

ORIGINAL ARTICLE OPEN ACCESS

What Is the Outcome When Schools Report Concern for a Child to the Norwegian Child Welfare and Protection Services?

Svein Arild Vis  | Camilla Lauritzen

Regional Centre for Child and Youth Mental Health & Child Welfare, UiT-Arctic University of Norway, Tromsø, Norway

Correspondence: Svein Arild Vis (svein.arild.vis@uit.no)**Received:** 8 February 2023 | **Revised:** 5 November 2024 | **Accepted:** 11 November 2024**Funding:** The authors received no specific funding for this work.**Keywords:** child maltreatment | child protection | mandated reporting | school

ABSTRACT

School teachers are a professional group that are responsible for a large proportion of reports concerning suspected child abuse and neglect. This study looks at which concerns are more often reported by schools and if these reports are more likely substantiated when the school is the reporter. The study was designed as a retrospective case-file study ($N=883$). Results show that concerns about the child being exposed to physical abuse were notably more frequent in reports from schools compared to other reporters and were more often substantiated when the reports came from schools as opposed to other reporting agencies. The odds for substantiation of abuse were 6.4 times higher if an abuse concern had been raised in the report compared to when it had not. This effect was not significantly mediated by the school being the reporter. School reports contain to a lesser extent concern about risk factors within the family and local environment. This is not necessarily a shortcoming on behalf of schools but may represent conditions that a teacher has less knowledge of and that constitute a 'blind spot' for employees in the education sector. The child welfare service must take this into account when assessing school reports.

1 | Introduction

Previous studies have documented that voluntary service provision for children in need of Child Welfare and Protection Services (CWPS) is offered in a minority of all reported cases (Christiansen et al. 2019). In Norway, about two thirds of all reported cases are screened out or dismissed at different stages of the case processing, and about one third receive some form of assistance (Statistics Norway 2022). The services provided are most usually variations of consultation or economical support for parents. Support that is directly aimed at children is less common, despite the fact that about 40% of the reports contain one or more specific concern for the child's health and development (Rustad et al. 2022). The conclusion that a child needs to be removed from their home is less common. According to Statistics

Norway, only 1.8% of the cases assessed by the CWPS concluded that the child needed to be removed from home (Statistics Norway 2022). This illustrates a key feature of the Norwegian CWPS system, showing how the system is aimed at assessment of needs and provision of home-based services whenever statutory requirements for removal of the child is not met. Yet there are indications that provision of voluntary support and prevention for children and families at risk is not sufficient (Vis et al. 2022; Reedtz et al. 2022). There is a large gap between what is known about risk factors, effective supportive intervention and what is available for the families in need of support. This has been shown in a review drawing on studies from Australia, Denmark, Finland, Germany, Greece, Sweden, the United Kingdom and the United States (Maybery and Reupert 2009) and applies to the Norwegian context as well (Christiansen et al. 2019). The lack of

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Author(s). *Child Abuse Review* published by Association of Child Protection Professionals and John Wiley & Sons Ltd.

Summary

- Teachers are well positioned to gain good insight into the child's social functioning and symptoms of mental health problems and to report suspected child abuse.
- Teachers and schools should list each and every concern they may have in a case to help guide the focus of the CWPS investigation.
- Teachers should be prepared to respond to children's disclosure of abuse and maltreatment.

adequate and available interventions is also evident in high referral rates. Lauritzen and colleagues found that approximately half the cases in Norway had been referred at an earlier time and that in approximately one fourth of the referrals the family had previously received support from CWPS (Lauritzen et al. 2019). Rustad et al. (2022) found that employees in schools and kindergartens are among the most frequent reporters of suspicion that children have been exposed to violence.

The Decision Making Ecology (Baumann et al. 2011) breaks down the factors influencing decision-making in child welfare services. According to the DME, decision-making is influenced by a combination of case factors, individual, organizational, and external factors. This framework illustrates the complex interplay of factors that influence teachers' decisions to report suspected cases of child abuse or neglect to child protection services. For teachers, individual factors might include personal beliefs about child abuse, knowledge of the signs of abuse and previous experiences with child protection services. Organizational factors encompass the policies and culture of the school regarding child protection, as well as the support and training provided to staff. External factors might include the legal mandates for reporting and the responsiveness of child protection services.

Identification is a prerequisite for service provision. First a concern must be recognized and reported to the CWPS. According to the Norwegian Child Welfare Act of 1992, professionals such as teachers, day care personnel and health care workers are mandated to report cases of concern to the CWPS. For children who experience maltreatment over a long period of time, adverse outcomes can be especially severe, which emphasizes the importance of early detection (Meyerson et al. 2002).

School teachers and school staff are a professional group that is responsible for a large proportion of reports concerning suspected child abuse and neglect to the CWPS in both Canada (Tonmyr et al. 2010) and in Belgium (Vanderfaeillie et al. 2018). This is due to the relation between teachers and children. Teachers are the only professionals that meet children daily and for an extended period. Teachers are consequently in a special position to be able to observe changes in pupils' appearance, behaviour and physical and emotional status (Vanderfaeillie et al. 2018; Briggs 1997; O'Toole et al. 1999). Because teachers spend a lot of time with children, they may develop a trusting relationship with the child. This may in turn lead to children being likely to disclose

information about neglect and abuse to school personnel (Egu and Weiss 2003). Subsequently, teachers are in a unique position to detect children living under conditions that may be potentially harmful.

Walsh et al. (2012) conducted a study on reporting behaviour to CWPS among teachers in Australia. They found that teachers who reported concerns about child maltreatment were more likely to have higher levels of policy knowledge and hold more positive attitudes towards reporting. Commitment to the reporting role, confidence in the system's effective response to their reporting and being able to override their concerns about the consequences of their reporting were important predictors of teachers' reporting behaviour (Walsh et al. 2012).

According to Münger and Markström (2019), there is reason to believe that underreporting is an issue even though school personnel is the most common among reporters of concern in many countries. They also found that teachers sometimes believe that reporting concerns may cause more harm than good. In a different study, Markström and Münger (2018) found that a common perception among school personnel in Sweden is that even if they do report concerns, the CWPS will most likely not act upon the report.

A study conducted by Lauritzen and colleagues (2019) explored reports of concern to the CWPS in Norway from the education sector. The reporters were mainly staff at schools and kindergartens, and in total, they represented about one fifth of all reports to the CWPS. These reports were often related to the child's behaviour and the child's functioning at school or kindergarten. The child's social functioning and relationship with peers are a frequent concern and occur in between 30% and 50% of all cases. In almost 30% of cases from school and kindergarten, there was also a suspicion that the child had been subjected to physical abuse (Lauritzen et al. 2019). The cases reported from the education sector are thus based on a teacher's or other school staff's observation and assessment of the child's development and functioning.

There is a substantial body of research describing teacher reporting behaviour (Goebbels et al. 2008). According to the authors, knowledge about the child protection process and training in child protection has been found to increase reports of concern, but the research on what influences teacher reporting behaviour seems to be limited by conceptual or methodological weaknesses. Little is however known about characteristics of reports of concern coming from schools to the CWPS in Norway. Are reports of concerns considered as more serious when the report comes from schools compared to other reporting agencies? Does it affect the likelihood of the concern being substantiated?

1.1 | Aims of the Study

The overall aim of this study was to investigate reports of concern to the CWPS about child abuse and neglect from schools. More specifically, we aimed to study:

- a. Which types of concerns are more likely to be reported by teachers and schools?

- b. Are the problems who are more commonly reported by teachers and schools more often substantiated than if these problems are reported from a nonschool setting?
- c. Is the chance of substantiation of abuse and child related problems mediated by who the reporting agency is? That is, are some child-related problems considered more serious when there is a school report?

2 | Methods

This study was a retrospective case-file study, which included a total of 1365 cases randomly drawn from all registered reports of concern in the period of January 2015 to June 2017. There were 16 participating agencies representing (i) six districts from the three major cities in Norway with a population ranging from 190,000 to 680,000; (ii) six regional cities with a population ranging from 20,000 to 80,000; and (iii) four agencies from smaller towns and rural areas with a population below 15,000. Depending on the size of the agency, the number of cases from each agency varied between 50 and 150. Case records from the participating agencies were then coded using a data entry form. The data entry form was created, and its interrater reliability was assessed through the independent coding of 20 cases by two different researchers. This initial test yielded an average interrater agreement of 86.9%. However, 13 variables demonstrated low reliability, with interrater agreements below 80%. Consequently, three of these variables were removed from the form due to the difficulty in obtaining reliable data. The other 10 variables were rephrased, and enhancements were made to the coding manual to provide clearer definitions and guidelines. Following these modifications, the reliability of the tool was evaluated again by having two researchers independently code 42 new cases. This subsequent assessment showed an improved interrater agreement of 90.8%. In health research, an interrater agreement over 80% is generally considered acceptable (McHugh 2012).

2.1 | Participants

All the cases that were subject of a child protection investigation, and which were concluded in an investigation report, were included in the analyses ($n = 883$). Cases that were screened out without any further investigation ($N = 242$) and cases that did not have a concluding report ($N = 240$) were excluded, because as substantiation decision could not be identified.

The sample consisted of 54.0% boys ($n = 477$), and the mean age was 9.0 years ($SD = 5.0$). The family had immigrant background in a total of 40.8% of the referrals. Immigrant background was defined as the child or one of the parents being born in a country other than Norway.

The sample was representative for the population of cases involved with the CWPS in Norway with respect to child age, child gender, and the proportion of cases screened out or screened in for service provision.

2.2 | Measures

Presence or absence of 15 types of concerns referred was recorded at two timepoints. Thus, creating two variables corresponding to assessing whether the concern is present/absent at the two timepoints. The first timepoint was at the time of referral. This thus represents the concerns as seen from the reporter's perspective. The second timepoint was when the investigation was finished. This then represents the views of the CWPS with regards to whether the referred concern was substantiated or not. Absence was coded as zero, and presence was coded as one. The following types of referred concerns were included.

2.2.1 | Abuse

Three types of abuse were recorded. Those were (i) physical abuse, (ii) sexual abuse and (iii) mental/emotional abuse.

2.2.2 | Child Problems

Four types of child problems were recorded. Problems related to the child's health and development was recoded as present if there was a specific concern about (i) the child's somatic health, (ii) a specific diagnosed mental health problem or (iii) nonage adequate, that is, delayed, development in social, physical or mental capacity (iii). Problems related to behaviour and feelings were recorded as present if there were undiagnosed symptoms of (i) emotional problems such as anxiety and depression and (ii) behaviour problems such as generalized externalizing behaviour problems or incidents of drug use or criminal activity. Social problems were recorded as present if there were concerns related to the child's social relations with siblings, peers, parents or other adults. School problems were recorded as present if there were social problems or behaviour problems at school or if there were problems related to the child's attendance and preparedness for school.

2.2.3 | Care-Related Problems

Four types of care related problems were recorded. Problems related to parenting were recorded if there were concerns about calous or harsh parenting styles and/or lack of parental stimulation and guidance. Problems related to parental care was coded as present if there were concerns for basic care such as appropriate food and clothing or daily routines and sleep. Problems related to parent's emotional care was recorded as present if there were concerns about the parent's ability or willingness to appropriately respond to the child's emotional needs and expressions. Concerns for child safety were recorded as present in cases with unsafe living environment or if the parents fail to monitor the child's movements and behaviour to prevent the child from taking part in dangerous activities or ending up in potentially dangerous situations.

2.2.4 | Family and Environmental Risk Factors

Four types of risk factors were recorded. These were parental problems related to the parent's somatic or mental health. The second risk factor was when there were concerns about the child

being witness to intrafamily violence (i.e., between parents or siblings), if there had been a stressful event in the family (e.g., a death), which had impacted family functioning, or if there were high levels of tension and conflict between the parents. The third risk factor was concern about the housing situation or family economy impacting the child's health and development. The final risk factor was concerns about the family's integration and social function within the local environment, that is, isolation from contact with friends, neighbours and activities within the community.

2.3 | Statistical Analyses

Analyses were conducted using SPSS for tests of differences in proportions of cases referred by schools and by other reporters for each of the 15 referred concerns. Mplus was used to test mediation models for each of the above five concerns.

First, the proportion of cases containing the 15 different types of concerns reported by schools was compared to the proportion of those concerns in reports to the CWPS made by all other reporters, by fitting logistic regression models. Based on the results from this test of difference, we chose the five types of concerns that were significantly more often reported by schools and tested if these concerns were also more often substantiated by the CWPS. Finally, we tested five different mediation models to see if the reporter being a school mediated the chance of a concern being substantiated. The mediation effect was tested for the following reported concerns: (i) physical abuse, (ii) child health and developmental problems, (iii) school problems, (iv) child problems related to behaviour and feelings and (v) child social problems. The direct (Path C) effects and mediated (Paths A*B) effects between referral and substantiation for each of those five types of concern were calculated in Mplus, using path analysis with weighted least square mean and variance adjusted estimation (WLSMV). Mediation testing by the path analysis approach has advantages over the traditional Four-Step method (Baron and Kenny 1986), primarily because it allows for testing multiple paths simultaneously. Mplus has special functions for calculating indirect paths and built-in bias corrected bootstrapping capabilities that does not rely on any distributional assumptions. We used the 'model indirect' function in Mplus to estimate the indirect effects with bootstrapped confidence intervals (10,000 iterations). The odds ratios were calculated manually from the logit coefficients. Figure 1 illustrates the conceptual mediation model.

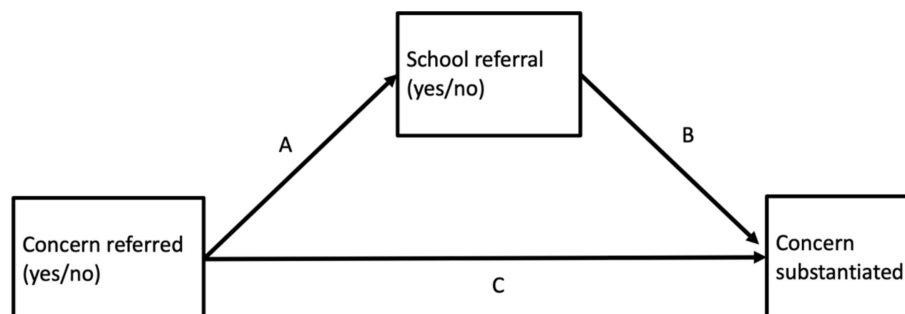


FIGURE 1 | Mediation model of effects between referral and substantiation of concerns. Note: $A*B$ =indirect effect, C =direct effect, and $(A*B) + C$ =total effect.

2.4 | Ethics and Procedures

The research protocol underwent ethical evaluation by the Norwegian Council for Patient Confidentiality in Research and an examination of data management practices by the Norwegian Centre for Research Data. The Norwegian Directorate for Children and Family Affairs facilitated access to the case files by providing a legal exemption from confidentiality obligations for the CWPS agencies involved in the study. Authorization to gather and preserve data was granted by the Norwegian Data Protection Authority.

Access to both physical case files and digital record-keeping systems was provided to the research team by the CWPS agency. At the agency's location, all case files were anonymized using a specially designed electronic web-based data entry system. The data were encrypted and then transferred to a highly secure sandbox environment that is sanctioned for the storage of sensitive client information.

3 | Results

The initial aim of this study was to investigate which types of concerns are more likely to be reported by teachers and schools. Concerns about the child being exposed to physical abuse were notably more frequent in reports from schools compared to other reporters. Other more frequent reports of concern coming from schools were child related problems, such as the child's health and development, the child's school related problems (academic achievements), behaviour problems and the child's social problems, for example, interaction with peers. In terms of suspected care related problems, concerns about the protection of the child were significantly less frequent in school reports. Regarding family and environmental risk factors, schools less frequently reported concerns about parental health issues and family conflicts compared to other reporting agencies. For detailed information about concerns reported by schools, see Table 1.

We were interested in studying if the problems that were more often reported by schools were also more often substantiated compared to when they were reported by others. The results showed that reports of concerns about physical abuse and concerns about the child's social problems were more often substantiated when the reports came from schools as opposed to other reporting agencies. For child's social problems, the difference is not statistically significant (cf. Table 2 for details).

TABLE 1 | Concerns reported by schools $N=883$.

| | In school reports | In other reports | OR (95% CI) | p value |
|--|---------------------------|---------------------------|---------------------|----------------|
| | $N=116$ | $N=767$ | | |
| | N (%) | N (%) | | |
| Types of abuse | | | | |
| Physical abuse | 43 (37.1) | 108 (14.1) | 3.59 (2.34–5.52) | <0.001 |
| Sexual abuse | 4 (3.4) | 33 (4.3) | 0.79 (0.28–2.29) | 0.669 |
| Psychological abuse | 7 (6.0) | 63 (8.2) | 0.72 (0.32–1.61) | 0.420 |
| Child problems | | | | |
| Health and development | 23 (19.8) | 95 (12.4) | 2.11 (1.32–3.37) | 0.002 |
| School problems | 64 (55.2) | 56 (7.3) | 16.16 (10.38–25.16) | <0.001 |
| Behaviour and feelings | 49 (42.2) | 189 (24.6) | 2.44 (1.65–3.61) | <0.001 |
| Child social problems | 41 (35.5) | 79 (10.3) | 4.75 (3.08–7.32) | <0.001 |
| Care-related problems | | | | |
| Parenting problems | 22 (19.0) | 99 (12.9) | 1.58 (0.95–2.63) | 0.079 |
| Basic care | 16 (13.8) | 150 (19.6) | 0.66 (0.38–1.15) | 0.141 |
| Emotional care | 8 (6.9) | 73 (9.5) | 0.70 (0.33–1.59) | 0.364 |
| Protection of the child | 4 (3.4) | 93 (12.1) | 0.26 (0.09–0.72) | 0.009 |
| Family and environmental risk factors | | | | |
| Parents health and problems | 15 (12.9) | 287 (37.4) | 0.25 (0.14–0.44) | <0.001 |
| Family conflicts, stress and violence | 31 (26.7) | 320 (41.7) | 0.51 (0.33–0.79) | 0.002 |
| Housing and economy | 6 (5.2) | 77 (10.0) | 0.49 (0.21–1.15) | 0.101 |
| Integration and social problems | 6 (5.2) | 45 (5.9) | 0.88 (0.37–2.10) | 0.875 |

TABLE 2 | Proportion of concerns that are substantiated by the CPS after investigation ($N=883$).

| | Substantiated reports | | OR (95% CI) | p value |
|------------------------|------------------------------|---------------------------|--------------------|----------------|
| | School reported | Reported by other | | |
| | N (%) | N (%) | | |
| Types of abuse | | | | |
| Physical abuse | 23 (53.5) | 38 (35.2) | 2.31 (1.14–4.67) | 0.020 |
| Health and development | 12 (52.2) | 55 (57.9) | 0.79 (0.32–1.98) | 0.620 |
| School problems | 45 (70.3) | 37 (66.1) | 1.21 (0.56–2.63) | 0.619 |
| Behaviour and feelings | 31 (60.8) | 109 (58.6) | 1.26 (0.66–2.42) | 0.479 |
| Child social problems | 20 (48.8) | 47 (59.5) | 0.65 (0.30–1.39) | 0.264 |

Note: Denominators are the frequencies in Table 1.

We were also interested in investigating if the source of the report mediated the relationship between problems identified in the report and the problems subsequently being substantiated by the CWPS. We therefore conducted an analysis that also accounted for the possibility that a concern is not mentioned in the report but may be detected and substantiated by

the CWPS at a later stage. The results from the mediated path model show, as could be expected, that there is a significant relationship between a problem being reported and a problem being substantiated (Table 3); that is, all the direct and total effect estimates were highly significant. The total effect was strongest for physical abuse where the odds for substantiation

TABLE 3 | Mediated paths from referral to substantiation—testing the conceptual model (Figure 1).

| | Indirect effect | | Direct effect | | Total effect | |
|------------------------|------------------|----------|------------------|----------|------------------|----------|
| | OR (95% CI) | <i>p</i> | OR (95% CI) | <i>p</i> | OR (95% CI) | <i>p</i> |
| Types of concern | | | | | | |
| Physical abuse | 1.15 (1.00–1.35) | 0.064 | 5.61 (4.08–7.75) | <0.001 | 6.44 (4.81–8.84) | <0.001 |
| Health and development | 1.02 (0.97–1.11) | 0.449 | 3.13 (2.43–4.02) | <0.001 | 3.21 (2.52–4.08) | <0.001 |
| School problems | 1.29 (1.01–1.65) | 0.039 | 2.71 (1.91–3.83) | <0.001 | 3.61 (2.73–4.47) | <0.001 |
| Behaviour and feelings | 1.05 (0.99–1.15) | 0.140 | 2.73 (2.23–3.32) | <0.001 | 2.88 (2.38–3.46) | <0.001 |
| Child social problems | 1.00 (0.88–1.14) | 0.980 | 2.67 (2.04–3.49) | <0.001 | 2.67 (2.11–3.40) | <0.001 |

Note: The indirect effect corresponds to path 'A' by path 'B' in the conceptual model. The direct effect, that is, the relation between concerns being reported and substantiated corresponds to path 'c' in the conceptual model (Figure 1). The total effects are the sum of the indirect and direct effects. Abbreviation: CI, confidence interval.

of abuse was 6.4 times higher if an abuse concern had been raised in the report compared to when it had not. This effect was not significantly mediated by the school being the reporter; that is, the total effect is approximately the same irrespective of who the reporter was. The same goes for children's health and developmental problems, children's emotional and behaviour problems and for children's social problems. With respect to children's school problems, we did however find a significant mediation effect of school reporting. This means that the relationship between presence or absence of these problems in a school report and the chance for CWPS substantiation is stronger than for other reporters. School reports about children's school problems had about 30% higher chance of being substantiated.

4 | Discussion

4.1 | Why Do Schools More Often Report Child Abuse and Problems Related to Child Development and Health?

We believe that the types of concerns schools are reporting to the CWPS reflects the type of contact teachers have with children and their families. Teachers are well positioned to gain good insight into and understanding of the child's social functioning and symptoms of mental health problems (Vanderfaellie et al. 2018; Briggs 1997; O'Toole et al. 1999). The findings that concern about physical abuse and social problems are more frequently reported and substantiated when coming from schools could be reflective of the direct and continuous contact teachers have with children, allowing them to observe and report based on concrete incidents or ongoing patterns of behaviour that are more readily substantiated by child welfare services. It is important to keep in mind though that teachers are not expected to report to the CWPS in all situations where children show challenging behaviours and social problems or have learning difficulties (Child Welfare Act 2023). What usually triggers a CWPS report from the school is when there are reasons to believe that the difficulties or symptoms the children display in school are caused or reinforced by the parents care for the child and/or adversities in their every-day lives.

Teachers may however not be well informed about family and environmental risk factors (Lautitzen et al. 2019). Although parental care and support may be observed by teachers on certain occasions in connection with the start and end of school day, this is usually only possible during the first year at school because most school children in Norway will walk or travel to school alone on most days. This may explain why it is less common for reports from school to be about parents' problems, such as mental health or substance abuse or socioeconomic risk factors. The presence of risk factors within the family is quite often not directly observable to the teachers but can be suspected by indirect indications. The most usual examples on this may be that the child does not bring a packed lunch (in Norway, the children are supposed to bring their own lunch), does not wear or bring adequate clothing or systematically fails to complete home assignments (Christiansen et al. 2019).

When a child discloses abuse to an adult, we believe that availability and trust are two conditions that determine that the adult will often be a teacher (Rustad et al. 2022). Availability refers to how easily a child can get in touch with an adult. Younger children in primary school will usually be able to get in contact with one of their main teachers every school day, whereas older children in secondary or high school will see the same teachers at least a once or twice a week. Availability may be an important factor in situations where an abuse incidence has recently happened, and the child feels in need of immediate support. Abuse however is not always disclosed by the child directly following an incidence and there are many reasons for this. The child may be frightful of the consequences of disclosure, or the child may have become accustomed to the abuse, which means that disclosure involves a process of building courage and motivation. In such instances will having access to a person that the child trusts be of utmost importance. At school, there are many adults that the child can choose to confide in whether that decision is based upon longstanding rapport with the adult or preferences related to age, gender or personality (Egu and Weiss 2003). In contrast, healthcare or social services may be much harder to access. Knowing that provision of preventive services for children who are at risk of abuse is insufficient (Vis et al. 2022; Reedt et al. 2022), the teacher–child relationship is a key factor in the identification of children in need of interventions.

4.2 | Why Are Abuse Reports From Schools More Likely Substantiated?

Employees in schools and kindergartens are among the most frequent reporters of suspicion that children have been exposed to violence (Rustad et al. 2022). It is interesting that physical abuse reported by schools is also more likely to be substantiated. We believe that the main reason for this is that physical abuse reported by schools are more often based upon disclosure of an abuse incident by the child itself; that is, the child tells a teacher what happened. Such disclosures are probably seen by the CWPS as more certain and trustworthy form of evidence of child abuse compared to reports that are based upon assumptions of child abuse derived from observation of risk factors, such as abnormal child behaviour or unexplained somatic symptoms (Egu and Weiss 2003). We may thus assume that it is not necessarily the teachers or the schools as such that are considered more trustworthy by the CWPS with respect to abuse substantiation but rather the form of evidence that forms the basis for the reports. On the other hand, it is also possible that child welfare services sometimes might perceive reports from schools as more credible or reliable due to the professional status of educators and their regular contact with children. This perceived credibility could influence the decision-making process of child welfare services, leading to a higher likelihood of substantiation when the report comes from a school. Drawing on the theory of the decision making ecology (Baumann et al. 2011), it is also possible that there could be systemic biases within child welfare services that favour certain types of reporters over others. For instance, reports from educational institutions might be prioritized or taken more seriously due to existing protocols or biases within the system, affecting the substantiation rates.

Another reason for this may be that teachers have been found to have more knowledge about reporting policies and hence conduct better and more targeted reports to the CWPS (Walsh et al. 2012).

4.3 | Why is the Chance for Substantiation of School Problems Mediated by the Referrer?

The presence of a significant mediated effect in this study means that the chance for substantiation is partly explained by who the reporter was. We believe that the reason why school problems have a higher chance of substantiation when such a problem has been referred from the school is twofold. First, it is probable that when school functioning has been identified as problematic by the school itself, that problem will most likely be a serious problem. After all, it is the school who is best positioned to discover if a child's problems in school functioning is cause for concern (Goebbels et al. 2008. Vanderfaeillie et al. 2018; Briggs 1997; O'Toole et al. 1999).

Additionally, the CWPS depends upon information from others to determine the seriousness of the reported problem. When school problems are reported by the school, teachers may be more ready to provide supporting documentation for the claim, in particular when the teacher has a high level of knowledge about reporting policy (Walsh et al. 2012). For example, may schools have more detailed and continuous access to information

about a child's academic and social behaviour compared to other reporters. This could lead to more comprehensive reports from schools, which in turn could influence the substantiation process. The mediation effect observed might not solely be due to the school being the referrer but could also be related to the quality and completeness of the information provided. Additionally, may factors related to interagency collaboration and communication also be important. The relationship and communication channels between schools and child welfare agencies might be more developed compared to other reporters (Walsh et al. 2012). Effective communication and established protocols for collaboration could facilitate a more thorough investigation and substantiation process, influencing the mediation effect observed.

Herein lies the recognition that CWPS substantiation is not solely dependent on the perceived seriousness of the problem but also on how well that claim is supported by evidence following the investigation. Teachers have been found to be more committed to the reporting role (Walsh et al. 2012) and may hence document their claims to a larger extent than other reporting agencies. It follows that when CWPS investigates school related problems their assessment and decision will to a very large degree depend upon the information provided by the school itself. On the other hand, for other child-related problems such as abuse, health and social problems or problems related to emotions and behaviour, the assessment may to a larger degree also depend upon information from other sources. The knowledge about characteristics of information from other sources is however limited (Vis et al., 2020).

4.4 | Limitations

A significant limitation of this study is its reliance on archival data, which may not fully capture the nuances of each case, such as the quality of the interaction between the child and the reporter, or the specific circumstances under which the abuse was reported. Furthermore, the archival nature of the data limits our ability to assess the potential biases or variations in how different caseworkers might interpret similar cases. How serious a concern must be to be substantiated is not only influenced by the facts of the case but also by how these facts are understood and interpreted by the decision-maker. Because we do not know who the case worker was, we cannot control for variability related to social worker judgements or how this have impacted substantiation decisions. On that same note we were not able to obtain a reliable and valid measure of how serious the allegations were at the time of referral or after the investigation. There were two main reasons for this: (i) the level of detail in the referrals showed large variation, and (ii) the reason for dismissal/substantiation after the investigation does depend upon not only seriousness but also the availability of evidence and parental cooperation in the investigation process.

The sample size is small when considering differences between concerns reported and concerns substantiated; this limits the precision of our estimates. By testing multiple hypothesis, the risk of Type I errors increases. In our case, we conducted 20 bivariate comparisons. Familywise error rate was not controlled because it would have lowered the study's power considerably because of the "small sample size."

4.5 | Conclusion and Implications

We conclude that the reports from schools are most often about the child's difficulties and how they can be related to parenting. The reports are to a lesser extent about underlying conditions that affect parents' ability to provide care. This is not necessarily a shortcoming or a failure on behalf of schools, but these are conditions that a teacher has less knowledge of and that constitute a "blind spot" for employees in the education sector. The child welfare service must take this into account when assessing school reports.

The results of this study have several implications for schools' reporting behaviour to CWPS. To enhance the effectiveness of child welfare interventions, it is crucial for educational institutions to adopt a comprehensive reporting protocol that includes detailed documentation of all observed concerns, not just the most apparent ones. Additionally, schools should establish stronger partnerships with child welfare agencies to ensure a seamless flow of information and coordinated response strategies. This will help guide the focus of the CWPS investigation in the proper directions and increase the chance that all concerns are assessed and addressed by the CWPS. Second, schools need to be aware of the special position they are in, with respect to identification and reporting of possible child abuse. It is therefore important that teachers are prepared to respond to children's disclosure of abuse and maltreatment. This may however require training in procedures for how to identify and talk to children about abuse as well as how to properly document children's disclosures. It is concerning that only half the schools' reports about child abuse were substantiated, by the CWPS.

In conclusion, this study highlights the important role schools play for identification and substantiation of child abuse in particular. Although many reports from schools focus on direct observations of children and children's direct disclosure of abuse, there is also a need for teachers to broaden the scope of their reports to include any additional environmental and familial factors they may be aware of and that may be relevant for the CWPS to look into.

Ethics Statement

The study has been assessed and recommended by the Norwegian Council for Duty of Confidentiality and the Norwegian Centre for Research Data.

Consent

The researchers were given access to social work records following a legal decision in accordance with the Public Administration Act section 13.d, by the Norwegian Directorate for Children, and Family Affairs. This decision released child protection agencies from their duty of confidentiality and allowed researchers to collect data without informed consent. A licence was granted by the Norwegian Data Protection Authority.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Research data are not shared.

References

- Baron, R. M., and D. A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51, no. 6: 1173–1182.
- Baumann, D. J., L. Dalgleish, J. Fluke, and H. Kern. 2011. *The Decision-Making Ecology*. Denver: American Humane Association.
- Briggs, F. 1997. "The Importance of Schools and Early Childhood Centres in Child Protection." Doctoral Dissertation, Irish Soc. for Prevention of Cruelty to Children.
- Christiansen Ø., K. J. S. Havnen, A. C. Iversen, et al. 2019. "Delrapport 4: Når barnevernet Undersøker [Child Protection Investigations] Tromsø:UIT."
- Egu, C. L., and D. J. Weiss. 2003. "The Role of Race and Severity of Abuse in Teachers' Recognition or Reporting of Child Abuse." *Journal of Child and Family Studies* 12: 465–474. <https://doi.org/10.1023/A:1026020225000>.
- Goebbels, A. F. G., J. M. Nicholson, K. Walsh, and H. de Vries. 2008. "Teachers' Reporting of Suspected Child Abuse and Neglect: Behaviour and Determinants." *Health Education Research* 23, no. 6: 941–951. <https://doi.org/10.1093/her/cyn030>.
- Lauritzen, C., S. A. Vis, G. Ulset, T. Tjelflaa, and K. B. Rustad. 2019. Meldinger Til Barnevernet. [Referrals to the Child Welfare Services]. Tromsø:UiT.
- Markström, A.-M., and A.-C. Münger. 2018. "The Decision Whether to Report on Children Exposed to Domestic Violence. Perceptions and Experiences of Teachers and School Health Staff." *Nordic Journal of Social Research* 8, no. 1: 22–35. <https://doi.org/10.1080/2156857X.2017.1405837>.
- Maybery, D., and A. Reupert. 2009. "Parental Mental Illness: A Review of Barriers and Issues for Working With Families and Children." *Journal of Psychiatric and Mental Health Nursing* 2009, no. 16: 784–791.
- McHugh, M. L. 2012. "Interrater Reliability: The Kappa Statistic." *Biochemia Medica* 22, no. 3: 276–282.
- Meyerson, L. A., P. J. Long, R. J. Miranda, et al. 2002. "The Influence of Childhood Sexual Abuse, Physical Abuse, Family Environment, and Gender on the Psychological Adjustment of Adolescents." *Child Abuse & Neglect* 26: 387–405.
- Münger, A.-C., and A.-M. Markström. 2019. "School and Child Protection Services Professionals' Views on the school's Mission and Responsibilities for Children Living With Domestic Violence—Tensions and Gaps." *Journal of Family Violence* 34: 385–398. <https://doi.org/10.1007/s10896-019-00035-5>.
- O'Toole, R., S. W. Webster, A. W. O'Toole, and B. Lucal. 1999. "Teachers' Recognition and Reporting of Child Abuse: A Factorial Survey." *Child Abuse & Neglect* 23, no. 11: 1083–1101.
- Reedtz, C., E. Jensaas, T. Storjord, K. B. Kristensen, and C. Lauritzen. 2022. "Identification of Children of Mentally Ill Patients and Provision of Support According to the Norwegian Health Legislation: A 11-Year Review." *Frontiers in Psychiatry* 12: 815526. <https://doi.org/10.3389/fpsy.2021.815526>.
- Rustad, K. B., C. Lauritzen, K. J. S. Havnen, S. Fossum, Ø. Christiansen, and S. A. Vis. 2022. "The Impact of Case Factors on the Initial Screening Decision in Child Welfare Investigations in Norway." *Child Abuse & Neglect* 131: 105708.

Statistics Norway 2022. "Child Welfare Statistics." Retrieved on December 19, 2022. <https://www.ssb.no/en/sosiale-forhold-og-kriminalitet/barne-og-familievern/statistikk/barnevern>.

Tonmyr, L., A. Li, G. Williams, D. Scott, and S. Jack. 2010. "Patterns of Reporting by Health Care and Nonhealth Care Professionals to Child Protection Services in Canada." *Paediatrics & Child Health* 15, no. 8: e25–e32. <https://doi.org/10.1093/pch/15.8.e25>.

Vanderfaellie, J., K. de Ruyck, J. Galle, E. van Dooren, and C. Schotte. 2018. "The Recognition of Child Abuse and the Perceived Need for Intervention by School Personnel of Primary Schools: Results of a Vignette Study on the Influence of Case, School Personnel, and School Characteristics." *Child Abuse & Neglect* 79: 358–370. <https://doi.org/10.1016/j.chiabu.2018.02.025>.

Vis, S. A., Ø. Christiansen, K. J. S. Havnen, C. Lauritzen, A. C. Iversen, and T. Tjeflaa. 2020. "Barnevernets Undersøkelsesarbeid-Fra Bekymring Til Beslutning. Samlede Resultater Og Anbefalinger [Child Welfare Services Investigations- from Referral to Conclusion]." Tromsø:UiT.

Vis, S. A., Lauritzen, C., Havnen, K. J., Reedtz, C., and Handegård, B. H. 2022. "Concerns of parental substance abuse and mental health problems reported to child welfare services—testing a moderated mediation model for paths from reports to substantiated concern and service provision." *Frontiers in Psychiatry* 13: 781332.

Walsh, K., B. Mathews, M. Rassafiani, A. Farrell, and D. Butler. 2012. "Understanding teachers' Reporting of Child Sexual Abuse: Measurement Methods Matter." *Children and Youth Services Review* 34, no. 9: 1937–1946. <https://doi.org/10.1016/j.childyouth.2012.06.004>.