**RESEARCH ARTICLE** 



# Personal Barriers to Reporting Child Maltreatment Among Early Childhood Education and Care Professionals

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Accepted: 27 December 2023 / Published online: 18 January 2024 © The Author(s) 2024

## Abstract

The current study examined personal barriers that can prevent early childhood education and care (ECEC) professionals from reporting concerns of child maltreatment to child welfare services (CWS). The objectives were to identify different types of personal barriers and to examine differences in reporting according to employee characteristics. Norwegian ECEC professionals (N = 1369; 92% women; mean age, 44 years [SD = 11]) from 170 kindergartens completed e-questionnaires with 25 questions about personal barriers to reporting concerns of child maltreatment and questions about their own personal characteristics. Four barrier factors that underly the 25 different barriers were confirmed with factor analysis. The most endorsed personal barrier factor was "Negative consequences for the child," which predicted barriers related to fear of negative consequences of reporting (e.g., to CWS). The second most important were the "Relationships" factor (barriers related to concerns about relationships with the child or parents), and the "Competence" factor (fear of misunderstanding and being unsure about guidelines). The least endorsed barrier factor ("Coworkers") included fear of what superiors and coworkers might think. In general, ECEC professionals with less formal training and less work experience reported more personal barriers to reporting concerns of child maltreatment. The results are consistent with studies involving other professional groups. Better collaboration between ECEC providers and CWS is important to prevent child maltreatment. Future efforts to improve the detection and reporting of concerns of child maltreatment could consider focusing specifically on professionals with little formal training and little work experience.

**Keywords** Early childhood education and care  $\cdot$  Kindergartens  $\cdot$  Barriers  $\cdot$  Child maltreatment  $\cdot$  Child welfare services  $\cdot$  Reporting

Child maltreatment is an umbrella term that includes physical, sexual and emotional abuse, and physical and emotional neglect. Across the globe, the estimated combined prevalence rates of such experiences based on self-report studies range from

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13 to 36% depending on the type of maltreatment considered (Stoltenborgh et al., 2015). While the risk of sexual abuse increases with age (Putnam, 2003), the risk of other types of maltreatment (e.g., physical abuse and neglect) may be greater for younger children (Hafstad & Augusti, 2019; van Berkel et al., 2020). Efforts to identify and manage child maltreatment at an early stage are crucial to prevent further harm (Evans et al., 2014; Kaplow & Widom, 2007; Klevens & Whitaker, 2007; Martin & Silverstone, 2013). Maltreatment may remain undisclosed due to children's lack of cognitive-emotional capacities or sufficient language development, or they may be too afraid to disclose such experiences to adults. Consequently, cases of maltreatment may be hard to uncover and could go unreported.

Norway has a mandated reporting system (Act relating to child protection, 2021, §13-2) which specifies that public service providers has an obligation by law to report their concerns to the local Child Welfare Services (CWS) if they have reason to believe that a child lives under conditions detrimental to their health and development (other countries have similar mandatory reporting legislations; see for example Mathews & Kenny, 2008). The Norwegian Directorate for Education and Training specifies that all employees of early childhood education and care (ECEC) providers have a duty to pay attention and to report to CWS if they see conditions that can be harmful to children (Norwegian Directorate for Education and Training, 2019). They also specify that reporting applies in cases of child abuse, neglect, lack of necessary treatment for serious illnesses, unmet needs for children with disabilities, and serious neglect including sexual abuse and genital mutilation.

Between 2018 and 2022, the average rate of notifications per year from ECEC providers to CWS concerning children aged 0-5 years was 7 per 1000 ECEC children (Statistics Norway, 2023b). Nonetheless, a Norwegian official report recently concluded that in many cases, concerns about child maltreatment had not been reported despite clear evidence of harmful conditions (Official Norwegian Reports, 2017). The current scope of non-reporting in Norway is unknown; however, a survey of more than 500 ECEC principals from 2009 found that about half reported instances in the last 5 years where they had considered reporting to the CWS but decided not to report (Backe-Hansen, 2009). While many provided justifiable reasons for not reporting, there is reason to suspect that non-reporting can be common in Norway. Research from other countries has also shown that many professionals who are legally mandated to report child maltreatment sometimes fail to do so (see Alvarez et al., 2004; Wilson & Lee, 2021). For example, in a study from the USA, 20% of pediatric nurse practitioners disclosed instances where suspicious injuries were not reported to child protective services-despite mandatory reporting laws (Herendeen et al., 2014). This gap in reporting is the reason why several training programs for child-serving professionals have been developed to improve reporting of child maltreatment (Walsh et al., 2022), including training of ECEC professionals (Mathews et al., 2017).

For training and other types of interventions to be effective, it is crucial to understand the barriers that prevent professionals from reporting child maltreatment. Studies have highlighted a wide range of barriers that contribute to professionals' (e.g., healthcare professionals, teachers, police officers, and social workers) failure to file mandated reports of concerns to CWS (Alvarez et al., 2004;

Fraser et al., 2010; Mathews et al., 2008; Walsh et al., 2012, 2013; Wilson & Lee, 2021). Some of these relate to structural barriers such as the infrastructure of reporting systems, laws and regulatory policies, and lack of resources and support structures (Wilson & Lee, 2021). Other barriers are of a psychological or personal nature and include lack of knowledge about child maltreatment and reporting procedures, negative attitudes towards CWS, and fear of negative consequences for the child, family, and oneself (Alvarez et al., 2004; Wilson & Lee, 2021). Regarding such personal barriers, there may be important differences between professional groups. For example, schoolteachers may be more concerned about jeopardizing the relationship with both the child and the parents compared to professional groups that have no ongoing relationships with the parties involved. Indeed, the fact that reporting to CWS cannot be done anonymously has been implicated as a barrier to reporting among Dutch primary school teachers (Schols et al., 2013). It is also important to note that many professionals have experienced negative outcomes of reporting child maltreatment (McTavish et al., 2017), and this may reduce their willingness to report in the future.

ECEC providers constitute an important arena for the early identification and management of child maltreatment. In Norway, 93% of children aged 1 to 5 years attend ECEC (Statistics Norway, 2023a). ECEC professionals spend a considerable amount of time with young children and form personal relationships with them, which can enable communication about difficult issues. They also communicate with parents or legal guardians on a regular basis. Moreover, they observe children undressed when changing diapers or clothing—enabling them to identify physical signs of maltreatment. For these reasons, ECEC professionals constitute the professional group most likely to identify and disclose maltreatment among young children. In Norway, ECEC providers are responsible for the majority of reports to CWS concerning children aged 3 to 5 years (Statistics Norway, 2023b). However, there is reason to believe that non-reporting is a widespread problem (Backe-Hansen, 2009; Official Norwegian Reports, 2017). One reason for non-reporting is that there might be personal barriers that could lead ECEC professionals to neglect reporting of child maltreatment.

Unfortunately, few studies have investigated the nature and relative importance of different kinds of barriers to reporting concerns about child maltreatment among ECEC professionals. Prior research has focused on other professional groups such as medical doctors, dental healthcare personnel, nurses, and primary school teachers (Alvarez et al., 2004; Bjørknes et al., 2019; Herendeen et al., 2014; Schols et al., 2013; Tiyyagura et al., 2015; Wilson & Lee, 2021). In contrast to these professional groups, ECEC professionals can observe children and their parents on multiple occasions. Another difference is that ECEC professionals constitute a heterogenous group with different educational backgrounds. Barriers in this group may therefore be different from those reported by other professional groups. A qualitative study of ECEC professionals' experiences of reporting such instances were characterized by feelings of both obligation and desire to preserve relationships with the child and parents. To our knowledge, no studies have investigated barriers to disclosing and reporting child maltreatment among ECEC professionals specifically. There is

a clear need for more knowledge about such barriers, which will be important for future improvement efforts.

The aim of the current study was to examine perceived personal barriers to reporting concerns of child maltreatment among ECEC professionals. The first objective was to identify underlying factors that gave rise to variation in scores on different personal barriers and to rank different types of barriers by importance. The second objective was to assess differences according to ECEC professionals' characteristics. To achieve this, we used data from a large sample of Norwegian ECEC professionals.

## Methods

### **Study Context and Sample**

The current study used data from the baseline assessment of a randomized controlled trial undertaken to evaluate the effect of the "Stine Sofie Kindergarten-Package," an intervention designed to strengthen kindergarten professionals' ability to identify and manage maltreatment of children under their care. In Norway, kindergartens constitute the main ECEC provider for children under the age of 6, with 93% of Norwegian 1–5-year-olds attending kindergartens. The study was restricted to two Norwegian counties that were selected because they are relatively large and populous counties with many kindergartens. Principals of all kindergartens within "Vestfold og Telemark" county and all kindergartens in the largest municipalities of "Innlandet" county were contacted and asked to participate in the study. A total of 200 kindergartens (out of a total of 722 kindergartens in these counties) gave their consent. Principals of all participating kindergartens distributed an e-mail invitation to participate in the study to all their employees. The invitation e-mail contained a web link to an informed consent form, which redirected to an e-questionnaire. The participants in this study were N = 1369 ECEC professionals from 170 different kindergartens. The majority were women (92%), and the mean age was 43.65 years (SD = 10.95). Sample characteristics are presented in Table 1.

All participants in the project provided written consent. As the study did not collect information about participants' health, approval from the Regional Committees for Medical and Health Research Ethics was not required (reference number: 285689) according to the Norwegian Health Research Act. The current study was approved by the Data Protection Officer at the Norwegian Institute of Public Health (reference number: 22/01867).

#### Measures

Personal barriers to reporting concerns about child maltreatment were assessed with 25 self-report question items. Participants were first introduced to the concept of "barriers," which in this context are personal factors that may prevent one from reporting concerns of child maltreatment to CWS or others (e.g.,

Table 1Sample characteristics(N = 1374)

	Ν	%/mean (SD)
Sex		
Female	1260	92.04
Male	109	8.0
Age	1369	43.65 (10.95)
Education		
ECEC teacher	716	52.3
ECEC teacher equivalent	27	2.0
Special education teacher	14	1.0
Other educational education	28	2.1
Child care and youth worker	331	24.2
Other higher education	37	2.7
Other skilled worker	51	3.7
Other background	165	12.1
Professional group		
Principal	155	11.3
Pedagogical leader/ECEC teacher	594	43.4
Certified staff	315	23.0
Assistant/educational staff member	254	18.6
Other	51	3.7
Percentage of full time equivalent:		
100%	1045	76.3
80–99%	175	12.8
60–79%	73	5.3
40–59%	61	4.5
20–39%	12	0.9
20%	3	0.2
Mainly works with age group		
0–2 years	475	34.7
3–6 years	578	42.2
Both 0-2 years and 3-6 years	316	23.1
Years in current ECEC provider		
0–2 years	257	18.8
3–6 years	296	21.6
7–11 years	239	17.5
12–16 years	274	20.0
17–40 years	303	22.1
Total ECEC work experience		
0–6 years	254	18.6
7–12 years	293	21.4
13–18 years	266	19.4
19–24 years	261	19.1
25–40 years	295	21.6

(continued)		Ν	%/mean (SD)
	Maltreatment suspected past 6 more	nths	
	No	796	58.1
	Yes	454	33.2
	Don't want to answer	39	2.9
	Don't know	80	5.8

colleagues). We included the word "others" to acknowledge that many reporting instances are initiated after voicing one's concerns to colleagues, the guardians of the child, or the child him/herself. Also, many ECEC providers have guide-lines that dictate who should formally submit a report of concern to CWS (e.g., the principal). Participants were then asked: "Below we have listed a range of barriers which may prevent one from reporting one's concerns. On a general basis, to what degree would the following *prevent you* from reporting a concern?" Responses were recorded on a 6-point scale ranging from 1 = "not at all" to 6 = "to a very large degree." A higher score therefore signifies that the barrier in question is likely to impede reporting behaviors.

The specific barriers listed were based on barriers identified in past studies involving other professional groups (Albaek et al., 2018; Alvarez et al., 2004; Herendeen et al., 2014; Schols et al., 2013; Tiyyagura et al., 2015; Wilson & Lee, 2021). Examples of included barriers are "afraid that the concern turns out to be unfounded," "afraid that my personal relationship with the child will be ruined," "I don't feel it is my responsibility to report," and "the thought that reporting will not help." See Table 2 for all the barriers included in the questionnaires.

The questionnaires included a question about educational background. The first of eight response options was "ECEC teacher," which in Norway is a bachelor's degree for candidates who plan to work as a ECEC teacher or pedagogical leader. The other response options were "ECEC teacher equivalent," "Special education teacher," "Other educational education," "Child care and youth worker," "Other higher education," "Other skilled worker," and "Other background."

The questionnaires also included a question about professional group. The response options were "Principal" (i.e., the manager of the ECEC provider), "Pedagogical leader/ECEC teacher" (combined because a staff member with a ECEC teacher degree often takes on the role of pedagogical leader), "Certified staff" (i.e., certified as childcare and youth workers or holding a related certificate), "Assistant/educational staff member," and "Other."

The questionnaires also included questions about sex, age, percentage of full time equivalent, which child age group they mainly worked with, and work experience in both the current ECEC provider and in ECEC providers overall. Furthermore, participants were asked if they had encountered concerns of child maltreatment in the past 6 months and what actions they had taken to address their most recent concern (e.g., discussed their concern with colleagues, guardians, or the child; or reported their concern to child protective services).

Table 1

	Item To what degree would the following keep you from reporting a concern to the child protective services or to colleagues?	Not at all	<ul><li>I To a very small</li><li>degree</li></ul>	To a small degree	To some degree	To a large degree	To a very large degree	Sum
_	A fraid that my concern proves to be unfounded (e.g., because I have misunderstood something)	12	20	19	36	12	2	100
0	Afraid that it is not in the child's best interest that I report my concern	26	28	18	20	7	1	100
~	A fraid that my cooperation with the parents will be ruined	21	26	22	23	7	1	100
4	A fraid that my personal relation with parents/guardians will be ruined	33	28	21	13	Э	0	100
	A fraid that my personal relationship with the child will be ruined	33	25	17	16	Ζ	2	100
9	A fraid that my superior does not share my concern	43	25	15	12	4	1	100
2	A fraid that my superior will think negatively about me	63	19	11	5	2	0	100
8	A fraid that my colleagues do not share my concern	39	31	16	12	2	0	100
~	A fraid that my colleagues will think negatively about me	56	25	12	5	1	0	100
0	Afraid that the child will come to know that I was the one who reported	49	28	15	7	2	0	100
Ξ	Afraid that parents/guardians will come to know that I was the one who reported	26	29	19	20	5	1	100
12	Afraid that parents/guardians will get angry at me	23	30	20	21	9	1	100
13	Afraid that parents/guardians will take revenge on me	27	28	23	16	4	1	100
14	Afraid that "everyone" (e.g., other parents/guardians in the ECEC provider or local community) will learn that I was the one who reported the concern	33	30	20	13	ю	1	100
15	Afraid that I will make the situation more difficult	14	25	19	30	6	2	100
16	Afraid that child protective services will implement something I do not feel is in the best interest of the child	17	27	23	25	L	1	100
17	Afraid that I will be held responsible for a report of concern to the child protective service	31	27	21	16	4	1	100
18	Afraid that I will break the duty of confidentiality	39	26	16	14	4	1	100
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Item	Item To what degree would the following keep you from reporting a concern to the child protective services or to colleagues?	Not at all	Not at all To a very To a small small degree degre	To a small degree		To To a some large degree degree	To a very large degree	Sum
20	20 Afraid that I could place the child at risk by passing on the concern	11	20	21	33	11	4	100
21	21 The thought that it will not help to report the concern further	24	26	19	21	8	2	100
22	22 I do not feel competent enough to report the concern further	28	26	18	21	5	2	100
23	23 I do not feel it is my responsibility to pass on the concern	67	19	6	4	1	1	100
24	24 I am unsure about the guidelines for reporting concerns	37	28	16	15	4	1	100
25	25 The discomfort I feel in passing on the concern	28	30	19	18	4	1	100

#### Analyses

We first produced summary statistics for each of the barrier items and sorted the barriers by importance (i.e., the fraction of respondents who indicated that the barrier was relevant to some degree, a large degree, or a very large degree).

The next step was confirmatory factor analysis to examine if a set of latent variables could cause covariation in scores on the 25 barrier items. Based on content, the barrier items were set to load on four factors "Negative consequences for the child," "Relationships," "Coworkers," and "Competence." The confirmatory factor analysis was computed with the "sem" module in Stata 17 (StataCorp, 2021). Model fit was determined with the  $X^2$  test, the root mean squared error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean squared residual (SRMR).

Finally, linear regression models were estimated to assess associations of staff characteristics with scores on the latent factors. Here, the outcome variables were factor scores saved from the confirmatory factor analysis using the "predict" command in Stata. To aid interpretation of regression coefficients, these were converted into *z*-scores. Not all worker characteristics were included in the regression models because of conceptual overlap (e.g., age with work experience; education with professional group). In separate models, the barrier factor scores were regressed on sex, years of ECEC work experience, dummy variables for professional group, dummy variables for children's age group, and dummy variables for suspecting maltreatment. *p*-values and 95% confidence intervals were based on robust standard errors clustered at ECEC providers to correct for the nesting of individual respondents. All the questions in the e-questionnaire were set as obligatory; therefore, there were no missing values and no need for a strategy to handle missing values.

## Results

## **Sample Characteristics**

Study sample characteristics are presented in Table 1. More than nine out of ten were women, and the mean age was 44 years. ECEC teacher was the largest educational group, with education as a childcare and youth worker in second place. The largest professional group was pedagogical leader/ECEC teacher, but there were also certified staff (90% of whom were childcare and youth workers), assistants, and ECEC principals. Almost the entire sample worked either full time or slightly less than full time. The group that worked only with children aged 3–6 years was slightly larger than the group that worked only with the younger age group (0–2 years), and almost a quarter worked with both age groups. Eightly percent of the sample had more than 6 years of ECEC work experience.

One third of the sample had suspected child maltreatment in the past 6 months. Concerning their most recent suspicion, 77% indicated that they had discussed the concern with colleagues, 67% had discussed the concern with a supervisor, 38% had contacted child protective services for guidance or assistance, 30% had sent a report of concern to child protective services (or assisted), 27% reported conversations with the parents or guardians regarding their concern, 26% reported conversations with the child regarding their concern, 8% had contacted services other than child protective services, 7% reported "other," and finally 0.2% (one respondent) reported none of the above.

Percentages for agreement with each response option for all 25 barriers are presented in Table 2. In Fig. 1, the barriers are sorted top to bottom by the percentage that endorsed the top three agreement categories. The most endorsed barriers were concerns that the suspicion proved to be unfounded, and concerns about negative consequences of reporting. The least endorsed barriers were concerns about negative reactions from superiors or colleagues, or a lack of feeling responsibility for passing on concerns.

### **Confirmatory Factor Analysis**

The confirmatory factor analysis assessed the model fit of a four-factor solution (i.e., "Negative consequences for the child," "Relationships," "Coworkers," and "Competence"). A simple model without any specified covariances between error terms fitted the data adequately ( $X^2$  (269) = 3558.81, p < 0.001; RMSEA = 0.095, CFI = 0.856, SRMR = 0.063). After inspecting modification indices and specifying covariances between four error terms (item3 with item4; item6 with item9; item12 with item11 and item13) the model fit was further improved ( $X^2$  (265) = 2278.22, p < 0.001; RMSEA = 0.075, CFI = 0.912, SRMR = 0.055). The factor loadings for each item on the specified factors are shown in Table 3. All factor loadings were strong (i.e., > .50). The four factors were all correlated (rs ranged from 0.51 to 0.75). We also computed Cronbach's alpha for the items belonging to each factor, and the lowest was .82 (for the "Competence" factor). The highest mean of item scores was for the factor "Negative consequences for the child." Paired samples *t*-tests indicated

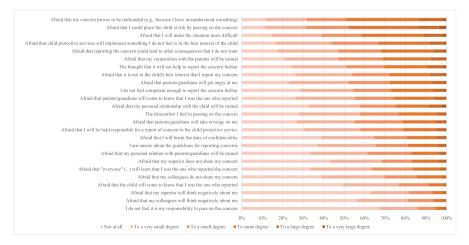


Fig. 1 Perceived barriers to reporting concerns of child maltreatment sorted top to bottom by importance

Item		"Negative consequences for child"	"Relationships" "C	"Relationships" "Co-workers" "Competence"
	Afraid that it is not in the child's best interest that I report my concern	.63		
15	Afraid that I will make the situation more difficult	.81		
16	Afraid that child protective services will implement something I do not feel is in the best interest of the child	.74		
19	Afraid that reporting the concern could lead to other consequences that I do not want	.82		
20	Afraid that I could place the child at risk by passing on the concern	.76		
21	The thought that it will not help to report the concern further	.61		
~	Afraid that my cooperation with the parents will be ruined		.60	
<del>. +</del>	Afraid that my personal relation with parents/guardians will be ruined		.59	
	Afraid that my personal relationship with the child will be ruined		.58	
10	Afraid that the child will come to know that I was the one who reported		.70	
Ξ	Afraid that parents/guardians will come to know that I was the one who reported		.81	
12	Afraid that parents/guardians will get angry at me		.79	
13	Afraid that parents/guardians will take revenge on me		.66	
14	Afraid that "everyone" () will learn that I was the one who reported the concern		.82	
17	Afraid that I will be held responsible for a report of concern to the child protective service		.78	
18	Afraid that I will break the duty of confidentiality		.70	
	Afraid that my superior does not share my concern		06.	
~	Afraid that my superior will think negatively about me		.85	10
~	Afraid that my colleagues do not share my concern		.83	~
•	Afraid that my colleagues will think negatively about me		.93	~
_	Afraid that my concern proves to be unfounded (e.g., because I have misunderstood some-			.59

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Table	Table 3 (continued)				
Item		"Negative consequences for child"	"Relationships" "Co-workers" "Competence"	"Co-workers"	"Competence"
22	22 I do not feel competent enough to report the concern further				.76
23	I do not feel it is my responsibility to pass on the concern.				.56
24	I am unsure about the guidelines for reporting concerns.				.73
25	The discomfort I feel in passing on the concern.				.81
	Cronbach's alpha	.87	.91	.91	.82
	Mean score (SD)	2.84 (1.00)	2.37 (0.91) <sup>a</sup>	1.88 (0.97)	2.39 (0.91) <sup>a</sup>
	Correlations				
	"Negative consequences for child"	1.00			
	"Relationships"	0.75	1.00		
	"Coworkers"	0.51	0.61	1.00	
	"Competence"	0.63	0.74	0.52	1.00
Mear	Means with superscript <sup>a</sup> are not significantly different at the $p < .05$ level				

that this mean score was statistically significantly higher than the other four mean scores (ps < 0.001), but that there was no significant difference between scores on the "Relationships" and "Competence" factors. Scores on the "Coworkers" factor were however significantly lower than the scores on the other three factors (p < 0.001).

#### **Regression Analysis**

The next analytical step was to examine which employee characteristics might be associated with higher scores on the four barrier factors using linear regression models. The model estimates are presented in Table 4.

Compared to women, men had considerably lower scores on all four factors. More ECEC work experience was also associated with lower scores on all four factors (each year of experience was estimated to be associated with a reduction in all four barrier factor scores by one percent of a standard deviation).

There were differences between the professional groups. Compared to the reference category ("Educational supervisor/ECEC teacher"), the "Principals" had significantly lower scores on all four types of barriers. "Certified staff" (for the most part childcare and youth workers) had higher scores on all four barrier factors compared to the reference category. The "Assistants/educational staff members" (i.e., staff without higher education or certificates) scored higher on two of the barrier scores, namely "Coworkers" and "Competence."

There were no noticeable differences between employees who worked with younger children, older children, or both younger and older. In general, there were only small differences depending on whether the employees had suspected maltreatment in the last 6 months. An exception to this was that the small group who reported "don't know" had higher scores on all barrier factors.

## Discussion

The aim of this study was to examine perceived personal barriers to reporting concerns of child maltreatment to CWS among ECEC professionals. Our findings indicate that a range of barriers may prevent the reporting of maltreatment. We found evidence for four groups of barriers, and ECEC professionals endorsed these as likely to impede reporting behaviors to a varying extent. Moreover, our findings highlight that the endorsement of different kinds of personal barriers depended on the personal characteristics of ECEC professionals.

The first objective of the current study was to examine which barriers are most likely to impede reporting behaviors. We found evidence for four different types of barriers. The most important factor was named "Negative consequences for the child," and comprised barriers related to fear of negative consequences of reporting. In shared second place were the "Relationships" factor, which included barriers related to concerns that the relationship with the child or the child's parents would be jeopardized, and the "Competence" factor, which covered barriers

lable 4 Linear regression models for J	TOT ELEU professionals barriers to reporting concerns of child mattreatment "Negative consequences for "Relationships" "Co-v	es for	sporting concerns of chi "Relationships"	Id maltre	atment "Co-workers"		"Competence"	
	child"							
	b (95% CI)	b	b (95% CI)	p	b (95% CI)	р	b (95% CI)	р
Sex								
Female	Reference		Reference		Reference		Reference	
Male	-0.29(-0.49, -0.10) 0.004	0.004	-0.34(-0.52, -0.17) < 0.001	<0.001	-0.28(-0.44, -0.13) < 0.001	<0.001	-0.28 (-0.45, -0.11)	0.001
Total ECEC work experience	-0.01 (-0.02, -0.01) <0.001	<0.001	-0.01 (-0.02, -0.01)	< 0.001	-0.01 (-0.02, -0.01)	<0.001	-0.01 (-0.02, -0.01) <0.001 -0.01 (-0.02, -0.01) <0.001 -0.01 (-0.02, -0.004) <0.001	<0.001
Professional group								
Pedagogical leader/ECEC teacher	Reference		Reference		Reference		Reference	
Principal	-0.28(-0.52, -0.05)	0.017	-0.53(-0.75, -0.32)	<0.001	-0.32 (-0.50, -0.14)	< 0.001	-0.51 (-0.73, -0.30)	<0.001
Certified staff	0.13 (-0.02, 0.28)	0.088	$0.25\ (0.09,\ 0.40)$	0.002	0.22 (0.06, 0.37)	0.006	$0.33\ (0.19, 0.48)$	<0.001
Assistant/educational staff member	-0.01 (-0.16, 0.14)	0.869	0.11 (-0.04, 0.26)	0.145	$0.15\ (0.01,\ 0.28)$	0.036	$0.29\ (0.15,\ 0.44)$	<0.001
Other	-0.03(-0.30, 0.24)	0.842	0.01 (-0.26, 0.28)	0.962	-0.07 (-0.35, 0.21)	0.614	0.12 (-0.18, 0.42)	0.438
Mainly works with age group								
0–2 years	Reference		Reference		Reference		Reference	
3–6 years	-0.05(-0.18, 0.07)	0.397	-0.03(-0.16, 0.10)	0.682	-0.05(-0.18, 0.09)	0.501	-0.03 (-0.16, 0.10)	0.636
Both 0–2 years and 3–6 years	0.09 (-0.08, 0.26)	0.298	0.11 (-0.07, 0.28)	0.219	-0.06(-0.23, 0.11)	0.515	0.12 (-0.06, 0.31)	0.186
Maltreatment suspected								
No	Reference		Reference		Reference		Reference	
Yes	0.12 (-0.01, 0.24)	0.068	0.02 (-0.10, 0.13)	0.781	0.02 (-0.08, 0.12)	0.655	-0.07 (-0.19, 0.04)	0.225
Don't want to answer	0.27 (-0.08, 0.63)	0.135	0.29 (-0.08, 0.66)	0.121	0.27 (-0.10, 0.63)	0.158	0.17 (-0.17, 0.50)	0.337
Don't know	$0.29\ (0.11, 0.48)$	0.002	$0.41 \ (0.22, 0.61)$	<0.001	$< 0.001  0.32 \ (0.11, \ 0.53)$	0.003	$0.41\ (0.20,\ 0.62)$	<0.001
								- 1

related to the fear of misunderstanding, not feeling competent enough, and being unsure about guidelines. The least endorsed barrier factor, the "Coworkers" factor, involved concerns that supervisors or colleagues would react negatively. The relative importance of various barriers identified in our study is in accordance with prior research with other professional groups (Alvarez et al., 2004; Wilson & Lee, 2021).

The frequent endorsement of the "Negative consequences for the child" factor as an important barrier may indicate a lack of trust in the CWS among ECEC professionals. Prior research has shown that professional groups often have negative attitudes to and experiences with CWS (Alvarez et al., 2004; McTavish et al., 2017; Wilson & Lee, 2021). Over the past few years, a number of child welfare cases from Norway have been appealed to the European Court of Human Rights. These cases have been particularly critical of parental rights, which raises questions about the effectiveness of the Norwegian system in upholding the Convention on the Rights of Children (Melinder et al., 2021). This wave of criticism could also make professionals hesitant to report cases to the CWS due to uncertainty about the system's efficacy. ECEC professionals' skepticism of the CWS may also be a reflection of a relative lack of trust in the CWS in the general Norwegian population (Loen & Skivenes, 2023). Continued improvement of CWS and improved cooperation between ECEC professionals and CWS can mitigate these barriers.

Our results are in line with a study of dental personnel in Norway (Bjørknes et al., 2019), where the most frequently mentioned reason for not reporting concerns of child maltreatment to CWS was "unsure of own assessment." A study of school teachers also identified fear of false positives as an important barrier (Schols et al., 2013). These findings likely reflect the fact that schoolteachers have close relationships with the child and guardians and interact with them daily. The fear of reporting false suspicions might be reduced by teaching ECEC professionals how to raise concerns about maltreatment with colleagues, children, and guardians.

Our study also showed that fear of jeopardizing relationships with the child and parents was an important barrier (i.e., the "Relationships" factor). These findings might challenge the requirement that reports of concern from ECEC professionals to CWS cannot be done anonymously in Norway. In the absence of the possibility to report anonymously, our results suggest that efforts should be made to mitigate the fear that reporting might jeopardize relationships with both the child and the family.

Feeling a lack of competence (i.e., the "Competence" factor) was also a barrier likely to hinder reporting. However, this might be comparatively easy to overcome using clear reporting guidelines. In our study, 83% reported that their ECEC provider had written guidelines for reporting practices, and perhaps ECEC providers with such guidelines should refresh the staff's knowledge of those guidelines at regular intervals. ECEC providers without such guidelines could benefit from their implementation.

While fear of reactions from supervisors and co-workers (i.e., the "Co-workers" factor) was the least commonly reported type of barrier, it was still reported by some of the employees, especially those with less formal training and less work experience. This barrier can perhaps be mitigated by better communication about guide-lines for reporting, and emphasis on the staff's shared responsibilities.

This study's second objective was to identify employee characteristics associated with different scores on various barriers. Overall, the ECEC principals endorsed barriers to a lesser extent than did other professional groups. Principals typically have more years of education, training, and experience, which can partly explain these differences. They are also the point of contact between the ECEC provider and CWS and might therefore have a greater understanding of how CWS operate compared to other professional groups. Conversely, the certified staff (i.e., staff certified as childcare and youth workers or holding a related certificate) endorsed the barriers "Relationships," "Coworkers," and "Competence" to a greater extent than the reference category (Pedagogical leaders/ECEC teachers). The assistants/educational staff members also had higher scores on the "Coworkers" and "Competence" factors compared to the reference category. The certified staff and assistants/educational staff typically have less formal education and training, which might partly explain these differences. Pedagogical leaders/ECEC teachers have more training in how to handle concerns about child maltreatment. In addition, they have leadership roles and extra responsibility to follow up the cooperation between the ECEC provider and families, including parent teacher conferences.

After accounting for differences between professional groups, we also found that men endorsed barriers to a lesser extent than women. We also found that more years of work experience was associated with lower scores on barriers overall. A likely explanation for this is that employees with more years of experience have faced more concerns of maltreatment, submitted more reports of concern to CWS, and had more time to learn guidelines for reporting child maltreatment. Similar findings were reported in a prior systematic review (Wilson & Lee, 2021). Sharing accounts of the events that unfolded after reporting between more and less experienced staff might mitigate these barriers, especially for less experienced staff.

### **Strengths and Limitations**

Strengths of the current study include its novelty and large sample size, and a battery of items developed specifically to assess barriers to reporting child maltreatment among ECEC staff. We collected information that probed the extent to which the various personal barriers were likely to impede reporting behaviors, which differs from studies where participants are merely asked to list barriers that may be important. Some limitations should also be noted. As we included non-random samples of ECEC providers from two counties and included only the largest municipalities in one of the counties, there might be issues regarding the representativity of ECEC providers and subsequently the generalizability of findings to other counties in Norway and beyond. The current study was conducted in the context of an ongoing randomized controlled trial, and it is possible that participating ECEC providers are more resourceful (and thus less susceptible to barriers) than ECEC providers that opted not to participate. Furthermore, a disproportional share of our sample comprised ECEC principals who typically have more formal training and experience compared to other ECEC staff. The potential effect of selection bias on our results could be assessed in a future study that samples ECEC professionals at random from a list of all ECEC professionals in Norway. In our

study, we assessed the degree to which a pre-specified list of personal barriers may hinder the reporting of child maltreatment. Participants were therefore not given the opportunity to formulate the barriers themselves, which may have led us to exclude potentially important barriers. For example, we did not include purely structural or systemic barriers. However, we based the list of barriers on prior research. Lastly, in our study we focused on general barriers to reporting maltreatment without exploring specific types of maltreatment or severity levels. Moving forward, it is crucial for future research designs to differentiate between various types and severity levels of maltreatment. These distinctions can influence how professionals perceive, report, and respond to cases, underscoring the necessity for nuanced considerations across research, law, policy, education, and practice.

## Conclusion

In conclusion, ECEC professionals are subject to similar barriers to reporting child maltreatment as other professional groups. An overall finding is that all barriers were to some extent endorsed as likely to hinder the reporting of child maltreatment by a significant proportion of the sample. Fear of negative consequences for themselves, the child, or their relationship to the child and guardians were among the most potent barriers according to staff. Less formal training and work experience was associated with a higher degree of perceived barriers. Better collaboration with CWS may ameliorate some of the barriers endorsed as particularly challenging. Moreover, as ECEC professionals with less formal training and experience were particularly susceptible to barriers, future efforts should consider focusing specifically on these professional groups. Continued competence-building is important to overcome barriers to reporting child maltreatment.

**Acknowledgements** We thank all the kindergarten professionals who participated in this study. We also thank Tonje Holt (Department of Children and Families, Norwegian Institute of Public Health) for administrative support for this project.

**Funding** Open access funding provided by Norwegian Institute of Public Health (FHI) This study was funded by Stine Sofie's Foundation (SSF), in turn by funding from Gjensidige Foundation (GF). SSF is a Norway-based children's non-profit rights charity which provides support to victims of child abuse. GF is a Norway-based financial foundation that provides funding to socially beneficial purposes.

## Declarations

**Conflict of Interest** This study is part of a research project commissioned and funded by Stine Sofie's Foundation (SSF). The research project was carried out in collaboration with SSF, where they aided in the recruitment of participants. SSF had no role in the analysis or interpretation of findings, decision to publish, or preparation of the current manuscript.

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