

Exploring the Influence of Child Race/Ethnicity and Child Maltreatment Type on Teacher
Reporting Intention

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Abstract

Despite Canadian teachers being the most frequent reporters to child welfare agencies, research shows many teachers who suspect child maltreatment fail to make a report. In this research study, we aimed to advance the understanding of various levels of influence (i.e., teacher and system characteristics) as well as the impact of components from the theory of planned behaviour on teachers' child maltreatment reporting intentions. Canadian teachers (N = 93) viewed case vignettes that varied across maltreatment types (sexual, physical, emotional abuse, neglect, intimate partner violence (IPV) exposure) and child race/ethnicity (Black, White, Indigenous, East Indian, Chinese) and indicated the likelihood of reporting each case vignette within the factorial survey design. They also responded to questions related to the teacher and system characteristics, including theory of planned behaviour components. Findings showed a significant difference in teachers' reporting intentions based on teacher and system characteristics, although the influence fluctuated based on the two manipulated variables. Reporting intentions were highest for sexual abuse, followed equally by physical abuse and IPV exposure, and then neglect and emotional abuse. Legal obligations and a desire to help drove reporting, while fears of worsening circumstances and resource suitability hindered it. Race/ethnicity had no direct effect, but subjective norms increased reporting likelihood for Black, East Indian, and Chinese children. The results highlight the need for a comprehensive understanding of multi-level predictors of teachers' child maltreatment reporting intentions and how they fluctuate based on type of maltreatment and race/ethnicity of the child victim.

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Exploring the Influence of Child Race/Ethnicity and Child Maltreatment Type on Teacher Reporting Intention

Child Maltreatment Overview

Child maltreatment is abuse and neglect that occurs to children under 18 years of age and comprises sexual, physical, and emotional abuse, neglect, and exposure to intimate partner violence (IPV; World Health Organization, 2022). Across the globe, child maltreatment is considered a public health concern (Afifi et al., 2014), with 1 in 15 children and adolescents experiencing some form of maltreatment annually (Svevo-Cianci et al., 2010). Within Canada, a retrospective study indicated that 1 in 3 Canadians aged 15 years and older reported having experienced some form of maltreatment as a child (Burczycka & Conroy, 2018). Despite its pervasiveness, there is a substantial discrepancy between the number of children who experience maltreatment, and the number reported to the authorities (i.e., police, child welfare system) for protection and support (e.g., 93% who experienced physical or sexual abuse said it was not reported; Burczycka & Conroy, 2018).

Failure to identify these children for early intervention places them at higher risk of experiencing harmful short- and long-term effects. These effects include physical health problems (e.g., obesity, congenital heart disease, and chronic pain; Proskynitopoulos et al., 2021; Top & Cam, 2020) and mental health difficulties (e.g., bipolar disorder, suicide attempts, and substance use disorder; Afifi et al., 2014). Life achievements are also jeopardized, with a higher likelihood of poor academic performance, unhealthy relationships, and behavioural problems (Doyle & Cicchetti, 2017; Goodkind et al., 2013; Romano et al., 2015). Abuse and neglect can also lead to intergenerational transmission of child maltreatment where the harmful cycle is modeled through families (Yang et al., 2018). Ultimately, these dire consequences speak to the necessity for early intervention to mitigate these risk factors, prevent further harm, and stop cycles of maltreatment (Goebbels, 2008).

Teachers' Reporting Role

Teachers play a critical role in helping ensure a child's safety, because they are legally mandated reporters (e.g., educators, physicians) that interact with children on a frequent and regular basis (Joh-Carnella et al. 2020; King & Scott, 2014; Mathews et al., 2015). Teachers are the professionals who make the highest number of reports in Canada (32-36%; Fallon et al., 2020; Trocmé et al., 2010). However, there is much literature that suggests teachers within

Canada and in other countries may be suspecting maltreatment but not reporting it (Beck et al., 1994; Dinehart & Kenny, 2015; Feng et al., 2010; Glouchkow et al., 2020; Goebbels et al., 2008; Greco et al., 2017; Greco et al., 2020; Kenny, 2001; King, 2011; Mathews et al., 2015; Tite, 1993; Weegar, 2019). The rates of under-reporting vary widely between 4% and 47% (Dinehart & Kenny, 2015; Greco et al., 2017). A Canadian study (Weegar, 2019) found that roughly one third of teachers chose not to report maltreatment despite suspecting and being legally required to do so.

Factors That Influence Teachers' Reporting Practices

In the past 30+ years, researchers have been slowly conceptualizing teachers' decision making around child maltreatment reporting. An integrative review by Alazri and Hannah (2020) examined 14 studies that identified common factors that facilitate or inhibit child maltreatment reporting behaviour and intentions by school personnel. There were a range of factors that fell into victim (e.g., race, abuse severity), reporter (e.g., uncertainty, past reporting experience), and system characteristics (e.g., school setting, mandatory reporting law). The large number of factors highlight the complexity of this phenomenon (Christodoulou et al., 2019) and the difficulties around how best to examine this topic. The majority of most findings identify and describe influencing factors yet do not provide insight into the degree of association among factors or the predictive power of factors on reporting behaviour (Alazri & Hannah, 2020). A lack of predictive models, in particular by type of maltreatment, reduces our current understanding of the strength and direction of factors that influence teacher reporting. Alazri and Hannah's (2020) review also illuminated the limited number of research studies using theory to guide the exploration of child maltreatment reporting behaviours as well as the lack of consistent methodology to measure intention to report (i.e., vignettes vs. actual reporting in the past 12 months). Collectively, these findings indicate the lack of a cohesive direction within the field, which makes analyzing results and drawing conclusions around teachers' maltreatment reporting behaviour difficult.

Victim characteristic

Alazri and Hannah (2020) identified four victim characteristics found to influence teacher reporting behaviours and intentions. These factors were *maltreatment severity* (e.g., greater severity was linked with greater reporting; Christodoulou et al., 2019; Crenshaw et al., 1995; Egu et al., 2003; Mathews et al., 2015; King & Scott, 2014), *victim race/ethnicity* (e.g., child with a non-western European background was reported more frequently; Sinanan, 2011; Vanderfaellie

et al., 2018), *victim socioeconomic status* (e.g., higher socioeconomic status was associated with less reporting; Zellman, 1992), and *family characteristics* (e.g., victim who was a part of a family already involved in the child welfare system was reported more frequently; King & Scott, 2014). Researchers have also identified additional victim variables linked with teacher reporting intention and behaviour, such as maltreatment type (Bibou-Nakou & Markos, 2017; Glouchkow et al., 2022; Toros & Tiirik, 2016) and maltreatment chronicity (i.e., increase in reporting intent if a similar event is witnessed on multiple occasions; Glouchkow et al., 2022; Walsh et al., 2008). Further, an increased likelihood of teacher reporting was found when a child disclosed maltreatment compared to when there was only a suspicion from observation by the teacher (Falkiner et al., 2017), when the victim was younger in age (6 months to 6 years), and/or when the victim was male (King & Scott, 2014; Sinanan, 2011; Webster et al., 2005; Zellman, 1992). A decrease in the probability of reporting among teachers included instances where a victim displayed aggressive behaviours and instances involving an older child (8-14 years; Webster et al., 2005; Weegar, 2019; Zellman, 1992).

Looking at *child maltreatment type more closely*, the findings are contradictory, with the highest reporting behaviour and intention rates varying among physical abuse (Bibou-Nakou & Markos, 2017; Crenshaw et al., 1995; Falkiner et al., 2017; Karadag et al., 2015; Toros & Tiirik, 2016; Walsh et al., 2008), sexual abuse (Beck et al., 1994; Bruyninckx et al., 2021; Glouchkow et al., 2022; O'Toole et al., 1999; Toros & Tiirik, 2016; Webster et al., 2005), and neglect (Goebbels et al., 2008; Tite et al., 1998). Physical abuse (Glouchkow et al., 2022; Webster et al., 2005) and sexual abuse (Falkiner et al., 2017; Goebbels et al., 2008) have also been found to be the least likely to be detected and intended to be reported relative to each other, as well as relative to emotional abuse and neglect. Currently, it is hard to discern how maltreatment type impacts reporting and how other factors interact with maltreatment type to influence teachers' reporting behaviour. However, it should be noted that emotional abuse has been relatively consistent in being a more challenging maltreatment type insofar as the reporting intention and behaviour are low for this form of abuse (Bruyninckx et al., 2021; Crenshaw et al., 1995; Toros & Tiirik, 2016). Further, researchers have yet examined the likelihood of reporting a young person's IPV exposure relative to other types of maltreatment. However, Markström and Münger (2018) found that teachers struggled with knowing whether, and how, to intervene in instances of this type of maltreatment.

Turning to *race*, certain racial groups are overrepresented within the Canadian child welfare system (e.g., Indigenous; Black; Boatswain-Kyte et al., 2020; Blackstock et al., 2020; Cénat et al., 2021; Child Welfare Information Gateway, 2016). An early Canadian study examining the intersection of reporting and race (Lavergne et al., 2008) found that Indigenous children, followed by Black children, were overrepresented in the child welfare system. This finding was confirmed in follow up studies, with Indigenous children being over four times more likely to be reported for abuse and neglect than non-Indigenous children (Sinha et al., 2013) and Black children being five times more likely to be reported than White children (Children's Aid Society of Toronto, 2015; Noorishad et al., 2023). When exploring school reporting rates within Ontario, King et al. (2017) found that the proportion of Black children reported was substantially higher than their White peers.

Researchers have started to examine how the role of *culture* influences teachers' reporting (de Haan et al., 2019; Gubbels et al., 2021, Krase, 2015; Nagy et al., 2019; Sinanan, 2011; Vanderfaeillie et al., 2018). Certainty around reporting suspected child maltreatment has been found to decrease when teachers must account for differences in child-rearing practices among cultures (Gubbels et al., 2021, de Haan et al., 2019; Nagy et al., 2019). de Haan et al. (2019) identified that, for certain ethnic populations, teachers might mistake child maltreatment for typical parenting practices and vice versa. This situation can lead to underreporting when a child is at risk but also inaccurate reporting when there is no safety risk for a child. Gubbels et al., (2021) found that teachers experienced greater difficulty in assessing for the risk of maltreatment when they were aware of cultural differences regarding parenting practices. This is concerning as Feng et al. (2010) found that the biggest reason for failure to report child maltreatment stemmed from teachers' uncertainty about evidence. Consequently, the addition of uncertainty based on cultural practices may further reduce the likelihood of teachers reporting child maltreatment concerns.

Teachers have also been found to have differences in reporting behaviours and intent to report rates based on race/ethnicity. In a Belgian study by Vanderfaeillie et al. (2018), teachers' reporting behaviours differed based on family ethnic background such that, when viewing maltreatment vignettes that teachers appraised as more severe, they more frequently indicated their intention to report if the parents were not of Western European descent. In a more recent Belgian study examining intention to report among Flemish rural primary teachers (Bruyninckx

et al., 2021), similar results were found. Both perceived severity and intent to report increased when the child's background was North African/Turkish or African, compared with an Eastern European child. In the United States, findings have indicated that education personnel disproportionately report Black and Hispanic children to child welfare services relative to White children, particularly in low-income contexts (Krase, 2015; Sinanan, 2011). However, an older study (O'Toole et al., 1999) found that teachers' reporting intentions were somewhat higher when the child was Black but much higher when the child was White, Latino, or Asian American. Despite much evidence indicating differences in reporting intentions and behaviours based on child race/ethnicity, it should be noted that an earlier study using case vignettes (Egu et al., 2003) found no effect of child race for the reporting intentions of teachers.

Teacher characteristics

Alazri and Hannah's (2020) systematic review concluded that reporter characteristics, to be called teacher characteristics in the current study, could be placed into one of six categories. These include (1) knowledge about child maltreatment reporting, (2) prior experience with child abuse and neglect, including training, (3) fear and level of certainty, (4) beliefs and attitudes towards reporting, (5) relationships, and (6) self-confidence and personal control. Within these six categories, factors that both increase and decrease the likelihood of reporting were found.

Focusing on factors that *increase* reporting intentions and behaviours with respect to *knowledge*, teachers with substantial information about child welfare reporting procedures (Feng et al., 2010; Greco et al., 2020; Gubbels et al., 2021; Mathews et al., 2015; Toros & Tiirik, 2016) and school administration reporting procedures (Bryant, 2009; Dinehart et al., 2015, Feng et al., 2012; Toros & Tiirik, 2016; Walsh et al., 2012) appear more apt to report suspicions. This knowledge includes recognizing their legal duty to report child maltreatment (Glouchkow et al., 2022). Under *prior experience*, researchers have found that exposure in a teacher's private life (i.e., knowing someone who has experienced child maltreatment; Bonardi, 1999; Webster et al., 2005), including a personal connection to child welfare agencies (e.g., knowing someone who has been involved with the child welfare system; Bonardi, 1999; Vanderfaellie et al., 2018; Webster et al., 2005), increases the probability of intent to report and reporting behaviours. Similarly, if a teacher has prior reporting experience (Bibou-Nakou et al., 2017; Bonardi, 1999; Walsh et al., 2005; Webster et al., 2005), has reported multiple times (Goebbels et al., 2008; O'Toole et al., 1999), and/or has received training for reporting child abuse and neglect (Bonardi, 1999; Walsh,

2012; Weegar, 2019), there is a greater likelihood of intent to report and reporting behaviour for child maltreatment. Included in prior experience is *educational training and working experience*. More schooling (Goebbels et al., 2008), a greater number of years in the teaching profession (Goebbels et al., 2008; Greco et al., 2017; Kenny, 2001; Toros & Tiirik, 2016; Walsh et al., 2008), holding a permanent teaching position (Karadag et al., 2015), and working with children who have learning differences or mental/physical disabilities in a role outside of a homeroom teacher (Kenny, 2001) have been found to increase the likelihood of reporting.

Turning to the category of *fear and level of certainty*, it appears that fear of continued harm to a child is linked with greater reporting behaviour. For level of certainty, a high level of certainty determined by sufficient/clear evidence and/or clearer boundaries of acceptable versus non-acceptable parental behaviour (e.g., sexual abuse versus emotional abuse) has been associated with an increase in the likelihood of intent to report (Glouchkow et al., 2022; Falkiner et al., 2017). *Attitudes* that appear to increase teacher reporting intention include believing the report will help the child or family, that it is better to report than not (Glouchkow et al., 2022), having a positive attitude toward the child welfare system (Walsh et al., 2012), and having a positive attitude about their own role as a reporter (Bibou-Nakou et al., 2017; Christodoulou et al., 2019; Feng et al., 2009), such as viewing reporting as an important task (Gubbels et al., 2021) or believing teachers should be the first line of defence (Crenshaw et al., 1995). *Relationally*, teachers who felt supported by colleagues, administration, and child welfare (Glouchkow et al., 2022; Gubbels et al., 2021), who thought the informant had high credibility (e.g., a parent versus a child) and who had a desire to help the child/family (Glouchkow et al., 2022) would more often indicate a greater intent to report. Lastly, within *self-confidence and personal control*, the higher a teacher's self-confidence in their reporting abilities, the more likely they were to report suspected child maltreatment (Alazri & Hannah, 2020).

In addition to Alazri and Hannah's (2020) categories, certain teacher demographics have been found to influence child maltreatment reporting, such as gender. However, the results are mixed with some research indicating that women report more often than men (Vanderfaellie et al., 2018; Walsh et al., 2008), some research showing that men report more often than women (Greco et al., 2017; O'Toole et al., 1999), and some research showing no gender differences in reporting (Crenshaw et al., 1995; Greco et al., 2020; Kenny, 2001). Further, both an increase in intent (Anuar et al., 2024) and a decrease in intent and reporting (Webster et al., 2005) have been

found if teachers are married versus unmarried and if teachers do not have their own children (O'Toole et al., 1999). It is important to note that Karadag et al. (2015) found that having a child increased the likelihood to report but Walsh et al. (2008) did not find any such relationship. Lastly, Bonardi (1999) found that if the teacher's race differed from that of the child, there was an increased likelihood of intent to report suspicions of child maltreatment.

Regarding factors that *decrease* reporting behaviour and intentions, there is the category of *knowledge*, with teachers who lack information about reporting duties and processes tending not to report child maltreatment suspicions (Dinehart et al., 2015; Feng et al., 2012; Hurtado et al., 2013; Toros & Tiirik, 2016). Further, misinterpretation of whether teachers should intervene in different cultural disciplinary practices that may/may not be considered child maltreatment (Greco et al., 2017) was found to hinder reporting. Under *prior experience*, the findings contradict those by Weegar et al. (2019) and other researchers (Bonardi, 1999; Feng et al., 2012; Mathews et al., 2015; Walsh et al., 2012), with prior training in child maltreatment being shown to reduce reporting (Kenny et al., 2004; Falkiner et al., 2017; Walsh et al., 2008). *Fear* appears to be a frequent rationale for lack of reporting, such that many teachers fear being incorrect (Dinehart et al., 2015; Kenny, 2001; Toros & Tiirik, 2016) and fear experiencing negative repercussions (Alvarez et al., 2004; Falkiner et al., 2017), including harming the teacher-child relationship (Gubbels et al., 2021; Feng et al., 2009), harming the teacher-parent relationship (Gubbels et al., 2021; Feng et al., 2009; Gilbert et al., 2009; Greco et al., 2017), worsening the circumstance for the child (Beck et al., 1994; Gubbels et al., 2021; Webster et al., 2005), and risking potential litigation (Dinehart et al., 2015). Similarly, uncertainty about the evidence (Falkiner et al., 2017; Feng et al., 2010; Glouchkow et al., 2022; Toros & Tiirik, 2016), including lack of physical marks on a child's body (Falkiner et al., 2017), as well as a perception that there is insufficient evidence (Beck et al., 1994; Falkiner et al., 2017; Glouchkow et al., 2022; Kenny, 2004; Markström & Münger, 2018) and lack of clarity if a child welfare agency is the correct resource for the situation (Gubbels et al., 2021) appear to reduce the likelihood of reporting and intent to report.

Attitudes that appear to diminish the odds of teacher reporting intention and behaviour include the belief that it is not their responsibility to intervene (Glouchkow et al., 2022), that there are higher priorities in the classroom (Gubbels et al., 2021), and that they do not have confidence in the child welfare agency (Greco et al., 2017; Feng et al., 2009). For the latter, this

includes teacher perceptions that child welfare agency response times are too long, that communication is poor, and that files are closed too quickly (Gubbels et al., 2021). *Relationships* could also deter reporting if teachers perceive a lack of cooperation from a child welfare agency or a lack of support from their school administration (Gubbels et al., 2021). Lastly, a lack of teacher *self-confidence* in identifying certain symptoms of child maltreatment (Cater et al., 2016) and sharing their suspicions with highly educated parents reduced reporting.

Theory of planned behaviour. As evidenced in the preceding section on teacher characteristics, child maltreatment reporting by teachers is a complex phenomenon (Alazri & Hannah, 2020; Christodoulou et al., 2019). There are a host of potential influencing factors, and only a few studies have drawn on a theoretical model to guide the research. The theory that has appeared most often in this literature has been the theory of reasoned action and its subsequent additions (e.g., theory of planned behaviour, integrated change model; Christodoulou et al., 2019; Feng et al., 2010; Goebbels et al., 2008; O'Toole et al., 1999). These authors measured the main components of these various theoretical models (e.g., attitude about reporting) and found them to account for 22-42% of the variance in teachers' reporting intentions (Christodoulou et al., 2019; Feng et al., 2010). Alazri and Hannah (2020) proposed that researchers select a theory to (1) unite the fragmented research findings, (2) clarify definitions of fundamental ideas, (3) develop scientifically robust insight of teacher reporting behaviour, and (4) assist in the creation of a valid measure. Based on prior research and Alazri and Hannah's (2020) recommendations, the Theory of Planned Behaviour (TPB) was used in the current study to better understand teachers' likelihood of reporting suspected child maltreatment. TPB is based on the premise that, if we understand behavioural intentions, we can then predict behaviour (McEachan et al., 2011). Behavioural intentions reflect the likelihood of an individual performing a behaviour by measuring (1) the amount of attitudinal positivity towards the targeted behaviour, (2) the level of perceived social pressure to complete the behaviour, and (3) the extent to which there is perceived control to perform the behaviour (Ajzen, 2012). Better understanding teachers' behavioural reporting intentions will help to better predict how teachers would actually behave were they to encounter a similar situation in their teaching career.

System characteristics

In addition to the victim and teacher levels, Alazri and Hannah (2020) also noted the systems level as important in influencing teacher reporting behaviours around child maltreatment.

Factors within the systems level include school education level, school setting, and availability of mandatory reporting laws. At the *school education level*, a greater number of reports are made at the elementary level than for middle or high school, which Alazri and Hannah (2020) noted may reflect the victim characteristic of younger children being more likely to be reported. In relation to *school setting*, geographical location and socioeconomic status appear to influence teacher reporting, such that teachers at schools in lower income areas with greater health disparities had lower levels of intention to report (Bruyninckx et al., 2021; Feng, 2012). Further, within the school setting, both schools located in a rural setting (Hurtado et al., 2013; O'Toole et al., 1999; Webster et al., 2005) and schools located in less ethnically and racially heterogeneous neighbourhoods were found to have lower levels of reporting and intent to report (Klein & Merritt, 2014). For *availability of mandatory reporting laws*, research indicates that jurisdictions with mandatory reporting legislation led to teachers having more knowledge about reporting (Walsh et al., 2013), and this factor has been viewed as important in teacher decision making around contacting child welfare with their suspicions (Beck et al., 1994; Dinehart et al., 2015; Walsh et al., 2008). In addition to Alazri and Hannah's (2020) review, some researchers have found that the degree of administrative support (Feng et al., 2009; Kenny, 2001) and school administration reporting policies (Dinehart et al., 2015; Falkiner et al., 2017; Feng et al., 2009; Tite et al., 1993) can influence the likelihood of teachers contacting authorities to report their child maltreatment suspicions. Finally, Bruyninckx et al. (2021) identified that fewer supplemental education services hours (i.e., teacher activities that occur outside of the typical classroom hours designed to benefit students reading, language, and math skills) within a school was associated with greater child maltreatment reporting intentions.

Study Objectives

Alazri and Hannah's (2020) review highlighted a number of gaps in the research literature on teachers' reporting of suspected child maltreatment. In this study, we used a factorial survey design that used child maltreatment vignettes was used to address some of the limitations from past research. In particular, three study objectives were addressed.

1) The research literature shows that three categories of factors (i.e., victim, teacher, and system) tend to influence teachers' child maltreatment reporting intentions and behaviours. However, most studies have not included factors across all categories. In the current study, factors from all three categories were measured to address the following research question: What

is the relationship of teacher and system characteristics on teachers' child maltreatment reporting intentions within varied conditions of victim characteristics (i.e., maltreatment type and victim race/ethnicity)? Based on prior research, there appears to be more robust evidence about the role of number of years teaching, prior reporting experience, and school location (e.g., urban versus rural) in influencing the reporting process. In line with past research, it was hypothesized that teachers in the current study would have higher reporting intentions if they had been teaching for longer, if they had previously reported in their teaching career, and if their school was located in a higher density area. There is emerging research on the level of satisfaction with child welfare from past reporting having an influence on reporting intentions. As such, it was hypothesized that teachers would indicate higher reporting intentions if they had a positive past experience with a child welfare agency. For the remaining teacher (i.e., gender, parental status, teacher education level, teachers working outside homeroom with students who have learning/physical/mental disabilities, prior professional experience working with children with a history of child maltreatment, and prior training for child maltreatment reporting) and system (i.e., school education level, socio-economic status of school area) characteristics included in the current study, there was either very limited research or the existing research was equivocal. As such, no hypotheses were made.

2) In the current study we explored in greater detail the role of child race/ethnicity on teachers' reporting intentions. The research question was as follows: Does child race/ethnicity influence teachers' reporting intentions for five different maltreatment types? Based on past, albeit limited, research, it was hypothesized that teachers would have a lower intention to report White children relative to their peers from other race/ethnicities across the five forms of maltreatment (sexual, physical abuse, emotional abuse, neglect, IPV exposure).

3) Past research generally has not adopted a theoretical framework to examine teachers' child maltreatment reporting intentions or behaviour. Of the few studies that used a theory, the majority used the Theory of Planned Behaviour (TPB). We used TPB in the current study to examine how attitudes, subjective norms, and perceived behavioural control influence teachers' reporting decisions of case vignettes. This research objective was similar to that in the study by Christodoulou et al., (2019), except the three TPB variables in the current study were examined in relation to the child's race/ethnicity in the vignettes rather than the maltreatment type or the maltreatment severity. This approach was aligned with Alazri and Hannah's (2020)

recommendation that using TPB constructs can help to better understand the role of race/ethnicity (and culture more generally) on child maltreatment reporting. It was hypothesized that all components of TPB would influence teacher reporting intention.

Methodology

Participants

To address the research questions, a sample of 185 teachers were recruited from social media platforms and snowball sampling in Canada between March 2024 to August 2024. There were 92 individuals who were excluded because (a) they did not consent at survey completion to their data being used, either clicking that they did not give consent ($n=7$) or by omission of not giving an answer ($n=66$), (b) they had time completions significantly under a typical response (e.g., 5 minutes) relative to the average survey completion time of 27 minutes and a median of 20 minutes ($n=3$), suggesting that they were not following task instructions or were bots, or (c) they did not meet inclusion criteria ($n=1$) or provide unusual responses (e.g., different participant identical answers initiated at the exact same time; $n=15$). Of the final sample, all teachers met the inclusion criteria of: (a) kindergarten to Grade 12 teachers who had two or more years of teaching experience (to increase the likelihood of exposure to suspected child maltreatment) and (b) the ability to read and write in English, as this was the language of the data collection materials. Informed written consent was obtained from each participant twice, once prior to starting, and once upon completion to provide full disclosure of aims of the survey (i.e., understand the influence of child maltreatment type and race/ethnicity of the victim on a teacher's intent to report behaviour).

Tables 1 to 4 present the characteristics of the sample. For sociodemographic variables, Table 1 shows that teachers predominantly identified as a woman (71.0%) and White (84.9%). The majority of teachers were partnered (i.e., married or common law; 70.2%), had children (53.8%), and lived in a household with an income of \$90,000 or greater (61.3%). With respect to employment, Table 2 indicates that the majority of teachers had a bachelor's degree (61.3%) and had been working for an average of 11.3 years. The majority worked in a permanent full-time position (76.3%), taught at the elementary level (66.7%), and did not work in a role of supporting students with mental/physical disabilities outside of that as a homeroom teacher (58.1%). Turning to prior professional experience related to child maltreatment, Table 3 shows that 4 in 10 teachers (39.8%) reported having worked with children who experienced child maltreatment, and the

majority (61.3%) made a report a child welfare agency within their teaching career. There was variability in teachers' child welfare reporting experience, with the most common responses showing slight (26.3%), moderate (29.8%), and high satisfaction (26.3%) with the reporting experience. Lastly, close to 75% of teachers reported having participated in child maltreatment reporting training, with the majority (88.3%) endorsing that the training prepared them to identify and report child maltreatment. At a systems level, Table 4 indicates that most teachers taught in Ontario (72.0%), at schools with middle income families (i.e., between \$50,000-\$90,000; 49.5%), and at schools located in large population centres (i.e., 100,000 people and over; 55.9%) within racially diverse neighbourhoods (78.5%).

Research Design and Measure (Vignettes)

For this study, we utilized a multi-factorial survey design. Within the social sciences, this type of research is valuable because it combines experimental design qualities with a resemblance to real life events (Sauer et al., 2020). For factorial survey designs (FSD), respondents read case vignettes of hypothetical situations that are comprised of several dimensions (factors) that fluctuate experimentally in their levels. Several benefits of these designs are as follows: (a) Internal validity is improved through the incorporation of experimental factors relative to one-dimensional stimuli presented in questionnaires (Auspurg & Hinz, 2015); (b) Causal relationships can be drawn based on the researcher's ability to manipulate levels within dimensions to better understand saliency and interaction effects; (c) There is the ability to investigate a phenomenon that is not easily observable and unethical to observe in a true experiment, such as child maltreatment reporting in the classroom; (d) The complexity of considerations presented resembles life-like scenarios to provide a more accurate understanding of a phenomenon; (e) It is more economically viable as respondents view multiple vignettes and are therefore exposed to multiple conditions at once, requiring fewer participants for the study (Auspurg & Hinz, 2015); and (f) It enables researchers to measure intentions that have been found to relate to actual behaviour (Randall & Wolff et al. 1994).

The initial study phase focused on the development of the factorial survey, specifically the development of case vignettes and the determination of teacher and system characteristics to include. A comprehensive literature review was performed to identify factors that enhance and impede child maltreatment reporting by teachers. The review also identified case vignette studies and analyzed the frequency of language and variables included to derive the current study's

vignettes (i.e., the word 'hit' was selected as it was most commonly used to depict perpetrator acts of physical abuse). This procedure was structured to be aligned with prior research for standardization. The finalized vignettes were reviewed by an expert in child maltreatment research and intervention. Below is a presentation of the decisions that were made, in particular with regard to the requirements for the case vignettes around complexity, sampling techniques, response scale(s), and compilation (Auspurg, & Hinz, 2015).

Complexity of survey design

Complexity of case vignettes. The first consideration was determining the complexity of the case vignettes based on the number of dimensions (independent variables) and selected levels. A recommended number of dimensions is seven (plus or minus two; Auspurg & Hinz, 2015). Too many dimensions overburden respondents, whereas not enough dimensions make the vignettes too predictable, boring, and susceptible to social desirability (Sauer et al., 2011). The total number of case vignettes selected for each vignette deck should be the same for each condition.

Within this study, we manipulated two dimensions, each having five levels. Two dimensions were selected because of feasibility, as a minimum of five respondents per condition were needed to have enough statistical power to detect variation between dimensions (Auspurg & Hinz, 2015). The two dimensions selected were (1) *type of maltreatment* (physical abuse, sexual abuse, emotional abuse, neglect, and IPV exposure), and (2) *child race/ethnicity* (Black, White, Indigenous, East Indian, and Chinese). Type of maltreatment was selected due to the equivocal results from the research literature around the form that is most easily reported. Race/ethnicity was chosen due to the over-representation of certain racialized groups for child welfare reporting and system involvement. The race/ethnicities chosen for the victims were in the top five listed from Statistics Canada data that identified percentages of the Canadian population from various ethnocultural origins (Statistics Canada, 2017). Language selected to describe the race/ethnicity of the victim within the current study was selected from Statistics Canada. The two dimensions and varying levels led to 25 different case vignette combinations such that each level of each dimension was manipulated with each level of the other dimension (see Appendix C).

However, to meet the ideal number of dimensions (i.e., 7 ± 2), there were three additional dimensions included in a statement presented prior to the vignettes that remained constant. This statement provided information on the (1) length of time the teacher had the child

in their classroom (i.e., 5 months into the school year), (2) child age (i.e., 8-year-old), and (3) socioeconomic status of the area where the child goes to school (i.e., middle class neighbourhood). This standard description helped ensure all teachers considered each case vignette as similarly as possible to reduce variability around making individual assumptions about the hypothetical case (Auspurg & Hinz, 2015). Further, within the vignettes, (1) victim gender (i.e., boy), (2) perpetrator gender (i.e., father), (3) informant type (i.e., child informant), (4) maltreatment severity (i.e., high severity), and (5) maltreatment frequency (i.e., all one-time occurrences) were also dimensions held constant. High severity case vignettes were selected, as the Theory of Planned Behaviour has been found to better predict intention to report for more severe child maltreatment case vignettes versus less severe cases (Christodoulou et al., 2019). Within each case vignette, inclusion of all dimensions was present, but the order in which each dimension was presented varied based on type of maltreatment. An example of a vignette with the race manipulation of a Black child and the maltreatment manipulation of physical abuse read: "Usain, a Black child, has bruising on the back of his legs. When you ask him about the bruising, he replies that his father hit him repeatedly with a belt for not doing his homework."

The dimensions and levels selected were based on prior empirical research showing their influence on teachers' reporting behaviours. In reference to the child maltreatment dimension, child symptoms and parent perpetration acts were selected based on the high frequency of use in past vignette studies (Alvarez et al., 2010; Beck et al., 1994; Dinehart et al., 2015; Feng & Levine, 2005; Tillman et al., 2016; Toros & Tiirik et al., 2016; Tufford et al., 2018; Tufford et al., 2020; Vanderfaeillie et al., 2018; Walsh et al., 2008; Webster et al., 2005; Weegar, 2019), with a focus on selecting severe symptoms to maintain consistency across vignettes and to ensure all manipulated vignettes were reportable.

In addition to the reportable case vignettes, all participants viewed a non-reportable vignette. This vignette also included the initial statement with the three dimensions (length of time the teacher had the child in their classroom, child age, and socioeconomic status of the area where the child goes to school), as well as all six dimensions included within the case vignettes (child maltreatment type, race/ethnicity of the child who was victimized, perpetrator gender, informant type, maltreatment severity, and maltreatment frequency). However, the child and parent behaviour did not rise to the level of being reportable. The behaviour selected was based on the work of Weegar (2019), whose inclusion of non-reportable Canadian case vignettes had

been verified by an advisory group of child maltreatment professionals. Further, this non-reportable case vignette included experimental manipulation for the race/ethnicity dimension, with half the teachers viewing the case vignette with a White child and half viewing it with a Black child. The non-reportable case vignette was added to increase the likelihood of identifying participants who selected the same response options for each condition indicating they may not be following the task.

Complexity of teacher and system variables. The other set of independent variables (i.e., teacher and system characteristics) were measured within the first two sections and the last section of the survey. These sections comprised: (1) socio-demographics, (2) education and employment information, and (3) professional exposure to child maltreatment (see Appendix B). Selected questions were based on prior literature showing their importance in influencing reporting behaviours. This initial component of the survey (i.e., teacher- and systems-level questions) was shared with an advisory group ($n=7$) composed of researchers, teachers, mental health professionals, and child maltreatment experts, as is advised by Flake et al. (2015). This group reviewed and provided feedback on the layout of questions, clarity of language/terms, and relevance of items to child maltreatment reporting.

Socio-demographics. Teachers answered socio-demographic questions about their age, gender (Falkiner et al., 2017), race/ethnicity (Gubbels et al., 2021; Vanderfaeillie et al., 2018), household income (Kesner et al., 2018), relationship status (Webster et al., 2005), and parent status (i.e., if they have children or not; Gubbels et al., 2021; Karadag et al., 2015; Walsh et al., 2008; Appendix C).

Employment and system information. Participants responded to questions about education level (Goebbels et al., 2008), the number of years in the teaching profession (Greco et al., 2017), current employment status (Karadag et al., 2015), grades currently teaching (Webster et al., 2005), alternative educational support roles outside of homeroom teacher (i.e. helping students with learning, physical or mental disabilities; Kenny, 2001), socio-economic status of most of the children attending the school (Bryant, 2009), province/territory in which they are currently teaching, racial heterogeneity of area in which students live (Klein & Merritt, 2014), and population density of school location (Hurtado et al., 2013; see Appendix C).

Child maltreatment exposure. To better understand participants' knowledge and exposure to possible situations of child maltreatment, teachers responded to questions about their

professional exposure to child maltreatment. Included in the questions were whether teachers had previous work experience outside of a school setting with children that had experienced child maltreatment, details pertaining to the number of circumstances of child maltreatment exposure and reporting they had experienced as a teacher, the type of child maltreatment exposure reported, and their satisfaction levels of reporting to child welfare. Teachers were also asked to reflect on their most memorable reporting circumstance, to select all rationales that applied for their decision to report, and to select all rationales that may explain why a teacher would suspect but not report child maltreatment. Lastly, there were questions about any past training around child maltreatment reporting and whether they felt adequately prepared to address child maltreatment from the training. This last section was provided to the teachers following the vignettes to reduce their likelihood of becoming fully aware of the study objectives (see Appendix C).

Case vignette sampling

In addition to determinants surrounding complexity of the survey design, the second consideration was determining techniques to sample case vignettes (i.e., choose which case vignettes will be shown). Most vignette universes (the complete population of potential combinations of levels within dimensions) have more case vignettes than can realistically be presented to a respondent (Auspurg & Hinz, 2015). However, for this study, we constructed 25 case vignettes in a manner that allowed all possible combinations of the two dimensions (maltreatment type, child race). Each case vignette deck was composed of a combination of five different conditions, with each case vignette sample having all five levels of maltreatment and the five levels of race. However, each vignette sample only had 5 out of the 25 possible combinations of the two dimensions. Selecting five conditions for each vignette sample aligned with Auspurg and Hinz (2015) recommendations that the total number of vignettes be divisible by the number of vignettes in a deck so all participants would see the same number of case vignettes. This also maximized level balance (e.g., each deck has an equal frequency of each level). It also was within the recommendations of 10 vignettes or less per condition so as not to overload a participant's cognitive capacities (e.g., fatigue effects; Auspurg & Hinz, 2015).

Response scale selection

The third consideration was response item selection to ensure that the response options encapsulated the full range of potential responses. Auspurg and Hinz (2015) recommend using a

convenient response scale (e.g., a rating scale). As such, there were seven questions following each vignette that mapped onto (1) severity, (2) reporting intention, (3) reporting rationale(s), and (4-7) theory of planned behaviour components.

Severity. To better understand how teachers may view the severity of different maltreatment types, the following question, adopted from Feng (2003), was asked: “Based on the information provided, how serious do you think this scenario is?” Responses ranged from 1 (not at all serious) to 5 (extremely serious).

Reporting intention. Participants were asked the following question: “Would you report this scenario?” and were asked to respond using a visual analog scale ranging from 1 (definitely would not report) to 100 (definitely would report). This response option format was selected to increase detection of variability between reporting intentions.

Reporting rationale. To explore the rationale behind the reporting intention, participants were asked the following question: “If you responded ‘yes’ or ‘no’ to reporting this scenario, please check all the reasons that are related to your decision.” The list of rationales included options from the six teacher characteristic categories from Alazri and Hannah’s (2020) research for both reporters and non-reporters. These categories were knowledge of reporting abuse and neglect, prior experience, fear and level of certainty, beliefs and attitudes towards reporting, relationships, and self-confidence and personal control. There was also an “Other” category, to which participants were able to provide any additional rationale not captured in the list.

Theory of planned behaviour. To examine reporting attitudes, participants responded to six questions, two for each component of TPB from Feng (2003). The following is an example from each component. For attitude, the question was: “All things considered, what overall impact would a child abuse report be likely to have on this child?” Responses could range from 1 (highly harmful) to 5 (highly beneficial). To examine subjective norms, one of the questions asked was: “Would your colleagues think that you should report this scenario to a child welfare agency?” Responses could range from 1 (definitely, no) to 5 (definitely, yes). To examine perceived behavioural control, the following question was asked as one of the items: “As a teacher, do you feel that you could do something to help this child?” Responses could range from 1 (definitely, no) to 5 (definitely, yes).

Vignette Assemblance

The fourth area of consideration is vignette assemblance because factorial survey designs are susceptible to order effects (Auspurg, & Hinz, 2015). As such, prior to data collection, design development needs to include computer-assistance for vignette order rotation. To implement vignette order rotation, vignette decks need to be developed that are equivalent to number of respondents. Vignettes would then be sorted at random with a deck in a manner that ensures that each participant viewed all dimension levels.

Procedure

Various recruitment strategies were used to obtain a convenience sample of Canadian teachers. These included the use of the community pool from the University of Ottawa's School of Psychology's INSPIRE lab, as well as online social media platforms (e.g., X, Facebook, Reddit, and LinkedIn). Network and snowball sampling strategies were also used (Sadler et al., 2010).

For the various recruitment strategies, there was a recruitment flyer with a brief description of the study including its aims and benefits, criteria to participate, estimated time commitment, contact email for the study investigators for potential participant questions, and a link to the 20-minute online survey (Appendix A). The online survey, available on Qualtrics (Qualtrics, Provo, UT), began with a consent form that included the eligibility criteria for teachers to participate (i.e., 2+ years of experience and ability to understand English; Appendix B). The consent form also notified teachers about confidentiality and privacy protocols, the voluntary nature of the study, data collection procedures, and a statement that the study had received approval from the Office of Research Ethics and Integrity at the University of Ottawa. After reviewing the consent form, participants were able to click on either the "Yes, I want to participate" button, or the "No, I do not want to participate" button. When participants clicked that they wanted to participate, they were directed to the survey. Teachers who were ineligible or who did not consent to participate were exited from the survey.

To maintain anonymity, teachers were not asked to provide any identifying information. Instead, teachers were asked to create a 6-digit code based on their month of birth and the last four digits of their cellphone number. Also, participants were not allowed to save their answers and come back to the questionnaire, but rather there was no time limit placed on completion of the study. For the questionnaire, teachers responded to questions related to the respondent

variables (i.e., socio-demographics, employment information, and child maltreatment exposure) and then were randomly assigned to 1 of the 5 vignette decks (variations in the content of the vignettes; Appendix C). Random assignment occurred through Randomizer, a function of Qualtrics, to place each participant into a group. Attempts were made with random assignment to ensure that approximately the same number of participants were exposed to each deck through setting the participant target number of 140. All participants were presented with an introductory statement at the beginning of the vignette deck that included the child age, amount of time teaching the child, and socio-economic status of the children attending the school. Teachers were then provided with a vignette and answered questions around severity, intentions to report, and theory of planned behaviour (i.e., attitude, subjective norm, and perceived behavioural control). They were also asked to select all rationales that apply for their decision surrounding intent to report or not. Participants were allowed to skip any questions following the case vignettes to maximize choice. However, to minimize missing data, participants were provided with a "I would prefer not to answer" option for all questions in the demographic, teaching experience, and exposure to maltreatment sections. For the vignettes, the participants were asked to respond six times, with five case vignettes being reportable and one not reportable. Each reportable case vignette had a different manipulation of race/ethnicity and type of maltreatment.

Following completion of the survey, teachers received a debriefing through another consent form that explained the two variables of manipulation (i.e., child maltreatment type and race/ethnicity of victim) within the vignettes, the rationale for the focus of these factors, and an opportunity to opt in or opt out of the research (Appendix D). No matter their selection, teachers were directed to another browser window so that they were able to provide their email information (if they wished) to be entered into a draw for a \$50 gift card. They were also provided with a button they could click to receive an answer key, with a justification for the correct responses to the vignettes.

Data Analyses

We performed both descriptive and inferential statistics using SPSS Statistics (Version 29). Prior to analyzing the data, they were cleaned (e.g., removing participants who did not consent to participate or who failed to provide responses to the majority of questions such as none of the vignettes) to ensure accurate analysis. Further, the amount of missing data was explored, but no requirements for any alterations to the data set (e.g., imputations) were found to

be necessary. Descriptive statistics summarized participants' personal and professional characteristics along with system factors. The following sections outline the inferential analyses performed to explore the three research questions.

Q1: Influence of teacher and system factors on child maltreatment reporting intentions within varying victim factors

For the *first* research question around potential differences in teachers' reporting intentions based on teacher and system characteristics while accounting for victim characteristics (i.e., maltreatment type and child race/ethnicity), multiple independent samples *t*-tests and one-way Analysis of Variances (ANOVAs) were planned. However, the assumption of normality was violated for over 90% of these tests (Shapiro-Wilk $p < .05$), likely due to the case vignettes depicting severe scenarios of child maltreatment, creating a negative skew in the data. Therefore, non-parametric tests were conducted instead (i.e., Mann-Whitney U tests and Friedman tests, respectively). Statistical significance was set to $p < .05$ for all tests due to the exploratory nature of our study. Although analyses also were run with corrections for Type 1 error, the results in the current study do not have corrections applied. This decision was because the current study is the first that investigated teacher and system characteristics within victim characteristics, so we did not wish to adopt an overly conservative approach. In addition, no results showed statistical significance when corrections were applied. Future researchers may use these findings to identify and explore potential directions for further study (see Tables 5, 6, 7, and 8).

To determine whether reporting intention (the dependent variable) differed for categorical independent variables, a non-parametric Mann Whitney U test was used to independently examine each of the following variables: teacher gender (woman vs man); presence of a child within the teacher's home (yes vs no); teacher education (bachelor vs master); grades taught (elementary vs high school); student support for physical/mental disabilities outside of classroom (yes vs no), prior professional exposure to child maltreatment outside of homeroom classroom (yes vs no); professional reporting experience to child welfare (yes vs no); and teacher training for reporting child maltreatment (yes vs no). To determine whether reporting intention (the dependent variable) differed for ordinal independent variables, several Kruskal-Wallis H tests were performed, with Dunn's post-hoc tests to compare sum rank differences for statistically significant results. The ordinal variables included the following: socioeconomic status of students (low vs middle vs high); population density of the area that the school resides in (small vs

medium vs large); and teacher reporting satisfaction to a child welfare agency (slightly vs moderately vs very). Lastly, a Spearman correlation was conducted to determine the strength and direction of the relationship between intent to report and number of years teaching.

In addition to standard null-hypothesis significance tests (e.g., p -values), the Bayesian version of the above-mentioned statistics was used. Bayesian analyses return a Bayes factor (BF), which allows for the interpretation of null effects. All BF s were calculated in JASP version 0.19.1 (JASP-team, 2024) with non-informative priors (i.e., no developed expectations about the data; see Wagenmakers et al., 2018 for a review). BF s are model comparisons, with BF_{01} denoting more evidence for the null model than the alternative model and BF_{10} denoting more evidence for the alternative model than the null model. Interpretation of BF results is as follows: BF_{01} values from 1-3 indicate anecdotal (insufficient) evidence for the null model; 3-10 indicate moderate evidence for the null model; and > 10 indicate strong evidence for the null model. As long as $BF_{01} > 3$, this supports the conclusion that there is no difference between groups.

To ensure a more representative sample when examining reporting intentions based on teacher and victim characteristics, any response category that had fewer than 10 participants was excluded. As such, the following were omitted: (a) gender: non-binary, agender, genderqueer; (b) education level: college, PhD, professional degree, other; (c) grades taught: teachers that taught both elementary and high school; (d) population density: teachers within a rural area, I do not know; (e) level of reporting satisfaction to child welfare agency: not at all satisfied and extremely satisfied; and also all *I would prefer not to respond* categories. These groups were not condensed into a larger group (e.g., bachelor's versus college) as there is a lack of literature to indicate if these groups behave in similar ways with regard to child maltreatment reporting. Consequently, these response categories were excluded for this component of the analysis. However, for all other analyses, they were included (e.g., teachers who identified as Agender were excluded for analyses pertaining to gender but were included in all other analyses for teacher and system characteristics as well as for the following research questions).

Q2: Influence of type of maltreatment and race/ethnicity on reporting

To address the *second* research question, the intention was to run factorial ANOVAs to investigate the relationship between child race/ethnicity and teachers' reporting intentions. The sample size calculations indicated that 28 participants were required in each condition; unfortunately, there were 16 to 20 in each condition for the current study, so the examination of

interactions was not possible. Consequently, two separate repeated measures ANOVAs were performed for each dimension (i.e., child maltreatment type and child race/ethnicity), as G*Power (Faul et al., 2007) indicated, that the required sample was $n = 21$, ~5 participants per condition, a power level of .80, to detect a moderate effect size of .25, with a probability value of .05. Similar to question one, non-parametric testing was performed for each dimension (i.e., child maltreatment type and race/ethnicity of child) as no dimension met the assumptions of normality (Shapiro-Wilk $p < .05$). Two Holm-Bonferroni corrected Friedman's tests (the non-parametric alternative to a repeated measures ANOVA) were conducted, one for each dimension (child maltreatment type and race/ethnicity of child) and Kendall's W for effect size, with follow-up Dunn-Bonferroni post-hoc tests for statistically significant results. To better understand intent to report scores, percentages were provided for the most to least frequent rationales behind teachers' decision making. Their rationales were divided into the three categories that could be presented to the teachers based on reporting intention scores. These three were (a) likely would report to a child welfare agency (60-100 intent to report score), unsure if I would/would not report to a child welfare agency (41-59 intent to report score), and unlikely to report to a child welfare agency (0-40 intent to report score).

Q3: Theory of planned behaviour and reporting intention

To explore the *third* research question around whether the components within the theory of planned behaviour predict teachers' intentions to report based on child race/ethnicity, a linear regression was to be performed (see Tables 13, 14, and 15). This analysis was to examine teachers' attitudes, subjective norms, and perceived behavioural control (predictor variables) on intent to report child maltreatment (outcome variable). The required sample size calculated using G*Power (Faul et al., 2007) was $n = 77$, with a power level of .80, an alpha level of .05, and a medium effect size of ($f^2 = .15$). There is no known prior study that examines this relationship. Despite meeting the required sample size, all five of the race/ethnicity dimensions failed the assumptions of homoscedasticity (i.e., variance differed based on how teachers responded to TPB), and the regression failed the normality of the residuals assumption (i.e., negative skew). Transformations designed to correct for negatively skewed data (i.e., squared and log) were performed, but the data still failed the assumptions. Consequently, binomial logistic regressions (outcome variable: 0 = intent to report score 60+ versus 1 = intent to report score <60) were performed for each dimension as all assumptions were met. Binomial regression (yes report

versus maybe/no report) was selected instead of ordinal regression (yes report, maybe report, no report) to reduce possible overfitting of the model; binomial regression ensured the maybe/no report category had at least 20 responses.

Results

Q1: Exploring the Influence of Teacher and System Factors on Child Maltreatment Reporting Intention within Varying Victim Factors

The analysis presented below examined teacher reporting intentions considering both teacher and system factors within child maltreatment type and race/ethnicity of victim characteristics. To summarize the main findings, only 12 of the 130 non-corrected tests were statistically significant. As the first study to examine teacher and system characteristics within victim characteristics, these findings may provide useful guidance for future researchers in the selection of characteristics to more rigorously explore. Of the 12 tests that were significant across 8 variables, six were for teacher characteristics (i.e., parental status, education level, years teaching, learning support teacher, prior teacher reporting experience, and prior teacher reporting satisfaction), and two were for system characteristics (i.e., socio-economic status and population density of school area). These 12 statistically significant findings, across the 8 variables, occurred within 4 of the 5 child maltreatment types (not emotional abuse) and only for the Black child victim.

Child maltreatment dimensions

Physical abuse. Among the teacher and system variables that were examined, teacher level of education was significantly associated with the intention to report physical abuse ($U = 408$, $z\text{-score} = -1.987$, $p = .047$, *Cohen's d* = .284; see Tables 5, 7 and 8). Teachers with a graduate degree were more likely to report physical abuse (mean rank score of 47.10) relative to teachers with an undergraduate degree (mean rank score of 36.16). In the physical abuse condition, 56% of the factors (i.e., gender, parent status, support of students with mental/physical disabilities, prior reporting within teacher role, and training in child maltreatment reporting) had a $BF_{01} > 3$, indicating that there were no differences in reporting intentions for the groups within these variables.

Sexual abuse. Among the teacher and system variables, four were statistically significant at the teacher level and one was statistically significant at the system level (see Tables 5, 7, and 8). For teacher variables, teachers who had children of their own were found to have lower intent

to report scores for sexual abuse ($U = 882$, $z\text{-score} = -2.207$, $p = .027$, *Cohen's d* = .180), compared with teachers who did not have children. Teachers with children had a mean rank score of 43.14, and teachers without children had a mean rank score of 51.49. Also, teachers who supported students with mental/physical disabilities outside of homeroom activities were found to have lower sexual abuse reporting intentions than solely homeroom teachers ($U = 811$, $z\text{-score} = -2.796$, $p = .005$, *Cohen's d* = .230), with a mean rank score of 40.79 for teachers with additional support roles and 51.48 for solely homeroom teachers. Finally, a Spearman's rank correlation test indicated that there was a statistically significant positive relationship between length of teaching and sexual abuse reporting intention ($r(1) = .21$, $p = .043$).

At the systems level, the Kruskal-Wallis H test for sexual abuse reporting intention based on population density was statistically significant ($\chi^2(2) = 8.312$, $p = .016$). Follow-up pairwise comparisons, using Dunn's statistical test, indicated a statistically significant difference (adjusted $p = .024$) between teachers from a medium density centre (mean rank of 34.12), relative to a large density centre (mean rank of 46.05). Specifically, teachers from medium population centres were less likely to indicate an intention to report sexual abuse.

Examining the dichotomous non-significant teacher and system variables, Bayes factors indicated that 67% of factors in the sexual abuse condition (i.e., grades taught, teacher education level, racial diversity at school where teacher is employed, prior exposure to child maltreatment in an employment outside of the teaching role, prior reporting within teacher role, and training in child maltreatment reporting) had a $BF_{01} > 3$, suggesting there were no differences in reporting intention between the groups that comprised these variables.

Emotional abuse. Among the teacher and system variables, none were found to be statistically significant (see Tables 5, 7, and 8). To understand the non-significant values, the emotional abuse condition had 56% of Bayes factors showing moderate evidence of groups within teacher and system variables being similar in their intent to report. This applied to grades taught, education level, racial diversity at school where teacher is employed, prior exposure to child maltreatment in an employment outside of the teaching role, and child maltreatment reporting training.

Neglect. Among the teacher and system variables, two were statistically significant at the teacher level, and none were statistically significant at the system level (see Tables 5, 7, and 8). For the Kruskal-Wallis H test, intent to report based on prior satisfaction with reporting to a child

welfare agency reached statistical significance ($\chi^2(2) = 7.317, p = .026$) between slightly satisfied (mean rank of 16.60), moderately satisfied (mean rank of 29.59) and very satisfied (mean rank of 25.07). Follow-up pairwise comparisons using Dunn's statistical test indicated a statistically significant difference between teachers who were slightly satisfied with prior reporting relative to teachers who were moderately satisfied (adjusted $p = .022$). In specific, teachers with moderate satisfaction were more likely to indicate an intention to report neglect in comparison to teachers with slight satisfaction. The Spearman rank-order correlation was computed to assess if there was a relationship between length of teaching and intent to report neglect. There was a positive correlation between the two variables ($r(1) = .265, p = .010$).

For the teacher and system factors in the neglect condition (i.e., gender, support of students with mental/physical disabilities, education level, racial diversity at school where teacher is employed, prior exposure to child maltreatment in an employment outside of the teaching role, and training in child maltreatment reporting), 67% had a $BF_{01} > 3$, suggesting that there were no differences in intent to report for the groups within these variables.

IPV exposure. Among the teacher and system variables, two were statistically significant at the teacher level (see Tables 5, 7, and 8). Teachers who had reported during their teaching career were found to have statistically significantly higher intent to report IPV exposure than the group of teachers who had not reported during their teaching careers ($U = 757, z\text{-score} = -1.986, p = .047, \text{Cohen's } d = -.241$), with a mean rank score of 50.98 for teachers who had previously reported and a mean rank score of 39.63 for teachers who had not reported. The Spearman rank-order correlation showed a positive relationship between length of teaching and reporting intention ($r(1) = .343, p < .001$). For the Bayes factors, 56% of the teacher and system factors (gender, parent status, education level, prior child maltreatment exposure, and child maltreatment reporting) had moderate evidence of similar intent to report behaviours.

Child race/ethnicity dimensions

Black child victim. Within the teacher and system variables, two statistically significant factors at the teacher level were found and one at the systems level (see Tables 6, 7, and 8). For the teacher variables, results indicated that there were differences in child maltreatment reporting intentions between teachers who had children relative to teachers who did not, when the child was Black ($U = 817, z\text{-score} = -2.060, p = .039, \text{Cohen's } d = -.240$). Teachers who had their own children had higher intent to report scores (mean rank of 52.16) relative to teachers who did not

have their own children (mean rank of 41.00). The Spearman rank-order correlation indicated a positive relationship between length of teaching and intent to report a Black child victim ($r(1) = .258, p = .013$).

For the systems level, a Kruskal-Wallis H test showed statistically significant differences between teachers who taught at schools with varying socioeconomic status (i.e., low vs middle vs high) and their reporting intentions when the victim was a Black child ($\chi^2(2) = 10.501, p = .005$). The mean rank score was 42.70 for low-income schools, 37.39 for middle-income schools, and 58.35 for high-income schools. Based on Dunn's pairwise comparisons, the intent to report a Black child was significantly lower for teachers who taught at a middle-income school relative to teachers who taught at a high-income school (adjusted p -value = .004).

Lastly, for non-significant teacher and system variables, 56% of the Bayes factors (gender, student support teacher, school located in a racially diverse neighbourhood, prior exposure to children who had experienced abuse/neglect in a role outside of school, and past reporting in the role of a teacher) had moderate evidence for between group similarities reporting intentions.

White child victim. For the White child victim, no differences were found (see Tables 6, 7, and 8). 78% of factors had moderate evidence of similar child maltreatment reporting intentions between groups, with the exception of student support teachers and prior reporting of child maltreatment as a teacher.

Indigenous child victim. In the Indigenous child condition, no differences were found (see Tables 6, 7, and 8). 89% of groups indicated moderate evidence, except for student support teacher.

East Indian child victim. In the East Indian child condition, no differences were found (see Tables 6, 7, and 8). Only one condition did not indicate moderate evidence for similar reporting intentions (i.e., prior reporting experience).

Chinese child victim. For the Chinese child victim, no differences were found (see Tables 6, 7, and 8). All factors had a $BF_{01} > 3$, except for prior reporting experience.

Q2: Influence of Maltreatment Type and Child Race/Ethnicity on Reporting Intentions

The analysis presented below examined teacher reporting intentions based on type of child maltreatment and child race/ethnicity. To summarize the main findings, the omnibus test

that examined differences in teachers' reporting intentions based on child maltreatment type was significant. This analysis was followed by comparisons between all possible maltreatment type pairings. Results showed that all were statistically significant, with the exception of physical abuse and IPV exposure (Table 9). This means that teachers' reporting intentions were different based on the type of maltreatment in the vignette. An omnibus test was also performed to test differences in teachers' reporting intentions based on victim race/ethnicity. No statistically significant differences were found; therefore, no follow up tests were performed. Therefore, teachers' reporting intentions do not appear to differ according to the race/ethnicity of the child.

The relationship between maltreatment and teachers' reporting intentions

Prior to examining the relationship between intent to report and type of child maltreatment, descriptive information on reporting intentions (out of 100) showed the following: sexual abuse ($M = 97.4$, $SD = 7.8$); physical abuse ($M = 86.7$, $SD = 18.2$); IPV exposure ($M = 82.9$, $SD = 20.5$); neglect ($M = 68.9$, $SD = 28.4$); and emotional abuse ($M = 48.4$, $SD = 28.3$). The variability in intent to report scores ranged from 48.4-97.4. Further, aside from sexual abuse, the standard deviations for the other forms of maltreatment were quite large, suggesting that teachers lacked consistency in reporting intentions.

To examine teachers' reporting intentions based on child maltreatment type, non-parametric testing was used because all maltreatment types failed the assumption of normality (Kolmogorov-Smirnov $p < .001$). A Friedman test indicated that, overall, there was a statistically significant difference ($\chi^2(4) = 196$, $p < .001$) based on maltreatment type. The Kendall's test ($W = .520$, $\chi^2(4) = 193.6$, $p < .001$) suggested that type had a large effect on intent to report. Follow-up Dunn-Bonferroni comparisons showed that all comparisons were statistically significant, aside from that between child physical abuse and IPV exposure (Table 9). Teachers' intent to report sexual abuse score (Mean Rank = 4.38) was the highest, followed by physical abuse (Mean Rank = 3.48) and IPV exposure (Mean Rank = 3.14, which were not statistically significant from each other), then neglect (Mean Rank = 2.37), and lastly, emotional abuse (Mean Rank = 1.62).

We review in the following sections the top three reasons indicated by teachers as informing their decision making when selecting their intent to report score for each scenario. Top rationales are presented for likely to report, unlikely to report, and reporting uncertainty for each maltreatment type. As previously noted, the score that teachers chose altered the rationale options

that were provided to them (e.g., a teacher who selected a score of $\geq 60+$ saw different rationales than a teacher who selected a score between 41-59 or a teacher with a score of ≤ 40).

Top rationales for likely to report intentions. The number of teachers who endorsed that they were *likely* to report (intent to report score 60 or higher) ranged from 36-99% across all the types of child maltreatment. Following are the top three rationales endorsed by teachers as influencing their reporting intention (Table 10). For *physical abuse*, the most common reasons for a reporting intention were: (a) being a legally mandated reporter (83%); (b) clear evidence of harm to child (73%); and (c) desire to help the child/family (68%) as well as having a sufficient amount of potential evidence to suspect (68%). For *sexual abuse*, the most frequent rationales included: (a) being a legally mandated reporter (88%); (b) believing that the type of abuse portrayed in the scenario was in greater need of reporting relative to the other forms (67%) and desire to help the child/family (67%); and (c) a need to fulfill a moral obligation (54%) along with a sufficient amount of potential evidence to suspect (54%). In the case of *emotional abuse*, teachers most frequently endorsed (a) a desire to help the family/child (70%); (b) better to report than not (48%); and (c) indicating that they know they do not have to be certain to report (45%) and believing that the situation within the case vignette crosses the line of appropriate cultural practices (45%). For *neglect*, the most frequent rationales were (a) being a legally mandated reporter (76%); (b) a desire to help the child/family (69%); and (c) believing that, in this scenario, it would be better to report to a child welfare agency than not (58%). Lastly, for IPV exposure, teachers most frequently endorsed (a) a desire to help the child/family (78%); (b) being a legally mandated reporter (65%); and (c) believing that, in this scenario, it would be better to report to a child welfare agency than not (62%).

Top rationales for unlikely to report intentions. The number of teachers who endorsed that they were *unlikely* to report (intent to report score 40 or lower) ranged from 0-41% across all child maltreatment types. Following are the top three rationales endorsed by teachers as influencing their intention to not report (Table 11). For *physical abuse*, *sexual abuse*, and *IPV exposure*, there was virtually no teacher that would not report. For *emotional abuse*, the most likely rationales were (a) preference for an intervention with the family that did not involve child welfare (63%); (b) feeling uncertain if child welfare was the right resource for this situation (50%) and a lack of sufficient evidence (e.g., no visible sign or mark of child abuse; 50%); and (c) fears around worsening the circumstances for the child with a report (34%). For *neglect*, the

top rationales for not intending to report were (a) feeling uncertain about how risky the situation was for the child (53%); (b) feeling uncertain if a child welfare agency was the right resource (40%); and (c) feeling uncertain of school reporting policies (33%) and preferring to use a non-child welfare intervention with the family (33%).

Top rationales for reporting uncertainty. The number of teachers who endorsed that they were *unsure* about reporting (intent to report score 41-59) ranged from 1-24% across all maltreatment types. Following are the most common rationales endorsed by teachers (Table 12). For *physical abuse*, teachers indicated a desire to help the child/family (50%) and an awareness of their mandated duty to report (40%), yet they also felt uncertain if a child welfare agency was the right resource for the family (40%), feared worsening the circumstances for the child (40%), and feared misinterpreting cultural practices (40%). *Sexual abuse* had virtually no endorsements within this category, indicating little uncertainty about reporting. Within *emotional abuse*, teachers had a desire to help the child/family (59%) yet indicated a preference for a non-child welfare intervention for the family and feared worsening the circumstances for the child (50%). Finally, for IPV *exposure*, teachers had a desire to help the child/family (54%) but felt uncertain of their legally mandated reporting obligations (62%) and feared being incorrect (31%).

The relationship between child race/ethnicity and teachers' reporting intentions

Before examining teachers' intent to report (score out of 100) based on child race/ethnicity, descriptive information was as follows: Indigenous child ($M = 78.6$, $SD = 26.2$); Black child ($M = 77.6$, $SD = 28.8$); White child ($M = 77.0$, $SD = 28.4$); Chinese child ($M = 76.0$, $SD = 27.7$); and East Indian child ($M = 75.5$, $SD = 27.4$). The intent to report scores and the variability among groups were relatively consistent. Similar to the child maltreatment dimension, the standard deviations for the categories of child race/ethnicity were quite large, suggesting that teachers lacked consistency in reporting intentions.

Non-parametric testing was used to compare differences in teachers' reporting intentions based on child race/ethnicity, as all conditions failed the test of normality (Kolmogorov-Smirnov $p < .001$). A Friedman test indicated no statistically significant difference between groups ($\chi^2(4) = .487$, $p = .975$) so no follow up tests were performed. Further, Kendall's test indicated ($W = .001$) suggested that race/ethnicity of the child experiencing maltreatment had almost no effect on reporting intention. These findings indicate no statistically significant differences in teachers' reporting intentions when the race/ethnicity of the child varied.

Q3: Theory of Planned Behaviour and Intent to Report Results

Five logistic regressions were conducted, one for each child race/ethnicity category, to analyze the impact of the three theory of planned behaviour components (attitudes, subjective norms, and perceived behavioural control) on child maltreatment reporting intention (i.e., likely versus unlikely/unsure). The number of teachers for the regression analyses ranged from 89 to 92 due to missing data in some conditions. It should be noted that, due to smaller sample sizes within the unlikely/unsure (i.e., between 23 and 27 teachers), there was a risk of overfitting the model. Therefore, the results should be interpreted with caution. For the White child and Indigenous child levels, the overall model of theory of planned behaviour was not statistically significant when compared to the null model.

For the Black child victim, the overall model of theory of planned behaviour was statistically significant when compared to the null model, $\chi^2(3) = 39.5$, $p < 0.001$, explaining between 17.7% (Cox & Snell pseudo R^2) to 26.5% (Nagelkerke pseudo R^2) of the variation in intent to report and correctly predicting 78.0% of teachers' behaviour (see Table 13). Holding attitude and perceived behavioural control constant, for each one-point increase in the subjective norm scale, the odds of child maltreatment reporting intention increased by 3.6 times ($p < .001$; $CI_{95} = [1.8, 7.4]$).

For the East Indian child victim, the model of theory of planned behaviour was statistically significant when compared to the null model, $\chi^2(3) = 17.8$, $p < 0.001$, explaining between 35.6% (Cox & Snell pseudo R^2) to 50.4% (Nagelkerke pseudo R^2) of the variation in intent to report and correctly predicting 80.0% of teachers' behaviour (see Table 14). Holding attitude and perceived behavioural control constant, for each one-point increase in the subjective norm scale, the odds of child maltreatment reporting intention increased by 5.8 times ($p < .001$; $CI_{95} = [2.6, 13.0]$).

For the Chinese child victim, the model of theory of planned behaviour was statistically significant when compared to the null model, $\chi^2(3) = 50.7$, $p < 0.001$, explaining between 43.4% (Cox & Snell pseudo R^2) to 63.8% (Nagelkerke pseudo R^2) of the variation in intent to report and correctly predicting 86.5% of teachers' behaviour (see Table 15). Holding attitude and perceived behavioural control constant, for each one-point increase in the subjective norm scale, the odds of intent to report the child maltreatment increased by 20.2 times, on average ($p < .001$; $CI_{95} = [4.9,$

82.8]). In summary, of the three components of theory of planned behaviour, only subjective norms influenced reporting intentions for Black, East Indian, and Chinese child victims.

Discussion

Q1: Exploring Teacher and System Factors Influence on Child Maltreatment Reporting Intentions Within Varying Victim Factors

Despite past research showing that victim, teacher, and system characteristics influence teacher child maltreatment reporting, there remains limited consensus on their role and how they may impact each other. To further understanding in this area, the current study examined whether teacher and system characteristics influenced reporting intentions within the context of two varying victim factors (maltreatment type, child race/ethnicity). Note that the following discussion is within the context of case vignettes depicting a severe child maltreatment incident that occurs halfway into the school year. The perpetrator is a father, and the informant is an 8-year-old Canadian male victim from a middle-class family. Note too that some characteristics under certain conditions had inconclusive results, based on statistical analyses indicating that there was no strong enough for differences (Mann-Whitney U test) or sameness in intent to report behaviour (Bayesian analysis).

When examining differences in findings between the current study and past research, there are a few possibilities regardless of the specific variables examined. First and foremost, this is the only known study that examined teacher and system characteristics within varying contexts of victim characteristics (i.e., five maltreatment types, five child victim races/ethnicities). The studies cited below all explored these teacher and system characteristics collapsed across maltreatment type and victim's race/ethnicity conditions. Second, there were several methodological variations across studies that included, the examination of actual reporting behaviour versus reporting intentions. In addition, there was variability in the content presented within case vignettes across studies; it should be noted that the current study was the first to have included an IPV exposure vignette. Third, past research has been primarily international (e.g., Europe, Australia, United States), for teacher and system characteristics relationships to reporting behaviour and intention, with only one Canadian study (Weegar, 2019). Fourth, for many of the teacher and system characteristics considered, there is limited empirical understanding of the way in which they might influence teacher reporting behaviour or intentions as past research has not tended to speculate on finding implications.

Teacher Characteristics

There were three categories within teacher characteristics that were examined, namely *demographics* (gender, parental status), *prior experience* (level of education, number of years teaching, whether worked with children who have learning differences or mental/physical disabilities outside of homeroom teacher, whether worked with children who experienced maltreatment in a professional role outside of a school, prior reporting experience, maltreatment training experience), and *relational* (level of satisfaction with child welfare system).

Demographics. For *gender*, there was moderate evidence for similarities between male and female teachers' intent to report behaviour across all variations of child race/ethnicity and when the scenario depicted physical abuse, neglect, and IPV exposure. Note that results were inconclusive for the sexual abuse and emotional abuse vignettes. These findings of similar reporting intentions and behaviour align with several past studies (Crenshaw et al., 1995; Greco et al., 2020; Kenny, 2001) but not with others that indicate greater reporting among female teachers (Vanderfaellie et al., 2018; Walsh et al., 2008) or among male teachers (Greco et al., 2017; O'Toole et al., 1999). Greco et al. (2017) speculated that males might be more likely to report suspicions due to living in a culture where they experience less fear of possible perpetrator retaliation. Alternatively, Vanderfaellie et al. (2018) found that female teachers not only were more likely to report but also more likely to rate vignettes as having greater severity. Although not examined in the current study, it is possible that both men and women viewed the scenarios similarly in relation to severity, leading to comparable reporting intentions.

For *parental status*, teachers who did have a child of their own had lower reporting intentions in the case of sexual abuse and higher reporting intentions when the child was Black. For physical abuse and IPV exposure, as well as across all other child race/ethnicity types, there was moderate evidence to indicate that both teachers with and without their own children had similar reporting intentions. Findings from the emotional abuse and neglect vignettes were inconclusive. Past research is mixed, with some studies showing that being a parent increases reporting intentions (Karadag et al., 2015), lowers reporting intentions (O'Toole et al., 1999), or has no impact (Walsh et al., 2008). It is possible that having one's own child heightens a teacher's awareness of signs suggesting that a child's safety and well-being may be compromised (Karadag et al., 2015). In contrast, being a parent may desensitize teachers to signs that could be

seen as indicators of maltreatment (O'Toole et al., 1999). Given the inconsistencies in the current study across maltreatment type and child race/ethnicity, additional research is needed.

Prior experience. For *education level*, differences in intent to report were only found for the physical abuse condition, such that teachers with a master's degree had significantly higher reporting intentions compared to those with a bachelor's degree. For all other forms of child maltreatment and for child race/ethnicity, aside from when the victim was Black, evidence indicated moderate support that all teachers, regardless of education level, had the same reporting intentions. The results were inconclusive for the Black victim condition. The association between higher teacher education level and increased maltreatment reporting intentions aligns with previous research (Goebbels et al., 2008) suggesting that advanced qualifications contribute to greater teacher confidence in reporting behaviour. In the current study, Canadian teachers with a graduate degree may have gained more confidence and/or knowledge about physical abuse reporting, which could explain their higher intent to report scores.

For *number of years teaching*, the greater the number of years a teacher was in the profession, the greater the reporting intention in cases of sexual abuse, neglect, and especially IPV exposure, as well as when the child was Black. No relationship was found for the physical and emotional abuse vignettes or for any child race/ethnicity (unless the child was Black). The positive association between years of teaching and reporting intentions aligns with both the current study's hypothesis and a number of prior studies for both actual reporting and intent to report (Goebbels et al., 2008; Greco et al., 2017; Kenny, 2001; Toros & Tiirik, 2016; Walsh et al., 2008). Past studies suggest that more time in the field provides greater exposure to diverse cases of child maltreatment and increases confidence in reporting (Goebbels et al., 2008; Greco et al., 2017). The current study's findings may be a result of more experienced Canadian teachers exhibiting higher confidence and familiarity with reporting certain forms of maltreatment. For the condition with a Black child, younger Canadian teachers may have more cultural sensitivity training, leading them to report more consistently across racial/ethnic groups. It should be noted that some research has found no relationship between years of teaching and reporting, but no possible explanations for these findings were provided (Crenshaw et al., 2005; Kenny, 2004).

Teachers who, outside of a homeroom context, worked with children with learning/physical/mental disabilities had statistically significant lower reporting intentions for sexual abuse, compared with teachers who solely worked with children in the context of a

homeroom teacher. These findings should be interpreted with caution as homeroom teachers had an average intent to report score of 99%, relative to 95% for teachers working specifically with children with physical/mental disabilities. As such, the real-world application of these statistically significant differences may be quite small. For the emotional abuse and IPV exposure vignettes, as well as for vignettes where the child was White or Indigenous, any potential differences as a function of this specific teacher characteristic were inconclusive. Moderate support was found to suggest teachers' intent to report behaviour was the same for the physical abuse and neglect scenario and when the victim was Black, East Indian, and Chinese. The current study's finding for sexual abuse is counter to prior findings by Kenny (2001) that showed teachers working with children who have learning differences or mental/physical disabilities in a role outside of a homeroom teacher have higher reporting behaviour. This is likely a methodological difference as Kenny (2001) examined the number of actual reports made by these two groups of teachers. It was suggested that teachers working with children with learning or mental/physical disabilities made more reports because such children, affected by the physical, emotional, and academic impacts of maltreatment, are more often in their care (Kenny, 2001). As such, the current study's examination of reporting intentions may indicate that homeroom teachers are mildly less desensitized to signs of sexual abuse. Alternatively, with the rise of inclusive classrooms, all teachers, regardless of role, have greater exposure to students with varying support needs. As a result, differences in reporting intentions between these groups may have decreased.

No significant differences were found between teachers who, in a professional role outside of school, have and have not *worked with children who experienced child maltreatment*. Only the physical abuse vignette showed inconclusive results. All the other maltreatment types and variations of child race/ethnicity showed moderate evidence for similar reporting intentions. These findings are contradictory to prior research that teachers who know someone in their private life who has experienced child maltreatment and/or know a person who has been involved with a child welfare agency (Bonardi, 2000; Webster et al., 2005) have increased reporting intentions and behaviours. These studies suggested that personal experience leads to viewing symptoms as more severe (Bonardi, 1999) and having a heightened sensitivity for reporting (Webster et al., 2005). Potentially, the difference between the current study and past research can be explained by having measured this factor from a less personal stance. Teachers were asked if

they had worked in a setting outside of school with children who had experienced child maltreatment. As such, there was a professional, rather than a personal, connection to the vignettes. Also, professional experience is quite broad, and the findings may have changed if the question had been more targeted to certain lines of work (e.g., job experience as a camp counsellor versus a social worker).

Differences in *prior reporting experience* were found for IPV exposure, such that teachers who had made a previous report of suspected child maltreatment had higher reporting intentions. Inconclusive results were found for neglect and when the victim was White, East Indian, or Chinese, suggesting a need for future exploration. There was moderate evidence that prior reporters and non-reporters behaved similarly in their intent to report physical, sexual, and emotional abuse, as well as when the child was Black or Indigenous. The current study's finding for IPV exposure is aligned with our hypothesis and with prior findings where past reporting experience increased reporting behaviour (Bibou-Nakou et al., 2017; Bonardi, 2000; Walsh et al., 2005; Webster et al., 2005). It was suggested that previous reporting may increase teachers' awareness of their reporting responsibilities, thereby leading to an increased likelihood of future reporting (Bibou-Nakou et al., 2017). For the current study, it may be that prior reporting helped teachers better recognize their responsibility regarding IPV exposure.

No differences were found between teachers as a function of whether they had *received training in identifying and reporting child maltreatment*. There was moderate evidence of the similar reporting intentions across all maltreatment types and all variations in child race/ethnicity. The one exception was for the vignette when the child was Black; here the result was inconclusive. The current study's findings are surprising as the 75% of teachers who received training endorsed that their training ranged from good to excellent. As such, one would anticipate stronger reporting skills by the majority of the teachers. Past research is mixed, with some finding that teachers with training on child maltreatment reporting had higher intent and reporting behaviour (Bonardi, 2000; Walsh, 2012; Weegar, 2019), but other research indicating lower reporting intentions and behaviour (Falkiner et al., 2017; Kenny, 2004; Walsh et al., 2008;). Weegar (2019) suggested that training may improve knowledge in such areas as anonymous consultation with child welfare and may provide resources on how to navigate relationships during the reporting experience. Other researchers who found that training was associated with decreased reporting noted several possibilities: training was inadequate and inconsistent; training

improved reporting confidence but not actual reporting behaviour; and training increased awareness of the complexity of child maltreatment and reporting, thereby leading to lower confidence in reporting and greater concerns about potential reporting outcomes (Falkiner et al., 2017; Kenny, 2004; Walsh et al., 2008). Also, there is a potential lag-time between training and an increased reporting proficiency (Walsh et al., 2008). In the current study, teachers may have gained knowledge from trainings of maltreatment reporting but it failed to translate into their behaviour. In contrast, the high severity of maltreatment depicted in the current study's vignettes may have made it so that teachers without training were able to perform at a similar level to teachers with training.

Relational. Level of satisfaction with past reporting showed a significant difference for neglect, such that teachers with slight satisfaction were less likely to indicate an intention to report in comparison to teachers with moderate satisfaction. This finding was hypothesized and is aligned with Gubbels and colleagues (2021), where teachers shared during interviews that a deterrence in reporting behaviour occurred when they perceived a lack of cooperation from child welfare agencies. Similarly, in an older study (O'Toole et al., 1999), teachers' lower evaluations of child welfare were linked with decreased reporting intentions. These findings were not specific to any type of child maltreatment. It was suggested that lower levels of satisfaction stem from child welfare not viewing teachers as professional partners and taking too long to intervene not providing updates regarding the reporting process, or closing files quickly (Gubbels et al., 2021).

System Characteristics

There were two categories within system characteristics, namely *school education level* and *school setting*. School setting included the socio-economic status of children at school, location density in which school is situated, and racial diversity of the neighbourhood.

School education level. There were no significant differences between elementary and high school teachers in reporting intentions across maltreatment type and child race/ethnicity. However, the evidence for the lack of statistically significant differences was inconclusive for physical abuse, neglect, and IPV exposure as well as for when the child was Black, suggesting the need for further research. The current findings are in contrast to Alazri and Hannah's (2020) review, which showed that elementary school teachers make a greater number of reports than high school teachers. The researchers suggested that younger children suspected of experiencing maltreatment appear to be more likely to be reported to child welfare authorities. In the current

study, all teachers were presented with vignettes in which the child was 8 years old, so it seems that teachers, no matter the grade taught, respond similarly if exposed to a situation involving a younger child. As high school teachers tend not to be in contact with younger age children, they would consequently be less likely to report suspected maltreatment.

School setting. Socio-economic status of the students led to differences in reporting intentions between teachers in middle-income versus high-income schools, such that teachers at high income schools had greater intent to report scores when the child was Black. No differences were found for any other condition. These findings are aligned with Walsh and colleagues (2008), who found that teachers at schools in high-income areas had higher levels of reporting intentions in general. However, O'Toole et al. (1999) found no relationship on socio-economic status on teachers' reporting intentions and suggested that teachers had internalized the frequently communicated message that maltreatment frequency is unrelated to one's socio-economic standing. Currently, there is not enough information to understand the findings. One could speculate, if employing O'Toole's reasoning, that teachers at high SES schools have not internalized the message that maltreatment frequency is unrelated to the child's race/ethnicity, potentially due to less diversity within higher SES schools. Alternatively, teachers at high SES schools may report more in general, and therefore this finding is in keeping with their typical reporting intention regardless of race/ethnicity.

For *population density*, teachers within medium population areas had lower reporting intention scores for sexual abuse relative to teachers in large population areas. This finding is consistent with our hypothesis and prior research (Hurtado et al., 2013; O'Toole et al., 1999; Webster et al., 2005) showing that teachers within lower density areas have decreased reporting intentions. It should be noted, however, that these past research findings were about the context between urban and rural settings. Nevertheless, a lower population setting still applies. Hurtado and colleagues' (2013) study transpired in El Salvador, where it was noted that gang and gun violence occur at very high rates. Consequently, teachers in rural settings shared worries around personal safety, noting that it seemed unlikely to be able to make an anonymous and that they felt uncomfortable reporting a family that lived in their community. While Canadian teachers in lower density areas may not face the same level of overt threat, the limited anonymity and smaller community may contribute to lower reporting intentions, compared with teachers in urban settings.

Lastly, there were no significant differences in reporting intentions as a function of whether students were from *racially diverse neighbourhoods*. For the case of sexual abuse, emotional abuse, and neglect, as well as across child race/ethnicity, moderate evidence of the same reporting behaviour was found. The results for physical abuse and IPV exposure were inconclusive. This is the first study to examine the racial diversity of neighbourhoods within a teacher reporting context. Klein and Merrit (2014) generally found that higher child welfare referrals occurred in racially diverse neighbourhoods due to lower social cohesion and reduced capacity to enforce prosocial norms. It is difficult to make meaning of the finding from the current study as this is a new variable of study. It is possible that the difference is at the methodological level (i.e., reporting intention versus reporting behaviour).

Conclusion

The current study findings are preliminary, but they nevertheless illuminate that nuance can be found between teacher and system characteristics on intent to report based on victim characteristics. More research is needed to tease apart these distinctions in a more definitive manner. For future research, a more defined victim context in which teacher and system characteristics are viewed may provide greater understanding for variations on intention to report for the same teacher/system characteristic. It is also important to note that the current study's findings are in keeping with prior research that found a low contribution of both teacher and system characteristics in the variation of reporting behaviour (e.g., 1% of variance was accounted for when adding teacher and system characteristics to the model; O'Toole et al., 1999; Walsh et al., 2008). As such, it is possible that these aspects have minor effects on reporting intention and behaviour. Therefore, when considering future research and the development of more tailored teacher training, potentially greater emphasis should be placed on the victim characteristics as they appear to weigh more heavily in teachers' decision making (e.g., more knowledge provided regarding potential variations in presentations of child symptoms and parent behaviour that are indicators of maltreatment).

Q2: Influence of Maltreatment Type and Child Race/Ethnicity on Reporting Intentions

To address Alazri and Hannah's (2020) findings around the lack of research that has examined interactions between different factors that influence teacher reporting, this research question was intended to examine whether child race/ethnicity influenced teachers' reporting intentions for the five maltreatment types. As such, the goal was to examine not only the direct

influence of maltreatment type and child race/ethnicity separately, but to examine potential interactions. However, there were not enough participants to explore potential interaction effects, so analyses focused on child maltreatment type and child race/ethnicity separately.

Currently, research findings on teachers' reporting intentions and behaviours for various maltreatment types as well as the effects of race/ethnicity of the victim remain unclear. We added to the literature by providing further research within a Canadian context on the relationship between maltreatment types and intentions to report using a factorial survey design. This design differed from the majority of the past literature as it made it possible to hold constant the other victim characteristics (e.g., frequency of abuse) within case vignettes to better isolate the effects of the two variables of interest (i.e., child maltreatment type and race/ethnicity of victim). This allowed for causal conclusions. Additionally, after each vignette, a set list of rationales was provided depending on the teachers' endorsed intent score (i.e., unlikely to report 40 and below, unsure 41-59, and likely to report 60 to 100). This is one of the first studies that has linked quantitative (i.e., intent to report score) and qualitative methods (i.e., list of potential rationales behind intent to report score) to provide a more concrete understanding of the reasoning behind teachers' intent to report scores that can also be quantifiable. Intent to report based on maltreatment type

Study findings from the vignettes indicated that teachers were most likely to report sexual abuse, followed equally by physical abuse and IPV exposure, then neglect and lastly, emotional abuse. The differences in intention to report scores between maltreatment types were statistically significant (aside from physical abuse and IPV exposure). While no hypotheses were developed, the results were aligned with what was anticipated based on past research. These results are also supported by multiple research studies (Beck et al., 1994; Bruyninckx et al., 2021; Glouchkow et al., 2022; O'Toole et al., 1999; Toros & Tiirik, 2016; Walsh et al., 2012; Webster et al., 2005) that found sexual abuse to have the highest intent to report among teachers. However, the findings are, at the same time, contradictory to many other studies in the field that found physical abuse to have the highest reporting and intent to report rates among teachers (Bibou-Nakou & Markos, 2017; Crenshaw et al., 1995; Falkiner et al., 2017; Karadag et al., 2015; Walsh et al., 2005, 2008). It should be noted, however, that physical abuse still had a higher reporting intention, coming in second (tied with IPV exposure) after sexual abuse.

Reasons for the differences among studies in terms of the most reported maltreatment type are likely because of the methodology used. Multiple studies with higher reporting rates for physical abuse than sexual abuse ask teachers about their prior reporting experiences (instead of using case vignettes) and have suggested that sexual abuse is harder to identify relative to physical abuse and therefore less reported (Bibou-Nakou & Markos, 2017; Goebbels et al., 2008; Gubbels et al., 2021; Falkiner et al., 2017; Walsh et al., 2005, 2008). In specific, Falkiner et al. (2017) noted that clear indicators of harm (e.g., bruising) are important to increase teachers' feelings of confidence in their suspicions, thereby increasing their belief that they need to make a report. Because the current study used case vignettes that had severe depictions, with quite obvious indicators for all forms of abuse including sexual abuse (i.e., inappropriate sexual touching by a parent), it may have made it easier for teachers to identify and consequently indicate their reporting intention. As such, the difference may be more between identification versus reporting, such that sexual abuse is harder to identify when there are no details about clear inappropriate behaviour, but once it is identified, it is more likely to be reported. Prior research supports this notion, with Walsh et al. (2012) stating that sexual abuse is typically considered a more serious and consequently more reportable form of child maltreatment. Differences in methodology may also be applicable when considering Karadag et al.'s (2015) study that used statements that solely depicted child maltreatment symptoms and asked teachers to rate (on a 5-point-Likert scale) their level of agreement that the item was child maltreatment. As the current study included inappropriate parental behaviour in the vignettes, it perhaps made identification (and in turn reporting) of sexual abuse clearer for teachers relative to physical abuse that had a higher reporting rate in Karadag et al. (2015).

The only study that also used case vignettes and found higher reporting intentions for physical abuse, relative to sexual abuse, was conducted 30 years ago (Crenshaw et al., 1995). During the 1990s, there was a growing awareness around sexual abuse's occurrence and its presentation, so Crenshaw et al. (1995) suggested this is what led to a change in hierarchy with sexual abuse being more reported than emotional abuse. Potentially, over the additional thirty years since that study, societal awareness of sexual abuse has continued to increase and consequently has now shifted the hierarchy again with intent to report behaviours being higher than physical abuse. Additionally, that study was comprised of other educator roles (e.g.,

principals, counselors) so differences may potentially also stem from more professional diversity within the participant pool.

The current study's finding that emotional abuse had the lowest score among teachers for intention to report is aligned with the majority of past research studies (Beck et al., 1994; Bruyninckx et al., 2021; Christodoulou et al., 2019; Crenshaw et al., 1995; O'Toole et al., 1999; Toros & Tiirik, 2016; Vanderfaeillie et al., 2018; Walsh et al., 2012). The findings, however, are in contrast to some prior research that has identified physical abuse (Glouchkow et al., 2022; Webster et al., 2005) and sexual abuse (Goebbels et al., 2008) as the least likely to be identified. As previously noted, the sexual abuse results are likely based on methodology and the challenges in identifying this form of maltreatment when there is no clear information. Turning to the differences for physical and emotional abuse, they may be explained by the level of ambiguity. In Glouchkow et al. (2022), the physical abuse case did not depict any inappropriate parent behaviour (only symptoms), whereas the emotional abuse case included both parental behaviours and child symptoms. Consequently, this may explain why the reporting intention was higher for emotional abuse, compared to physical abuse. However, in the current study, inappropriate behaviour was clearly indicated in the vignettes for both maltreatment types. In addition, Webster et al. (2005) indicated that physical maltreatment may be more ambiguous due to challenges discerning harsh parenting practices from physical abuse; this may have explained the lower reporting behaviours among teachers for physical abuse relative to sexual and emotional abuse. Lastly, it may be that the signs used to depict these forms of maltreatment were less severe in Webster and colleague's (2005) vignettes than the ones selected for the current study and therefore had more ambiguity.

The current study was the first to examine teachers' reporting intentions for IPV exposure alongside other forms of maltreatment. Consequently, there is a lack of context in which to examine the results. However, Markström and Münger (2018) did note that teachers found it challenging to know if and how to intervene in cases of children being exposed to violence between parents and feared making an inaccurate report. These uncertainties were also echoed by some of the teachers within our study regardless of their reporting intention (would report or unsure whether they would report).

Reporting rationales based on maltreatment type. To understand teachers' decision making for their reporting intentions, we examined the rationales that teachers endorsed (from a

predetermined list). The rationales fell within five of the six categories created by Alazri and Hannah (2020). Prior experience with child abuse and neglect, including training was measured in a different section. The five rationale categories included (1) knowledge about child maltreatment reporting, (2) fear and level of certainty, (3) beliefs and attitudes towards reporting, (4) relationships, and (5) self-confidence and personal control. The rationales helped create an opportunity to conceptualize what may be driving the differences between type of child maltreatment reporting intentions. All categories were endorsed by teachers; however, certain categories weighed more heavily in teachers' top three rationales for likely to report, uncertainty of reporting, and unlikely to report.

Across the five maltreatment types depicted in the vignettes, there were similarities in the top three rationales when teachers indicated that they were *likely to report* the maltreatment to child welfare authorities. These rationales fell within the categories of *knowledge*, *level of certainty*, and *relationships*. Among the top three rationales for all maltreatment types were a desire to help the child/family (relationships) and their legally mandated reporting duty (with the exception of emotional abuse; knowledge). For IPV exposure, neglect, and emotional abuse, teachers all indicated as their top rationale that it was better to report to child welfare than not (level of certainty). Turning to the main differences in intention to report rationales, all fell within level of certainty. One could view the following rationales as a gradient of certainty, such that the reasoning goes from very certain to quite uncertain and reflects the number of teachers who indicated being likely to report based on type of maltreatment. The primary reason for sexual abuse reporting among many teachers was that the vignette clearly represented abuse. For the physical abuse case, the rationale of clear evidence of harm done was a heavily endorsed reason. Lastly, for the emotional abuse case, knowing that a teacher does not have to be certain to make a child welfare report was in the top three rationales. This indicates that even among teachers who are likely to report, there still exists fluctuation in level of certainty. As such, an increased level of certainty increases reporting intention, yet maybe teachers who are able to tolerate more ambiguity are also more likely to report. Within prior research, all of these rationales were found in a recent Canadian study (Glouchkow et al., 2022). Potentially, these findings are reflective of the national context such that Canadian teachers tend to be more reliant on these reasonings for intent to report.

Across all maltreatment types, aside for sexual abuse (N=1), teachers who indicated being *uncertain about reporting* endorsed rationales most frequently that fell into the categories of *knowledge, level of certainty, relationships, fear, and self-confidence*. Teachers who were uncertain about reporting still indicated a desire to help the child/family (relationships). Also, for both physical and emotional abuse, about one-third of teachers did indicate being aware of their reporting duty (knowledge). However, teachers indicated being conflicted by uncertainties and fears, and some teachers endorsed a preference to use a non-child welfare intervention. For physical and emotional abuse, close to half of the teachers also endorsed fear around worsening the situation for the child if a child welfare report were made, and a little over a third indicated uncertainty as to whether a child welfare agency was the right resource for the situation. Also, for both for the emotional abuse and neglect scenario, approximately half of teachers endorsed a preference for a non-child welfare resource. There were several rationales that were more uniquely endorsed for certain types of maltreatment. For example, a handful of teachers (N=4) indicated being unsure about reporting for fear of misinterpreting cultural practices for the physical abuse case (fear). For neglect, slightly over one third of teachers suggested a lack of confidence in identifying the signs of this type of maltreatment (self-confidence), and for IPV exposure, teachers endorsed feeling unsure about their legally mandated obligations (knowledge). Evidently, the increase in categories for rationales likely speaks to the increased complexity that teachers who are uncertain about reporting are experiencing. Prior literature has also endorsed the rationales noted above, including Swiss teachers' fear of misinterpreting cultural practices as child maltreatment (Gubbels et al., 2021) and Swedish teachers' lack confidence in identifying signs needed to feel confident in making a report (Cater et al., 2016).

Lastly, for teachers who indicated being *unlikely to report*, only emotional abuse and neglect were examined as the other types had three or fewer scores in this category. For emotional abuse and neglect, the top rationales fell under predominantly the categories of *fear* and *level of certainty*, however knowledge was also included. A majority of teachers indicated uncertainty about whether a child welfare agency was the right resource for the situation and also indicated a preference for a non-child welfare intervention (more prominent rationale for emotional abuse). There were several rationales that were more unique. Half the teachers indicated that the emotional abuse vignette lacked sufficient evidence (e.g., no visible signs or marks of child maltreatment), and one third feared worsening the circumstances for the child. For

neglect, a little over half of teachers endorsed feeling uncertain about how much risk the situation posed to the child, and one third endorsed uncertainty about school reporting policies for neglect (knowledge). Within past literature, fear of worsening the circumstances was mentioned by American and Swiss teachers (Beck et al., 1994; Gubbels et al., 2021; Webster et al., 2005) to impede reporting, while uncertainty about reporting policies had also been found to deter American, Taiwanese, Salvadoran, and Estonian teachers (Dinehart et al., 2015; Feng et al., 2012; Hurtado et al., 2013; Toros & Tiirik, 2016). For uncertainty around the risk to the child, there is no prior literature, but a Swiss study (Gubbels et al., 2021) did also identify uncertainty if child welfare was the right resource as an impediment to reporting. Lack of sufficient evidence has also been noted both in prior Canadian (Glouchkow et al., 2022) as well as international studies (Beck et al., 1994; Falkiner et al., 2017; Kenny, 2004; Markström & Münger, 2018).

Intent to report based on race/ethnicity of the child

Even though there is over representation (e.g., Black children represent 9% of the general Canadian population but comprised 24% of children receiving child welfare intervention) of certain racial/ethnic groups (e.g., Indigenous; Black; Boatwain-Kyte et al., 2020; Blackstock et al., 2020; Cénat et al., 2021; Children's Aid Society of Toronto, 2015; Child Welfare Information Gateway, 2016) within the Canadian child welfare system, no research thus far has examined Canadian teachers' reporting intentions based on child race/ethnicity. We explored in the current study if there were differences in reporting intentions between child victims who were Black, White, Indigenous, East Indian, and Chinese. Findings indicated no significant differences in intent to report based on a child's race/ethnicity. These findings are surprising based on Canadian child welfare data and on prior research that has indicated teachers' over-reporting (e.g., Black students are twice as likely to be reported as White students by education personnel (Krase, 2015)) of Black students (relative to White students) both within Canada and the United States (King et al., 2017; Krase, 2015; Sinanan, 2011). Also, recent research in Europe (Bruyninckx et al., 2021; Vanderfaellie et al., 2018) found that teachers' reporting intentions increased if the child was of Turkish/African descent relative to a child of European descent.

One reason for the difference may be related to the varied geographical locations (i.e., U.S and Europe; Bruyninckx et al., 2021; Krase, 2015; Sinanan, 2011; Vanderfaellie et al., 2018) of the majority of past studies. Different cultural beliefs and attitudes may be held about race/ethnicity, and there also are differences in reporting duties that may be influencing results.

Secondly, differences in methodology may also be an important source of variability. Among Canadian research that found an over-representation for Black children, the data represented actual child welfare reporting rates and not intention to report rates (King et al., 2017), and the majority of Canadian studies were not specific to teachers (Boatswain-Kyte et al., 2020; Blackstock et al., 2020; Cénat et al., 2021; Children's Aid Society of Toronto, 2015; Child Welfare Information Gateway, 2016). For the European studies (Bruyninckx et al., 2021; Vanderfaeillie et al., 2018) that did measure reporting intentions through vignettes, differences may be explained by not having controlled for all victim factors that could influence reporting intentions (e.g., child age, perpetrator gender, informant type). As such, other factors may have confounded their findings. However, despite these studies identifying differences in intent to report, both studies noted a very small effect. Potentially, the small effect sizes in the European studies, and lack of significant findings in the current study, occurred as the vignette content all depicted scenarios deemed very severe. This severity may have weighed more heavily on teachers' decision making and consequently, outweighed any potential impacts of child race/ethnicity.

The current study's lack of difference in reporting intentions may also be the result of case vignette methodology having limits in mimicking real-world behaviour regarding child race/ethnicity. A similar finding, reported over 20 years ago (Egu et al., 2003), revealed no differences in teachers' reporting intentions based on child race/ethnicity. It was suggested that this outcome was possibly due to the method's inability to replicate real-world conditions for this victim characteristic (Egu et al., 2003). The failure to replicate real-world conditions may stem from the overt manipulation of child race/ethnicity in the case vignette format, which may fail to tap into unconscious biases. As such, a more covert method may be better suited to scientifically manipulate and measure (e.g., integrated change model) the child race/ethnicity of the victim and its relationship to teachers' reporting intentions. Alternatively, as O'Toole et al. (1999) suggested, teachers might aim to demonstrate cultural sensitivity. In the context of this research, this could mean they sought to ensure their behavior remained consistent regardless of the victim's race or ethnicity. Lastly, Egu et al. (2003) noted it is possible that teacher biases are not what account for differences in actual reporting between racial/ethnic groups. Despite evidence from our current study and prior studies indicating no/minimal differences based on race/ethnicity, actual reporting rates show that teachers are biased (Bruyninckx et al., 2021; King et al., 2017; Vanderfaeillie et

al., 2018). As such, this study may highlight that teachers intend to report child maltreatment similarly no matter race/ethnicity of the child, but this does not translate to when they actually make a report.

Q3: Theory of Planned Behaviour and Intent to Report

The prior research literature has typically not included a theoretical framework to improve understanding surrounding the reporting intentions of teachers. To address this limitation, we selected the theory of planned behaviour (TPB) for the current study, based on Alazri and Hannah's (2020) recommendation, to explore how attitudes, subjective norms, and perceived behavioural control might influence teachers' intent to report as a function of child race/ethnicity. The hypothesis that all three components would contribute to the prediction of reporting intentions based on child race/ethnicity was partially supported. In vignettes where the child victim was White or Indigenous, no TPB component was significant. For Black, East Indian, or Chinese children, subjective norms influenced reporting intentions. These results indicate that how teachers perceived the opinions (social pressure) of their colleagues and other people who are important to them increased the likelihood of teacher's intentions to report. It is hard to make precise meaning of the differences found between racial/ethnic groups, given the novelty of the current study in exploring this theory within the teacher intent to report context. However, in general, the lack of influence of most TPB components may reflect the severe depictions of child maltreatment that held more weight for teachers' reporting intentions.

While past research has not explored the components of TPB within the context of child race/ethnicity, it has found this theoretical model to account for 22-44% of the variance based on general teacher reporting intentions (Feng et al., 2010) and child maltreatment type and severity (Christodoulou et al., 2019). In the current study, the TPB model accounted for a similar amount of variance for the Black child (17-26.5%) and East Indian child (35-50%) vignettes. For the vignettes that depicted a Chinese child, the model accounted for a significantly higher amount of the variance (64-86%). Past studies have found attitude to consistently predict teachers' intent to report (Christodoulou et al., 2019; Feng et al., 2010) and perceived behavioural control to be a reliable predictor for kindergarten teachers in Taiwan (Feng et al., 2010) and to improve the prediction of teachers' reporting intentions for severe maltreatment (Christodoulou et al., 2019). The findings from the current study did not show significant associations for attitudes and perceived behavioural control when it comes to teachers' reporting intentions based on child

race/ethnicity. In contrast, subjective norms was statistically significant, which contrasts findings from Feng et al. (2010) but is aligned with those from Christodoulou et al. (2019) who found that, in addition to attitudes and perceived behavioural control for physical abuse and neglect, subjective norms was also predictive of reporting intentions. In addition, subjective norms was the only significant TPB predictor for severe sexual abuse (Christodoulou et al., 2019).

The various differences are somewhat surprising as all three studies used the same questions to measure TPB. However, the following differences in the studies' methodologies may provide potential explanations: (a) each study examined TPB in different research contexts (i.e., general intent to report, based on maltreatment type and severity, based on child victim race/ethnicity); (b) the studies were performed in different countries (Canada, Greece, Taiwan); and (c) there was variation in grade level of the participating teachers (i.e., kindergarten versus kindergarten to grade 12). In addition, there may have been an issue with overfitting of the model in the current study due to the small sample size in the unlikely/unsure reporting intention condition. Also, differences in TPB measurement may also explain the varying findings among the three studies as Christodoulou et al. (2019) used an additional six items to measure perceived behavioural control, and Feng et al. (2010) measured attitudes about child discipline, punishment for perpetrators, and professional responsibilities in addition to attitudes about reporting impacts. Nevertheless, all studies indicate that TPB provides some predictive capacity for teachers' reporting intentions under certain conditions.

Given the novelty of incorporating a theoretical model to understand teachers' maltreatment reporting intentions, further research is recommended. With a larger sample size and/or greater variation in the maltreatment depicted in the case vignettes (i.e., not high severity), it is possible to gain greater insight about the role of TPB in reporting intentions as a function of child race/ethnicity. Additionally, the race/ethnicity manipulation within the vignettes might have been too overt in the current study and consequently, may have failed to tap into unconscious biases where racialized/ethnic beliefs tend to be activated (Faber et al., 2019; Kanter, 2019). Future research may benefit from additional methodologies, such as potentially providing photos of children of different racial/ethnic backgrounds. Also, using a between-groups design such that teachers only see one racial/ethnic group might mitigate awareness of the manipulation. In conclusion, employing TPB in future studies, under different conditions, is needed to provide

greater understanding of the degree to which this theory is useful in understanding the role of race/ethnicity (and culture more generally) on child maltreatment reporting.

Conclusion

In this study, we sought to deepen the understanding of factors influencing teachers' intentions to report child maltreatment, including both teacher- and system-level characteristics, as well as elements from the theory of planned behaviour. Using a factorial survey design, 93 Canadian teachers reviewed case vignettes that varied across maltreatment type and child race/ethnicity and indicated the likelihood of reporting each case vignette. The findings revealed a notable variation in teachers' reporting intentions, influenced by both teacher and system characteristics, though this impact varied depending on the two manipulated variables. Reporting intentions also fluctuated based on maltreatment type, with sexual abuse being more likely to be reported and emotional abuse being least likely to be reported. Race/ethnicity had no direct effect; however subjective norms increased reporting likelihood for Black, East Indian, and Chinese children.

Limitations and Future Research Directions

The study had several limitations, which are outlined below, as well as some ideas to address them in future research. First, there are a breadth of victim, teacher, and system variables that have been identified as influencing teachers' reporting intentions and behaviours. As was noted in Alazri and Hannah's review (2020), most of the prior research in this field has focused on descriptions of these variables but failed to determine causality. The current study started to address this call to action by examining teacher and system variables within differing victim characteristics using a factorial survey design methodology. As there were a huge number of characteristics identified in prior literature, many tests were conducted. While performing 130 tests increased the experiment-wise error rate, a correction was not applied in order to potentially find statistical differences that could guide future research into this topic.

Second, the study had a high degree of face validity even though there were varied child maltreatment type or race/ethnicity conditions. Due to the sensitive topic and the relatively clear manipulations, it is possible that teachers felt some pressure to select answers based on what they may have perceived as desirable or appropriate. Further, as noted earlier, it is possible that the overt nature of the manipulation for child race/ethnicity contributed to the lack of significant

differences in reporting intentions due to racialized/ethnic beliefs tending to operate at an unconscious level (Faber et al., 2019; Kanter, 2019).

Third, Alazri and Hannah's (2020) review highlighted the lack of consistency and consensus on how best to measure and/or integrate varying measurement tools. There also is variability in measuring reporting intentions versus actual reporting behaviours. In the current study, both types of data were collected (although not analyzed for the current study). There is a limitation in the current study's focus on intentions, although there is a link between intentions and behaviours (Randall & Wolf, 1994). Also, the case vignettes in the current study were designed to more closely resemble real life events (Sauer et al., 2020) and are thought to potentially yield more valid results than relying on decision-makers' description of their own behaviours (Taylor, 2006). Factorial survey designs offer researchers the ability to manipulate independent variables, draw causal relationships, and study phenomena that are hard to observe and/or unethical to test in a true experiment (Auspurg & Hinz, 2015), such as child maltreatment reporting. Future research would benefit from exploring similarities and differences between intent to report and actual reporting within the context of child maltreatment reporting to better determine how to resolve any discrepancies. Further, experimenting with ways for there to be lower face validity (e.g., lower transparency of the measurement of influence of race/ethnicity of victim on reporting intentions) in variables examined by way of vignettes would be important.

Fourth, few studies have employed theory to guide the conceptualization of teachers' reporting intentions and behaviours. The current study used the theory of planned behaviour, as recommended by Alazri and Hannah (2020), to provide insight into how certain components (e.g., attitudes towards helpfulness of reporting) influence intent to report within the context of varying child race/ethnicity backgrounds. Nevertheless, to examine teachers' reporting intentions and behaviours as a whole, a more comprehensive theory could be helpful, such as the integrated change model that expands on the theory of planned behaviour and includes elements within awareness, motivation and action phases (Alazri & Hannah, 2020; Gubbels et al., 2021).

Last, larger studies are needed with randomized recruitment strategies. The current study did use a randomizer function to place participants into conditions and to ensure vignettes were viewed in random order. Nevertheless, the findings are based on a small convenience sample of Canadian teachers and therefore have limited generalizability. Further, it should be noted that the characteristics of the sample likely indicate that individuals with more exposure/interest in child

maltreatment intervention were more likely to participate in this study. For instance, 40% of the sample also indicated having worked with children who had experienced child maltreatment prior to the teaching context population. Additionally, 40% of teachers reported prior professional experience with children who had experienced maltreatment before becoming classroom teachers, though the context of this experience remains unclear. Consequently, these results may be skewed with teachers on average being more skilled at reporting than the average. Future, studies could benefit from partnering with several school boards across Canada to permit greater teacher access to the study and in turn larger more representative samples.

Applied Implications

Canadian teachers have had the role of mandated reporter starting within Ontario in 1965, followed by other provinces and territories within a 15-year time window (Tonmyr et al., 2018). The legally mandated reporter designation has led to more child welfare involvement and protection for children experiencing maltreatment (Tonmyr et al., 2018). However, the complexity of this task suggests the imperative need to better equip teachers for this exceptionally important role. Many years later, numerous teachers are still lacking the necessary knowledge and skills to accurately report suspicions of child maltreatment in a consistent manner, such as suspecting but not reporting child maltreatment (Beck et al., 1994; Dinehart & Kenny, 2015; Feng et al., 2010; Glouchkow et al., 2020; Goebbels et al., 2008; Greco et al., 2017; Greco et al., 2020; Kenny, 2001; King, 2011; Mathews et al., 2015; Tite, 1993; Weegar, 2019)). Evidently, we are not yet providing the vital training needed to meet this duty.

The following training recommendations are based on findings from the current study. It should be noted that these recommendations are iterations of studies that have come before indicating these gaps are not new but instead have been challenges for many years (Bonardi 1999; Tite et al., 1998).

Content of training

1. **Tailored intervention for more ambiguous forms of child maltreatment.** The current research findings indicate that teachers are still in need of developing reporting skills for child maltreatment, in specific for emotional abuse and neglect. Despite 75% of teachers within this study having participated in child maltreatment reporting training, many indicated being uncertain or unlikely to report (based on information from the case vignettes). Further, study findings showed that prior training seemed to have no bearing on increasing the likelihood of

reporting intentions. These findings are concerning as the case vignettes were developed with more blatant and severe indicators such that the scenarios were intended to be easier to identify and report. Consequently, teachers might benefit from more tailored training to recognize reportable cases of child maltreatment. These findings will hopefully be shared with Canadian teachers, child welfare agencies, and training developers, to promote collaboration between these three shareholders for creating or building on pre-existing training to have a more tailored approach. With more personalized training, ideally it will increase the sensitivity to these forms of maltreatment and improve the odds that teachers will share their suspicions with a child welfare agency.

2. **Legally mandate reporter rationale.** In this study, we found that being a mandated reporter was associated with greater reporting intentions. Consequently, training should help teachers draw upon their mandated reporter role when encountering suspicions to motivate teachers to consult with a child welfare agency including with more ambiguous cases, and if necessary, report.
3. **Navigating fear and uncertainty.** Our research identified that teachers need more help in addressing fears and uncertainties when reporting. These two categories were most frequently endorsed by teachers who were unlikely or unsure about reporting. Fear mostly stemmed from concerns about worsening the circumstances for the child or being incorrect, and uncertainties mainly centered on how risky the situation was for the child, about school reporting policies, and about child welfare involvement was the right resource for the child/family. Trainings efforts need to address these valid fears and uncertainties by offering support and options (e.g., child welfare consultation, anonymity). Teachers may also benefit from ongoing training, potentially during their professional development days, to increase certainty in detection and risk assessment of child maltreatment and support clarity around their legal responsibilities.
4. **Influences of the relationships within the system.** Teachers within this study indicated that subjective norms (i.e., what others may think about reporting a certain scenario) play an important role in their intent to report. This finding speaks to a larger issue, such that teachers do not operate within isolation but rather within a system. Consequently, training needs to address how the relationships within these systems (e.g., the education system) influence teachers, along with ways in which these systems can better aid in supporting teachers.

Included within these systems would likely be creating community for consultations and support such as between child welfare agencies and schools. A better relationship with child welfare agencies, may help demystify for teachers the role of these agencies and the multiple avenues to connect with them (e.g., anonymously reporting).

Training method

1. **Mandated pre-service training and continued education.** Despite ~75% of teachers indicating having done training, there is still a quarter that indicate they have not received any. Consequently, it may be beneficial to integrate and mandate tailored training focused on identifying child maltreatment and navigating the reporting process for pre-service teachers. This would ensure that all teachers entering the work force had some level of exposure to their legally mandated reporting duty and what it entails. Further, continued education training with a more tailored curriculum seems necessary, as despite many teachers receiving training, it appears under some circumstances to have little bearing on their reporting.

Final Remarks

This research study began to address several gaps in the area of teachers' child maltreatment reporting intentions and behaviours. The study (1) created a more nuanced understanding of teacher and system characteristics within varying victim contexts (i.e., maltreatment type and child race/ethnicity); (2) explored causal relationships between child maltreatment type and race/ethnicity on teachers' intent to report; and (3) employed the theory of planned behaviour to explore how attitudes, subjective norms, and perceived behavioural control influence reporting intentions based on race/ethnicity. The results showed the importance of a more nuanced understanding of the interplay among child, teacher, and system characteristics. The current study provided a more controlled and rigorous methodology to continue to create clarity of the reporting hierarchy for type of child maltreatment. Last, the findings illuminated that teachers' reporting intentions are influenced by the perceptions of people in teachers' network when it comes to child race/ethnicity. Hopefully, this work has moved the area forward and has added to the research collective. Ultimately, it is hoped that the findings encourage additional dialogue for teacher training so these professionals can be better supported in their very important role in early child maltreatment intervention.

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Table 1*Sociodemographic Characteristics of Participants*

	n	%
Gender		
Woman	66	71.0
Man	23	24.7
Other	<5	4.3%
Race/ethnic background		
White (e.g., Western European descent)	79	84.9
Black (e.g., African descent, Caribbean descent)	7	7.5
Other	6	6.5
I would prefer not to answer	1	1.1
Household income (prior to income tax)		
<\$70,000	16	17.2
\$70,000 – \$89,999	14	15.1
\$90,000 – \$109,999	19	20.4
Above \$110,000	38	40.9
I would prefer not to answer.	6	6.5
Relationship status		
Married/Common-law	67	72.0
Unmarried (Single/Separated/Divorced)	26	28.0
Parental status (i.e., children in the home)		
Yes	50	53.8
No	43	46.2

Table 2*Employment Information*

	n	%
Highest level of education		
Bachelors	57	61.3
Masters	20	21.5
Professional degree (e.g., medicine, law pharmacy)	7	7.5
PhD/College/Other	9	9.7
Employment Status		
Permanent	74	79.5
Occasional	12	13.0
I would prefer not to answer/other	7	7.5
Support work with students with mental/physical disabilities outside of traditional home room teacher		
Yes	39	41.9
No	54	58.1

Table 3*Prior Professional Experience with Child Maltreatment*

	N	%
Previous work experience outside of a school setting with children that have experienced child maltreatment		
Yes	37	39.8
No	54	58.1
I would prefer not to answer	2	2.2
Experience reporting to a child welfare agency as a teacher		
Yes	57	61.3
No	35	37.6
I would prefer not to answer	1	1.1
Satisfaction level with reporting to a child welfare agency		
Not at all satisfied	8	14.0
Slightly satisfied	15	26.3
Moderately satisfied	17	29.8
Very satisfied	15	26.3
Extremely satisfied	2	3.5
Received training about child maltreatment reporting		
Yes	69	74.2
No	23	24.7
I would prefer not to answer	1	1.1
Satisfaction level of training received for reporting child maltreatment		
1- Poor	1	1.5
2- Slight	7	10.3
3- Good	32	47.1
4- Very	22	32.4
5- Excellent	6	8.8

Table 4*System Level Information*

	N	%
Location of employment		
British Columbia	5	5.4
Alberta	6	6.5
Saskatchewan	0	0.0
Manitoba	3	3.2
Ontario	67	72.0
Quebec	9	9.7
New Brunswick	0	0.0
Prince Edward Island	2	2.2
Nova Scotia	1	1.1
Newfoundland	0	0.0
Canadian Territories	0	0.0
Grades teaching		
Elementary	62	66.7
Highschool	28	30.1
Both (e.g., grade 8-11)	<5	-
Socioeconomic status of students		
Low income (e.g., family income under \$50,000)	20	21.5
Middle income (e.g., family income between \$50,000-\$90,000)	46	49.5
High income (e.g., family income over \$90,000)	20	21.5
I do not know	6	6.5
I would prefer not to answer	1	1.1
Population density of school location		
Rural (< 1,000)	6	6.5
Small population centre (1,000 to 29,999)	13	14.0
Medium population centre (30,000 to 99,999)	21	22.6
Large population centre (> 100,000)	52	55.9
I would prefer not to answer	1	1.1
School located in racially diverse neighbourhood		
Yes	73	78.5
No	18	19.4
I do not know	1	1.1
I would prefer not to answer	1	1.1

Table 5
Mann Whitney U and Bayesian analysis for teacher and system characteristics within type of child maltreatment

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	Physical Abuse				Sexual Abuse				Emotional Abuse				Neglect				Intimate Partner Violence			
	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>
Gender	-0.13	.899	.02	3.9	-1.16	.248	.10	2.9	-1.27	.203	.18	2.9	-0.33	.742	.05	4.1	-0.57	.571	.08	3.9
Parental Status	-0.74	.459	.09	3.9	-2.21	.027	.18	1.8	-1.31	.189	.16	1.6	-1.94	.052	.23	1.1	-0.60	.551	.07	3.9
Education Level	-1.99	.047	.28	1.5	-0.65	.516	.06	3.2	-0.04	.972	.01	3.7	-0.61	.545	.09	3.2	-0.58	.562	.09	3.5
Grades Taught	-1.32	.185	.17	2.8	-0.65	.948	.01	3.8	-0.45	.653	.06	3.8	-1.13	.260	.15	2.8	-1.28	.200	1.7	2.4
Learning Support Teacher	-0.55	.581	.06	3.7	-2.80	.005	.23	1.1	-1.88	.060	.23	1.6	-0.55	.585	.07	4.2	-1.09	.277	.13	2.4
Neighbourhood Racial Diversity	-1.60	.110	.23	2.8	-1.13	.259	.12	3.0	-0.63	.526	.10	3.9	-0.12	.905	.02	4.0	-1.20	.231	.18	2.9
Prior professional exposure	-1.65	.100	.19	2.3	-0.88	.377	.07	3.4	-0.08	.939	.01	4.4	-0.26	.792	.03	4.2	-0.48	.630	.06	3.8
Prior teacher reporting	-1.10	.273	.13	3.2	-0.66	.507	.06	3.6	-0.95	.342	.12	3.1	-1.50	.134	.19	2.0	-1.99	.047	.24	0.7
Prior reporting training	-0.84	.403	.11	3.7	-0.94	.348	.09	3.2	-0.54	.591	.08	4.0	-0.24	.814	.03	4.1	-0.95	.340	.13	3.1

Note. Highlighted characteristics are statistic

Table 6
Mann Whitney U and Bayesian analysis for teacher and system characteristics within victim race/ethnicity

	Black Child				White Child				Indigenous Child				East Indian Child				Chinese Child			
	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>	<i>z</i>	<i>p</i>	<i>d</i>	<i>BF</i>
Gender	-0.38	.707	.05	3.9	-.129	.898	.02	4.0	-.082	.935	.01	4.0	-.485	.628	.07	3.7	-.220	.826	.03	4.0
Parental Status	-2.06	.039	.24	.77	-.031	.975	.00	4.2	-.782	.434	.09	3.9	-.729	.466	.09	3.8	-.741	.459	.09	3.4
Education Level	-1.39	.166	.20	2.5	-.587	.557	.09	3.4	-.036	.971	.00	3.8	-.427	.670	.06	3.6	-.848	.396	.04	3.4
Grades Taught	-1.61	.107	.21	1.8	-.107	.915	.01	3.8	-.153	.878	.02	3.8	-.018	.986	.00	4.2	-.522	.602	.07	3.8
Learning Support Teacher	-.218	.828	.03	4.3	-1.49	.136	.18	2.0	-1.17	.241	.14	2.8	-.452	.651	.05	4.1	-.904	.366	.11	3.4
Neighbourhood Racial Diversity	-.129	.898	.02	3.3	-.218	.828	.03	3.7	-1.58	.114	.23	3.1	-1.30	.195	.19	3.6	-.275	.784	.04	4.0
Prior professional exposure	-.483	.629	.06	3.8	-.654	.513	.08	3.7	-.354	.727	.04	4.0	-.075	.940	.00	4.3	-.377	.706	.05	4.2
Prior teacher reporting	-1.86	.063	.25	2.0	-1.57	.116	.19	1.8	-.654	.513	.09	4.1	-1.26	.207	1.5	2.7	-.943	.346	.12	3.0
Prior reporting training	-1.39	.166	.20	2.5	-.083	.934	.01	4.0	-.654	.513	.09	4.1	-.199	.842	.03	4.1	-.305	.761	.05	3.8

Note. Highlighted characteristics are statistically significant. No Bonferroni adjusted *p*-values.

Table 7
Kruskal Wallis H analysis for teacher and system characteristics within victim type of child maltreatment and race/ethnicity

	Physical Abuse		Sexual Abuse		Emotional Abuse		Neglect		Exposure to IPV		Black Victim		White Victim		Indigenous Victim		East Indian Victim		Chinese Victim	
	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>
Socio-economic Status	3.15	.207	3.14	.208	.480	.786	3.56	.168	.700	.705	10.5	.005	4.34	.114	3.47	.177	2.73	.255	.104	.949
Population Density	3.79	.150	8.31	.016	2.11	.349	.509	.775	3.31	.192	2.64	.267	.361	.835	1.88	.389	.365	.833	3.30	.192
Reporting Satisfaction	2.76	.251	3.93	.140	3.45	.178	7.32	.026	2.45	.294	1.08	.582	.315	.854	4.65	.098	5.92	.052	4.66	.098

Note. Highlighted characteristics are statistically significant. No Bonferroni adjusted *p*-values.

Table 8
Spearman correlation analysis for teacher characteristic within victim type of child maltreatment and race/ethnicity

	Physical Abuse		Sexual Abuse		Emotional Abuse		Neglect		Exposure to IPV		Black Victim		White Victim		Indigenous Victim		East Indian Victim		Chinese Victim	
	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>	<i>H</i>	<i>p</i>
Years	.156	.135	.210	.043	-	.054	.256	.010	.343	<.001	.258	.013	.163	.120	.025	.810	.111	.289	.084	.422
Teaching					.201															

Note. Highlighted characteristics are statistically significant. No Bonferroni adjusted *p*-values.

Table 9*Intent to report differences between types of child maltreatment*

Type of Maltreatment	Physical Abuse MR = 3.48	Sexual Abuse MR = 4.38	Emotional Abuse MR = 1.62	Neglect MR = 2.37	IPV Exposure MR = 3.14
Physical Abuse	-	.001	<.001	<.001	1.00
Sexual Abuse		-	<.001	<.001	<.001
Emotional Abuse			-	.011	<.001
Neglect				-	.009

Note. This table illustrates the differences and lack of found in reporting intentions of teachers based on type of child maltreatment.

*The table provides mean rank (MR) values and Bonferroni adjusted *p*-values.

Table 10*Teacher rationales for likely to report based on child maltreatment type*

Rationales to report	Physical Abuse (N=82)	Sexual Abuse (N=92)	Emotional Abuse (N=33)	Neglect (N=62)	Exposure to Intimate Partner Violence (N=77)
Sufficient amount of potential evidence to suspect	68%	54%	27%	42%	40%
Clear evidence of harm done	73%	38%	39%	47%	22%
This type of behaviour feels more clearly in need of reporting	45%	67%	33%	47%	60%
Desire to help the child/family	68%	67%	70%	69%	78%
Need to fulfill a moral obligation	44%	54%	42%	42%	51%
Better to report than not	61%	51%	48%	58%	62%
Gut feeling it is maltreatment	34%	42%	39%	31%	36%
Comfortable with the reporting process	24%	33%	33%	27%	25%
High credibility of the informant	16%	12%	9%	10%	17%
Positive prior experience collaborating with CWA	12%	14%	24%	8%	9%
Legally mandated duty to report	83%	88%	42%	76%	65%
I know I do not have "to be certain" to report suspected maltreatment	50%	53%	45%	55%	51%
I know I can report anonymously	21%	26%	24%	29%	29%
I think the situation crosses the line of the appropriate cultural practices	34%	29%	45%	15%	25%
If rational not mentioned but fits best, please describe below	1%	3%	3%	5%	9%

Note. Highlighted rationales are within the top three endorsed for each type of child maltreatment

Table 11*Teacher rationales for unsure about reporting based on child maltreatment type*

Rationales for unsure about reporting	Physical Abuse		Sexual Abuse		Emotional abuse		Neglect		Exposure to Intimate Partner Violence	
	N= 10		N= 1		N= 22		N= 16		N= 13	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sufficient amount of potential evidence to suspect	30%		0%		27%		19%		0%	
Clear evidence of harm done	20%		0%		18%		19%		23%	
This type of behaviour feels more clearly in need of reporting	0%		0%		18%		0%		23%	
Desire to help the child/family	50%		0%		59%		44%		54%	
Need to fulfill a moral obligation	20%		0%		27%		13%		8%	
Better to report than not	30%		0%		32%		6%		0%	
Gut feeling it is maltreatment	10%		0%		14%		6%		8%	
Comfortable with the reporting process	10%		0%		5%		0%		0%	
High credibility of the informant	10%		0%		5%		13%		8%	
Positive prior experience collaborating with CWA	0%		0%		9%		0%		0%	
Legally mandated duty to report	40%		0%		32%		0%		0%	
I know I do not have "to be certain" to report suspected maltreatment	30%		0%		18%		0%		0%	
I know I can report anonymously	30%		0%		18%		6%		0%	
I think the situation crosses the line of the appropriate cultural practices	20%		0%		23%		0%		15%	
I do not think this scenario is child maltreatment		0%		0%		5%		0%		8%
Lack of sufficient evidence (e.g., no visible sign of mark of child abuse)		0%		0%		27%		6%		0%
It is not my responsibility to intervene		0%		0%		5%		0%		15%
Feeling uncertain about the evidence		30%		0%		18%		6%		8%

Feeling uncertain about how risky the situation is for the child	30%	0%	18%	6%	8%
Feeling uncertain if child welfare agency is the right resource for this situation	40%	0%	36%	13%	23%
Feeling uncertain of legally mandated reporting obligations	10%	0%	27%	31%	62%
Feeling uncertain of school reporting policies	0%	0%	14%	13%	15%
A lack of confidence in identifying the signs of maltreatment	10%	0%	27%	38%	23%
A lack of confidence in maltreatment reporting abilities to child welfare	0%	0%	14%	13%	8%
Fear of being incorrect	0%	0%	14%	25%	31%
Fear of worsening the circumstances for the child	40%	0%	50%	25%	23%
Fear of misinterpreting cultural practices	40%	0%	18%	19%	8%
Fear of misinterpreting discipline practices	30%	0%	23%	0%	0%
Fear of reprisal from parent or family	10%	0%	18%	6%	0%
Fear of litigation	0%	0%	0%	0%	0%
Worried about how to interact with child and parent following a report	0%	0%	14%	13%	0%
Worried about damaging the parent-teacher or child teacher relationship	10%	0%	18%	13%	15%
The informant lacks credibility	0%	0%	0%	13%	0%
For this case I would prefer other non-CWA intervention with the family	20%	0%	55%	50%	8%
For this case I would prefer to do the intervention with the family	10%	0%	27%	31%	0%
Previous experience with child welfare services was poor with a similar case	0%	0%	9%	6%	0%
Do not have confidence in child welfare services	10%	0%	5%	6%	15%

My school administration would be the reporters for a case like this	20%	100%	14%	19%	15%
If there is a rational not mentioned but fits, please describe below	10%	0%	27%	25%	15%

Note. Highlighted rationales are within the top three endorsed for each type of child maltreatment

Table 12*Teacher rationales for not likely to report based on child maltreatment type*

Rationales to not report	Physical Abuse (N=1)	Sexual Abuse (N=0)	Emotional Abuse (N=38)	Neglect (N=15)	Exposure to Intimate Partner Violence (N=3)
Lack of sufficient evidence (e.g., no visible sign or mark of child abuse)	0%	n/a	50%	20%	100%
It is not my responsibility to intervene	0%	n/a	5%	13%	33%
Feeling uncertain about the evidence	0%	n/a	24%	13%	33%
Feeling uncertain about how risky the situation is for the child	100%	n/a	18%	53%	0%
Feeling uncertain if a child welfare agency is the right resource for this situation	0%	n/a	50%	40%	0%
Feeling uncertain of legally mandated reporting obligations	0%	n/a	13%	7%	0%
Feeling uncertain of school reporting policies	0%	n/a	8%	33%	33%
A lack of confidence in identifying the signs of maltreatment	0%	n/a	8%	7%	0%
A lack of confidence in maltreatment reporting abilities to child welfare	0%	n/a	24%	7%	0%
Fear of being incorrect	0%	n/a	18%	20%	33%
Fear of worsening the circumstances for the child	0%	n/a	34%	20%	67%
Fear of misinterpreting cultural practices	0%	n/a	16%	20%	0%
Fear of misinterpreting discipline practices	0%	n/a	8%	13%	33%
Fear of reprisal from parent or family	0%	n/a	5%	13%	0%
Fear of litigation	0%	n/a	5%	7%	0%
Worried about how to interact with child and parent following a report	0%	n/a	8%	13%	0%
Worried about damaging the parent-teacher or child teacher relationship	0%	n/a	11%	13%	0%
The informant lacks credibility	0%	n/a	0%	7%	0%
For this case I would prefer other non-CWA intervention with the family	0%	n/a	63%	33%	0%
For this case I would prefer to do the intervention with the family	0%	n/a	24%	27%	33%
Previous experience with child welfare services was poor with a similar case	0%	n/a	11%	0%	0%

Do not have confidence in child welfare services	0%	n/a	13%	7%	0%
My school administration would be the reporters for a case like this	0%	n/a	8%	13%	33%
If there is a rational not mentioned but fits, please describe below	0%	n/a	0%	33%	0%

Note. Highlighted rationales are within the top three endorsed for each type of child maltreatment

Table 13*Theory of planned behaviour and Black victim*

	Estimate	SE	95% CI		<i>p</i>
			LL	UL	
Attitude	-.465	.370	.304	1.298	.209
Subjective norm	1.285	.368	1.758	7.429	<.001
Perceived behavioural control	-.347	.271	.415	1.203	.200
Intercept	-1.029	1.363			.450

Note. This table demonstrates the variance accounted for the three different components of theory of planned behaviour based on a victim who is Black.

Table 14*Theory of planned behaviour and East Indian victim*

	Estimate	SE	95% CI		<i>p</i>
			LL	UL	
EI_TPBA	.362	.381	.681	3.028	.342
EI_TPBSBN	1.763	.409	2.616	12.983	<.001
EI_TPBPBC	-.276	.347	.385	1.497	.426
Intercept	-5.788	2.058			.005

Note. This table demonstrates the variance accounted for the three different components of theory of planned behaviour based on a victim who is East Indian.

Table 15*Theory of planned behaviour and Chinese victim*

	Estimate	SE	95% CI		<i>p</i>
			LL	UL	
EI_TPBA	.068	.515	.390	2.936	.895
EI_TPBSBN	3.007	.719	4.941	82.799	<.001
EI_TPBPBC	-.431	.446	.271	1.556	.333
Intercept	-8.543	2.580			<.001

Note. This table demonstrates the variance accounted for the three different components of theory of planned behaviour based on a victim who is Chinese.

Appendix A

Recruitment Poster

Thoughts about child maltreatment reporting?

WE'RE RECRUITING

Join us in building the foundation to a better understanding about the complexity of child maltreatment reporting.

ELIGIBILITY CRITERIA

- 1** Canadian teacher
- 2** 2+ years in the classroom
- 3** Read & write in English
- 4** Access to a computer

If YES to all 4, then we invite you to participate!

20

minute
survey

\$50

Amazon gift card
draw to win one of
three.

**Complete confidentiality
and anonymity for answers**

**Can stop participation in
the survey at any time.**

Click for online survey link

OR copy and paste link:

http://uottawapsy.az1.Qualtrics.com/jfe/form/SV_0PPrfFwueHhg4jc

Principal Investigator
Amanda Glouchkow
M.A. Candidate

Research Supervisor
Elisa Romano, PhD
Professor, School of
Psychology



uOttawa

Appendix B

Consent Form for Teachers Child Maltreatment Reporting Research

Title of the Study: Enhancing understanding of teachers' reporting behaviour of child maltreatment

Principal Researcher: Amanda Glouchkow, B.A. (Hons.), M.A. Candidate, Counselling Psychology, Faculty of Education, University of Ottawa

Supervising Professor: Elisa Romano, Ph.D.; School of Psychology, Faculty of Social Sciences, University of Ottawa

Invitation to Participate: You have been invited to participate in this master's thesis study, *enhancing understanding of teachers' reporting behaviour of child maltreatment*, conducted by Ms. Amanda Glouchkow, a master's student in counselling psychology, under the supervision of Dr. Romano, a Professor in the School of Psychology at the University of Ottawa. The purpose of this consent form is to provide you with information to ensure that you understand the nature of this study and its requirements. Before agreeing to take part in this research, we ask that you carefully review this consent form.

Purpose of the Study: The aim of this research is to better understand the child maltreatment reporting behaviours of Canadian teachers.

Tasks to be completed: Should I decide to participate, my participation will consist of completing an online survey with two components:

1. The first component will take about 10 minutes to complete. The questions will ask me about my background, attitudes, influence from network of colleagues, past experiences reporting child maltreatment, and comfort level when encountering situations that may be child maltreatment.
2. The second component will take about 10 minutes to complete. There will be 6 scenarios for me to read. Following each scenario, I will be asked to provide details about how I perceive the situation and how I would imagine I would react if I were to encounter it in the classroom.

Risks: My participation in this study will entail that I am exposed to a topic of sensitive nature. Participating in this study is likely to prompt myself to reflect upon the topic of child maltreatment. For instance, I will be prompted to reflect upon my knowledge, attitudes, and/or behaviours when supporting children who may be showing signs of child abuse and neglect. I have received assurance from the researchers that every effort will be made to minimize these risks with an option to refuse any question I am not comfortable with, and I can withdraw from

the study at any point. I also understand that my responses will be anonymous. Further, if I do feel anxiety or discomfort for any reason, I will be provided with resources to connect with either upon completion or if I select the button “I do not want to continue with the survey” that will be provided on every webpage of the survey.

Benefits: My participation in this research will benefit both teachers reporting, and children experiencing child maltreatment. By participating I will help to contribute to a more nuanced understanding of the barriers and facilitators that influence the likelihood of teachers accurately reporting child maltreatment. I may also increase my own knowledge by receiving additional information after the survey if I choose to learn more about the signs of child maltreatment.

Confidentiality and Privacy: I have received assurance from the researchers that the information I will share will remain strictly confidential. I understand that my responses will be analyzed amongst the responses of other teacher responses. I recognize that my responses may be specifically included in a write up used for publication but that no personally identifying information will be collected. Some participants’ responses may be presented verbatim as quotes during presentations of results; however, if this were to happen, any potentially identifying features would not be included. To minimize the risk of security breaches and to help ensure my confidentiality, it is recommended that standard safety measures, such as signing out of my account, closing my browser, and locking my device when I am no longer using it/when I have completed the study are done.

Conservation of data: Only research team members will have access to the survey data collected, which will be kept for the duration of 10 years following study completion on a password protected computer.

Compensation: Should I decide to participate in this study, I will be entered into a draw to win one of three gift cards of \$50.00 amount. This draw will take place at the end of data collection, and I will be notified that I won by receiving the winnings through my email. If I choose to withdraw from the study, I will still be eligible to participate in the draw for winning this compensation. If at any point I do choose to withdraw, I will continue to hit next till the end of the study, where I will be redirected to a new web browser to provide my email for compensation.

Voluntary Participation: I will to the best of my ability provide honest feedback about the questions in all components of this research study, recognizing I am under no obligation to participate and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw but have completed some of the questionnaire, the researcher will remove the data from analysis.

Additional information: If I have any questions about the current study, I may contact Ms. Amanda Glouchkow or the supervising professor Dr. Elisa Romano. If I have any questions with regards to the ethical conduct of this study, I may contact the Office of Research Ethics and Integrity.

It is recommended that I keep/print/save a copy of this consent form for my records. I can do this by hitting ctrl+p or command+p and hitting the print button or saving it as a pdf. Thank you for your time and consideration.

Thank you for your time and consideration!

Informed consent:

Acceptance: By selecting the consent statement below, I agree to participate in this research study.

☐ Yes, I want to participate.

Code (birthday month + last 4-digits of cellphone #)

☐ No, I do not want to participate.

Appendix C

Factorial Survey Design

Please answer the following questions by clicking or entering the answer that seems most appropriate for you. Providing an honest answer to the question as possible is greatly appreciated and greatly valuable for quality data.

Section A: Demographic Questions

1. What is your date of birth (DD/MM/YYYY)? _____
2. What is your gender?
 - ☐ Man
 - ☐ Woman
 - ☐ Non-binary/third gender
 - ☐ Two-spirit
 - ☐ Transgender man
 - ☐ Transgender woman
 - ☐ Agender
 - ☐ Genderqueer
 - ☐ Prefer to self-describe. I identify as: _____
 - ☐ I would prefer not to answer.
3. What is your race/ethnic background? Choose all that apply.
 - ☐ Black (e.g., African descent, Caribbean descent)
 - ☐ First Nations, Métis, Inuit
 - ☐ White (e.g., Western European descent)
 - ☐ East Asian (e.g., Chinese, Japanese, Korean)
 - ☐ South and Southeast Asian (e.g., Indian, Vietnamese)
 - ☐ Middle Eastern/Arab (e.g., Lebanese, Syrian)
 - ☐ Latin America
 - ☐ I would prefer to self-describe. I identify as: _____
 - ☐ I would prefer not to answer.
4. Please indicate in which of the following groups your household income falls (prior to income tax).
 - ☐ Less than Can\$10,000
 - ☐ Can \$10,000-Can\$29,999
 - ☐ Can \$30,000-Can\$49,999
 - ☐ Can \$50,000-Can\$69,999
 - ☐ Can \$70,000-Can\$89,999
 - ☐ Can \$90,000-Can\$109,999
 - ☐ Above Can\$110,000
 - ☐ I would prefer not to answer.

5. Please indicate your relationship status

- ☐ Single
- ☐ Common-law
- ☐ Married
- ☐ Divorced
- ☐ Widowed
- ☐ I would prefer not to answer.

6. Do you have children? Please check all that apply.

- ☐ Biological
- ☐ Adopted
- ☐ Kinship
- ☐ Foster
- ☐ Stepchildren
- ☐ Other (please specify) _____
- ☐ I have not raised children.
- ☐ I would prefer not to answer

Section B: School setting questions

7. Please select your highest level of completed education.

- ☐ High school diploma
- ☐ College diploma
- ☐ Bachelors
- ☐ Masters
- ☐ PhD +
- ☐ Professional degree (e.g., medicine, law, pharmacy)
- ☐ Other (please specify) _____
- ☐ I would prefer not to answer

8. How many years have you been a teacher?

- ☐ 0-30+ years
- ☐ I would prefer not to answer

9. How long have you held your current position? Years: _____, Months: _____

- ☐ I would prefer not to answer

10. What grade(s) do you currently teach on a regular basis? (Please select all that apply)

- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6

- ☐ Grade 7
- ☐ Grade 8
- ☐ Grade 9
- ☐ Grade 10
- ☐ Grade 11
- ☐ Grade 12
- ☐ I would prefer not to answer

11. Please indicate your employment status:

- ☐ Permanent full-time
- ☐ Permanent part-time
- ☐ Long-term occasional (LTO) full-time
- ☐ Long-term occasional (LTO) part-time
- ☐ Occasional
- ☐ Other: _____
- ☐ I would prefer not to answer

12. Are you a teacher who supports students with learning differences, or mental/physical disabilities in a role outside of the traditional role of homeroom teacher (e.g., Learning Support Teacher, Student Study team, etc.)?

- ☐ Yes
- ☐ No
- ☐ I would prefer not to answer

13. Where do you teach in Canada?

- ☐ British Columbia
- ☐ Alberta
- ☐ Saskatchewan
- ☐ Manitoba
- ☐ Ontario
- ☐ Quebec
- ☐ New Brunswick
- ☐ Prince Edward Island
- ☐ Nova Scotia
- ☐ Newfoundland
- ☐ Northwest Territories
- ☐ Nunavut
- ☐ Yukon
- ☐ I would prefer not to answer

14. What is the socio-economic status for most of the children at your school?

- ☐ Low income (e.g., family income under \$50,000)
- ☐ Middle income (e.g., family income between \$50,000 - \$90,000)
- ☐ High income (e.g., family income over \$90,000)
- ☐ I do not know
- ☐ I would prefer not to answer

15. What is the population density of the area where the school you teach at is located?

- ☐ Rural area (< 1,000 people)
- ☐ Small population centre (1,000 to 29,999 people)
- ☐ Medium population centre (30,000 to 99,999 people)
- ☐ Large urban population centre (100,000 people and over)
- ☐ I would prefer not to answer

16. Is the school you teach at located in a racially diverse neighbourhood?

- ☐ Yes
- ☐ No
- ☐ I do not know
- ☐ I would prefer not to answer

Section C: Scenarios

Please answer the questions that follow each of the six scenarios as honestly as possible. For any questions you are not comfortable to answer, you may skip them.

Pre-information: In the scenarios presented below, please envision them occurring part way into your teaching year. The vignettes are fictional and were developed based on the children living in Canada, being 8-year-old boys, and growing up in families of middle-class backgrounds.

Scenario 0 (*Not reportable*):

James is a White child who has been struggling to pay attention in class. When trying to determine why, he tells you that his dad is worried about paying the rent and he fears his family may become homeless.

Scenario 1:

Usain, a Black child, had bruising on the back of his hands. When you ask him about the bruising, he replies that his father hit him with a belt for not doing his homework.

Scenario 2:

During recess, Noah a White child, rubs another classmate's genitalia non-consensually. While you're addressing the issue with him, he says a few nights ago his stepfather played with his privates and told him there was nothing wrong with it.

Scenario 3:

When helping Atotozti, an Indigenous child, with his schoolwork, he tells you he is "dumb" and "useless." You ask him why he thinks that, and he mentions that his dad screamed at him, calling him those names and telling him "He will never amount to anything and is a waste of space".

Scenario 4:

Dhruv, an east Indian child, asks if you have any cream to help soothe his hands that have a deep cut. He mentions that his father went to a friend's house for the night, leaving him alone. While cooking his dinner, he sliced his hand while cutting a cucumber.

Scenario 5:

Before school starts, Hàoyǔ (浩宇), a Chinese child, comes into your classroom and bursts into tears. While consoling him, he manages to tell you between sobs that he saw his dad punched his mom in the face that morning.

(To be asked after each case vignette)

Based on the information provided, how serious do you think this incident is?"

1-not at all serious 2 – slightly serious 3-somewhat serious 4 – moderately serious 5-extremely serious

What is the likelihood that you would report this situation to a child protection agency?

Unlikely to report (0-40) Unsure if I would/wouldn't report (41-59) Likely to report (60-100)

1. Your response suggests that you are likely to report (rating of 60 or higher). What might be some reasons for reporting at this point in time? Please check all that apply.

- ☐ Sufficient amount of potential evidence to suspect
- ☐ Clear evidence of harm done
- ☐ This type of behaviour feels more clearly in need of reporting
- ☐ Desire to help the child and/or family
- ☐ Need to fulfill a moral obligation
- ☐ Better to report than not
- ☐ Gut feeling it is maltreatment
- ☐ Comfortable with the reporting process
- ☐ High credibility of the informant
- ☐ Positive prior experience collaborating with Child Welfare Agencies
- ☐ Legally mandated duty to report
- ☐ I know I do not have "to be certain" to report suspected maltreatment
- ☐ I know I can report anonymously
- ☐ I think the situation crosses the line of appropriate cultural practices

If there is rational not mentioned but fits best, please describe below.

2. Your response suggests that you are unlikely to report (rating of 40 or lower). What might be some reasons for not reporting at this point in time. Please check all that apply.

- ☐ Lack of sufficient evidence (e.g., no visible sign or mark of child abuse)
- ☐ It is not my responsibility to intervene
- ☐ Feeling uncertain about the evidence
- ☐ Feeling uncertain about how risky the situation is for the child
- ☐ Feeling uncertain if a child welfare agency is the right resource for this situation
- ☐ Feeling uncertain of legally mandated reporting obligations
- ☐ Feeling uncertain of school reporting policies
- ☐ A lack of confidence in identifying the signs of maltreatment
- ☐ A lack of confidence in maltreatment reporting abilities to a child welfare agency
- ☐ Fear of being incorrect
- ☐ Fear of worsening the circumstances for the child
- ☐ Fear of misinterpreting cultural practices
- ☐ Fear of misinterpreting discipline practices
- ☐ Fear of reprisal from parent of family
- ☐ Fear of litigation
- ☐ Worried about how to interact with child and parent following a report
- ☐ Worried about damaging the *parent-teacher* or *child-teacher* relationship
- ☐ The informant lacks credibility
- ☐ For this case I would prefer other non-CAS intervention methods to be tried first
- ☐ For this case I would prefer to do the intervention with the family
- ☐ Previous experience with child welfare services was poor with a similar case
- ☐ Do not have confidence in child welfare services
- ☐ My school administration would be the reporters for a case like this
- ☐ Other

If there is rational not mentioned but fits best, please describe below.

3. Your response suggests that you are unsure about whether or not to report (ratings between 41 to 59). What might be some reasons for reporting and some reasons for not reporting at this point in time? Please check all that apply.

- ☐ Sufficient amount of potential evidence to suspect
- ☐ Clear evidence of harm done
- ☐ This type of behaviour feels more clearly in need of reporting
- ☐ Desire to help the child and/or family
- ☐ Need to fulfill a moral obligation
- ☐ Better to report than not
- ☐ Gut feeling it is maltreatment
- ☐ Comfortable with the reporting process

- ___ High credibility of the informant
- ___ Positive prior experience collaborating with Child Welfare Agencies
- ___ Legally mandated duty to report
- ___ I know I do not have “to be certain” to report suspected maltreatment
- ___ I know I can report anonymously
- ___ I think the situation crosses the line of appropriate cultural practices
- ___ Lack of sufficient evidence (e.g., no visible sign or mark of child abuse)
- ___ It is not my responsibility to intervene
- ___ Feeling uncertain about the evidence
- ___ Feeling uncertain about how risky the situation is for the child
- ___ Feeling uncertain if a child welfare agency is the right resource for this situation
- ___ Feeling uncertain of legally mandated reporting obligations
- ___ Feeling uncertain of school reporting policies
- ___ A lack of confidence in identifying the signs of maltreatment
- ___ A lack of confidence in maltreatment reporting abilities to a child welfare agency
- ___ Fear of being incorrect
- ___ Fear of worsening the circumstances for the child
- ___ Fear of misinterpreting cultural practices
- ___ Fear of misinterpreting discipline practices
- ___ Fear of reprisal from parent of family
- ___ Fear of litigation
- ___ Worried about how to interact with child and parent following a report
- ___ Worried about damaging the *parent-teacher* or *child-teacher* relationship
- ___ The informant lacks credibility
- ___ For this case I would prefer other non-CAS intervention methods to be tried first
- ___ For this case I would prefer to do the intervention with the family
- ___ Previous experience with child welfare services was poor with a similar case
- ___ Do not have confidence in child welfare services
- ___ My school administration would be the reporters for a case like this
- ___ Other

All things considered, what overall impact would a child abuse report be likely to have on this child?”

1 = highly harmful, 2= harmful, 3= 4= beneficial, 5 = highly beneficial

All things considered, what overall impact would a child abuse report be likely to have on the rest of the family?

1 = highly harmful, 5 = highly beneficial

Would most people who are important to you think that you should report this scenario to a child welfare agency?

1 = Definitely NO to 5 = Definitely YES

Would most colleagues whose opinion you respect think you should report this scenario to a child welfare agency?

1 = Definitely NO to 5 = Definitely YES

I believe I have a lot of control over choosing the reporting decision for this scenario to a child welfare agency.

1= Definitely NO to 5= Definitely YES

It would be mostly up to me whether or not I would choose to report this scenario to a child welfare agency.

1= Definitely NO to 5= Definitely YES

Section D: Prior Child Maltreatment Exposure

For the following questions, child maltreatment (i.e., child abuse or child neglect) is defined as follows: Action(s) or inaction(s) by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child under the age of 18. This includes physical, sexual, and emotional abuse, as well as neglect and exposure to intimate partner violence.

Questions in Section C are asked because our experiences can impact the way we think about child maltreatment. Any questions that you are not comfortable answering please select the prefer not answer option.

1. Not considering your position as a teacher in a school setting, do you have any experience working with children who have a history of child maltreatment?

☐ Yes

☐ No

☐ I would prefer not to answer

(If yes to #19) Please indicate all circumstances you encountered in working with children who have a history of maltreatment.

☐ Physical abuse

☐ Sexual abuse

☐ Emotional abuse

☐ Neglect

☐ Exposure to intimate partner violence

☐ I would prefer not to answer

2. During your teaching career in a school setting, have you ever suspected child maltreatment?

☐ Yes. I have reported ~ (#) of times. (Please indicate below).

☐ No

☐ I would prefer not to answer

3. During your teaching career in a school setting, have you ever made a report to a child welfare agency for child maltreatment suspicions?

☐ Yes; How many? ☐ 1-2 ☐ 3-5 ☐ 6-9 ☐ 10+

☐ No

☐ I would prefer not to answer

(21.1) (If yes to #21) Please indicate the type(s) of maltreatment you reported to a child welfare agency. If you made a report based on more than one type of maltreatment, please indicate each type separately.

- ☐ Physical abuse
- ☐ Sexual abuse
- ☐ Emotional abuse
- ☐ Neglect
- ☐ Exposure to intimate partner violence
- ☐ I would prefer not to answer

(21.2) (If yes to #21) Please indicate the race/ethnicity of the children you reported to a child welfare agency.

- ☐ Black (e.g., African descent, Caribbean descent)
- ☐ First Nations, Métis, Inuit
- ☐ White (e.g., Western European descent)
- ☐ East Asian (e.g., Chinese, Japanese, Korean)
- ☐ South and Southeast Asian (e.g., Indian, Vietnamese)
- ☐ Middle Eastern/Arab (e.g., Lebanese, Syrian)
- ☐ Latin America
- ☐ I would prefer not to answer

(21.1) (If yes to #21) Thinking about the reporting instance that you remember most, please indicate the reasons for choosing to report to a child welfare agency (select all that apply).

- ☐ Physical abuse
- ☐ Sexual abuse
- ☐ Emotional abuse
- ☐ Neglect
- ☐ Exposure to intimate partner violence
- ☐ I would prefer not to answer

CERTAINTY	SELF-CONFIDENCE
There was sufficient amount of potential evidence to suspect	I felt comfortable with the reporting process
There was clear evidence of harm done	I felt confident in identifying signs of maltreatment
The type(s) of maltreatment were clearer to report	

ATTITUDES/BELIEFS	RELATIONSHIPS
I wanted to help the child and/or family	There was a positive <i>teacher-administration</i> collaboration and support for reporting
I need to fulfill a moral obligation	There was a positive <i>teacher-teacher</i> collaboration and support for reporting

	I thought the child welfare agency can help with this situation		There was a positive <i>teacher-child welfare agency</i> collaboration and support for reporting
	I thought it was better to report than not		The informant had high credibility

	FEARS		KNOWLEDGE
	I had a gut feeling it was maltreatment		I knew that I am a legally mandated reporter
	I was concerned for the safety of the child		I was following school reporting procedures
	I was worried about the repercussions of suspecting but not reporting the situation		I knew that I do not have “to be certain” to report suspected maltreatment
			I thought the situation crossed the line of appropriate cultural practices
			I knew I could report anonymously

(If your rationale to report was not mentioned in the above list please describe below.)

4. What has been your overall satisfaction level with the reporting experience to a child welfare agency?
- ☐ Extremely satisfied
☐ Very satisfied
☐ Moderately satisfied
☐ Slightly satisfied
☐ Not at all satisfied
☐ I have not reported to or consulted with a child welfare agency.
5. Researchers across the globe have found that between 5-47% (Dinehart et al., 2015; Greco et al., 2017) of teachers have at some point in their career suspected maltreatment but not made a report. In your opinion, what might be some reasons for teachers not reporting their suspicions? Please select your top five rationales.

	CERTAINTY		SELF-CONFIDENCE
	A lack of sufficient evidence		A lack of confidence in identifying the signs of maltreatment
	A lack of a visible sign or mark of maltreatment on the child		A lack of confidence in maltreatment reporting abilities to a child welfare agency
	Felt uncertainty about the evidence		
	Feelings of uncertainty about how much risk the situation posed to the child		

Feelings of uncertainty if a child welfare agency would be the right resource for the child	BELIEF/ATTITUDE
Feelings of uncertainty about the obligations of being a legally mandated reporter	Belief around it not being a teacher's responsibility to intervene.
FEARS	RELATIONSHIPS
Fear of being incorrect	The informant lacks credibility
Fear of worsening circumstances for the child through reporting	Alternative methods to child welfare agencies for help were chosen
Fear of misinterpreting cultural practices as child maltreatment	Teachers would choose to intervene with the family themselves
Fear of misinterpreting a family's discipline practices	Poor prior experience with child protection services
Fear of reprisal from parent/family	Lack of confidence in child welfare agencies
Fear of litigation	Administrative teams (e.g., principal) at my school made the report(s)
Worries about how to interact with parent/child following the report	Lack of support from the school administration
Worries about damaging the parent-teacher or child-teacher relationship	I would prefer not to answer

(If a rationale for not reporting was not mentioned in the above list please describe below.)

Section D: Questions related to child maltreatment intervention training.

6. Have you ever completed any training within or outside of the school (e.g., teachers' college, webinar, course, readings) about child maltreatment reporting?
☐ Yes
☐ No
☐ Prefer not to answer
7. (If yes to #6) Please rate at what level you believe your training to date has prepared you to identify and report child maltreatment.

Poor	Slight	Good	Very	Excellent
1	2	3	4	5

☐ Prefer not to answer

Appendix D

Debriefing Consent Form

Title of the Study: Enhancing understanding of teachers' reporting behaviours of child maltreatment

Principal Researcher: Amanda Glouchkow, B.A. (Hons.), M.A. Candidate, Counselling Psychology, Faculty of Education, University of Ottawa

Supervising Professor: Elisa Romano, Ph.D.; School of Psychology, Faculty of Social Sciences, University of Ottawa

Thank you for your participation in this research study. For this study, it was important that we withheld some information from you about some aspects of the study. Now that your participation is complete, we will describe the withheld information to you, why it was important to withhold it, and provide you with the opportunity to decide on whether you would like to have your data included in this study.

What you should know about this study

The purpose of this study remains the same, namely, to better understand the child maltreatment reporting behaviours of Canadian teachers. However, we did not share that we are focusing on two factors, namely the ways in which the type of maltreatment and the race/ethnicity of the victim might influence the intent to report child maltreatment.

- (1) **Type of child maltreatment:** Results of past studies suggest that some forms of child maltreatment are perceived as more severe and more obvious, leading to an increased likelihood of reporting relative to other maltreatment types. However, findings have varied about which form leads to the highest reporting behaviours. This study is attempting to provide greater clarification on this issue.
- (2) **Victim race/ethnicity:** Preliminary research indicates that when the victim's race/ethnicity does not match that of the reporter, there can be increased uncertainty in how best to proceed because of potential misperceptions. This study is trying to increase understanding of this issue by examining if the accuracy of reporting intentions fluctuates based on victim race/ethnicity within different maltreatment types.

Within the questionnaire that you completed, the factors of child maltreatment and victim race/ethnicity had multiple options that fluctuated based on each scenario you read. We will bring back to the education sector the information gained through your participation in the study. In this way, we are hoping to help with efforts to continue supporting teachers when encountering situations that may warrant a child maltreatment report.

Where can I learn more?

If you have any concerns, questions, or comments about the study, please feel free to contact Amanda Glouchkow or Dr. Elisa Romano.

If you feel any distress or discomfort after participating in this study, please feel free to contact one of the resources provided below.

Right to withdraw data

You may choose to withdraw the data you provided in the questionnaire without penalty or loss of benefits to which you are entitled. As such, whether you agree or do not agree to have your data used for this study, you can still be entered into a draw to win one of three gift cards of \$50.00 for your participation. After completion of this form, you will be redirected to a new web browser to provide my email for compensation. Please click below to indicate if you do, or do not, give permission to have your data included in the study:

_____ I give permission for the data collected from or about me to be included in the study.

_____ I do not give permission for the data collected from or about me to be included in the study. The code attached to my data is _____ (month of birthday + last four digits of cellphone number).

Please do not disclose the research procedures and/or purpose of the study to anyone who might participate in this study as this could affect the results of the study.

If you would like to receive a summary of the findings when it is completed, please feel free to contact the researcher.

Thank you for participating in this research!

Resources for distress

In case of immediate emergency in Canada, dial **911** or go to your nearest emergency department. You may contact your primary healthcare provider or access the support resources listed here depending on your location.

Resources for distress

British Columbia	Crisis Line Association of B.C. Mental Health Support	310-6789
Alberta	Alberta Health Services Mental Health Line	1-877-303-2642
Saskatchewan	Regina Mobile Crisis Services Crisis Line	306-525-5333
Manitoba	Klinic Crisis Line	1-888-322-3019.
Ontario	Crisis Line (English and French)	1-866-996-0991
Quebec	Inter-ligne	1-888-505-1010
New Brunswick	Chimo Helpline	1-800-667-5005
Nova Scotia	Provincial Crisis Line	1-888-429-8167
Prince Edward Island	Island Helpline	1-800-218-2885
Newfoundland & Labrador	Mental Health Crisis Centre	1-888-737-4668
Yukon	Canadian Mental Health Association, Yukon Division	867-668-6429

Northwest Territories	NWT Help Line	1-800-661-0844
Nunavut	Awareness Centre Crisis Line	867-982-0123

For support anywhere in Canada, call or text **988** OR call Wellness Services Canada at **1-866-585-0445** OR text **WELLNESS** to **741741** to talk with a trained crisis responder.