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Comments, Reflections, Presentations, Reports, Debates, Interviews

Teachers' Recognition of School Bullying According to Background Variables and Type of Bullying[*]

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RICONOSCIMENTO DA PARTE DEGLI INSEGNANTI DEL BULLISMO SCOLASTICO IN RELAZIONE A VARIABILI DI SFONDO E TIPO DI BULLISMO

Abstract

How teachers identify and judge school bullying may affect their willingness to intervene in bullying situations and influence their strategies for doing so. This study aimed to investigate whether there were significant differences in teachers' identification of bullying incidents according to background variables (gender, teaching experience, and education level). The participants of this study were 150 primary school and middle school teachers in Taiwan, A 24-item Recognition of Bullying Incidents Questionnaire (RBIQ) was used in this study to explore whether teachers can identify physical, verbal, and relational scenarios as bullying or non-bullying incidents. A mixed-model two way ANOVA was used to analyze this data. Results revealed that teachers' teaching experiences signifi-

cantly interacted with behavioral types, and teachers' education levels also significantly interacted with behavioral types. In addition, no gender differences in the identification of bullying were observed. Overall, teachers were more likely to identify physical bullying incidents than relational ones. The results of this study suggest that teachers should participate in training to help them identify bullying incidents, particularly when these involve relational bullying.

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School bullying has attracted public concern because of its high prevalence rate among students (Mok *et al.*, 2014) and the damage it can cause to students' physical and psychological well-being. Research has shown that students who are bullied tend to report higher levels of psychosomatic symptoms (Nansel *et al.*, 2001; O'Moore & Kirkham, 2001; Yang, Li, & Salmivalli, 2016). To reduce the negative effects of school bullying, many researchers and practitioners have examined the role of teachers in bullying prevention and intervention. For example, the Olweus Bullying Prevention Program (OBPP) recommends having teachers incorporate anti-bullying issues into a regular classroom meeting and discuss several actual incidents of this phenomenon with students (Olweus & Limber, 2010).

Although many people believe that teachers should take responsibility for dealing with bullying incidents among students, many teachers have considerable difficulty identifying different types of bullying. Bauman and Del Rio (2005) argued that teachers in the United Kingdom and the United States do not have a clear understanding of the nature and definition of school bullying and suggested including training in anti-bullying procedures in teacher-preparation programs. Mishna, Scarcello, Pepler, and Wiener (2005) argued that many teachers find it challenging not only to respond appropriately to bullying involving students but also to distinguish bullying from normal behavior. This implies that teachers' ability to identify bullying incidents may rest on their personal experiences rather than on a formal definition of bullying, and they have difficulties to identify incidents of school bullying.

Indeed, teachers' definitions of school bullying are not necessarily consistent with either that of scholars or the actual characteristics of such bullying, which include intentionality, repetition, and power imbalance (Olweus, 1993). Intentionality means that bullies intent to harm victims through negative behaviors. Power imbalance represents power differences exist between

bullies and victims, such as stronger individuals against weaker ones, a group of people against an individual, and seniors against juniors. Repetition means bullies repetitively harm victims over time (Olweus, 1996, 1997). Among these characteristics, repetition has often been ignored by teachers (Hazler *et al.*, 2001; Carney, 2005), and few teachers (5%) have been able to directly identify the three features of bullying (Byers, Caltabiano, & Caltabiano, 2011). Thus, teachers' perceptions of bullying might differ from the definition of this phenomenon in the relevant literature.

Kochenderfer-Ladd and Pelletier (2008) indicated that teachers are less likely to intervene if they view bullying incidents as normal behavior. In other words, teachers may misjudge a situation and not respond appropriately when they have difficulty defining school bullying and identifying incidents as such. Previous study also supported that whether teachers can timely intervene bullying incidents depends on their accurate identification to these incidents (Craig, Bell, & Leschied, 2011). Moreover, based on the perspective of the social information processing model (SIP model; Crick & Dodge, 1994; Reemst, Fischer, & Zwirs, 2016), when teachers witness a potential bullying incident, they will decode it based on their schemas which formed by their past experiences. Second, the decoding results will be interpreted whether it is a bullying incident. Third, if teachers ensure that is a bullying incident, teachers will search possible strategies to deal with it. Finally, teachers will select an appropriate response from possible strategies and then put it into enactment. In the interpretation step of the SIP model, relevant factors (e.g., teachers' background variables) may influence teachers' interpretation regarding a potential bullying incident. Teachers may misread a true bullying incident as a non-bullying incident and then select inappropriate responses for it. Therefore, it is important to explore what factors may have an impact on teachers' identification of bullying incidents to prevent misidentification from teachers' perspectives.

Recent research has shown that teachers' backgrounds can affect their perceptions of bullying. For example, teachers with more years of teaching experience are less likely to sympathize with victims and might even express negative attitudes toward bullying incidents (Boulton, 1997). However, Burger, Strohmeier, Sprober, Bauman, and Rigby (2015) found that teachers with more than 25 years of teaching experience reported a higher likelihood of dealing with bullying incidents, helping victims through psychological trauma, and ameliorating a bully's behavior compared to inexperienced teachers. Goryl, Neilsen-Hewett, and Sweller (2013) explored the relationship between teachers' teaching experience and their confidence in their ability to identify bullying incidents and found no correlation between these variables. In brief, although teachers with more years of teaching

experience are more willing to handle bullying incidents, they are not as confident as they seem to be. Oldenburg, Bosman, and Veenstra (2015) suggested that future research should explore teachers' abilities to define and identify bullying incidents according to teaching experience, and this issue awaits additional research. Therefore, we explored whether the identification of bullying incidents is related to one's level of teaching experience.

Moreover, few studies have investigated gender differences in how teachers identify bullying incidents. Maunder, Harrop, and Tattersall (2010) found that a higher percentage of female than male teachers defined certain incidents as bullying. In addition, female teachers perceived school bullying incidents as more severe than their male counterparts did (Duy, 2013). In addition, teacher gender may be correlated with perceptions of severity, and such perceptions may underlie the identification of bullying incidents (Mishna *et al.*, 2005). If these arguments were true, it implies that male teachers may need much assistance to raise their perceived severity of school bullying and their abilities to identify incidents of school bullying. However, further studies are warranted before jump to this conclusion. Whether there are gender differences among teachers in the identification of school bullying still needs further investigations. According to previous studies, this study hypothesized that female teachers would be better able than male teachers to identify bullying incidents as such.

Teachers' perceptions of bullying incidents may also be related to their education level. Goryl *et al.* (2013) found that teachers with a bachelor's degree were more confident in their ability to identify bullying incidents than were other teachers. Thus, we hypothesized that teachers with more advanced degrees would be better able than those with less formal education to identify bullying incidents.

In addition to the aforementioned variables, the type of bullying may have an influence. Compared to other types of bullying, physical bullying, verbal bullying, and relational bullying more often appear in school (Sánchez-Queija, García-Moya, & Moreno, 2017). Physical bullying means bullies harm victims through hitting, pushing, and kicking, etc. Verbal bullying means bullies use threats, name-calling, and teasing in a hurtful way to harm victims. Relational bullying means bullies intent to harm victims via social exclusion, and spreading rumors, etc. (Young, Boye, & Nelson, 2006; Wang, Iannotti, & Nansel, 2009). Boulton (1997) found that teachers usually regarded physical conflicts (e.g., kicking or fighting) and verbal threats as bullying incidents, whereas they did not define group exclusion or making fun of others as such. Indeed, it seems that indirect bullying has probably been neglected by teachers. Hazler *et al.* (2001) indicated that teachers tended to view physical conflicts between

students or any threatening acts as bullying incidents although these might not include the three typical characteristics of bullying noted above. In addition, research has found that teachers may ignore the relational bullying incidents experienced by girls, because these are seen as characteristic patterns of interaction among girls (Mishna, Pepler, & Wiener, 2006). Based on previous studies, teachers seem to find it easier to identify physical types than relational types of bullying incidents. Therefore, this study continued this line of research by examining whether teachers would be better able to identify physical than relational types of bullying.

In addition, the possibility of interactions between teacher background and different types of bullying requires further research. Boulton, Hardcastle, Down, Fowles, and Simmonds (2014) found no interaction between the gender of preschool teachers and their ability to identify different types of bullying, Nevertheless, few studies have focused exclusively on potential connections between background variables and teacher identification of different types of bullying, and this issue warrants further examination.

In summary, there are three research questions in this study. First, whether teachers with different teaching experience may have differences in their identification scores on different types of bullying. Second, whether teachers of different gender may have differences in their identification scores on different types of bullying. Third, whether teachers with different education levels may have differences in their identification scores on different types of bullying. This study may contribute to the existing knowledge on teachers' awareness of bullying. Results of this study can expand extant knowledge about the effects of teachers' background variables on their identification of different types of bullying. Moreover, the results of this study may assist educational administrators in judging that the training sessions should be provided to which groups of teachers with specific background variable for enhancing their professional development of bullying identification and intervention.

1. Method

1.1. *Participants*

This study adopted convenience sampling to recruit participants. A total of 150 teachers from 18 elementary and middle schools in northern, western, and southern Taiwan were recruited. This sample consisted of 41 male

(27.3%) and 109 female (72.7%) teachers with an average age of 38.3 years (SD = 7.1, ranging from 25 to 63) and an average teaching experiences of 12.7 years (SD = 7.3, ranging from 1 to 39). In addition, 55 participants had a bachelor's degree (36.6%), 91 had a master's degree (60.7%), and 4 had a PhD (2.7%). Because only 2.7% of the participants had a PhD, we divided the participants into two groups according to the highest level of education attained: a bachelor's degree (N = 55) and a master or more advanced degree (N = 95).

1.2. *Instruments*

Scenarios regarding negative interations among students were used in this study. Hypothetical or practical scenarios were used in many studies as well (e.g., Bauman & Del Rio, 2006; Chau & Cheung, 2017). Previous studies have shown that individuals' responses to hypothetical vignettes are closely aligned with their behavior in real life situations (Bellmore *et al.*, 2012; Batanova, Espelage, & Rao, 2014). The Recognition of Bullying Incidents Questionnaire (RBIQ), developed by the authors, includes scenarios based primarily on real cases of school bullying provided by the Ministry of Education, Taiwan. First, scenarios were developed along two dimensions: the situation (bullying, non-bullying) and, when present, the types of behavior (physical, verbal, or relational bullying). In total, 24 scenarios were developed (8 for each type of behaviors), 12 of which depicted bullying incidents and 12 of which did not. An example of the scenarios was shown in *Figure 1*.

	This is a bullying case	This is not a bullying case
Firstly, please identify whether the scenario matches each of the three characteristics of school bullying. Secondly, based on the results of your identification, please rate the scenario as either «this is a bullying case» or «this is not a bullying case».		
1. 'A' and 'B' often ridicule 'C' by using abusive language, acting with maliciousness toward 'C', and calling 'C' names. This made 'C' feel hurt.	☐	☐

Figure 1. – An item example scenarios provided to the participants.

We invited two researchers who specialized in school bullying and psychometrics and two middle school teachers to edit each item so that target readers would have a clear understanding of its meaning, and confirm that the 12 items coded as bullying incidents were characterized by intentionality, power imbalance, and repetition and that the other 12 items were not. We revised a few items according to the experts' suggestions, and 24 items were included in the formal RBIQ. This questionnaire, which adopts a dichotomous scoring system, was designed to examine teachers' ability to identify bullying incidents. After reading the scenarios, participants were asked to endorse either «this is a case of bullying» or «this is not a case of bullying». Each item was scored for accuracy, and total scores ranged from 0 to 24, with higher scores reflecting a greater number of correct answers.

We used Rasch analysis to examine the reliability and validity of the questionnaires, because it provides indicators of whether each item is consistent with the underlying construct. It can be used to analyze dichotomous items (Bond & Fox, 2007). As the scenarios were based on three types of behavior (i.e., physical, verbal, and relational bullying), we used a multidimensional dichotomous model and ConQuest 2.0 software for the analyses. The infit MNSQ (mean square) indices for all items ranged from 0.70 to 1.26, which met the standard suggested by Wright and Linacre (1994) (i.e., between 0.6 and 1.4). The item separation reliability of the RBIQ was .99, indicating that item difficulty indices of each item can be effectively distinguished in the sample (Linacre, 2006). In addition, the correlations among physical, verbal, and relational dimensions ranged from .92 to .93. This evidence supports the psychometric quality of the RBIQ.

1.3. *Procedures*

The procedures of this study were reviewed and approved by an Institutional Review Board in Taiwan (NCKU-HERC-E-105-057-2). First, we contacted school representatives and informed them about the purpose of this study for inviting them to join in this project. Second, after receiving an approval from each school, we sent instructions, informed consent forms, gifts (a pen for each teacher), and questionnaires to each school. Third, each school representative assisted in administering questionnaires and informed consent forms to teachers who voluntarily participated in this study. Forth, after collecting the questionnaires and informed consents, school representatives helped to return those to the researchers by mail.

1.4. *Data analysis*

We used SPSS 21 to analyze the data. First, we applied the expectation-maximization (EM) algorithm (Lauritzen, 1995) to address missing data. Second, a mixed-model two-way ANOVA was used to examine whether there was an interaction between teachers' background variables (teaching experience, gender, and education) and the identification of different types of behavioral incidents (physical, verbal, and relational bullying).

2. Results

2.1. *Relationship between teaching experience and types of behaviors*

Respondents were divided into three groups according to years of teaching experience: 1-10 years (N = 56), 11-20 years (N = 72), and more than 20 years (N = 22). The mixed-model two-way ANOVA (see *Tab. 1*) suggested a significant interaction between one's teaching experience and the type of behaviors (F = 3.58, p < .05, η^2 = .05). According to the results of the simple main effects analysis, teachers with 1-10 years of teaching experience scored higher on items addressing verbal versus physical and relational bullying. Teachers with 10-20 years of teaching experience and those with more than 20 years of experience scored higher on items addressing physical versus relational and verbal bullying (see *Fig. 2*).

2.2. *Relationship between one's education level and the type of behaviors*

Participants were divided into two groups according to the highest level of education attained: a bachelor's degree (N = 55) and a master's or more advanced degree (N = 95). A two-way ANOVA analysis showed (see *Tab. 1*) a significant interaction between one's education level and the type of behaviors (F = 4.04, p < .05, η^2 = .03). According to a simple main effects analysis, teachers with a bachelor's degree were more likely to score higher on items involving physical than other types of bullying. Teachers with at least a master's degree scored higher on items addressing verbal than other types of bullying (see *Fig. 3*). In addition, participants in both groups scored lower on items addressing relational bullying incidents.

Table 1. – *Marginal means and se from the mixed-model two way ANOVA.*

| Teachers' background variables	Groups	N	Physical type		Verbal type		Relational type	
			M	*SE*	*M*	*SE*	*M*	*SE*
Teaching experiences	1-10 years	56	6.23	.18	6.38	.18	6.11	.18
	11-20 years	72	6.29	.16	6.25	.16	5.49	.16
	> 20 years	22	6.68	.29	6.27	.28	5.27	.29
Education level	Bachelor	55	6.75	.18	6.49	.18	5.66	.19
	At least a master	95	6.08	.14	6.19	.14	5.71	.15
Gender	Male	41	6.54	.21	6.20	.20	5.96	.22
	Female	109	6.25	.13	6.34	.13	5.59	.14

Note: N = 150.
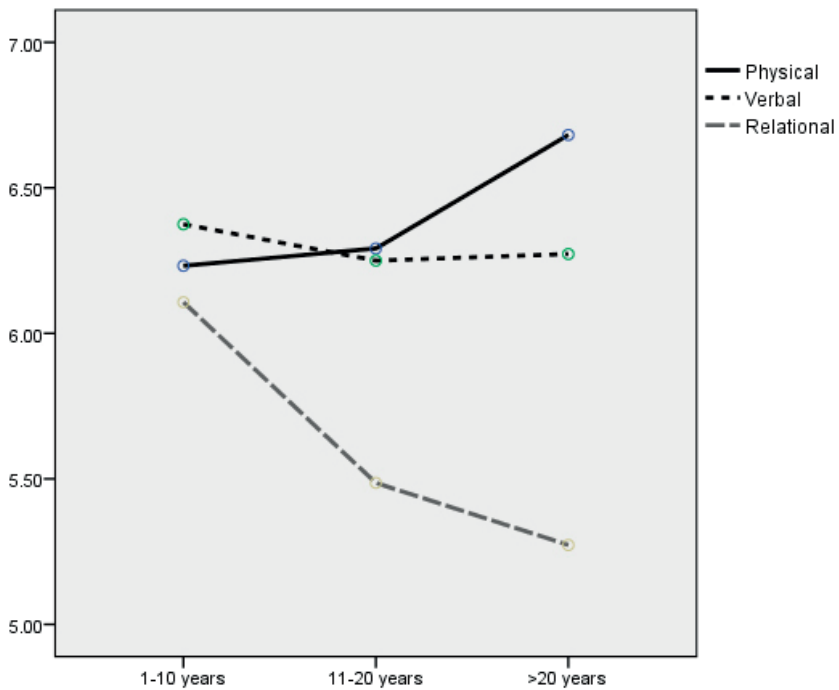
Figure 2. – RBIQ scores by teaching experience.
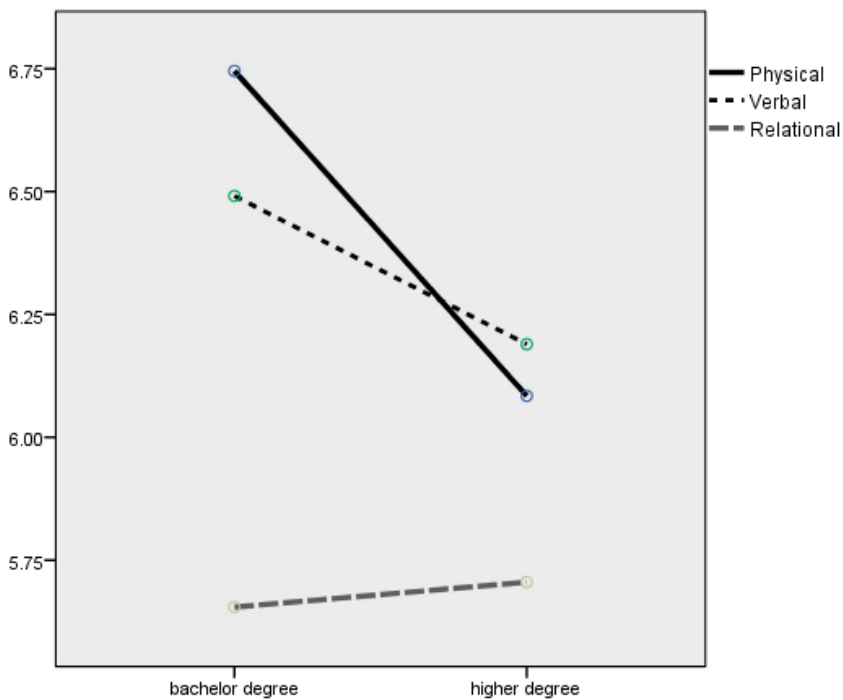

Figure 3. – An item example scenarios provided to the participants.

2.3. *Relationship between one's gender and the type of behaviors*

As shown in *Table 1*, there was no interaction between one's gender and the type of behaviors recognized by that person (F = 2.02, p > .05). There was also no main effect of teacher gender (F = .78, p > .05), which means that teachers' identification scores did not differ based on their gender. However, the results revealed a significant main effect of the type of behavior (F = 10.31, p < .05, η^2 = .12). Teachers scored higher on items addressing physical (M = 6.39) than relational (M = 5.77) bullying and on items addressing verbal (M = 6.27) than relational (M = 5.77) bullying.

3. Discussion

We examined whether there were significant mean differences in teachers' bullying identification scores according to background variables (gender, teaching experience, and education level). Although Goryl *et al.* (2013) found connections between teacher education level and their confidence in their identification of bullying incidents, we found additional evidence of a significant interaction between teacher education level and type of bullying behavior, as teachers' identification scores for different types of scenarios varied by their educational level. This discrepancy may be due to the fact that we further divided bullying into three categories (i.e., physical, verbal, and relational types).

   We found a significant interaction between one's teaching experience and the type of behaviors. Teachers with 1-10 years of teaching experience scored higher on items addressing verbal than physical bullying, and teachers with 11 or more years of teaching experience scored higher on items addressing physical than relational and verbal bullying. In addition, scores on items depicting verbal bullying decreased as teaching experience increased, possibly because verbal bullying incidents are common and therefore ignored by more experienced teachers, who might regard them as merely verbal conflict and not bullying per se. Few studies have examined the relationship between teaching experience and one's ability to identify bullying incidents, and thus this issue warrants additional research in the near future.

   Our study did not find an interaction between gender and the type of bullying behavior recognized. This is inconsistent with Maunder *et al.* (2010), who argued that female teachers are better able than their male counterparts to identify bullying incidents. There seems to be no consen-

sus about the relationship between these two variables. Therefore, additional research regarding this issue is needed.

Our results are consistent with our hypothesis that teachers would be more likely to correctly identify physical bullying incidents than relational ones. These results are consistent with previous findings (Hazler *et al.*, 2001; Maunder *et al.*, 2010; Byers *et al.*, 2011). The causes of these results might be that physical bullying incidents are more obvious than relational bullying incidents so that physical bullying incidents are easier to be identified than relational ones. Moreover, when teachers identify school bullying, besides following the explicit perspectives, namely the three school bullying characteristics proposed by Olweus (1993) (Menesini, Fonzi, & Smith, 2002), they also rely on their personal implicit perspectives (i.e., their recognized definition and characteristics of relational bullying) to judge the behavior (Migliaccio, 2015). This may affect teachers' identification of relational bullying. For instance, besides the explicit perspectives of three characteristics proposed by Olweus(1993), teachers may use some other features, such as physical and psychological injury to victims, to identify bullying (Benitez, Garcia-Berben, & Fernandez-Cabezas, 2009; Cheng *et al.*, 2011; Raven & Jurkiewicz, 2014). However, most teachers believe that relational bullying is less serious than other types of bullying (Bauman & Del Rio, 2006; Maunder *et al.*, 2010; Byers *et al.*, 2011) and that the physical and psychological harms might be less to victims. Hence, teachers tend to consider the situation of relational bullying as non-bullying behavior. In addition, Chiu and Chang (2012) demonstrated that teachers would identify bullying behavior according to relationship between the bullies and the victims. When teachers consider the bullies and the victims as «possible friends» (for instance, the victims often follow the bullies around, or the bullies and the victims belong to the same social group or were in the same group before), even if bullying takes places between the bullies and victims, teachers tend to regard it as the interpersonal conflict of inner group rather than relational bullying behavior. When teachers do not consider the behavior as relational bullying, they would not take actions immediately (Kochenderfer-Ladd & Pelletier, 2008). Therefore, teachers' misidentification of relational bullying warrants to be noticed.

3.1. *Limitations and implications*

This study had several limitations. First, the RBIQ did not provide participants with a definition of school bullying. Therefore, teachers might have answered the questions based only on their own perspective. Future

studies can provide a definition of bullying before presenting the scenarios to examine whether similar results would be produced under different conditions. Second, variables other than those discussed above (gender, teaching experience, and education level), such as experience with anti-bullying training or educational qualification of teacher can be considered to assess their effects on teachers' identification of bullying incidents. Third, although this study already explored that whether teachers with different background variables might have differences in their identification of different types of bullying, this study did not focus on the reasons underlying the teachers' categorization of each types of bullying. Therefore, future studies can further explore these reasons for understanding and addressing the problem of misjudging potential bullying incidents.

The results of this study also have important implications. First, scores for identifying verbal bullying seemed to decrease as teaching experience increased. Schools should try to realize the causes of this situation and then organize relevant training sessions according to these causes. For this concern, in order to increase teachers' awareness of the potential detrimental consequences of verbal bullying and to thereby reduce the tendency to minimize or ignore it, these training sessions can put emphasis on educating more experienced teachers about the nature and consequences of verbal bullying; moreover, relevant practical cases of verbal bullying also can be provided them to practice that how to accurately identify it. Second, teachers obtained low scores for the identification of relational bullying. This situation may be influenced by the features of relational bullying and the teachers' implicit perspectives to relational bullying. Therefore, school should pay more attention to explore the above factors for avoid the teachers' misidentification for relational bullying. Moreover, school also should encourage in-service teachers to participate in anti-bullying seminars and learn more about actual relational bullying incidents.

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Riassunto

Il modo in cui gli insegnanti identificano e giudicano il bullismo scolastico può influenzare la loro volontà di intervenire e le loro strategie per farlo. Questo studio aveva lo scopo di verificare se vi fossero differenze significative nell'identificazione da parte degli insegnanti degli episodi di bullismo in base a variabili di fondo (genere, esperienza di insegnamento e livello di istruzione). Hanno partecipanto a questo studio 150 insegnanti di scuola primaria e di scuola media a Taiwan, è stato utilizzato un questionario 24 Recognition of Bullying Incidents (RBIQ) per esplorare se gli insegnanti riescono ad identificare tipologie prevalentemente fisiche, verbali o relazionali di bullismo. Per elabirare questi dati è stata utilizzata l'analisi ANOVA bidirezionale a modello misto. I risultati hanno rivelato vi era una interazione significativa tra i livelli di istruzione degli insegnanti e i tipi di bullismo identificati. Inoltre, non sono state osservate differenze di genere nell'identificazione del bullismo. Nel complesso, gli insegnanti hanno più probabilità di identificare gli episodi di bullismo fisico rispetto a quelli relazionali. I risultati di questo studio suggeriscono che gli insegnanti dovrebbero avvalersi di una specifica formazione per essere aiutati a identificare gli episodi di bullismo, in particolare nei casi di bullismo relazionale.

Parole chiave: Bullismo scolastico; Identificazione; Insegnanti; Riconoscimento; Tipologie di bullismo.