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Why witnesses of bullying tell: Individual and interpersonal factors

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\textbf{ABSTRACT}

The reactions of those who witness bullying are important because they can stop the bullying and prevent further harm. Factors associated with telling behavior were investigated with 477 elementary school students who witnessed bullying. Approximately seventy percent of the students talked to someone about bullying incidents, most often, teachers. Chi-square and logistic regression analyses demonstrated that gender, frequency of witnessing, cognitive empathy, and social skills were found to be associated with telling behavior of witnesses, whereas affective empathy and school connectedness were not significantly related. Findings from this research are important for future practice and studies on bystander intervention.

\textbf{Keywords:} Bullying Witness, Telling behavior Empathy, Social skill, School connectedness

1. \textbf{Introduction}

School violence and bullying are serious problems throughout the world, negatively impacting large numbers of children and youth (UNESCO, 2017). Bullying is defined as "any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated." (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014, p. 7). Prevalence rates of bullying vary between countries and studies, ranging from less than 10\% to over 65\% (UNESCO, 2017). Data from the U.S. indicate about 20 percent of students ages 12 through 18 reported being bullied at school in 2017 (Musu, Zhang, Wang, Zhang, &
The effects of bullying on victims do not necessarily end during childhood and adolescence, but continue into young adulthood with higher prevalence levels of agoraphobia, generalized anxiety, and panic disorder (Copeland, Wolke, Angold, & Costello, 2013). Witnessing victimization of others also predicted risks to mental health over and above bullying and victimization (Rivers, Poteat, Noret, & Ashurst, 2009). The result is that negative mental, emotional, and social consequences can impact everyone who are actively involved or aware of bullying.

There is a complex dynamic among peers in most bullying situations that goes beyond the dyad of bully and victim (Mazzone, Camodeca, & Salmivalli, 2018). Reactions and behaviors of bystanders to bullying can create different outcomes for everyone (Barhight, Hubbard, & Hyde, 2013; Salmivalli, 2014). Bystanders were identified in a meta-analysis by Polanin, Espelage, and Pigott (2012) as anyone who witnessed an episode of bullying, no matter what participant role was taken. Earlier stages of bystander research identified participant roles as assistants (join in the bullies), reinforcers (show a positive reaction to bullies), outsiders (withdraw from situations), or defenders (comfort and support victims) (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). More recent research identified five categories of bystanders' response to bullying as passive, defender, contributor, limited, and inconsistent (Waasdorp & Bradshaw, 2018).

Categorizing roles in bullying situations is generally viewed as a reasonable way to envision interactions; however, categorizing may not be accurate due to complexities in many situations. Research results demonstrated that bystanders can also be bullies or victims in different situations (Waasdorp & Bradshaw, 2018). Frey, Newman, and Onyewuenyi (2014) stated that bystanders who instigate bullying could also be defenders or encouraging bystanders at other times. Jenkins and Nickerson (2017) suggested that it may be a more accurate way to examine the degree of behavior that youth display rather than just focusing on behavior categories.

Witnesses of bullying can support victims with empathy, supportive actions, talking to bully if they feel comfortable, and also reporting bullying to adults including a parent, teacher, staff, or administrator. Sainio, Veenstra, Huitsing, and Salmivalli (2011) found that being defended by classmates was positively associated with victims’
adjustment. Empowering students to tell a trusted adult, parent, teacher, or school administrator is often emphasized in anti-bullying intervention programs (Berger, Poteat, & Dantas, 2019; Shaw et al., 2019). Some schools recognize the importance of an engaged student body to combat peer violence and implement online reporting systems and encourage all students to report bullying incidents (Patchin & Hinduja, 2016). Information is key to implementing and assessing preventive interventions to reduce the amount of abuse and to appropriately empower peers to taking the all-important step of notifying others of the peer violence. A unique feature of the current study is that we focused on factors associated with telling behavior especially among witnesses of bullying. The present study followed Jenkins and Nickerson’s (2017) recommendation to examine what factors are likely to influence whether someone tells about bullying and whom they tell.

Seeking support from friends or adults was included as coping strategies in previous research though most studies focused on coping strategies of victims (Berger et al., 2019; Kochenderfer-Ladd & Pelletier, 2008; Mendez, Bauman, Sulkowski, Davis, & Nixon, 2016; Shaw et al., 2019; Smith, Shu, & Madsen, 2001). Victims of bullying were also most often the focus of research on student’s dilemma of telling others (Cortes & Kochenderfer-Ladd, 2014; Oliver & Candappa, 2007; Rigby & Barnes, 2002). The current study emphasized understanding variables associated with witnesses’ telling behavior in response to a lack of studies focusing on the telling behavior of witnesses of bullying.

1.1. Factors associated with telling and witnesses’ behaviors

1.1.1. Grade level

Previous studies found that students in higher grades are more reluctant to talk to adults when seeking help (Oliver & Candappa, 2007; Williams & Cornell, 2006). Williams and Cornell (2006) stated that adolescents may be less willing to seek help from an adult since they see themselves as becoming more independent and self-reliant. Trach, Hymel, Waterhouse, and Neale (2010) found that elementary school students were more likely to take direct action against bullying (e.g., telling the bully to stop, helping the victim, telling adults, and so forth) and secondary school students were
more likely to walk away or not to intervene. Midgett, Doumas, and Johnston (2018) reported that turning it over (telling an adult) and accompanying others (reaching out to the target of bullying) were used more frequently by elementary students than the other strategies.

1.1.2. Gender

There are mixed results regarding how gender relates to telling behaviors and to the likelihood to intervening. Past research indicated that girls were generally more willing to seek help for bullying or threats of violence (Addington, 2013; Eliot, Cornell, Gregory, & Fan, 2010). Unnever and Cornell (2004) found out that middle school boys were more likely than girls to tell an adult, but not a peer. Newman, Murray, and Lussier (2001) found, in their sample of third and fourth graders, that fourth grade girls were more likely to seek help, but fourth grade boys were less likely to seek help. Some researchers indicated different bystanding behaviors by gender. Jenkins and Nickerson (2017) reported that girls were more likely than boys to interpret bullying events as emergencies. They also suggested that girls with greater knowledge of how to intervene are more likely to show less outsider behavior. However, boys with higher knowledge of how to act are more likely to display more outsider behavior (Jenkins & Nickerson, 2017). Pozzoli, Gini, and Altoè (2017) found that girls’ accurate recognition of disgust in highly intense conditions is related to their passive bystanding behavior, and boys’ better recognition of surprise in the high-intensity condition is associated with their passive bystanding.

1.1.3. Experience of bullying and frequency of witness

Student’s previous experience of bullying or frequency of bullying can impact their decision to tell others. Shaw et al. (2019) found that student’s prior reporting experience as a bystander to another bullying incident is associated with speaking to a school staff member about their own victimization experience. It is possible that a positive outcome of previous telling behaviors encourages students to disclose their own victimization to others. Addington (2013) determined that the frequency of cyberbullying increases the likelihood of reporting to a teacher. Students’ past
experience or involvement were found to be related to their bystanding behavior. Students who had been bullies or bully-victims were likely to assist bullies or reinforce bullying as bystanders (Oh & Hazler, 2009). Oh and Hazler (2009) posited that students who bullied others may continue aggressive behaviors by being unhelpful bystanders. Waasdorp and Bradshaw (2018) also suggested that student’s prior experiences with bullying might impact how they respond as a witness to bullying situations. Some studies have examined the association between frequency of experience and bystander’s behavior. Oh and Hazler (2009) reported that the frequency of witnessing did not significantly predict bystander’s reaction to bullying.

1.1.4. **Empathy**

Empathy is a multidimensional construct including cognitive and affective components (van Noorden, Haselager, Cillessen, & Bukowski, 2014). One systematic review suggested that there is a positive association between defending and both cognitive and affective empathy (van Noorden et al., 2014). van Noorden et al. (2014) stated in their systematic review that previous studies reported negative or positive associations with cognitive empathy and bystanding, and negative or no association with affective empathy and bystanding. Nickerson, Mele, and Princiotta (2008) found that empathic concern was significantly related to a tendency to intervene in a bullying situation.

Nickerson et al. (2008) stated that although causation cannot be inferred based on their study design, teaching empathy to children may significantly decrease the passive bystander phenomenon. Some interesting gender differences were reported in the study of empathy. Barchia and Bussey (2011) found that affective empathy is significantly associated with defending behaviors of girls, but not boys. Affective empathy was associated with defending behaviors among boys who have a high status in a group (Caravita, Di Blasio, & Salmivalli, 2009).

1.1.5. **School connectedness**

School connectedness represents student’s relationship to school including student’s sense of belonging, level of teacher support, the presence of friends,
engagement in education, effective discipline, and participation in extracurricular activities (Libbey, 2004). Centers for Disease Control and Prevention (2009) defined school connectedness as "the belief by students that adults and peers in the school care about their learning as well as about them as individuals" (p. 3). Some studies suggested that student’s positive relationship with potential help giver is related to their help-seeking or telling behavior (Cortes & Kochenderfer-Ladd, 2014; Eliot et al., 2010; Wilson & Deane, 2001). School personnel behaviors may give a sense of safety and trust to students that encourages them to tell victimization experiences to teachers and staff (Berger et al., 2019). Bystander’s level of connectedness is also associated with their level of defending behavior. Ahmed (2008) stated that students who feel more connected to school are more likely to intervene in a bullying situation. Waasdorp and Bradshaw (2018) found that youth who defend feel more connected to school staff than other bystanders.

1.1.6. **Social skills**

Social skills include peer relations, self-management, academic, compliance, and assertion dimensions (Caldarella & Merrell, 1997). Social skills enable children and adolescents to have positive interactions with adults and peers at school (Carney, Kim, Hazler, & Guo, 2018). Little research has focused on the association between social skill and telling behavior though there are studies, which examined the relation between social skills and different bystanding behaviors. Thornberg et al. (2012) suggested that peer relationships and peer social rank may be important factors in a bystander’s decision to intervene. Pozzoli and Gini (2010) found that personal responsibility was positively associated with self-reported defending behavior only under low level of perceived peer pressure, but not at medium and high levels of peer pressure. Pozzoli and Gini (2010) also reported that self-reliance/problem solving and personal responsibility are negatively associated with self-reported passive bystanding behavior. Gini, Albiero, Benelli, and Altoe (2008) concluded that adolescents’ high social self-efficacy belief positively predicted active defending behavior, while students with lower levels of self-efficacy were less likely to support victims regardless of their level of empathic responsiveness.
1.2. **The present study**

Studies are increasingly investigating the complex nature of involvement in bullying by examining different variables. Espelage, Green, and Polanin (2012) stated that individual level predictors of bystander intervention could include gender, age, attitude toward bullying, bullying experience, empathy, and peer friendship network. Pozzoli and Gini (2010) explored individual characteristics and perceived peer pressure in active defending and passive bystanding behavior in bullying. Caravita et al. (2009) investigated interactive effects between individual (empathy) and interpersonal level (social status) variables on involvement in bullying. Our study examined both individual (cognitive and affective empathy) and interpersonal factors (school connectedness and social skills), in order to gain a more holistic understanding of witness telling behavior. A unique feature of the current study is that we specifically focused on telling behavior of witnesses, because this is often encouraged in anti-bullying interventions and policy.

The following research questions were addressed in the present study: (a) To what extent and to whom do witnesses of bullying tell others? (b) Are demographic features (i.e., gender, grade level) associated with telling behavior of bullying witnesses? (c) Are individual and interpersonal factors associated with telling behavior of witnesses after controlling demographic features and frequency of bullying experiences?

2. **Method**

2.1. **Design**

The purpose of the current study was to examine whether individual factors (cognitive and affective empathy) and interpersonal factors (school connectedness and social skills) are associated with telling behavior of witnesses of bullying after controlling for gender and frequency of bullying experience. A quantitative analysis tool with a cross-sectional research design to address research questions was employed in this study. Data were collected through the use of an online survey form. We adopted hierarchical logistic regression as the primary analytical methodology to examine which predictors were related to telling behavior of witnesses of bullying at school. Logistic regression was used because the outcome variable is dichotomous (Hosmer, Lemeshow, & Sturdivant,
2.2. **Sample**

The initial sample included a total of 860 elementary school children in a suburban school district in the mid-Atlantic region who were part of a larger research study related to school climate factors influence on relationships and learning. A key criterion for this analysis was that students saw others bullied at least one time at school last year. Students who reported they never witnessed others bullied at school last year (343, 41.8%) were excluded from our final sample of 477. The final sample included 252 boys (52.8%) and 225 girls (47.2%), in fourth grade to sixth grade (26.1% fourth grade, 36.7% fifth grade, and 36.9% sixth grade) with age range from 9 to 11 years-old. The ethnic make-up presented mainly White population (76.5%) and little ethnic diversity (5.9% African American, 3.1% Hispanic/Latino, 1.5% Native American, 0.6% Asian, 3.8% Multiracial, and 8.4% others), which was reflective of the school district in general. Approval was obtained from the university Institutional Review Board prior to data collection, which included passive parent consent and opt-out data collection procedures. Parents were asked to return a signed consent form if they wanted to withhold their child from participation. Students, who had permission to participate were instructed by their teachers to complete the survey electronically via Qualtrics (https://www.qualtrics.com/) in computer labs during a typical school day.

2.3. **Measures**

2.3.1. **Frequency of involvement in different bullying experiences**

Three items measuring different types of involvement in bullying experiences were utilized. Each item assessed the frequency of involvement in bullying (I bullied others last year at school), victimization (I was bullied last year in school), and witnessing (I saw others bullied at school last year). All three items were rated on a five-point Likert Scale ranging from 1 (never) to 5 (everyday). The mean and standard deviation for the items were [1.23, 0.62] for bullying, [1.92, 1.21] for victimization, and [2.06, 1.11] for witnessing.
2.3.2. **Telling behavior**

Students’ telling behaviors were measured using the self-report questions adapted from Unnever and Cornell’s (2004) study. These items were provided to participants who answered that they have witnessed bullying incidents at school in previous question. First item assessed whether students told someone when they witness bullying (Have you told anyone that you have seen others bullied at school?) Telling behavior was a binomial item and coded as 1 (=Yes) and 0 (=No). A follow-up question was asked to identify who they had told (To whom have you told about it?) Participants chose multiple answers that applied to them (e.g., teachers, parents, siblings, friends, resource officers, another adult at school (e.g., a principal, a nurse, a counselor, etc.), and somebody else).

2.3.3. **Empathy**

Empathy was assessed by the Interpersonal Reactivity Index (IRI) developed by Davis (1980). We adopted two subscales from the IRI: perspective taking and empathic concern. Perspective taking measures the tendency to spontaneously adopt the psychological viewpoint of others (e.g., I sometimes try to understand my friends better by imagining how things look from their perspective). Empathic concern assesses other-oriented feelings of sympathy and concern for unfortunate others (e.g., I often have tender, concerned feelings for people less fortunate than me). Each subscale consists of seven items and all items were measured on a five-point Likert Scale ranging from 1 (=not at all) to 5 (=very well). Cronbach’s alpha for perspective taking was 0.60 ($M = 3.39$, $SD = 0.70$) and empathic concern was 0.49 ($M = 3.50$, $SD = 0.66$). Cronbach’s alpha for total items was 0.69 ($M = 3.45$, $SD = 0.59$).

2.3.4. **Social skills**

We used a social skill scale developed by Anderson-Butcher, Amorose, Iachini, and Ball (2013). This scale measures the degree to which students demonstrate effective social and life skills as they engage in pro-social interactions with others (i.e., I respect others, I work well with others, I am responsible, and I am a good friend). A set of four items was rated on a five-point Likert Scale ranging from 1 (strongly disagree) to
5 (strongly agree). Higher total scores correspond to the higher degree of social skill. Cronbach’s alpha for these four items was 0.76, and the total score ranged from 4 to 20. (M = 4.33, SD = 0.57).

2.3.5. **School connectedness**

School connectedness was assessed by a scale developed by Anderson-Butcher et al. (2013). It measures the degree to which students enjoy and feel like they belong to the school. A combination of four items was measured and all items were rated on a five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). Each item addresses how children feel connected to school (i.e., I enjoy coming to school, I am proud to be at my school, I have good relationships with my teachers and other adults at my school and I feel like I belong to my school). Higher total scores correspond to higher connectedness to school. Cronbach’s alpha for these four items was 0.76 and the total score ranged from 4 to 20. (M = 3.99, SD = 0.72).

2.4. **Data analysis**

Descriptive analysis including frequency, mean, standard deviation, and chi-square analysis were conducted first. Specifically, chi-square analysis was used to examine the association between telling behavior and demographic features, such as gender and grade level. Correlation coefficients among variables, including frequency of bullying, victimization, and witnessing experiences, empathic concern, perspective taking, school-connectedness, and social skills, were calculated in order to show general associations between predictors in the regression analysis.

Hierarchical logistic regression analysis was conducted to examine factors associated with the probability of student telling behavior of witnesses of bullying. Predictors of Model 1 include demographic characteristics that are showing significant associations with telling behavior. Frequency of bullying, victimization, and witnessing experiences were added in Model 2, while empathy was included in Model 3. Last, school connectedness and social skill were added in Model 4. A follow-up analysis using a one-way ANOVA was conducted to examine whether the scores of significant predictors differ between those who told to only one person versus those who told
multiple people. Post-hoc test was not conducted because there were only two groups. SPSS 21 was used to conduct the statistical analysis. EM (Expectation Maximization) algorithm was used to calculate missing values of predictors, excluding gender, and grade.

3. Results

The researchers examined the descriptive statistics of telling behavior of witnesses, association between telling behavior of witnesses and demographic features (i.e., gender, grade), and predictors that are associated with the probability of telling behavior of witnesses of bullying. The first research question investigated the extent that witnesses of bullying tell others. A total of 210 (44.0%) reported that they hardly ever saw bullying, 177 (37.1%), witnessed a few times, 65 (13.6%), witnessed many times, and 25 (5.2%) witnessed every day. Among 477 students who witnessed bullying incidents, 333 (69.8%) told other people that they saw others being bullied, and 143 (30.0%) participants did not tell anyone, with one missing response (0.2%).

Out of the 333 students who reported telling someone about witnessing bullying, more than two thirds of them \( n = 256 \) talked to their teachers about what they witnessed. Approximately half of the students \( n = 164 \) and \( n = 166 \), respectively) shared their witnessing experiences with parents and friends. Many fewer participants told what they witnessed to siblings \( n = 50 \) or resource officers \( n = 22 \) (see Fig. 1). Among 333 students who reported they told someone about what they witnessed, almost a third of them \( n = 96 \) told one person, while 234 students told it to more than one person. Specifically, 90 students told it to two people, followed by three people \( n = 67 \), four people \( n = 49 \), five people \( n = 15 \), and six people \( n = 10 \). Three students reported they told it to all seven people, while three students did not specify to whom they told it.

Chi-square analysis was conducted to examine the second research question, the association between telling behavior and demographic features including gender and grade. Only gender showed significant association with telling behavior, as shown in Table 1 \( X^2 = 6.668, p < .05 \). Specifically, the percentage of girls who reported what they witnessed was significantly higher than boys. Grade did not show significant
association with telling behavior.

Pearson’s correlation coefficients were calculated among predictors to identify possible multicollinearity (See Table 2). The results showed no detection of multicollinearity because the typical cutoff score of correlation coefficients to avoid multicollinearity is 0.80 (Berry & Feldman, 1985). Frequency of bullying others, victimization, and witnessing were positively correlated ($r_s = 0.325 \sim 0.335$, $p < .001$). Empathic concern and perspective taking are subscales of empathy and were positively correlated with each other ($r = 0.522$, $p < .001$). School connectedness and social skills showed moderate correlation as well ($r = 0.507$, $p < .001$). There were also negative correlations among some variables. The relations between the frequency of bullying others, and school-connectedness, empathic concern, and social skills showed negative correlations ($r_s = -0.241 \sim -0.153$, $p < .01$).

The third research question examined the association of individual (empathy) and interpersonal (school connectedness, social skill) predictors with telling behavior of witnesses. Hierarchical logistic regression analysis was conducted to answer the third research question (Table 3). Only gender was included as a demographic predictor in the logistic regression analysis due to the results of chi-square analysis. The results showed that Model 4, which includes all predictors, best describes the possibility of expecting telling behaviors of students ($Model \chi^2 = 74.894$, $p < .001$, $p < .001$; Nagelkerke $R^2 = 0.206$).

Model 1 was significantly associated with the probability of telling behavior ($Model \chi^2 = 6.722$, $p < .01$), and being a female student is significantly associated with a higher probability of telling their witnessing experience to others ($OR = 1.688$, $p < .001$). Frequency of bullying others, victimization, and witnessing experiences were included in Model 2, and this significantly improved the model (Step $\chi^2 = 22.241$, $p < .001$). Being a female ($OR = 1.573$, $p < .05$) and frequent experience of witness ($OR = 1.729$, $p < .001$) were significantly associated with the possibility of telling behavior, while the more students bullied others, the less likely that they were to tell someone about what they witnessed ($OR = 0.698$, $p < .05$).

The inclusion of empathy (empathic concern and perspective taking) in Model
3 significantly improved the model (Step $\chi^2 = 33.133, p < .01$). Higher levels of perspective taking increased the probability of telling someone about what was witnessed ($OR = 2.462, p < .001$). Gender and bullying experience were no longer significantly associated with the possibility of telling behavior, while the more frequent experience of witnessing still significantly associated with telling behavior ($OR = 1.827, p < .001$).

Interpersonal factors including school connectedness and social skills were added in Model 4. The model significantly improved by adding these variables (Step $\chi^2 = 12.798, p < .001$), and was therefore selected as the final model. The results of Model 4 indicated that more frequently witnessing bullying increased the possibility of telling someone ($OR = 1.794, p < .001$). Perspective taking, a sub-scale of empathy, remained significant in the final model. The higher levels of perspective taking model indicated the higher possibility telling someone ($OR = 2.156, p < .001$). Witnesses with better social skills were more likely to tell someone about what they saw ($OR = 2.105, p < .01$), but school connectedness was not significantly associated with telling behavior in this model.

![Bar graph](image.png)

Fig. 1. To whom have you told that you have seen others bullied at school? (n = 333).

A follow-up analysis using one-way ANOVA was conducted to examine the mean differences of significant predictor variables, frequency of witnessing, perspective taking, and social skills, based on whether the students told one person or multiple people. The mean of perspective taking was significantly different based on the number of people that students told ($F = 4.317, p < .05$). Students who told
multiple people showed significantly higher scores in perspective taking ($M = 3.40$, $SD = 0.60$, $n = 96$) than those who told only one person ($M = 3.56$, $SD = 0.66$, $n = 234$). The frequency of witnessing bullying and social skills did not show significant differences between those who told one person and multiple people.

Table 1

<table>
<thead>
<tr>
<th>Telling behavior</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (%)</td>
<td>No (%)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>Gender</td>
<td>Boys</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>Fourth</td>
<td></td>
</tr>
<tr>
<td>Fifth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$.

4. Discussion

The purpose of this study was to understand variables associated with telling behavior of witnesses in bullying situations. Children and adolescents facing bullying situation feel conflicted and respond in various ways (Midgett, Doumas, & Trull, 2017; Salmivalli, 2010). Bystanders are often encouraged to either report bullying or to confront bullies, but not all witnesses take these actions (Espelage et al., 2012; Nickerson et al., 2008; Porter & Smith-Adcock, 2018). Having at least one person supporting a target of bullying can make a difference (Salmivalli, 2014), and those who have friends that support and/or defend them have higher self-esteem than those who do not (Sainio et al., 2011). The results of the present study contributed to a growing body of research on supportive behaviors of witnesses by focusing on the specific variables associated with telling behavior.

Approximately fifty-eight percent (58.2%) of elementary school students in our sample witnessed bullying incidents, and 69.8% told other people that they saw others being bullied. Previous study results on witness telling behaviors had different results. A study of 18,863 high school students found only 17.2% of high school students said they usually tell an adult about bullying (Waasdorp & Bradshaw, 2018). Bistrong, Bottiani, and Bradshaw (2019) found that 18.4% of 57,314 middle and high school students
endorsed an adult about the incident when they see bullying happen. Kanetsuna and Smith (2002) found that 28.5% of students aged 13–14 years think that bystanders should ask teachers to stop bullying, but only 12% actually did this.

Witnesses in our study reported telling teachers most often, followed by friends, parents, another adult at school, siblings, somebody else, and resource officers. These findings contribute to the small but growing research body on students’ reporting behavior. Approximately 76.4% of elementary school students received bystander intervention reported that they told a safe adult at school when they witness bullying (Midgett et al., 2018). Wood, Smith, Varjas, and Meyers (2017) stated that trustworthy and reliable school personnel not only teachers, but also counselors, nurses, administrators, psychologists, bus drivers, food service personnel, and custodians could be a good support system. More studies are needed to examine how witnesses decide whom to tell when they see bullying happens. For example, future research may examine whether a student–teacher relationship is associated with seeking help from an adult and school social relationship is related to seeking help from a friend (Mulvey et al., 2019).

Table 2
Correlation among frequencies, school connectedness, empathic concern, perspective taking, and social skills (N = 477).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Frequency of Bullying experience</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Frequency of victimization experience</td>
<td>0.325***</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Frequency of witness experience</td>
<td>0.326***</td>
<td>0.335***</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>Empathic concern</td>
<td>-0.154**</td>
<td>0.081</td>
<td>0.006</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Perspective taking</td>
<td>-0.085</td>
<td>0.009</td>
<td>-0.042</td>
<td>0.522***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>School-connectedness</td>
<td>-0.153**</td>
<td>-0.059</td>
<td>0.012</td>
<td>0.294***</td>
<td>0.278***</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Social skills</td>
<td>-0.241***</td>
<td>-0.043</td>
<td>-0.025</td>
<td>0.268***</td>
<td>0.351***</td>
<td>0.507***</td>
</tr>
<tr>
<td>M</td>
<td>1.31</td>
<td>2.24</td>
<td>2.80</td>
<td>3.53</td>
<td>3.39</td>
<td>4.00</td>
<td>4.33</td>
</tr>
<tr>
<td>SD</td>
<td>0.71</td>
<td>1.29</td>
<td>0.86</td>
<td>0.67</td>
<td>0.68</td>
<td>0.72</td>
<td>0.57</td>
</tr>
</tbody>
</table>

* p < .05,  
** p < .01,  
*** p < .001.
### Table 3
Hierarchical logistic regression analyses on student telling behavior of witnessing bullying (N = 477).

<table>
<thead>
<tr>
<th>Model</th>
<th>β</th>
<th>SE</th>
<th>OR</th>
<th>β</th>
<th>SE</th>
<th>OR</th>
<th>β</th>
<th>SE</th>
<th>OR</th>
<th>β</th>
<th>SE</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Model 2</strong></td>
<td></td>
<td></td>
<td><strong>Model 3</strong></td>
<td></td>
<td></td>
<td><strong>Model 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>0.523</td>
<td>0.204</td>
<td>1.688**</td>
<td>0.453</td>
<td>0.212</td>
<td>1.573*</td>
<td>0.169</td>
<td>0.225</td>
<td>1.184</td>
<td>0.102</td>
<td>0.232</td>
<td>1.107</td>
</tr>
<tr>
<td>Frequency of bullying experience</td>
<td>-0.360</td>
<td>0.161</td>
<td>0.698*</td>
<td>-0.315</td>
<td>0.171</td>
<td>0.729</td>
<td>-0.187</td>
<td>0.182</td>
<td>0.830</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of victimization experience</td>
<td>0.132</td>
<td>0.092</td>
<td>1.142</td>
<td>0.131</td>
<td>0.095</td>
<td>1.140</td>
<td>0.142</td>
<td>0.097</td>
<td>1.153</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of witnessing experience</td>
<td>0.548</td>
<td>0.145</td>
<td>1.729***</td>
<td>0.602</td>
<td>0.149</td>
<td>1.827***</td>
<td>0.585</td>
<td>0.151</td>
<td>1.794***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathic concern</td>
<td>0.095</td>
<td>0.195</td>
<td>1.099</td>
<td>0.029</td>
<td>0.203</td>
<td>1.030</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspective taking</td>
<td>0.901</td>
<td>0.195</td>
<td>2.462***</td>
<td>0.768</td>
<td>0.202</td>
<td>2.156***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School connectedness</td>
<td>-0.028</td>
<td>0.181</td>
<td>0.972</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social skill</td>
<td>0.744</td>
<td>0.228</td>
<td>2.105**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

-2 Log likelihood

| Model X² | 6.722** | 28.963*** | 62.096*** | 74.894*** |
| Step X² | 6.722** | 22.241*** | 33.133** | 12.798*** |

Nagelkerke R²

| 0.020 | 0.083 | 0.173 | 0.206 |

* p < .05, ** p < .01, *** p < .001.

Several demographic variables were significant in this study, starting with girls being significantly more likely to tell others when they witnessed bullying than boys. This is consistent with prior research that girls were more likely to seek social help than boys (Eliot et al., 2010; Pozzoli & Gini, 2010) and girls tend to defend more than boys (Barchia & Bussey, 2011; Porter & Smith-Adcock, 2018; Pöyhönen, Juvonen, & Salmivalli, 2010).

Students in our study who frequently bullied others were less likely to tell others when they witnessed bullying. This relates to Waasdorp and Bradshaw's (2018) conclusions that bystanders might also be bullies or victims in a different situation, and their prior experiences with bullying will likely influence their reaction as a witness. Their study found that bullies were 14 times more likely to be inconsistent in reacting to witnessing bullying (Waasdorp & Bradshaw, 2018). Our study also found that the frequency of witnessing experience increased the odds of witnesses’ telling behaviors. It is possible that witnesses decide to tell others because increased observation of
bullying situations raises the sense of how harmful bullying is (Thornberg et al., 2012). Given that witnesses’ intervention can prevent further bullying, it is important to encourage students to ask for help rather than view it as a routine phenomenon (Salmivalli, Voeten, & Poskiparta, 2011; Thornberg et al., 2012).

The main purpose of this study was to examine whether individual (cognitive and affective empathy) and interpersonal factors (school connectedness and social skills) are associated with telling behavior of witnesses after controlling for demographic features and frequency of bullying experiences. Our results showed that perspective taking was positively associated with telling behavior of witnesses, while empathic concern was found to have no association with telling behavior. These findings significantly add to the literature by investigating the relationship between empathy and specifically telling behavior of the defenders. Previous studies found defending behaviors associated with affective empathy (Caravita et al. 2009; Yun & Graham, 2018) and overall empathy (Choi & Cho, 2013; van Noorden et al., 2014). Our results are interesting given that few previous studies (Barchia & Bussey, 2011; Caravita et al. 2009; Pöyhönen et al., 2010) highlighted affective empathy than cognitive empathy in regards to defending behavior. It is noted that telling behavior, which was the focus of the current study may be seen different by students from other forms of defender actions such as comforting or taking sides with victims (Bistrong et al., 2019; Nickerson, Aloe, & Werth, 2015; Salmivalli et al., 1996; Waasdorp & Bradshaw, 2018). More investigation is needed to understand how compositions of other individual and interpersonal factors make differences in telling behavior of witnessing bullying.

Social skills were significantly positively associated with telling behavior of witnesses after controlling demographic features, frequency of bullying experiences, and empathy. Findings indicated the better social skills witnesses have, the more likely to tell others when they see bullying happen. These results supported a study by Gini et al. (2008), in which reported a positive association between social self-efficacy and active defending behavior and emphasized the needs for further investigation on associations between other personal abilities (i.e., communication skills, social problem-solving abilities, coping skills) of students and bystanders’ different participant roles. Pöyhönen et al. (2010) also confirmed that students with a stronger sense of self-efficacy for
defending and higher social status among peers are more likely to defend victims. It is likely that students who feel a sense of responsibility are more likely to tell teachers or other adults to intervene in favor of the victim (Pozzoli & Gini, 2010).

School connectedness, however, was not significantly associated with telling behavior in our study. Limited research investigated the relationship between school connectedness and defending behavior of witnesses, and results varied across studies. Bistrong et al. (2019) reported that students who feel more connected to school are more likely to defend victims. In a study with 1452 secondary school students, Ahmed (2008) found a significant positive relationship between school connectedness and bystander intervention. Mulvey et al. (2019) study, with a sample of 896 middle and high school students, however, found that school connectedness is not significantly associated with bystander intervention behaviors, neither active intervention nor inactive responses. They found that positive student–teacher relationships and higher ratings of the school environment were related to a greater expected likelihood of active bystander intervention (Mulvey et al., 2019). Given that defenders need a powerful social status to intervene, defending or telling behavior might be different from general prosocial behaviors (Yun & Graham, 2018). Additional research should continue to further investigate the role of school connectedness (Mulvey et al., 2019). One possible explanation for this result is that telling behavior might require the positive anticipated outcome of reporting (i.e., separating involved students) than just feeling connected to school (Aceves, Hinshaw, Mendoza-Denton, & Page-Gould, 2010; Cortes & Kochenderfer-Ladd, 2014). Given a unique feature of our study that we assessed whether witnesses had told anyone including parents, friends, or siblings, further research is needed to examine other variables such as attachment to parents (Nickerson et al., 2008) in examining the relationship between school connectedness and telling behaviors.

4.1. Limitations and implications

Self-report data that can be impacted by memory,夸张 results, and social desirability when assessing issues of bullying was used in this study (Morbitzer, Spröber, & Hautzinger, 2009). The Cronbach alpha for total items was 0.69, which
meets the recommended coefficient for a good Cronbach alpha is between 0.65 and 0.80 (Goforth, 2015), but internal reliability of the empathic concern and perspective taking sections of the instrument did not meet that level: perspective taking was 0.60 ($M = 3.39, SD = 0.70$) and empathic concern was 0.49 ($M = 3.50, SD = 0.66$). It is possible that the reliability of the empathic concern subscale could have impacted the finding that empathic concern had no associations with telling behavior. Future research could use instruments that have a higher Cronbach alpha to determine if there is any association between empathic concern and telling behavior. The cross-sectional design was a limitation that precluded drawing conclusions regarding causal associations. More longitudinal research is necessary to strengthen the understanding of witnesses’ telling behavior.

Witness telling behaviors are generally understudied compared to similar behaviors of victims. Future studies could expand the investigation of additional variables such as the outcome of previous telling experience, trust in intervention effectiveness as a result of previous telling, retaliation beliefs, type of bullying witnessed, number of incidents witnessed, different coping strategies when witnessing bullying, relationship with bully or victim, communication skills, social problem-solving abilities, and social status of witnesses (Bistrong et al., 2019; Gini et al., 2008; Midgett et al., 2018; Waasdorp & Bradshaw, 2018).

School personnel should be aware of potential factors that might be associated with different behaviors students display when witnessing bullying. Wood et al. (2017) recommended that school personnel should teach students the long-lasting negative effects of bullying on the victim, the importance of defending behaviors, and how to intervene when witnessing bullying.

The result of this study demonstrates that many witnesses of bullying are telling more multiple people. Students, parents, and school personnel need to collaborate when a witness of bullying tells them about bullying incidents. Educational presentations or teacher-parent meetings can support parents/guardians in their anti-bullying efforts (Nickerson et al., 2008; Ttofi & Farrington, 2011). Porter and Smith-Adcock (2018) recommended that significant others should examine their own beliefs and approaches around defending, communicating their expectations to children, and
modeling appropriate behaviors.

Social-emotional learning has been widely used to prevent bullying (Espelage, Low, Van Ryzin, & Polanin, 2015; Espelage, Rose, & Polanin, 2015; Smith & Low, 2013). Social-emotional learning curriculums often include empathy, social problem solving, emotion regulation, assertiveness, and friendship components, which are important skills for witnesses in supporting victims. Bystanders can be empowered by assertiveness and emotion management skills training to report bullying to adults, support victims, or intervene directly in bullying incidents (Smith & Low, 2013). Nickerson et al. (2008) also suggested that problem-solving games, storytelling, writing exercises, group discussion, and role-playing can be incorporated into the regular classroom lessons to increase students’ empathic skills. School personnel can also utilize diverse formats such as individual counseling, group activity, classroom guidance lesson, and school-wide intervention to empower witnesses of bullying to support victims and tell others to seek help.

5. Conclusion

The aim in this study was to determine what extent and to whom do witnesses of bullying tell others, the association of demographic features (i.e., gender, grade level) with telling behavior of witnesses of bullying, and individual and interpersonal factors associated with telling behavior of witnesses. Understanding the impetus for telling behavior in schools could inform bullying prevention interventions, social-emotional learning curricula, and school climate assessment. As research continues to investigate methods to increase telling behavior in youth and the impact of demographics on the likelihood to report, a clearer path can be built to develop school climate programs that can effectively reduce bullying behaviors.

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Declaration of Competing Interest
The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References


Davis, M. H. (1980). A multidimensional approach to individual differences in


interpreting-cronbachs-alpha/.


Rigby, K., & Barnes, A. (2002). The victimized student’s dilemma: To tell or not to tell. Youth Studies Australia, 21(3), 33–36.


