been found among school professionals of all kinds: early caregivers (Dinehart & Kenny, 2015), pre-school teachers (Svensson et al. 2015), elementary school teachers (Goebbels et al., 2008) and school staff in general (Edwards et al., 2017), in very different cultures (see, for example, AlBuhairan et al., 2011 in Saudi Arabia).

However, some research argues that this population's knowledge of victimization is quite high (Edwards et al., 2019). Besides, there is evidence that school staff members' decisions to act on a suspicion by reporting it to services outside school depends not only on reporters' knowledge, but on the case and system characteristics (Alazri and Hanna, 2020). Some authors have even argued that increased knowledge might have little effect on disclosures, detection or reporting (Barron & Topping, 2010).

In sum, findings regarding the level of school staff's knowledge of children and youth victimization and its effects on detection and reporting are inconsistent and question the presence of a relationship between these two variables. Few studies report a relationship (with the exception of Bibou-Nakou & Markos, 2017; Webster, O'Toole, O'Toole, & Lucal, 2005), and several have only considered one specific type of violence, such as child sexual abuse (Hurtado et al., 2013; Márquez et al., 2016) or dating violence (Edwards et al., 2019).

1.3. The role of other reporter characteristics

Among the many variables studied in a recent review of 16 articles, Alazri and Hanna, 2020 highlighted several reporter characteristics that influence reporting: having received training, years of professional experience, feelings such as self-confidence, fear or uncertainty, and the link with other resources within the school (e.g., the support provided by a reference person or clear guidelines and protocols for making reports).

In terms of experience, most studies have found that participants who receive training about child victimization tend to report more (Bryant & Baldwin, 2010; Cerezo and Pons-Salvador, 2004). Although a similar positive correlation has been found between reporting and years of experience (Dinehart & Kenny, 2015), the association was not statistically significant in all studies (Alazri and Hanna, 2020).

Another variable that affects detection and reporting behaviors seems to be the confidence in one's ability to carry out a report plan (Goebbels et al, 2008), which significantly predicts intention to report, even in difficult cases (Feng et al., 2010). The support of staff specialized in reporting children at risk in the school environment (e.g., school counsellors) has also been found to affect the decision to report (Bryant & Baldwin, 2010).

Goebbels et al. (2008) explored how these characteristics varied among teachers who had never suspected any cases of child abuse or neglect among their students (i.e., non-detectors), teachers who had suspected but failed to report at least one case (i.e., inconsistent reporters) and teachers who systematically reported their suspicions of students being victimized (i.e., consistent reporters). They found that non-detectors had significantly lower levels of qualification and less years of experience, and had significantly lower levels of self-confidence than the other two groups. The likelihood of being a consistent reporter could only be predicted by having a clear action plan. That study proposed a synthesis of the complex picture of deterrents to report found in previous research. Goebbels et al. (2008) research was the inspiration for the present study, with the difference that we included the level of knowledge as potential predictor of detection and reporting and extend the participation to all school staff in contact with children.

1.4. Purpose of the present study

The aim of the present study is to explore the relationship between school staff members' level of knowledge of all kinds of victimization and their experience of detecting and reporting. We also aim to compare the effect of knowledge with the potential influence of other reporter characteristics. The findings may guide future interventions through achieving a deeper understanding of the effect of knowledge in

the recognition of potential cases of victimization and the decision to contact external sources of support.

The research questions and hypothesis that guided this study were:

(1) Does the level of knowledge vary between school staff that have never detected any potential cases (i.e., non-detectors), staff that have detected instances but decided not to report their suspicions (i.e., inconsistent reporters) and staff that have detected and reported at least one case at some point in their careers (i.e., consistent reporters)? This categorization was based on previous literature (Goebbels et al., 2008). Considering that in previous studies knowledge was significantly associated with identifying and reporting potential cases (Dinehart & Kenny, 2015; Hurtado et al., 2013; Webster et al., 2005), we expected that higher levels of knowledge would be found among consistent reporters.
(2) Is the level of knowledge relevant to predict a staff member's classification as a non-detector, inconsistent reporter or consistent reporter, even when controlling for other relevant reporter characteristics? Given the complex picture described in the literature, we expected that certain variables like having received training (Mathews et al., 2017) or confidence in one's ability to deal with detection and reporting (Feng et al., 2010; Goebbels et al., 2008) might predict the experience of detection and reporting more strongly than knowledge.

2. Methods

2.1. Participants

2.1.1. Sampling strategy

Assuming maximal heterogeneity and a confidence interval of 95%, a sample size of 386 participants was deemed necessary to achieve representativity. Expecting between 10 and 12 participants per school, 38 schools were then randomly selected and invited to participate. All schools from the city of Barcelona in Spain were stratified by district and type of funding (i.e., publicly funded, private, or semi-private) and a one-stage cluster sampling strategy was used, maintaining proportionality in terms of the type and number of schools per district. From the 38 schools invited, 18 (47%) accepted. Schools that rejected to participate was mostly due to time constraints and other responsibilities overlapping with the study collaboration. A total of 184 staff members at these schools filled in a self-administered questionnaire. The total number of schools invited and those that participated per city district may be consulted in the supplementary material (Table A1).

2.1.2. Sample

The final sample comprised 184 school staff members aged between 22 and 64 years old (84.04% females, $M = 43.40$, $SD = 10.37$). Years of working experience ranged from 0 to 48 years, with a mean of 19.43 ($SD = 10.39$). Most participants were working in elementary school or kindergarten (76.63%), 15.76% worked in middle or high-school and 7.61% at both school levels. Most were teachers who spent over four hours a day in charge of students (51.63%), 28.53% were staff who spent less than four hours a day in charge of students (e.g., monitors or special subject teachers), and 19.61% were special education teachers, psychologists, coordinators or other types of school staff whose functions brought them into contact with the students.

2.2. Instrument

The questionnaire used included a definition of victimization based on Finkelhor's framework (2007) but also considering the mandatory requirements[1] in the context of this research (i.e., *potential or actual harm (psychological or physical) caused by the intentional behavior (whether by action or omission) of individuals or groups of individuals towards someone younger than 18 years old, which interferes or might interfere with their optimal development in the short or the long-term*). It comprised a list of 45 items to measure knowledge and experience on victimization itself, its detection, and its reporting. There was also a section aimed to collect sociodemographic information. The questionnaire was created *ad hoc* for the current study, but it was based on previous work with similar aims (e.g., Dinehart & Kenny, 2015; Hurtado et al., 2013; Mathews et al., 2017) and adapted to the Spanish culture and context. The instrument was pre-tested with three different strategies. We used cognitive interviews ($n = 5$, 100% women, $M = 25.4$ years old, $SD = 1.16$) and focus group ($n = 8$, 75% women, $M = 27.5$ years old, $SD = 5.8$) with the target audience and an expert consulting ($n = 2$, 100% women, $M = 35.5$ years old, $SD = 1.50$) with a specialist in childhood victimization and an expert in methodology of survey studies. The instrument was available in the two official languages (Spanish and Catalan) and in on-line or printed versions to better suit the target population preferences. The measurements used were the following:

2.2.1. Outcomes

2.2.1.1. Detection. Interviewees were asked "How many times during your career have you suspected that a minor might be being victimized?" after being given the definition mentioned above. There were four possible answers ("Never", "Between one and ten times", "Between 11 and 20 times" and "Over 20 times").

2.2.1.2. Reporting. Participants were asked if they had ever reported a suspected case to an external agency during their career. The possible answers were "Yes", "No" and "I never had any suspicions".

2.2.2. Knowledge of victimization, detection and reporting

Items assessing knowledge were 10 statements about victimization (e.g., "Victimization affects less than 10% of children in Spain"), 10 statements about detection (e.g., "Most of the signs regarding child abuse are directly observable") and 10 statements about reporting (e.g., "Reporting a suspicion is legally mandated in Spain"). Participants answered each statement "Yes", "No" or "I don't know".

2.2.3. Other reporter characteristics

2.2.3.1. Training in victimization. Respondents were asked to answer to the item "Have you ever received any kind of training about children and youth victimization?" with the options, "Yes", "No" or "I am not sure about it". Participants answering "Yes" were considered to have been trained, whereas participants that chose any of the other options were considered not to have been trained.

2.2.3.2. Confidence in their ability to recognize victimization. This variable was addressed through two questions considering what has been argued in previous literature (King & Scott, 2014): whether participants considered themselves able to recognize signs in a child of potential victimization, and whether they considered themselves able to recognize the signs in a child's family. Each of these questions could be answered by choosing between "Yes", "No" and "not sure". Participants were grouped according to their responses to each of these items separately (i.e., those who answered "Yes" and those who chose "No" or "not sure").

*2.2.3.3. Reference **person**.* Participants were asked whether if they were able to identify a reference person to talk about suspicions of children victimization within the school framework. Possible answers

[1] Minors' Legal Protection Act of 1996 and the Modification of the Child Protection Services Act of 2015.

were “Yes”, “No” and “not sure”. Only respondents answering “Yes” were considered to have a clear reference point at school.

2.2.3.4. Familiarity with the protocol. Participants were asked if they were aware of a protocol to guide the reporting of suspicion of children and youth victimization at their school. Possible answers were “Yes”/ “No” / “I am not sure”. Respondents answering “Yes” were considered to be aware of the protocol and respondents answering “No” or “not sure” were deemed to be unaware of it.

2.2.3.5. Sociodemographic and professional data. Information on the respondent’s gender, age, role in school, school level at which they worked, and their years of experience working with minors was compiled from the answers to five questions. We created the category hours per day in charge of groups of students according to participants’ roles at their schools, considering the time and type of supervision provided to students. The first category comprised school staff who spent four hours or more in charge of the same group of children or adolescents (e.g., kindergarten and elementary school teachers). The second included school staff members who spent less than four hours per day with the same group of students (e.g., teachers of specific courses such as art, music, physical education, lunchtime or playground monitors, etc.). The last comprised staff such as head teachers, special education teachers or school psychologists who were not in charge of groups of children or adolescents but encountered them sporadically or in specific situations (e.g., intervening in a conflict). Participants that had more than one role were considered in the one with more hours in charge of students (e.g., a participant who was a teacher and a coordinator was included in the first category). The level at which the staff member was working was coded on the same basis, creating three categories: a) kindergarten and elementary school staff, b) middle and high school staff, and c) staff working at both levels.

2.3. Procedure

All procedures were conducted in accordance with the ethical principles of the Declaration of Helsinki (World Medical Assembly, 2013), the ethical standards drawn up by our university’s Committee on Bioethics, and the legal requirements in force in our region.

A reference person at each selected school (i.e., the principal, the academic coordinator, or the dean) was contacted by phone in February 2016, and the aim and procedure of the study were explained. Once the reference person gave consent, they were asked to invite all school staff members in contact with students at their school to participate online or by filling in printed questionnaires. All participants received a brief written invitation explaining the study’s aims and specifying that the data would remain anonymous and confidential. They were also informed that participation was voluntary. All participants gave written consent before taking part in the study. School staff members were provided with a contact phone-line and e-mail address to clarify any doubts or to report that they wished to abandon their participation at any stage of the study. Data collection was completed in May 2016 and by the end of the semester (June 2016), the person of reference at each school received a brief report with the results.

2.4. Data analysis

Around 5% of data (range 0.005% to 17% according to variable) were missing due to non-response. All variables had at least one missing data point, and 99 participants had no missing data. In view of the results of Little’s test of missing data pattern results ($p < .05$) and our proportion of missing data, we decided to use multiple imputation (MI), provided by *mice* package (van Buuren, & Groothuis-Oudshoorn, 2011) in R (R Core Team, 2015). MI is widely used as it allows a consideration of the uncertainty of the missing values (Rezvan et al., 2015). The incomplete dataset was replicated 10 times ($m = 10$) replacing the missing points with plausible values using multiple chained equations, including all variables as auxiliaries in the model. Imputed values were assessed through plots and summary statistics, and no significant differences were found between imputed and observed data. Estimates were then combined using ‘Rubin’s rules’ (Rubin, 1987) with *mice* and *psmfi* packages (Heymans, 2020). The analyses were also performed in the raw dataset and with $m = 40$ (all available upon request).

Following previous work (Goebbels et al., 2008; Svensson et al., 2015), participants were classified in three different groups: a) non-detectors (i.e., those who claimed they had never suspected a case of victimization, 26% of the sample), b) inconsistent reporters (i.e., participants who had had at least one suspicion over their careers but never reported a suspicion outside school, 53% of the sample), and c) consistent reporters (i.e., participants who had had at least one suspicion and stated that they had made reports to an external agency outside school, 21% of the sample). To answer research question (1), the proportion of correct answers per item for the three groups (non-detectors, inconsistent reporters and consistent reporters) were obtained. We used the Chi-squared test to compare percentages across groups in each dataset and then obtained a single D2 estimate (van Buuren, 2018). In order to quantify the links between knowledge, experience, sociodemographic and professional data and belonging to a particular group, we estimated and averaged effect sizes using Cramer’s V coefficient (except for years of experience, which was compared using Kruskal-Wallis test, obtaining an η^2). For each knowledge statement, the effect size was considered to be small when Cramer’s V values were between 0.07 and 0.20, moderate with values from 0.21 to 0.34, and large with 0.35 or above (Cohen, 1988). To answer research question (2), we ran two logistic regression models: one to predict the likelihood of being a detector (non-detectors vs. inconsistent and consistent reporters, $n = 184$) and another one excluding non-detectors ($n = 136$) to predict the likelihood among reporters of being consistent or inconsistent. For the models to be parsimonious and to avoid compromising the statistical power of our analysis, we included as predictors only those knowledge statements or other variables that had at least a medium effect size (Cramer’s $V > 0.20$ or $\eta^2 > 0.08$) in the bivariate analysis. Exponential beta coefficients are reported along with their 95% confidence interval. Statistical significance was tested through the D1 statistic, as recommended in MI (van Buuren, 2018). Multicollinearity was checked through variance inflation factors (VIF) and independence of errors was checked through the Durbin-Watson test; assumptions were met. All statistical analyses were performed using the R software (R Core Team, 2015).

3. Results

3.1. Bivariate analysis for knowledge

The comparisons to test whether the level of knowledge varied between non-detectors, inconsistent reporters and consistent reporters (the first research question) are shown in Table 1. As can be seen, three statements (i.e., “In most cases, child welfare services interventions are not good for the minor’s well-being”, “If the informant wishes to report anonymously, he/she may do so”, and “The school principal’s consent must be obtained before reporting” presented a medium significant effect ($V = 0.22$, 0.21 and 0.25, respectively) with a higher percentage of correct answers among consistent reporters vs. non-detectors and inconsistent reporters.

3.2. Bivariate analysis for other reporter characteristics

To decide which variables to include in our logistic regression model, we also tested whether other reporter characteristics varied significantly between non-detectors, inconsistent reporters, and consistent reporters. As shown in Table 1, identifying a reference person in school ($V = 0.19$), hours per day in charge of students ($V = 0.26$), and

Table 1
Proportions of participants answering correctly in non-detectors, inconsistent reporters and consistent reporters' groups, and distribution of other variables of interest.

Knowledge	Non-detectors	Inconsistent reporters	Consistent reporters	D2[a]	*Cramer's V*
1. Minors and adults are equally vulnerable to violence	0.44	0.39	0.37	0.16	0.03
2. If a behavior is harmful to the minor we consider it victimization, regardless of its intention	0.15	0.11	0.03	1.23	0.11
3. Child victimization can affect the minor's neurological development	0.90	0.95	0.97	0.74	0.11
4. We only consider victimization in a situation in which the minor's physical health is in immediate danger	0.66	0.80	0.78	1.53	0.14
5. Most parents who victimize their children are mentally or psychologically ill	0.62	0.49	0.63	1.22	0.13
6. Child victimization is always an action perpetrated by a grown-up against a minor	0.70	0.71	0.70	0.05	0.02
7. Physical maltreatment is the most frequent type of victimization	0.43	0.47	0.52	0.22	0.06
8. A minor who has suffered victimization is more likely to develop depression as an adult	0.71	0.80	0.70	0.72	0.08
9. Child victimization affects less than 10% of minors in Spain	0.14	0.16	0.26	0.92	0.11
10. A minor who has been victimized usually develops a feeling of rejection towards the perpetrator	0.22	0.26	0.40	1.41	0.15
11. Most signs of child victimization are directly observable	0.57	0.66	0.74	1.04	0.12
12. Only if I see more than one sign at a time can I suspect that a minor might be being victimized	0.32	0.33	0.40	0.22	0.08
13. Protecting minors' well-being is a legal obligation, even if it means getting involved in situations outside the school context	0.61	0.57	0.65	0.08	0.07
14. If the minor belongs to a culture that is more tolerant regarding abuse, we should not get involved	0.75	0.67	0.85	1.69	0.15
15. The frequency of an aggressive behavior is crucial to suspecting whether a minor is being victimized or not	0.47	0.49	0.42	0.19	0.05
16. A minor growing up in a one-parent family is more likely to experience victimization	0.05	0.06	0.06	0.23	0.04
17. A minor with low self-esteem is more likely to experience victimization	0.66	0.61	0.68	0.23	0.06
18. An isolated family is considered more likely to perpetrate victimization	0.37	0.33	0.28	0.22	0.08
19. A family that shows excessive protection towards their minors is associated with stronger precaution regarding victimization	0.50	0.55	0.66	0.83	0.11
20. It is easy to define whether a behavior can be considered abuse or not	0.50	0.55	0.70	1.30	0.15
21. In case of severe abuse, the first institution outside the school that should be notified is the police	0.40	0.42	0.40	0.05	0.12
22. In case of mild abuse, the first institution outside the school that should be notified is child welfare services	0.60	0.66	0.79	1.21	0.14
23. We should only report a case if we know for sure that the minor is being victimized	0.25	0.28	0.35	0.39	0.07
24. In most cases, child welfare services interventions are not good for the minor's well-being	0.30	0.33	0.59	3.67**	0.22**
25. If the informant wishes to report anonymously, he/she may do so	0.17	0.09	0.30	3.54*	0.21*
26. A report makes a judge aware of the case	0.16	0.20	0.36	2.13	0.17
27. If a suspicion turns out not to be true, the family is entitled to sue the informant	0.13	0.06	0.14	0.97	0.09
28. Too many reports make the system collapse	0.26	0.29	0.41	0.90	0.12
29. Reporting is up to the informant: the person who has the suspicion decides whether to report it	0.31	0.34	0.46	0.87	0.11
30. The school principal's consent must be obtained before reporting	0.16	0.13	0.38	4.64**	0.25*
Other reporter characteristics					
Have been trained	0.04	0.13	0.17	1.42	0.13
Self- confidence to recognize signs in minors	0.25	0.19	0.16	0.42	0.05
Self-confidence to recognize signs in families	0.20	0.08	0.16	1.55	0.13
Identifies a referent person in school	0.43	0.59	0.71	2.61*	0.19
Knows the school's protocol	0.23	0.33	0.34	0.73	0.08
Gender					
Female	0.85	0.86	0.76	0.88	0.11
Male	0.15	0.14	0.24		
Level					
Middle or high school	0.83	0.75	0.66		
Preschool or Elementary	0.15	0.16	0.16	1.72	0.09
Both	0.02	0.08	0.12		
Years of experience [b]					0.10
Hours a day in charge of groups of students					
Four hours or more	0.58	0.49	0.50		
Fewer than four hours	0.06	0.17	0.43	10.18***	0.26
Specific or sporadic contact	0.35	0.34	0.05		

Note. Proportions and Cramer's *V* have been computed in each imputed dataset and then averaged.

[a] Statistical significance assessed by means of D2 statistic (combined Chi squared results of each of the 10 imputed datasets following van Buuren, 2018) is shown by multiple stars: * $p < .05$, ** $p < .01$, *** $p < .001$.

[b] Mean (SD), comparison made by Kruskal Wallis χ^2 test and η^2 as effect size.

Table 2
Logistic regressions to test the influence of knowledge in detecting (non-detectors vs. inconsistent and consistent reporters) (Model 1) and reporting (inconsistent vs consistent reporters) (Model 2) potential victimization cases.

	Model 1 (n = 184)		*Model 2* (n = 136)	
	e^{β} (95% CI)	D1[a]	e^{β} (95% CI)	D1 [a]
Intercept	0.97 (0.41–2.27)	–	0.11 (0.03–0.37)***	–
24. In most cases, child welfare services interventions are not good for the minor's well-being	1.32 (0.60–2.91)	0.32	1.67 (0.85–8.35)	2.53
25. If the informant wishes to report anonymously, he/she may do so	0.67 (0.25–1.81)	0.31	3.85 (1.002–14.75)*	4.36*
30. The school principal's consent must be obtained before reporting	1.13 (0.40–3.23)	0.06	3.06 (1.002–9.32)*	3.95*
Years of experience	1.05 (1.01–1.09)*	5.11*	1.02 (0.74–5.47)	1.11
Hours a day in charge of groups of students (Reference = Four hours or more)		1.73		4.55*
Fewer than four hours	3.46 (0.93–12.91)	1.59	2.01 (0.74–5.46)	1.72
Specific or sporadic contact	1.14 (0.52–2.49)	0.59	0.16 (0.03–0.85)*	−2.30

Note. Pooled Nagelkerke's R^2 for model 1:0.13, for model 2:0.35.
[a] Statistical significance assessed by means of D1 statistic (combined results of each of the 10 imputed datasets following van Buuren, 2018).

years of experience (η^2 = 0.10) displayed significant effects.

3.3. Logistic regression models with knowledge and other reporter characteristics

Table 2 shows the results for the two logistic regression models aimed to predict the participants' membership of each group (i.e., model 1: non-detectors vs. detectors; model 2: inconsistent reporters vs. consistent reporters), based on the knowledge and other reporter characteristics. Using these analyses, we aimed to test whether the level of knowledge was relevant to predict staff members' classification as non-detectors, inconsistent reporters or consistent reporters, even when controlling for other reporter characteristics (the second research question). Only variables that had significant medium effect sizes in the bivariate analysis (i.e., knowledge statements 24, 25 and 30, hours per day in charge of students and years of experience) were included.

4. Discussion

Previous studies of the impact of school staff members' knowledge of victimization and its detection and reporting on their actual detection and reporting behavior have presented inconsistent and sometimes contradictory findings (e.g., Bibou-Nakou & Markos, 2017; Goebbels, Nicholson, Walsh, & De Vries, 2008). As demanded in recent research (Alazri and Hanna, 2020), we hope that our study will provide relevant information to help clarify the specific role that knowledge plays within the complex picture of detection and reporting potential victimization among school staff.

4.1. The role of knowledge of victimization, detection and reporting

Our first hypothesis that higher levels of knowledge would be displayed by school staff classified as consistent reporters (i.e., had detected potential cases and reported at least once) was only partially confirmed. Only some of the statements referring to knowledge of reporting, (i.e., the belief that interventions from child welfare services are not good for the child's well-being, the possibility of reporting anonymously and the need for the principal's consent also reported a significant difference among groups) showed medium effect sizes. In their assessments, school staff seem to consider the potential effect that reporting might have on the children in question when deciding whether or not to report a suspicion (Goebbels et al., 2008), even though it is not their responsibility. Better communication between child welfare services could help school staff to gain trust in these agencies and understand their duties more clearly. Interestingly, in some of these items inconsistent reporters scored lower than non-detectors, which may suggest that familiarity with the reporting procedures influences not just reporting but detection as well. It is also important to underline this result with regard to public policymaking: the authorities should make it easy for school staff members to report cases by providing clear and accurate instructions about the reporting procedure (Alazri and Hanna, 2020).

As other studies have highlighted (Dinehart & Kenny, 2015), knowledge of violence against children and youth, its typologies, prevalence and/or consequences does not seem to increase the detection of potential cases or the reporting of suspicions. Maybe, specific and practical information about reporting procedures are more effective than knowledge in victimization itself. In this regard, the trauma sensitive schools approach (Panlilio, 2019) promotes an integrative view of the child's development and stimulates staff to bond significantly with their students. This approach may be more effective in detecting risky situations than looking for specific signs.

4.2. The role of knowledge compared to other reporter characteristics

Regarding our second hypothesis, we expected that some variables other than knowledge, for example having been trained (Mathews et al., 2017), having the confidence to act on a suspicion (Goebbels et al., 2008), recognizing signs in minors or families (King & Scott, 2014) could better predict the experience of detection and reporting. Contradicting our expectations, the effect of some statements of knowledge was significant even when including the effect of other relevant variables.

Correct responses to the statements "If the informant wishes to report anonymously, he/she may do so" and "The school principal's consent must be obtained before reporting" significantly increased the likelihood of being a consistent reporter. It seems important to clarify that all people are entitled (and in Spain, obliged) to pursue a report outside school when they consider that a child might be in danger, even when the school principal does not agree. It is also crucial to encourage school staff members to make these reports even though their anonymity will not be upheld and to overcome the fear of retaliation (Mathews et al., 2017).

However, years of experience also showed a significant effect in our logistic regression model for predicting the likelihood of detecting at least one instance compared to being a non-detector. This finding is in line with previous reports (Mathews et al., 2017) but contradicts others (Alazri and Hanna, 2020), suggesting that detection does not increase systematically after training or experience *per se*, but probably depends on the quality of the educational program and past experience. Ways of recreating experience should be developed in training programs for school staff. Further research could develop and test the effect of including simulations of real situations of reporting through role-playing or recreating the experience by means of new technologies such as virtual reality. This latter method could gain relevance given the need to develop alternative ways for schools to perform their protective tasks, even if they stay closed due to the COVID-19 pandemic (Baron et al., 2020). Virtual reality is being used in some proposals addressed

to students in order to prevent some types of peer victimization, with promising evidence (Ingram et al, 2019). Besides, the first-hand experience of those who had previously reported cases should be shared with all school staff members in order to dispel misconceptions regarding reporting procedures, such as the fear for negative impact (Edwards et al., 2017). Finally, it could also be helpful to propose strategies for school staff to cope with the stress they may feel in these sensitive situations (van Bergeijk & Sarmiento, 2006).

The finding that school staff members with sporadic contact with children were less likely to be consistent reporters is an interesting result. These workers are usually counselors or principals, who are mostly responsible for leading reports or for guiding students through stressful experiences. These staff are also seen as reference points for other staff members, and our results suggest that this status also plays an important role. Thus, as shown by research performed exclusively with these staff members (Bryant & Baldwin, 2010; Lusk et al., 2015), more efforts should be made to highlight the responsibility of principals and counselors in terms of encouraging other staff to detect and report potential cases of victimization in spite of the complexity of the situation. Nevertheless, the fact that this type of staff spends less time in direct contact with children makes this finding logical.

4.3. Limitations

Even though the characteristics of our sample are similar to those reported by previous studies in terms of gender and years of working experience (Bibou-Nakou & Markos, 2017; Dinehart & Kenny, 2015) and the response rate of our study by school is also within the ranges reported (e.g., 26% in Bryant & Baldwin, 2010; 60% in Choo et al., 2013; and 47% in Feng et al., 2010), certain limitations should be borne in mind. First, given that no information on the number of school staff members per school was not available, the response rate per individual could not be estimated, so the generalizability of the results needs to be retested in future studies with larger samples. Second, in this research we did not focus on information regarding the characteristics of the detected cases, so further research including the influence of this aspect might add to the present contributions. A final limitation worth considering is the instrument used. Even though the questionnaire was extensively pre-tested and similar methodologies have been used in previous studies (e.g., Dinehart & Kenny, 2015; Mathews et al., 2017), future studies should explore its utility and feasibility in different cultural and linguistic contexts.

5. Conclusions

Knowledge of specific aspects of reporting procedures seems to affect school staff's response to the potential cases of victimization they encounter at school. This knowledge (for instance, if the principal's consent is required in order to make a report) contributed significantly to predict reporting, even when controlling for other variables. Years of experience was relevant for detecting potential cases and spending more hours directly in contact with children was relevant for reporting. Therefore, future interventions should aim to provide more detailed and concrete information about reporting procedures and to explore ways of recreating the experience of detecting and reporting, particularly in a context in which detection procedures may have to be carried out online due to the COVID-19 pandemic. This would help to overcome fears and barriers to identifying children at risk and to notifying the corresponding authorities about their situation.

6. Authors' note

Ana Martina Greco, Noemí Pereda, Georgina Guilera, Grup de Recerca en Victimització Infantil i Adolescent (GReVIA). Ana Martina Greco and Georgina Guilera, Departament de Psicologia Social i Quantiativa, Facultat de Psicologia, Universitat de Barcelona, Spain. Noemí Pereda, Departament de Psicologia Clínica i Psicobiologia, Facultat de Psicologia, Universitat de Barcelona, Spain. Ana Martina Greco, Noemí Pereda and Georgina Guilera, Institut de Neurociències (IR3C).

CRediT authorship contribution statement

Ana M. Greco: Conceptualization, Methodology, Software, Formal analysis, Investigation, Writing - original draft. **Noemí Pereda:** Validation, Resources, Writing - review & editing, Supervision. **Georgina Guilera:** Validation, Resources, Visualization, Data curation, Writing - review & editing, Supervision.

Declaration of Competing Interest

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We report no conflict of interest. We alone are responsible for the content and writing of the paper.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.childyouth.2020.105499.

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