



An International Investigation of Variability in Teacher Perceptions of Bias-Based Bullying and Their Likelihood of Intervening

Daria Khanolainen^{1,14} · Andrew Hall² · Wendy Craig² · Jessica Trach³ · Jared Noetzel⁴ · Lindsay Starosta⁵ · Karla Dhungana-Sainju⁶ · Jonas Bjärehe⁷ · Robert Thornberg⁸ · Sevgi Bayram-Özdemir⁹ · Marlene Bjärehe¹⁰ · Anke Görzig¹¹ · Michelle Wright¹² · Lucy Betts¹³ · Susan Swearer⁴ · Shelley Hymel⁵

Accepted: 4 January 2025

© The Author(s) 2025

Abstract

Bias-based bullying (i.e., bullying due to marginalized identities) is a significant and ongoing challenge within contemporary educational settings. Teachers are crucial in mitigating such harmful behaviors and cultivating positive peer relationships. The present study explores teachers' perceptions of and intervention intentions in bias-based bullying situations across diverse cultural and educational settings. Using a between-subjects experimental design, primary and secondary teachers from 13 international sites located in Africa, Asia, Australia, Europe, and North America ($n=4990$) were randomly assigned to read a hypothetical vignette depicting student victimization based on their ethnicity, learning difficulties, physical appearance, gender expression, or sexual orientation. Multilevel linear models revealed that teachers' perceptions varied depending on the type of bias-based bullying, such that when teachers were presented with a situation of bullying based on gender expression or sexual orientation, they reported lower levels of perceived responsibility, self-efficacy, and importance of responding when compared to other types of bullying. At the same time, teachers were less likely to blame the victim of bullying and expressed greater empathy towards involved students when being presented with a situation of weight-based bullying. However, there were no significant differences in rated intervention intentions across conditions. Results have important implications for teacher education and development, as well as for existing anti-bullying intervention programs.

Keywords Bias-based bullying · Identity-based bullying · Teachers' perceptions · Teacher beliefs · Teachers' intervention

An important factor contributing to children's well-being is their relationships at school. Research shows that experiences of social exclusion and bullying are associated with decreased

academic, socio-emotional, and health outcomes (Schoeler et al., 2018; Vergara et al., 2019). Unfortunately, bullying is a global, large-scale problem affecting almost a third of

✉ Daria Khanolainen
daria.p.khanolainen@jyu.fi

¹ Faculty of Education and Psychology, University of Jyväskylä, Huone RUU A225, Alvar Aallon Katu 9, 40600 RuusupuistoJyväskylä, Finland

² Department of Psychology, Queen's University, Kingston, Canada

³ Turku, Finland

⁴ Department of Educational Psychology, University of Nebraska-Lincoln, Lincoln, USA

⁵ Faculty of Education, University of British Columbia, Vancouver, Canada

⁶ Faculty of Social Science and Humanities, Ontario Tech University, Oshawa, Canada

⁷ Department of Psychology, Lund University, Lund, Sweden

⁸ Department of Behavioural Sciences and Learning, Linköping University, Linköping, Sweden

⁹ School of Behavioural, Social and Legal Sciences, Örebro University, Örebro, Sweden

¹⁰ Faculty of Education, Kristianstad University, Kristianstad, Sweden

¹¹ School of Human Sciences and Institute for Lifecourse Development, University of Greenwich, London, UK

¹² Department of Psychology, Indiana State University, Terre Haute, USA

¹³ NTU Psychology, Nottingham Trent University, Nottingham, UK

¹⁴ EDUCA Flagship, University of Jyväskylä, Jyväskylä, Finland

all school-aged children across the world on a regular basis (UNESCO, 2019). Students with marginalized identities or those perceived to have these identities (e.g., LGBTQ+ status, minority ethnic/cultural backgrounds, learning differences) are disproportionately more likely to experience bullying compared to their peers without such identities (Gage et al., 2021; Galán et al., 2021). Yet, the extant literature indicates that even the most effective anti-bullying programs do not eradicate bullying and often result in only modest reductions (Gaffney et al., 2019; Garandeau & Salmivalli, 2019). Notably, a review of intervention studies suggests that current anti-bullying programs are less effective in improving the situation for minority students specifically (Xu et al., 2020), and another systematic review of bias-based bullying interventions found that programs addressing stigma based on sex/gender and race/ethnicity are still limited (Earnshaw et al., 2018).

Teachers have been shown to be instrumental in reducing bullying behaviors and increasing positive school climate. Teachers who are supportive of school safety and promote positive student-teacher relationships can reduce the rates of school aggression and foster healthier, more peaceful relationships among all students (Espelage et al., 2014; Troop-Gordon & Ladd, 2015; Veenstra et al., 2014). Teachers' likelihood of intervening in bullying scenarios are influenced by a range of factors including their self-efficacy in managing bullying situations (Fischer et al., 2021) and perceptions related to seriousness of the situation (Thornberg & Delby, 2019; Yoon, 2004). However, our understanding of teacher perceptions towards bias-based bullying is still limited. In order to reduce the risk of bullying because of one's real or perceived minority status, it is essential to understand how different types of bias-based bullying are viewed by the adults who are tasked with addressing these situations (i.e., teachers). Additionally, given the rise in bias-based bullying worldwide, and the variety of conceptualizations of bullying that have been documented across different cultures and regions (see Smith et al., 2016), there is an urgent need to understand if teacher perceptions also differ across geographic locations, as this may warrant a need to develop unique prevention and intervention efforts (e.g., Strohmeier, et al., 2021).

This study contributes to our limited knowledge of teacher perceptions of bias-based bullying by exploring how teachers vary in their perceptions of and intentions to intervene in four types of bias-based bullying scenarios across diverse cultural and educational contexts. This study offers evidence from 13 different geographic locations, surveys teachers from both primary and secondary schools, and uniquely provides a global overview of both universal and context-specific patterns in how teachers perceive bias-based bullying. The findings have important implications for teacher education and development, as well as for existing anti-bullying intervention programs.

Bias-Based Bullying

Until recently, much of the research on bullying has focused on the consequences of different forms of bullying behavior (e.g., physical, verbal, relational/social, cyber), without paying enough attention to the content of the bullying messages that are directed at the victim. Yet, specific words that bullies use often end up being internalized by victims, becoming a part of how they see themselves (Boulton et al., 2010). Childhood and adolescence are critical periods of identity development, when youth may be most vulnerable to believing these kinds of negative messages about the self, with long-lasting, negative, and occasionally devastating consequences (Reijntjes et al., 2010).

Bias-based bullying is bullying behavior rooted in discrimination where someone is targeted due to their perceived or actual identity (Brinkman, 2015; Tippett et al., 2010; Walton, 2018). In the school context, studies from multiple countries including the United States, Canada, Iceland, Australia, England, Scotland, and Wales suggest that the following five attributes most commonly place students at a high risk for bias-based bullying: racial or ethnic minority status, learning difficulties, perceived weight difference, sexual minority status, and non-conforming gender expression (Gage et al., 2021; Galán et al., 2021; Puhl et al., 2016; Tippett et al., 2010). While actual status of these attributes in the victim may or may not be present, it is the perception of these attributes that is most influential to their respective vulnerability (Kisfalusi et al., 2020; Mishna et al., 2020). For example, a child who identifies as heterosexual may be the target of homophobic slurs, and a student who is a native-born citizen may be told to "go back where they came from." Similarly, a child without a diagnosed disability might still be subjected to ableist slurs. Thus, it is the behavior of the perpetrator that defines bias-based bullying, rather than specific characteristics of the victim.

To date, much of what is known about bias-based bullying is based on research that asks marginalized youth to describe their experiences at school (Bucchianeri et al., 2016; Galan et al., 2021; Poteat et al., 2021; Watson et al., 2021). Across several countries, including Australia, Canada, Iceland, and the United States (US), weight-based victimization was found to be the most prevalent type of bias-based bullying, affecting up to a quarter of all students (Bucchianeri et al., 2016; Puhl et al., 2016). The rates of ethnicity-based bullying have been found to vary across countries in North America and Europe depending on their recent migration policies and levels of ethnic diversity (Basilici et al., 2022). Interestingly, in North America, higher ethnic diversity of the school predicted

lower rates of bullying, while in Europe, higher ethnic diversity was a risk factor for higher rates of bullying (Basilici et al., 2022). One study from the US found that 5–10% of all students reported being bullied about their sexual orientation, disability, or gender expression (Bucchianeri et al., 2016). These numbers appear particularly high when the proportion of students who have observable attributes pointing to their marginalized status is taken into account. In the UK, nearly half of all sexual minority students reported experiencing harassment driven by prejudice (Bradlow et al., 2017), and a US-based study found that 37% and 82% of those students identifying as a sexual minority reported experiencing physical or verbal aggression based on their marginalized identity, respectively (Kosciw et al., 2018).

Whether youth are targeted based on their actual or perceived identity, bias-based bullying has been shown to have severe, negative consequences for victims' wellbeing. Studies from the US find that bias-based bullying is damaging to victims' self-image and self-worth leading to severe negative health outcomes such as depression, substance abuse, self-injury, engagement in violent acts, and suicidal ideation (Alvis et al., 2023; Galán et al., 2021; Tucker et al., 2016). Additionally, research from the US, Europe and Australia have found that experiences of being targeted for one's marginalized identity are significantly more detrimental to one's well-being compared to general victimization (Jones et al., 2018; Poteat et al., 2014; Sapouna et al., 2023). As well, in US-based studies, the intersection of multiple marginalized identities has been linked with more frequent incidents of bullying and even more negative consequences for the victim (Bucchianeri et al., 2016; Galán et al., 2021). Overall, the existing research on bias-based bullying tends to be limited primarily to North American and European contexts, with some focus on Australia, and almost no focus on populations in Africa and Asia. Most studies also focus on victimization based on one identity, with race/ethnicity, weight, and sexual orientation or gender expression being most common. Studies that do compare multiple identities tend to primarily be conducted with US-based populations. The majority of the studies also focus on high school or secondary school populations, with minimal studies examining elementary or primary school populations. There is a pressing need to examine multiple forms of bias-based bullying across broader geographic locations and educational contexts.

Teachers' Role in Addressing Bullying

Studies examining general forms of bullying find that teachers play a crucial role in shaping the daily social environment of their students, whether through inadvertent actions or intentional efforts (De Luca et al., 2019; Troop-Gordon

& Ladd, 2015; Veenstra et al., 2014). Finnish and US-based studies have found that teachers who take an active role in addressing bullying increase the likelihood of student reports of bullying (Cortes & Kochenderfer-Ladd, 2014; Veenstra et al., 2014). Additionally, a study from Italy found that warm student–teacher relationships can encourage defending behaviors (Jungert et al., 2016). Similarly, a study based in the US found that teachers' expectations can also influence students' motivation to help bullying victims (Thornberg et al., 2012).

When it comes to bias-based bullying specifically, studies looking at the role of teachers are scarce, and it varies by the different forms. For example, higher levels of perceived teacher responsiveness to ethnicity-based victimization were found to be related to decreased prevalence of ethnicity-based bullying and a more positive inter-ethnic classroom climate among a Swedish sample (Bayram Özdemir & Özdemir, 2020). In addition, Rose's et al. (2011) review of the literature on bullying among youth with disabilities, which included studies from the US and Europe, indicates that teacher awareness and intervention can significantly predict bullying perpetration, where lack of knowledge and ineffective intervention can further exacerbate the bullying. As well, teacher respect and support for cultural diversity have been linked to reduced ethnic and racial bullying victimization in US- and Canadian-based studies (Gage et al., 2014; Lanza et al., 2018; Vitoroulis & Georgiades, 2017).

Factors That Influence Teachers' Responses to General Bullying

Lower levels of empathy (Boulton et al., 2014; Kollerová et al., 2021; Strohmeier & Gradinger, 2021) and perceiving bullying situations as not serious (Maunder et al., 2010; Thornberg & Delby, 2019; Yoon, 2004) have been found to be significant predictors of teacher inaction in response to bullying. Some research further indicates that the perceived seriousness of a bullying situation mediates the association between teachers' empathy and their willingness to intervene (Dedousis-Wallace et al., 2014). Additionally, not accepting students' socio-emotional well-being as part of their professional responsibility is associated with less teacher intervention (Yoon et al., 2016). Blaming the victim and rationalizing bullying as a justified reaction also can affect teachers' intentions to act (Chen, 2023). Moreover, it has been shown that victims' reaction to bullying can significantly affect teachers' interpretation of the situation and attribution of blame (Sokol et al., 2016).

Teachers' passivity, irrespective of its cause, can represent a serious threat to school safety. When teachers step in to address a bullying incident, they not only stop victimization in the moment, but they also send an important

message to their students about what behavior is not tolerated at school (Cortes & Kochenderfer-Ladd, 2014; Oldenburg et al., 2015; Yoon & Bauman, 2014). Considering that the majority of school bullying occurs in the absence of teacher supervision (Bradshaw et al., 2007; Khanolainen et al., 2021), it is crucial for teachers to be proactive when it does. Not surprisingly, students' perceptions of their teacher as indifferent towards bullying are associated with increased rates of bullying (Saarento et al., 2013; Swearer et al., 2010).

In examining factors that influence teachers' role in creating prosocial classroom environments, Ryan et al. (2015) found that in the US, higher efficacy related to managing peer relations at school predicted higher classroom quality. At the same time, managing peer relations can be a significant professional challenge for many, so much so that teachers often report feeling least efficacious about managing peer relations compared to the other areas of their professional expertise (delivering instruction, facilitating student engagement, and maintaining classroom discipline) (Ryan et al., 2015). Findings indicating that teachers do not always have professional confidence to address bullying has important implications. A recent systematic review revealed that low teacher self-efficacy related to school bullying is a common problem and a consistent significant predictor of teachers' passive approach (Fischer et al., 2021). Indeed, in practice, low teachers' self-efficacy often means that bullying incidents remain not just unresolved but can even be completely unacknowledged by teachers. Reassuringly, however, evidence shows that teachers' self-efficacy can be developed over time. Anti-bullying professional development and teaching experience are often associated with an increased likelihood of teacher action (Kollerová et al., 2021; Strohmeier & Gradinger, 2021). Specialized intervention programs for teachers also were found to contribute to enhanced self-efficacy (Espelage et al., 2023).

Factors that Influence Teachers' Responses to Bias-Based Bullying

Research aiming to identify specific teacher perceptions and characteristics that predict their intervention in biased-based bullying is also limited. A key factor promoting student wellbeing might be teachers' willingness to act immediately before the problem of bias-based bullying grows and its consequences become more difficult to remediate. Similar to research on general forms of bullying, it has been shown that positive student-teacher relationships, positive school climate and perceived school safety were found to buffer the negative effects of bias-based bullying among the students experiencing low and moderate levels of victimization (Golaszewski et al., 2018; Mulvey et al., 2018; Poteat et al., 2021; Price et al., 2019). These factors, however, did

not mitigate the negative impact of bias-based bullying in students reporting significantly high levels of victimization, likely because their negative effects were too great (Mulvey et al., 2018; Price et al., 2019). Against this background it is concerning to discover that teachers sometimes choose to delay their intervention until they see that prejudice-motivated victimization is reoccurring (Hay et al., 2024).

Research also shows that teachers with greater perceived professional self-efficacy, confidence in their ability to make an impact, and lower levels of personal bias have stronger intentions to intervene in bullying incidents targeting sexual minority and gender non-conforming students (Collier et al., 2015; Nappa et al., 2018). As well, emerging research indicates that teachers with a clear anti-bullying stance can make a difference in the lives of ethnic minority students, for example, when they employ a comprehensive approach consisting of multiple strategies to address instances of ethnicity-based victimization (Bayram Özdemir et al., 2021). In the case of bullying due to students' abilities, teachers see the lack of relevant training and confidence as the main barriers to active responding (Purdy & Mc Guckin, 2015). Teachers also admit that when they do intervene in instances of racist bullying and bullying due to abilities, they often rely on ad hoc, instinctive actions (Hay et al., 2024; Purdy & Mc Guckin, 2015). Though there is still limited research across the different forms of bias-based bullying, what exists tends to indicate that when teachers do intervene to address bias-based bullying they can have a positive effect.

Current Study

Available research indicates that teachers have an important role to play in addressing problematic social dynamics taking place at school. What is known so far warrants further research into the mechanisms behind teachers' behavior and their immediate response in situations of bias-based bullying. It is not yet clear if teachers have similar attitudes towards different types of bias-based bullying, and if they are equally willing to intervene to defend students who are harassed about specific aspects of their identities. This knowledge is crucial for developing and carrying out more effective anti-bullying programs that protect all youth from harassment, and especially youth with marginalized backgrounds. Moreover, to date much of what we know about teacher perceptions towards bias-based bullying, and its subsequent implications on teacher training and development as well as anti-bullying programs is based on limited geographic locations, namely the US and Europe. Given the diversities in identities globally and the limited research on this topic, it is unclear if factors influencing teachers' intervention are context-specific or universal across the world. Additionally, existing surveys of teachers have primarily

focused on secondary school teachers, despite evidence suggesting that bullying also occurs among younger primary school-aged children (Glew et al., 2005; Yoon, 2004). The current study sought to address these gaps in the literature by conducting a large-scale, cross-cultural investigation that compared teacher perceptions and intentions to intervene across four different types of bias-based bullying. The goal of this study is to answer the following research questions:

1. To what extent do teachers' perceptions and intentions to intervene in bias-based bullying vary depending on contextual factors at (a) the school level (primary vs. secondary) and (b) by geographic location?
2. How do teacher perceptions (e.g., perceived seriousness of the situation, victim blaming, empathy for students) and intentions to intervene (e.g., importance of responding, responsibility to intervene, intention to intervene, and intervention self-efficacy) vary depending on the type of bias-based bullying behavior observed?
3. Does the association between the type of bias-based bullying and teacher perceptions/intentions to intervene vary across geographic locations?

Method

Procedure

This study was organized as an international collaboration involving 13 research teams located in Australia, Canada, India, Ireland, Italy, Poland, Romania, Russia, Sweden, Tanzania, Taiwan/Chinese Taipei, UK, and the US. An anonymous survey was distributed among teachers in each participating location in 2022–2023. The study utilized a between-subjects design to assess teachers' perceptions of and willingness to intervene in five different scenarios of types of bias-based bullying. Research teams from each participating location adhered to the ethical guidelines for research with human subjects established by their respective research institutions. Each team was responsible for translating the original survey from English to their local language while ensuring that the items retained the same meaning intended in the original survey as well as documenting their participant recruitment and data collection procedures. Practicing elementary and secondary teachers in each location were invited to respond to a confidential survey. Most teams distributed the survey online (e.g., using Qualtrics; $n=12$), but one country (Tanzania) collected data using paper-and-pencil measures.

After providing informed consent, participants were randomly assigned to read one text-based vignette describing an incident in a classroom where three students excluded a fourth student from a group assignment while making

derogatory comments about the excluded student's identity (e.g., based on their weight/appearance, learning difficulties, ethnic background, sexual orientation, or gender expression). Vignettes were designed for this study based on previous research on bullying that offered text-based vignettes to teachers (Bauman & Del Rio, 2006; Starosta, 2022). Primary school teachers were shown one of the four following vignettes: appearance/weight-based bullying, learning difficulty-based bullying, race/ethnicity-based bullying, and gender expression-based bullying. The survey for secondary school teachers included an additional fifth option—a vignette featuring sexual orientation-based bullying (this type of bullying is most likely to occur during secondary school specifically; Fish et al., 2023).

Importantly, in the vignette showing bullying due to learning difficulties, we chose to use the term "learning difficulties" as a more inclusive alternative to "learning disabilities." It could be argued that being targeted for having learning difficulties does not constitute bias-based (i.e., ableist) bullying. However, it is important to highlight that in our vignette, the bullying characters used the ableist slur "idiot." Given that the criteria for diagnosing learning disabilities and identifying special learning needs vary significantly across countries (Barow & Östlund, 2020) and considering that many individuals never receive an official diagnosis despite having disabilities (Barbiero et al., 2019), we opted for a more inclusive term not tied to any specific diagnosis. This choice ensures the relevance of our vignette across different national contexts included in our study.

As shown in Supplemental Materials (Tables D–J), two countries (India and Tanzania) excluded the gender expression vignette and/or sexual orientation vignette from their data collection battery due to context specific culture and ethical regulations. After reading their scenario, participants responded to a manipulation check where they were asked to identify the type of bullying presented in their scenario. Subsequently, all participants responded to a series of questions asking about their perceptions of the situation and their willingness to intervene in similar situations.

Participants

The researchers in each location collected data from (1) primary school teachers only (those teaching students aged up to 12 years), (2) secondary school teachers only (those teaching students aged up to 18 years; the exact age ranges varied depending on the local education system), or (3) among both primary and secondary school teachers. The international sample totaled 6588 teachers. Eighty-three participants who indicated their School Level as "other" (i.e., not primary or secondary) were subsequently excluded from the sample, leaving 6534 teacher participants prior to consideration of the manipulation check. The manipulation check included a

single item that asked participants to correctly identify the type of bias-based bullying depicted in the assigned vignette. After considering participant's responses to this item, 76.4% ($n = 4990$) of participants were included in the final sample. A decision was made to include participants in the final sample if they did not provide an answer to the manipulation check item, since they did not fail to identify the condition to which they were assigned.

Overall, within the final sample 71% of participants identified their gender as female (46 to 100% across geographic locations), and 20% identified as a cultural minority within their respective location (3 to 65% across locations). In two of the participating locations (Australia and Tanzania), data were exclusively collected from secondary school teachers, whereas in one location (Russia), data were gathered only from elementary school teachers. In the remaining 11 locations, 45% of teachers were at the primary school level (55% secondary). The majority of participating teachers indicated that they worked in schools serving middle to high socioeconomic neighborhoods; only 17% of teachers reported working in schools in low-income neighborhoods. However, this varied substantially across samples, with only 3% of teachers in the Canadian sample indicating that they worked in lower income schools compared to 54% of teachers in the US sample. On average, participating teachers reported having 14.6 years of teaching experience, ranging from an average of 6.5 years in the Canadian sample to over 33 years in the Italian sample. More information about sample demographics is included in Supplemental Materials (Tables A–J and Figures A–F).

Sample Attrition

The final sample sizes for each vignette condition across participating locations is presented in Table 1. There are two notable differences in the data after the manipulation check. First, there were fewer participants in the vignettes that described bullying due to a person's gender expression or sexual orientation. This difference is likely due to the fact that fewer countries offered these vignettes during data collection, resulting in a lower sample size. Additionally, more of the participants in the Canadian sample provided responses that did not match the assigned condition than in any other location. Concerns over this difference can be mitigated by the number of participants that were collected in that site overall. No other systematic differences in pre- and post-manipulation check attrition were observed across data collection sites.

Measures

A list of outcome measures and the items used for each of the measures are provided in Table 2. Across measures, seven countries had participants respond to the statements on a 5-point scale, with values ranging from 1 = strongly disagree to 5 = strongly agree. However, data from 6 countries were collected using different scales of measurement. Five countries had participants respond to the scale variables on a 1 to 10 scale using the same anchors (e.g., 1 = strongly disagree, 10 = strongly agree). Locations that used this response set were reduced down to the 5-point scale for consistency across countries. Rescaling variables was done in a way that

Table 1 Number of participants per condition, by location

Geographic location	Condition					Total (location)
	Ethnicity	Learning difficulties	Weight/appearance	Gender/sexual orientation		
Australia	8	13	11	10	42	
Canada	170	152	185	142	649	
India	205	203	203	0	611	
Ireland	39	38	38	39	154	
Italy	130	130	132	139	531	
Poland	20	18	24	14	76	
Romania	76	84	79	32	271	
Russia	46	48	46	35	175	
Sweden	42	47	34	78	201	
Tanzania	102	102	95	0	299	
Taiwan	120	145	136	111	512	
UK	74	84	80	61	299	
US	310	322	308	230	1170	
Total	1342	1386	1371	891	4990	

Table 2 Measures and their specific items

Outcome variable	Item(s)
Perceived seriousness	In your opinion, how serious is this situation?
Victim blaming	How likely is it that Student X (victim) brought this on him/herself?
Empathy for students	I would feel sympathy for Student X (victim) I would feel concerned about Student A (bully) This situation makes me feel sad for Student X I would feel angry about what Student A (bully) did
Perceived importance of responding	Relative to your other teaching demands, how important is it for you to address this situation?
Perceived responsibility to intervene	I consider it to be part of my professional responsibility to resolve these situations whenever they occur I consider it to be part of my professional responsibility to prevent these situations from happening
Perceived self-efficacy to intervene	I am confident in my ability to resolve this type of situation I am sure that I can effectively prevent this type of situation from happening
Intention to intervene	How likely are you to intervene in the situation?

preserved the relative standing of a participant's response on the 10-point scale by serving as the denominator for the smaller 5-point. One country opted to use an 11-point scale, with the same anchors, but with values from 0 to 10, instead. The same process was used to reduce scale variables to the common 5-point scale. Four of the outcome variables were measured using a single-item (perceived seriousness, victim blaming, perceived importance of responding, and intention to intervene). Average scores across items were calculated for the three outcomes that were measured using multiple-item scales: responsibility to intervene (Cronbach's $\alpha=0.81$) and self-efficacy to intervene (Cronbach's $\alpha=0.78$), each measured using two items, and empathy for students (measured using four items, Cronbach's $\alpha=0.69$).

More details on this study's measures and procedures (including the full texts of vignettes, all follow-up items and manipulation checks) are available on this study's Open Science Framework page (osf.io/zjgvu).

Data Preparation and Coding

The gender expression and sexual orientation vignettes were originally intended to be standalone comparison groups. However, unlike the ethnicity, learning difficulties, and weight/appearance vignettes, the gender expression and sexual orientation vignettes were divided, such that scenarios depicting bullying based on differences in the target student's perceived gender expression was exclusively given to primary school teachers, while the scenario describing a situation where the target student was excluded because of their perceived sexual orientation was primarily shown to secondary school teachers. However, two locations did not include either vignette, and two other locations submitted data for both vignettes from primary and secondary school participants. Therefore, to

decrease the chance of spurious findings due to unequal distribution of vignettes, the gender expression and sexual orientation vignettes were coded as condition "3" and are subsequently analyzed together (SOGI condition). This resulted in a final sample with a relatively even distribution of participants across the four study conditions: 27% ethnicity-based bullying, 29% bullying due to learning difficulties, 25% weight-based bullying, and 19% SOGI-based bullying.

The four study conditions were effects coded to identify differences among the bias-based bullying scenarios. All effects were weighted, such that bullying due to learning difficulties (-1) was used as the reference group for each of the three remaining conditions (e.g., ethnicity, weight, and gender/sexual orientation = +1). Estimates of fixed effects represent the contributions of vignettes describing bias-based bullying due to the target's appearance, ethnicity, and gender expression/sexual orientation, relative to the grand mean of each outcome, and controlling for the nested structure of the data. In order to obtain estimates for the learning difficulties condition, one additional effects-coded predictor was made to investigate differences between this condition and the grand mean. To accomplish this, the learning difficulties condition was coded as the sole predictor at level 1, while the ethnicity condition was used as the reference group (-1). This additional effects-coded predictor had to be included in separate models, in order to avoid multicollinearity when the learning difficulties condition was used as the reference group in the main models. Levels 2 and 3 were likewise school level (level 2: 1 = primary level; 2 = secondary level), nested within location (level 3: coded as samples 1–13). Comparisons of model fit indices overwhelmingly supported the use of random intercepts models over random intercepts and slopes (χ^2 values were $p > 0.05$) across all seven outcomes.

Analytical Plan

A series of seven multilevel regression models (MLMs) were constructed to examine how teachers varied in their perceptions of the vignette (e.g., perceived seriousness, victim blaming, empathy for students, importance of responding, responsibility to intervene, self-efficacy) and intention to intervene. Models were built using the lme4 version 1.1–35.1 package for R (Bates et al., 2015). Within each of the models, individual teachers were first nested within experimental condition (level 1), and subsequently nested within school level (primary/secondary; level 2), and geographic location (level 3) to identify variance accounted for by higher levels of the model.

To ascertain if variance in teacher perceptions existed between teachers in different school levels and geographic locations, the intraclass correlations (ICCs) for each null model were calculated using lmerTest v. 3.1–3 (Kuznetsova et al., 2017). This provides the proportion of unexplained variance that can be partitioned at the school level (level 2), and between location level (level 3) of the models for each outcome. Based on the total variance attributed to school level and location-level differences, random intercepts for geographic location were subsequently added to each of the seven multilevel models. To explore whether teacher perceptions and intentions to intervene varied across type of bullying, effects coded vignette conditions were included in the random intercepts models as level one predictors of each of the outcomes (as described above, one set of models tested the effects of ethnicity-based bullying, weight-based bullying, and SOGI relative to the grand mean, and a separate set of models coded for differences for learning difficulties relative to the grand mean). Finally, to examine if the pattern of associations between type of bullying and each of the outcomes varied across geographic location, random slopes were added to the models with the same effects-coded predictors to compare relative fit. Unfortunately, the addition of random slopes resulted in a decrease in model fit for six of the seven outcomes and produced considerable

model convergence errors. Both the Akaike information criterion (AIC) and Bayesian information criterion (BIC) were smaller compared to the random intercepts-only model. Chi-square statistics for these initial model comparisons were also non-significant (all p values > 0.05), with two exceptions, indicating that the addition of a random slope did not add to the explanation of the relationships in each model. Random intercepts and slopes for empathy and responsibility did have significant p values; however, the random intercepts model was retained due to better AIC and BIC fit. Therefore, a random intercepts model was preferred for models that predicted perceived seriousness, victim blaming, empathy for the victim, and perceived importance, responsibility, and willingness to intervene. However, the inclusion of random slopes had similar fit (AIC = 12,984, BIC = 13,145) to the random intercepts-only model (AIC = 12,982, BIC = 13,027), and significantly added to the interpretation of a teacher's perceived self-efficacy to intervene, $\chi^2(18) = 34.203, p = 0.012$. Thus, unlike the previous models, results for self-efficacy allow for random intercepts and slopes. Levels 2 and 3 continued to be school level and location, respectively. Model results are presented below for the null models, and for the final models predicting each of the seven outcome variables. All model comparisons statistics are tabled in the supplemental materials (Tables K and L).

Results

Intra-class Correlation. The null models for all tested outcome variables were statistically significant, indicating a substantial proportion of variance could be attributed to the higher-order grouping variables. As shown in Table 3, geographic location consistently accounted for the largest proportion of between-group variance in teachers' perceptions and intentions to intervene in different types of bias-based bullying. The ICCs for school level accounted for a comparatively small proportion of variance in all outcomes, with ICCs ranging from 0.3 (victim blaming) to 3.7% (perceived

Table 3 Intraclass correlations (ICCs) for null models and primary outcomes

Outcome	Null model		Interclass correlation (ICC)	
	Intercept	p	School level: Primary/secondary	Geo-graphic location
Perceived seriousness	4.155	<.001	.023	.238
Victim blaming	2.416	<.001	.003	.380
Empathy for Students	3.927	<.001	.018	.158
Perceived importance of intervening	4.462	<.001	.037	.126
Perceived responsibility to intervene	4.377	<.001	.010	.124
Perceived self-efficacy to intervene	3.871	<.001	.005	.168
Willingness to intervene	4.441	<.001	.010	.144

importance of intervening). In contrast, between-location differences ranged from 12.6% of unexplained variance in perceived responsibility to respond, to 38.0% of unexplained variance in victim blaming, indicating that the majority of unexplained variance across outcomes existed between geographic locations. Across all study outcomes, more variance was attributed to differences between geographic locations compared to school level differences (e.g., primary vs. secondary).

Perceived Seriousness of the Situation. There were no differences between teacher ratings of perceived seriousness of the bias-based bullying situation compared to the grand mean, whether it was happening because of a student's ethnicity, $\beta=0.014$, $SE=0.017$, $p=0.404$, their weight or appearance, $\beta=-0.006$, $SE=0.018$, $p=0.733$, or due to their gender expression or sexual orientation, $\beta=0.002$, $SE=0.018$, $p=0.894$. Teachers who read a scenario of bullying due to learning difficulties also did not significantly differ in the perceived seriousness of the vignette, compared to the grand mean, $\beta=-0.013$, $SE=0.013$, $p=0.347$.

Victim Blaming. Teachers that read the weight-based bullying vignette were significantly less likely to blame the victim for being bullied, $\beta=-0.079$, $SE=0.021$, $p<0.001$, compared to the overall average response across bias-based bullying scenarios. Teachers that read about ethnicity-based bullying, $\beta=0.035$, $SE=0.021$, $p=0.086$, and SOGI-based bullying, $\beta=-0.037$, $SE=0.022$, $p=0.093$, did not differ in their ratings, relative to the grand mean of victim blaming. Similarly, in the models coding for learning difficulty-based bullying, no significant differences were observed in how much teachers blamed the victim relative to the grand mean, $\beta=0.026$, $SE=0.016$.

Empathy for Students. Teachers expressed more empathy for the students in the vignette when the scenario described bullying based on the target student's weight and appearance, $\beta=0.036$, $SE=0.015$, $p=0.021$, compared to the overall mean of empathy expressed by teachers across vignettes. Teachers' empathy ratings did not differ from the grand mean for the ethnicity bullying scenarios, $\beta=-0.013$, $SE=0.015$, $p=0.306$, and the gender or sexual orientation scenarios, $\beta<0.001$, $SE=0.017$, $p=0.999$. No significant differences were observed in teachers' empathy toward students bullied for their learning difficulties, relative to the grand mean, $\beta=-0.002$, $SE=0.012$, $p=0.839$.

Perceived Importance of Responding. Teachers who were presented with the ethnicity-based bullying vignette rated that it was more important to respond compared to the average ratings of perceived importance across all scenarios, $\beta=0.039$, $SE=0.017$, $p=0.022$. At the same time, the importance of responding to bullying due to a person's gender or sexual orientation was perceived as less important, $\beta=-0.042$, $SE=0.018$, $p=0.021$, compared to the grand mean. There were no differences in perceived importance for

teachers that read about bullying based on weight or appearance, $\beta=-0.030$, $SE=0.017$, $p=0.081$.

Perceived Responsibility to Intervene. Teachers' perceived responsibility to intervene in bullying due to a student's gender and sexual orientation was lower, $\beta=-0.038$, $SE=0.019$, $p=0.039$, compared to the average perceived responsibility score. No significant differences in responsibility to intervene were reported by teachers who read about ethnicity-based bullying, $\beta=0.010$, $SE=0.017$, $p=0.641$, nor were there differences in the weight and appearance bullying condition, $\beta=-0.005$, $SE=0.017$, $p=0.766$. No significant differences were observed in responsibility to intervene among teachers who read about bullying due to learning difficulties, $\beta=-0.002$, $SE=0.012$, $p=0.839$.

Perceived Self-efficacy to Intervene. Teachers reported having a lower self-efficacy for responding to bullying that is due to a student's gender or sexual orientation, $\beta=-0.096$, $SE=0.041$, $p=0.038$, than the grand mean of the sample. Teachers did not significantly differ in their self-efficacy to respond to bullying due to a student's ethnicity, $\beta=-0.007$, $SE=0.024$, $p=0.791$, nor due to their weight or appearance, $\beta=-0.018$, $SE=0.020$, $p=0.382$. However, teachers that read about a student being bullied due to their learning difficulties reported a higher sense of self-efficacy in their ability to respond to the scenario, $\beta=0.032$, $SE=0.014$, $p=0.024$, compared to the grand mean of self-efficacy.

Intention to Intervene. There were no significant differences in whether a teacher intended to intervene in bullying due to the victim's weight/appearance, $\beta=-0.018$, $SE=0.019$, $p=0.341$, ethnicity, $\beta=0.014$, $SE=0.019$, $p=0.470$, nor their gender expression or sexual orientation, $\beta=-0.026$, $SE=0.020$, $p=0.199$, compared to the overall sample mean. Teachers in the learning difficulty-based bullying condition also did not significantly differ in their intention to intervene relative to the overall mean, $\beta=0.010$, $SE=0.015$, $p=0.494$.

Contextualizing Location- and Condition-level Differences. To provide additional information about differences in teacher perceptions and intentions to intervene in different types of bias-based bullying across geographic locations, we further investigated average scores for each of the outcome variables. Across locations, results indicated that there was a near ceiling effect for several outcomes, including perceived seriousness, importance and responsibility to respond, and intentions to intervene. For example, as shown in Fig. 1, regardless of location and condition, teachers were on average over the center point of the scale measuring intervention intentions. In other words, the average teacher in our study was in agreement that they intended to intervene in the bullying situation that they read about in the vignette, regardless of location. Another reassuring trend revealed by our study was that victim blaming was an outcome with the lowest ratings (see Fig. 2). Victim blaming tendencies were

Fig. 1 Mean intervention intention score, aggregated by location and condition

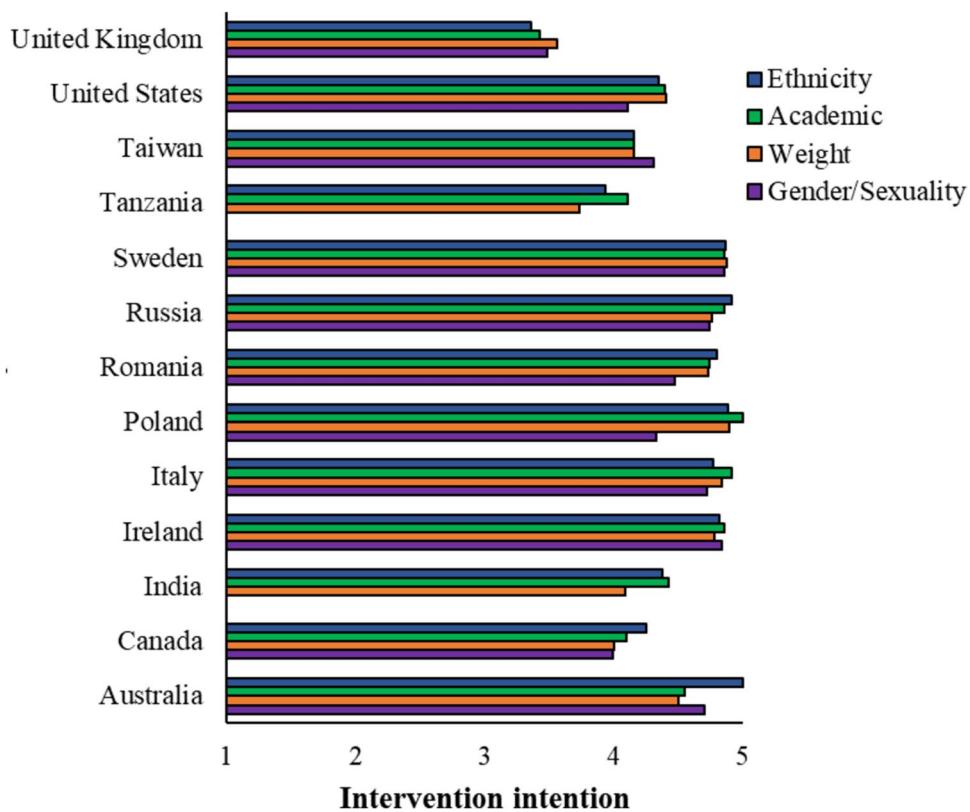
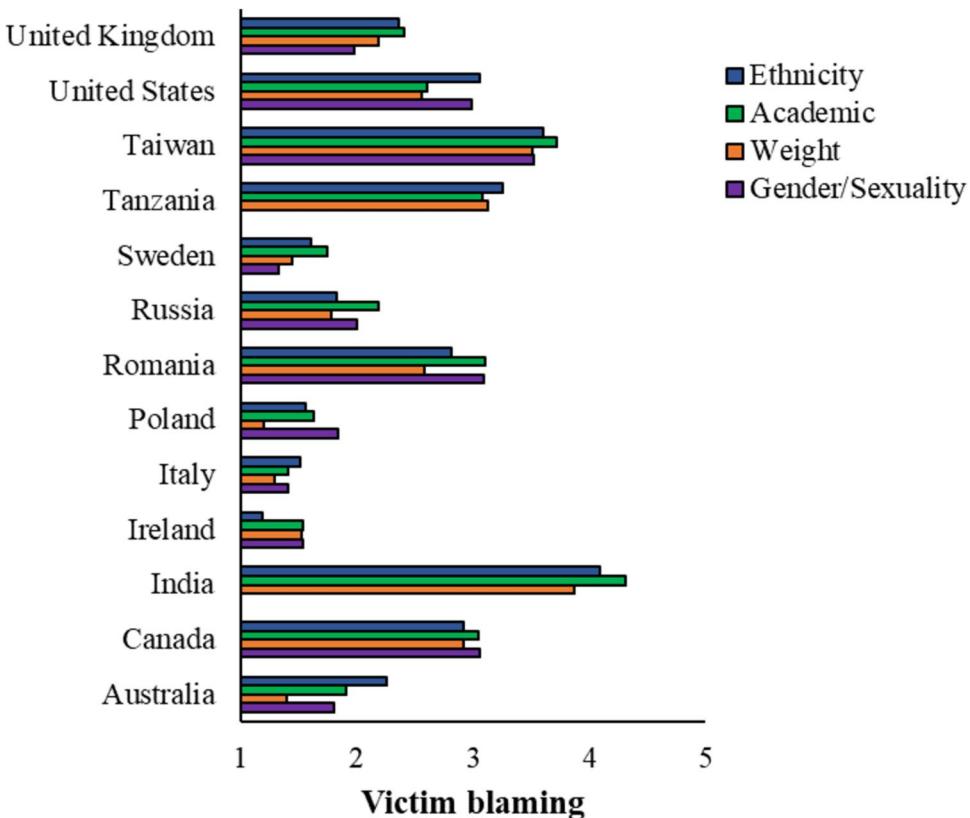


Fig. 2 Mean victim blaming score, aggregated by location and condition



not homogeneous across all locations and conditions, but on average, teachers did not blame the target of bullying, regardless of the bullying type.

Discussion

Bias-based bullying at school is a prevalent and persistent problem with deeply damaging consequences, yet teachers have the capacity to support affected youth within the school context. The goal of this study was to examine if teachers had different perceptions and intentions to intervene for different types of biased-based bullying, and whether their responses varied by school level and geographic location. Utilizing a large dataset collected across 13 geographic locations in Africa, Asia, Australia, Europe, and North America, this study is the first to provide an international comparison of teacher perceptions of bias-based bullying, which is a growing problem around the globe (Brinkman, 2015; Price et al., 2019; Puhl et al., 2016; Tippett et al., 2010). Understanding how teachers feel about the different ways that students can target others based on real or perceived aspects of their identities, is an important first step towards designing interventions and support mechanisms to enable educators to tackle bias-based bullying when it occurs.

International Variability in Teacher Perceptions of Bias-Based Bullying

Several interesting trends were identified in how teachers are likely to perceive different situations of bias-based bullying, depending on which aspects of the victim's identity are targeted by peers. Results of multi-level modeling revealed that a significant proportion of variance in all outcomes could be attributed to geographic location (including, perceived seriousness of the observed situation, empathy for the involved students, victim blaming, importance and responsibility to respond to the situation, perceived self-efficacy, and intention to intervene). Specifically, most of the between-group variance (up to 38%) was explained by location differences, with very little variability observed between primary and secondary teachers (nested within locations). These findings suggest that contextual factors at the national level are an important area to investigate when attempting to understand teachers' perspectives and willingness to intervene in different types of bias-based bullying. For example, a study of school bullying in the US found that schools with greater diversity had lower rates of bias-based bullying (e.g., schools with a higher proportion of students receiving special education had lower rates of bullying towards students with special needs, and schools with higher racial/ethnic diversity reported fewer incidents of bullying towards Black and Hispanic students: Gage, et al., 2021). Extrapolating

these results to a national level would suggest that a country's current and previous policies, and cultural values of openness and acceptance towards individuals from different backgrounds could be important predictors of how bias-based bullying is addressed in schools. Although further cross-country research is necessary to fully understand how broader societal contexts influence social dynamics within schools, some comparative evidence from North America and Europe suggests that ethnicity-based bullying rates vary and indeed reflect the contextual factor of recent migration policies and levels of ethnic diversity (Basilici et al., 2022). Consequently, such contextual variations could influence how bias-based bullying prevention and intervention initiatives are designed, implemented, and received adding further support to Pitsia and Mazzone's (2021) argument that there is a need for anti-bullying policies to be context-specific. Without such context specific developments, the success of any initiative may be limited.

Teacher Perceptions of Different Types of Bias-Based Bullying

Although this study revealed significant contextual diversity for most outcomes, a common theme was that most teachers reported high levels of intention to intervene across various types of bias-based bullying situations. This trend was consistent across all 13 locations. Regarding how teachers feel about the different types of bullying depicted in the hypothetical vignettes, there are some notable differences.

Weight-Based Bullying. When looking at situation of weight-based bullying teachers were less likely to blame the targeted student for being bullied, and expressed greater empathy for the students involved in this type of bullying compared to all other types of bias-based bullying. Weight-based bullying has been previously identified as one of the most common types of bias-based bullying across countries (Bucchianeri et al., 2016; Puhl et al., 2016). As such, weight-based bullying is likely the most familiar type of bias-based bullying for teachers, potentially contributing to their increased ability to recognize and address it. Although there has been a slight reduction in weight-based stigma over the past decade, its levels remain high (Chivers et al., 2022), and wider societal attitudes could be underlying this behavior at school. Despite the prevalence of weight-based bullying, however, teachers are not typically implicated in perpetuating this bias, as most of them do not judge students and their abilities based on weight (Shackleton & Campbell, 2014). Teachers' greater empathy for victims of weight-based bullying also may reflect their perception that most people experience negative feelings about their appearance at times (McGrath et al., 2023; Quittkat et al., 2019), and children who are still developing should not be blamed for,

or treated differently, because of differences in their physical size.

Ethnicity-Based Bullying. In contrast to weight-based bullying, responding to bullying due to a student's ethnicity was found to be more *important* for teachers than responding to other types of bias-based bullying. However, no other differences emerged in teachers' ratings of empathy, responsibility, self-efficacy, or intentions to intervene in this type of bias-based bullying compared to the other forms. This highlights an unexpected contrast in teachers' feelings about bullying situations that center around the target student's ethnic or cultural background. Despite heightened awareness of the importance of responding to this type of bullying, teachers in this study did not indicate that they were more likely to intervene, or that they felt more (or less) prepared to do so compared to other types of bias-based bullying. Other research that examined teachers' reactions to a hypothetical situation of ethnic-based cyber-bullying found that teachers were significantly more likely to report that they would ignore the incident if they had morally disengaged beliefs about online harassment and their school lacked guidelines for how to handle hate messages (Strohmeier & Gradinger, 2021). Another study of over 5000 US educators found that teachers overwhelmingly requested more training related to ethnicity-based bullying (Bradshaw, et al., 2013). Yet, most of the existing anti-bullying programs have not been designed for use with ethnically diverse populations (Xu et al., 2020). More information is needed about the specific strategies that teachers could use to respond to incidents of ethnic-based bullying, and the skills and training that would support them in addressing it effectively.

Gender and Sexual Orientation-Based Bullying. Regrettably, a different trend was observed regarding bullying based on the target student's gender expression or sexual orientation. Teachers in this study indicated that it was *less* important to respond to this type of bias-based bullying and felt *less* responsible for intervening when the student in the vignette was bullied due to a non-conforming gender expression or sexual orientation (compared to other types of bias-based bullying). At the same time, teachers also reported feeling that they were less prepared to handle this type of bullying (i.e., lower self-efficacy). This finding is alarming, considering that prevention and immediate action are the best strategies that teachers can adopt to ensure the mental wellbeing of their students with LGBTQ+ identities. Preventative measures and swift responses are essential because the negative impact of this type of bias-based bullying is known to be resistant to later mitigation efforts (Mulvey et al., 2018; Price et al., 2019). Furthermore, bullying related to a student's gender expression or sexual orientation is quite common (Bradlow et al., 2017; Kosciw et al., 2018). Consequently, it is

not surprising that a recent systematic review has found interventions aimed at reducing bullying based on gender expression or sexual orientation to be the most prevalent among youth stigma-based anti-bullying programs (Earnshaw et al., 2018). Despite these efforts, addressing this type of bullying remains challenging for teachers worldwide. Moreover, most interventions are limited to Europe and North America, with no interventions related to sexual orientation and/or gender expression found in Africa, Asia, or South America (Earnshaw et al., 2018).

Bullying due to Learning Difficulties. Finally, compared to the other types of bias-based bullying, teachers in this international study reported significantly higher levels of self-efficacy for responding to situations where the targeted student was excluded because of their academic performance. Our finding somewhat supports previous research showing that students' learning difficulties and special educational needs generally do not negatively impact the quality of their relationships with teachers (Berchiatti et al., 2022). Our finding is also reassuring as students with learning difficulties are significantly more likely to experience bullying at school (Berchiatti et al., 2022) and special needs make students more dependent upon adults at school and teachers' awareness and intervention efforts can significantly impact bullying perpetration (Craven et al., 2015; Rose et al., 2011). Social support from teachers has been found to reduce depressive symptoms among youth with disabilities who have experienced cyber victimization (Wright, 2017). Additionally, teacher-student relationships with low conflict and high warmth were found to be associated with lower levels of depression among youth with intellectual disabilities (Olivier et al., 2020). The higher reported levels of self-efficacy offer a reassuring finding also because previous research has identified a lack of training to prepare new teachers to address bullying of students with disabilities (Purdy & McGuckin, 2015). Studies suggest that teachers who receive appropriate intervention training can maintain their sense of efficacy in addressing the individual needs of students with disabilities (Farmer et al., 2010; Meadan & Monda-Amaya, 2008).

Study Limitations and Strengths

The current study was not without some limitations. The study adopted an experimental design where the teachers responded to hypothetical vignettes, which limits the generalizability of its findings. Examining how teachers respond to hypothetical vignettes is not the same as studying how they would respond in real-life situations, which means that the ecological validity is somewhat threatened (Cicourel, 1982). Future studies could gather data from teachers based on situations of bias-based bullying that they have encountered in real life. Although this study enabled the

comparison of teacher perceptions of four different types of bias-based bullying, it lacked a control condition making it difficult to determine if teachers would respond differently when a student is targeted because of their identity compared to general bullying or being excluded for some other reason (e.g., because the target student was absent on the day the project was assigned). Such comparisons would be useful to include in future research to determine if teachers tend to perceive bias-based bullying differently than other forms of peer conflict. Additionally, the study utilized self-report surveys and respondent bias such as social desirability bias may have impacted teachers' intervention intention responses. Moreover, not all conditions were able to be measured across all geographic locations due to the sensitive nature of some conditions. As well, the sexual orientation and gender identity vignettes were coded as one condition due to the vignettes being divided between primary school and secondary schools, some countries not including the vignettes and some collecting data on both across both school levels. Future studies should explore sexual orientation and gender expression separately to parse out potential differences.

Future research should also consider bias X location interactions to investigate cultural differences in how teachers interpret and respond to specific forms of bias-based bullying. Our analysis, while exploratory, indicated that in some countries (e.g., Sweden), there appeared to be no differences in intention to intervene across the different bias-based bullying scenarios, whereas in other locations (e.g., Australia), teachers reported greater differences in their perceptions and intentions to intervene in the different bias-based bullying situations.

At the same time, it is important to note that fundamental and conceptual differences in how bias-based bullying is perceived and experienced across cultures may have contributed to scale non-invariance between geographic locations. Outcomes in this study may also be non-invariant across contexts, for reasons beyond cross-cultural differences in understanding. Six outcomes in the study were either explicitly measured as single-item factors (i.e., intervention intent, seriousness, victim blaming, importance), or consisted of two, strongly correlated indicators that were more interpretable when combined ($r > 0.70$; i.e., responsibility and self-efficacy). Single-items indicators are useful survey inclusions when the target population may be time-limited or if the designers wish to reduce cognitive load imposed upon participants. At the same time, multi-item indicators are more reliable, as repeated measures can counter sources of within-participant error, such as misunderstanding items, or encountering distractions in the survey environment (Allen et al., 2022). Further, some teams used 5-point Likert-type scales, while others used 10-point scales for the same survey. Reducing the 10-point scales unintentionally could produce scale non-invariance between geographic locations by

changing the descriptive statistics of the measure (Dawes, 2008). There were also variations in ceiling effects among the outcomes. Highly restricted ranges among teacher responses from one geographical region may be flagged as non-invariant compared to an equally high, but unequally restricted (i.e., wider response distribution; Edwards & Soland, 2024).

Moreover, it is important to clarify how the manipulation check was applied in this study. Specifically, we chose to exclude only participants who failed the manipulation check, while retaining those who did not answer the question (10.71% of the sample, $n = 536$). This decision was informed by practical constraints and the need to preserve the integrity of certain datasets. For example, our team in Tanzania collected data using paper-and-pencil hand-outs that did not include the manipulation check question. As a result, applying a strict pass/fail criterion would have excluded all participants from this location. Additionally, in some other locations, the manipulation check question was not a mandatory item, and a subset of participants ($n = 237$) skipped it. These participants were predominantly from our largest geographic sub-samples, including Canada, Italy, Taiwan, the UK, and the US. Importantly, these participants do not significantly impact the statistical power of these sub-samples, given their relatively small proportions (ranging from approximately 3% in the US to about 9% in the UK). Nevertheless, we acknowledge that the inclusion of these participants might have slightly influenced the results of this study.

To determine what could have influenced the likelihood of teachers passing the manipulation check, a series of chi-square and Student's t tests were conducted to compare the frequencies and means of various teacher descriptives along the pass/fail dimension. There were pass/fail differences in frequencies between teacher gender, $\chi^2(1) = 75.64$, $p < 0.001$, with male teachers more likely to pass than female teachers, $OR = 1.70$, $p < 0.001$, 95% CI [1.50; 1.91]. Differences in pass/fail were also observed by school level, $\chi^2(1) = 12.92$, $p < 0.001$, as secondary school teachers were more likely to pass than primary school teachers, $OR = 1.24$, $p < 0.001$, 95% CI [1.10; 1.39]. Similarly, teachers with more years of teaching experience were more likely to pass the manipulation check ($M = 14.14$, $SD = 52.05$), than teachers with fewer years of experience ($M = 10.74$, $SD = 9.71$), $t(5431) = -4.19$, $p < 0.001$. In short, the teacher or school-level characteristics underlying the passing or failing of the manipulation check was varied. Future studies should ensure consistent teacher- and school-level characteristic questions, in order to control for differential pass/rates associated with identifying (or not) types of identity-based bullying.

Finally, in this study, convenience sampling was employed in each geographic location to facilitate data collection. Participants were recruited based on their accessibility and willingness to participate; however, each research team in our

international project took deliberate steps to distribute the survey broadly to ensure diverse representation within their respective samples. While this approach enhanced feasibility and included varied perspectives, it may limit the generalizability of our findings to wider populations.

Despite these limitations, the study provides significant contributions to the literature. To date, there have been no cross-national studies that have compared and explored the four forms of biased-based bullying included in this study. Starosta (2022) was the first to compare teachers' perceptions of two forms of bias-based bullying, ethnicity-based bullying and sexual orientation-based bullying using a sample of Canadian secondary school teachers. The present study expands on Starosta (2022) by conducting a cross-national sample of both primary and secondary school teachers and including two additional forms of bias-based bullying, academic-based bullying, and weight-based bullying. Additionally, each research team translated all survey materials to reflect cultural and linguistic contexts relevant to teachers in their jurisdiction, decreasing the risk of cross-cultural scale invariance, and increasing the face validity of each outcome. Using single-item outcomes also allowed the survey to capture more information from teachers, while also reducing the cognitive demands associated with carefully reading through the study vignettes. Future work investigating bias-based bullying in international samples should focus on fewer, but multi-item, outcome indicators. The present work serves to explore the dynamics of bias-based bullying across a variety of outcomes, geographic locations, and school levels.

Implications for School-Based Efforts to Reduce Bullying

By utilizing a large international sample that spans five continents, the current study has important implications for training of teachers in response to bullying situations. Previously, teachers' perceived seriousness (van Gils et al., 2023) and self-efficacy (Fischer et al., 2021) were found to be linked with intervention intentions. Our results, however, showed differential perceived seriousness and self-efficacy across different types of bullying situations, but a lack of significant differences in perceived intervention intentions. Similarly, Dawes et al. (2022) found that teachers viewed physical and cyberbullying as most serious, with social bullying being seen as the least serious offense. In either case, it seems important for teachers to view all forms of bullying as serious in order to effectively intervene in them.

With respect to intervention, research has shown that teachers and pre-service teachers often express that they do not feel trained to intervene in these situations, sometimes intervening in ways that cause harm (Dawes et al., 2023; D'urso et al., 2022; Purdy & McGuckin, 2015). Given recent

research studies showing the quality of intervention being related to lower rates of bullying (Burger et al., 2022; Tolmatcheff et al., 2023), teacher education and development programs should include specific training for teachers in how to intervene effectively in bias-based bullying situations. For example, within specific bias-based situations, results from our study suggest a need to raise awareness of the severity of bullying due to one's racial/ethnic background and sexuality or non-conforming gender expression. Such training should include information for teachers about how discrimination in schools has been found to negatively impact minority students' mental health and academic outcomes (Assari & Caldwell, 2018; O'Hara et al., 2012). Similarly, students who are perceived as LGBTQ often demonstrate lower academic performance and a lack of school belonging (Moyano & del Mar Sánchez-Fuentes, 2020). Raising awareness about the specific negative consequences of bias-based bullying, and how it may be different from other forms of bullying, is an important first step in preparing teachers to address it.

Equally important is educating teachers about the positive impact they can have in the lives of their students, especially those who hold minority identities. Previous research has shown that increasing the number of safe adults at school (Seelman et al., 2015), teacher support (Gale, 2020), as well as culturally responsive teachers have each been shown to be protective factors (Bottani et al., 2020) for ethnic minority and LGBTQ youth. In the context of the current results showing a lesser perceived severity for ethnic and sexuality/gender-based bullying highlights the importance of inclusive teacher training. Systemic efforts are also needed to support teachers in preventing bias-based bullying, including school policies and procedures that emphasize the severity and importance of intervening in both ethnicity and sexuality/gender-based bullying.

Having said that, we would like to stress that biases are deeply embedded within historical and cultural contexts, shaping the ways in which stigma and bias manifest and can be addressed, as highlighted by Earnshaw et al. (2018) in their systematic review of bias-based bullying interventions. It is therefore crucial to contextualize recommendations for bias-based bullying interventions according to the specific cultural and societal norms of each country. While the importance of addressing bias-based bullying is universal, assuming that teachers across different contexts have the same opportunities to address it, even if they share similar views on its seriousness, would be overly simplistic. The strategies and starting points for tackling bias-based bullying must align with the unique cultural and societal frameworks in which schools operate, ensuring that interventions are both culturally sensitive and practical for the local context. Considering that even anti-bullying intervention programs without explicit bias-based bullying components can vary significantly in their effectiveness depending

on cultural context (Strohmeier et al., 2021), we encourage future studies to investigate how bias-based bullying interventions can be effectively tailored to diverse cultural settings. Such research could explore not only the adaptation of intervention content but also the mechanisms for delivery that resonate with the values, beliefs, and practices of specific educational systems.

Conclusion

Information about how teachers perceive different types of bias-based bullying across countries is needed to inform teacher training and enhance the effectiveness of existing anti-bullying interventions. This study found that teachers report high levels of intention to intervene across various types of bias-based bullying situations but vary in their perceptions of victims and empathy for the students involved, their responsibility and perceived importance of responding to the situation, and their self-efficacy to intervene, depending on which aspects of the victim's identity are being targeted by bullies. Schools are a place where all students are entitled to feel safe and respected for who they are (United Nations, 1989). Empowering educators with tailored strategies to effectively address the distinct forms of bias-based harassment is crucial for ensuring that all children, regardless of their background, have equitable access to education.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s42380-025-00285-6>.

Acknowledgements We extend our sincere gratitude to everyone involved in the data collection process, including the dedicated members of our research team and all the individuals who participated in completing the survey.

Author Contribution SH, WC, SS, DK, LS, and JT came up with the idea for the present study, set up the research design and invited international collaborators. All listed authors contributed to data collection. AH and WC planned and conducted the data analysis. DK, AH, JT, and JN drafted the first version of the current manuscript. All authors contributed to the manuscript writing and approved the submitted version.

Funding Open Access funding provided by University of Jyväskylä (JYU). This research project was supported by the Edith Lando Charitable Foundation. Additionally, the EDUCA Flagship (funded in 2024–2028 by the Research Council of Finland, grant agreement no. 358924) provided support to Daria Khanolainen in the form of salary.

Data Availability Currently, the raw data supporting the conclusions of this article can be made available by the authors to any qualified researcher upon reasonable request (requests should be directed to WC). The raw data might also be openly shared on the study's Open Science Framework page in the future (osf.io/zjgsvu).

Materials, and/or Code Availability All materials used for data collection are available on this study's OSF page (osf.io/zjgsvu). Codes used for data analysis will be uploaded to this page as well.

Declarations

Ethics Approval Research teams from each of the 13 participating geographic locations adhered to the ethical guidelines for research with human subjects established by their respective research institutions. Throughout the study the ethical principles presented in the Declaration of Helsinki were followed.

Informed Consent All data was collected from adult participants who gave their informed consent prior to their participation.

Consent for Publication Not applicable because no personal data was collected for this study.

Competing Interests Lucy Betts is serving as a guest editor of the special issue “The Role of Teachers in Preventing and Intervening in Offline and Online Bullying” in the International Journal of Bullying Prevention (IJBP).

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Allen, M. S., Iliescu, D., & Greiff, S. (2022). Single item measures in Psychological science. *European Journal of Psychological Assessment*, 38(1), 1–5. <https://doi.org/10.1027/1015-5759/a00699>
- Alvis, L., Douglas, R. D., Oosterhoff, B., Gaylord-Harden, N. K., & Kaplow, J. B. (2023). Identity-based bullying and mental health among Black and Latino youth: The moderating role of emotional suppression. *Journal of Traumatic Stress*. <https://doi.org/10.1002/jts.22927>
- Assari, S., & Caldwell, C. H. (2018). Teacher discrimination reduces school performance of African American youth: Role of gender. *Brain Sciences*, 8(10), Article 10. <https://doi.org/10.3390/brainsci8100183>
- Barbiero, C., Montico, M., Lonciari, I., Monasta, L., Penge, R., Vio, C., ... & behalf of the EpiDIt (Epidemiology of Dyslexia in Italy) working group. (2019). The lost children: The underdiagnosis of dyslexia in Italy. A cross-sectional national study. *PLoS One*, 14(1), e0210448. <https://doi.org/10.1371/journal.pone.0210448>
- Barow, T., & Östlund, D. (2020). Stuck in failure: Comparing special education needs assessment policies and practices in Sweden and Germany. *Nordic Journal of Studies in Educational Policy*, 6(1), 37–46. <https://doi.org/10.1080/20020317.2020.1729521>
- Basilici, M. C., Palladino, B. E., & Menesini, E. (2022). Ethnic diversity and bullying in school: A systematic review. *Aggression and violent behavior*, 101762. <https://doi.org/10.1016/j.avb.2022.101762>

Bates, D., Maechler, M., & Bolker, B. (2015). lme4: Fitting linear models using lme4. *Journal of Statistical Software*, 67(1). 1–48. <https://doi.org/10.18637/jss.v067.i01>

Bauman, S., & Del Rio, A. (2006). Preservice teachers' responses to bullying scenarios: Comparing physical, verbal, and relational bullying. *Journal of Educational Psychology*, 98(1), 219–231. <https://doi.org/10.1037/0022-0663.98.1.219>

Bayram Özdemir, S., & Özdemir, M. (2020). The role of perceived inter-ethnic classroom climate in adolescents' engagement in ethnic victimization: For whom does it work? *Journal of Youth and Adolescence*, 49(6), 1328–1340. <https://doi.org/10.1007/s10964-020-01228-8>

Bayram Özdemir, S., Özdemir, M., & Elzinga, A. E. (2021). Psychological adjustment of ethnically victimized adolescents: Do teachers' responses to ethnic victimization incidents matter? *European Journal of Developmental Psychology*, 18(6), 848–864. <https://doi.org/10.1080/17405629.2021.1877131>

Berchiatti, M., Ferrer, A., Galiana, L., Badenes-Ribera, L., & Longobardi, C. (2022). Bullying in students with special education needs and learning difficulties: The role of the student–teacher relationship quality and students' social status in the peer group. *Child & Youth Care Forum*, 51, 515–537. <https://doi.org/10.1007/s10566-021-09640-2>

Bottiani, J. H., McDaniel, H. L., Henderson, L., Castillo, J. E., & Bradshaw, C. P. (2020). Buffering effects of racial discrimination on school engagement: The role of culturally responsive teachers and caring school police. *Journal of School Health*, 90(12), 1019–1029. <https://doi.org/10.1111/josh.12967>

Boulton, M. J., Smith, P. K., & Cowie, H. (2010). Short-term longitudinal relationships between children's peer victimization/bullying experiences and self-perceptions: Evidence for reciprocity. *School Psychology International*, 31(3), 296–311. <https://doi.org/10.1177/0143034310362329>

Boulton, M. J., Hardcastle, K., Down, J., Fowles, J., & Simmonds, J. A. (2014). A comparison of preservice teachers' responses to cyber versus traditional bullying scenarios: Similarities and differences and implications for practice. *Journal of Teacher Education*, 65(2), 145–155. <https://doi.org/10.1177/0022487113511496>

Bradlow, J., Bartram, F., Guasp, A., & Jadva, V. (2017). School report: The experiences of lesbian, gay, bi and trans young people in Britain's schools in 2017. <https://www.stonewall.org.uk/school-report-2017>. Accessed 5 July 2023

Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review*, 36, 361–382. <https://doi.org/10.1080/02796015.2007.12087929>

Bradshaw, C. P., Waasdorp, T. E., O'Brennan, L. M., Gulemetova, M., & Suldo, S. (2013). Teachers' and education support professionals' perspectives on bullying and prevention: Findings from a National Education Association study. *School Psychology Review*, 42(3), 280–297. <https://doi.org/10.1080/02796015.2013.12087474>

Brinkman, B. (2015). Detection and prevention of identity-based bullying: Social justice perspectives. *Routledge Taylor & Francis Group*. <https://doi.org/10.4324/9781315867342>

Bucchianeri, M. M., Gower, A. L., McMorris, B. J., & Eisenberg, M. E. (2016). Youth experiences with multiple types of prejudice-based harassment. *Journal of Adolescence*, 51, 68–75. <https://doi.org/10.1016/j.adolescence.2016.05.012>

Burger, C., Strohmeier, D., & Kollerová, L. (2022). Teachers can make a difference in bullying: Effects of teacher interventions on students' adoption of bully, victim, bully-victim or defender roles across time. *Journal of Youth and Adolescence*, 51(12), 2312–2327. <https://doi.org/10.1007/s10964-022-01674-6>

Chen, L. M. (2023). Exploring the impact of multiple predictors on teachers' willingness to intervene in relational bullying: The moderating role of victim-blaming tendency. *Journal of School Violence*, 1–13. <https://doi.org/10.1080/15388220.2023.2299984>

Chivers, E. A., Yogeeswaran, K., Zubilevitch, E., & Sibley, C. G. (2022). Change in weight-based bias over a decade: A longitudinal nationally representative survey. *The Lancet Regional Health–Western Pacific*, 23. <https://doi.org/10.1016/j.lanwpc.2022.100450>

Collier, K. L., Bos, H. M., & Sandfort, T. G. (2015). Understanding teachers' responses to enactments of sexual and gender stigma at school. *Teaching and Teacher Education*, 48, 34–43. <https://doi.org/10.1016/j.tate.2015.02.002>

Cortes, K. I., & Kochenderfer-Ladd, B. (2014). To tell or not to tell: What influences children's decisions to report bullying to their teachers? *School Psychology Quarterly*, 29(3), 336–348. <https://doi.org/10.1037/spq0000078>

Craven, R. G., Morin, A. J., Tracey, D., Parker, P. D., & Zhong, H. F. (Eds.). (2015). *Inclusive education for students with intellectual disabilities*. IAP.

D'Urso, G., Fazzari, E., La Marca, L., & Simonelli, C. (2022). Teachers and inclusive practices against bullying: A qualitative study. *Journal of Child and Family Studies*. <https://doi.org/10.1007/s10826-022-02393-z>

Dawes, J. (2008). Do data characteristics change according to the number of scale points used? *International Journal of Market Research*, 50(1), 61–77. <https://doi.org/10.1177/147078530805000106>

Dawes, M., Starrett, A., & Irvin, M. J. (2022). Preservice teachers' bullying attitudes and intervention likelihood: Differences by form of bullying. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-022-00153-7>

Dawes, M., Gariton, C., Starrett, A., Irdam, G., & Irvin, M. J. (2023). Preservice teachers' knowledge and attitudes toward bullying: A systematic review. *Review of Educational Research*, 93(2), 195–235. <https://doi.org/10.3102/00346543221094081>

Dedousis-Wallace, A., Shute, R., Varlow, M., Murrihy, R., & Kidman, T. (2014). Predictors of teacher intervention in indirect bullying at school and outcome of a professional development presentation for teachers. *Educational Psychology*, 34(7), 862–875. <https://doi.org/10.1080/01443410.2013.785385>

Earnshaw, V. A., Reisner, S. L., Menino, D. D., Poteat, V. P., Bogart, L. M., Barnes, T. N., & Schuster, M. A. (2018). Stigma-based bullying interventions: A systematic review. *Developmental Review*, 48, 178–200. <https://doi.org/10.1016/j.dr.2018.02.001>

Edwards, K. D., & Soland, J. (2024). How scoring approaches impact estimates of growth in the presence of survey item ceiling effects. *Applied Psychological Measurement*, 48(3), 147–164. <https://doi.org/10.1177/01466216241238749>

Espelage, D. L., Polanin, J. R., & Low, S. K. (2014). Teacher and staff perceptions of school environment as predictors of student aggression, victimization, and willingness to intervene in bullying situations. *School Psychology Quarterly*, 29(3), 287–305. <https://doi.org/10.1037/spq0000072>

Espelage, D. L., Rose, C., Nickodem, K., Robinson, L. E., Sheikh, A. E., Hanebutt, R. A., ... & Poekert, P. (2023). Pilot evaluation of Disabilities Anti-Bullying (DIAL) training for primary special and general education teachers: impact on teacher self-efficacy attitudes toward bullying and student outcomes. *International Journal of Bullying Prevention*, 1–15. <https://doi.org/10.1007/s42380-023-00168-8>

Farmer, T. W., Hamm, J. V., Petrin, R. A., Robertson, D., Murray, R. A., Meece, J. L., & Brooks, D. S. (2010). Supporting early adolescent learning and social strengths: Promoting productive contexts for students at-risk for EBD during the transition to middle school. *Exceptionality*, 18(2), 94–106. <https://doi.org/10.1080/09362831003673192>

Fischer, S. M., John, N., & Bilz, L. (2021). Teachers' self-efficacy in preventing and intervening in school bullying: A systematic review. *International Journal of Bullying Prevention*, 3, 196–212. <https://doi.org/10.1007/s42380-020-00079-y>

Fish, J. N., Bishop, M. D., & Russell, S. T. (2023). Age trends in bias-based bullying and mental health by sexual orientation and gender identity. *Prevention Science*, 24(6), 1142–1151. <https://doi.org/10.1007/s11121-023-01530-4>

Gaffney, H., Farrington, D. P., & Ttofi, M. M. (2019). Examining the effectiveness of school-bullying intervention programs globally: A meta-analysis. *International Journal of Bullying Prevention*, 1, 14–31. <https://doi.org/10.1007/s42380-019-00074>

Gage, N. A., Prykanowski, D. A., & Larson, A. (2014). School climate and bullying victimization: A latent class growth model analysis. *School Psychology Quarterly*, 29(3), 256–271. <https://doi.org/10.1037/spq0000064>

Gage, N. A., Katsiyannis, A., Rose, C., & Adams, S. E. (2021). Disproportionate bullying victimization and perpetration by disability status, race, and gender: A national analysis. *Advances in Neuropsychological Disorders*, 5, 256–268. <https://doi.org/10.1007/s41252-021-00200-2>

Galán, C. A., Stokes, L. R., Szoko, N., Abebe, K. Z., & Culyba, A. J. (2021). Exploration of experiences and perpetration of identity-based bullying among adolescents by race/ethnicity and other marginalized identities. *JAMA network open*, 4(7). <https://doi.org/10.1001/jamanetworkopen.2021.16364>

Gale, A. (2020). Examining Black adolescents' perceptions of in-school racial discrimination: The role of teacher support on academic outcomes. *Children and Youth Services Review*, 116, 105173. <https://doi.org/10.1016/j.childyouth.2020.105173>

Garandeau, C. F., & Salmivalli, C. (2019). Can healthier contexts be harmful? A new perspective on the plight of victims of bullying. *Child Development Perspectives*, 13(3), 147–152. <https://doi.org/10.1111/cdep.12331>

Glew, G. M., Fan, M., Katon, W., Rivara, F. P., & Kernic, M. A. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics and Adolescent Medicine*, 159(11), 1026–1031. <https://doi.org/10.1001/archpedi.159.11.1026>

Golaszewski, N. M., Pasch, K. E., Fernandez, A., Poulos, N. S., Batanova, M., & Loukas, A. (2018). Perceived weight discrimination and school connectedness among youth: Does teacher support play a protective role? *Journal of School Health*, 88(10), 754–761. <https://doi.org/10.1111/josh.12682>

Hay, N., Davies, E., & Sapouna, M. (2024). Teacher responses to racially motivated bullying in Scotland. *Frontiers in Education*. <https://doi.org/10.3389/feduc.2024.1376017>

Jones, L. M., Mitchell, K. J., Turner, H. A., & Ybarra, M. L. (2018). Characteristics of bias based harassment incidents reported by a national sample of U.S. adolescents. *Journal of Adolescence*, 65(August 2017), 50–60. <https://doi.org/10.1016/j.adolescence.2018.02.013>

Jungert, T., Piroddi, B., & Thornberg, R. (2016). Early adolescents' motivations to defend victims in school bullying and their perceptions of student–teacher relationships: A self-determination theory approach. *Journal of Adolescence*, 53, 75–90. <https://doi.org/10.1016/j.adolescence.2016.09.001>

Khanolainen, D., Semenova, E., & Magnusson, P. (2021). 'Teachers see nothing': Exploring students' and teachers' perspectives on school bullying with a new arts-based methodology. *Pedagogy, Culture & Society*, 29(3), 469–491. <https://doi.org/10.1080/14681366.2020.1751249>

Kisfalusi, D., Pál, J., & Boda, Z. (2020). Bullying and victimization among majority and minority students: The role of peers' ethnic perceptions. *Social Networks*, 60, 48–60. <https://doi.org/10.1016/j.socnet.2018.08.006>

Kollerová, L., Soukup, P., Strohmeier, D., & Caravita, S. C. S. (2021). Teachers' active responses to bullying: Does the school collegial climate make a difference? *European Journal of Developmental Psychology*, 18(6), 912–927. <https://doi.org/10.1080/17405629.2020.1865145>

Kosciw, J. G., Greytak, E. A., Zongrone, M. P., Clark, C. M., & Truong, N. L. (2018). The 2017 national school climate survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools. In *Gay, Lesbian and Straight Education Network (GLSEN)*. <https://www.glsen.org/research/2017-national-school-climate-survey-0>. Accessed 7 Aug 2023

Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). Package: Tests in linear mixed effects models. *Journal of Statistical Software*, 82(13). 1–26. <https://doi.org/10.18637/jss.v082.i13>

Lanza, H. I., Echols, L., & Graham, S. (2018). A silver lining: The role of ethnic diversity on co-occurring trajectories of weight status and peer victimization across early adolescence. *Journal of Adolescent Health*, 63(5), 554–560.

De Luca, L., Nocentini, A., & Menesini, E. (2019). The teacher's role in preventing bullying. *Frontiers in Psychology*, 10, Article 1830. <https://doi.org/10.3389/fpsyg.2019.01830>

Maunder, R. E., Harrop, A., & Tattersall, A. J. (2010). Pupil and staff perceptions of bullying in secondary schools: Comparing behavioural definitions and their perceived seriousness. *Educational Research*, 52(3), 263–282. <https://doi.org/10.1080/00131881.2010.504062>

McGrath, L. R., Oey, L., McDonald, S., Berle, D., & Wootton, B. M. (2023). Prevalence of body dysmorphic disorder: A systematic review and meta-analysis. *Body Image*, 46, 202–211. <https://doi.org/10.1016/j.bodyim.2023.06.008>

Meadan, H., & Monda-Amaya, L. (2008). Collaboration to promote social competence for students with mild disabilities in the general classroom: A structure for providing social support. *Intervention in School and Clinic*, 43, 158–167.

Mishna, F., Sanders, J. E., McNeil, S., Fearing, G., & Kalenteridis, K. (2020). "If Somebody is Different": A critical analysis of parent, teacher and student perspectives on bullying and cyberbullying. *Children and Youth Services Review*, 118, 105366. <https://doi.org/10.1016/j.childyouth.2020.105366>

Moyano, N., & del Mar Sánchez-Fuentes, M. (2020). Homophobic bullying at schools: A systematic review of research, prevalence, school-related predictors and consequences. *Aggression and Violent Behavior*, 53, 101441. <https://doi.org/10.1016/j.avb.2020.101441>

Mulvey, K. L., Hoffman, A. J., Gönültaş, S., Hope, E. C., & Cooper, S. M. (2018). Understanding experiences with bullying and bias-based bullying: What matters and for whom? *Psychology of Violence*, 8(6), 702. <https://doi.org/10.1037/vio0000206>

Nappa, M. R., Palladino, B. E., Menesini, E., & Baiocco, R. (2018). Teachers' reaction in homophobic bullying incidents: The role of self-efficacy and homophobic attitudes. *Sexuality Research and Social Policy*, 15, 208–218. <https://doi.org/10.1007/s13178-017-0306-9>

O'Hara, R. E., Gibbons, F. X., Weng, C.-Y., Gerrard, M., & Simons, R. L. (2012). Perceived racial discrimination as a barrier to college enrollment for African Americans. *Personality and Social Psychology Bulletin*, 38(1), 77–89. <https://doi.org/10.1177/0146167211420732>

Oldenburg, B., van Duijn, M., Sentse, M., Huitsing, G., van der Ploeg, R., Salmivalli, C., & Veenstra, R. (2015). Teacher characteristics and peer victimization in primary schools: A classroom-level perspective. *Journal of Abnormal Child Psychology*, 43, 33–44. <https://doi.org/10.1007/s10802-013-9847-4>

Olivier, E., Azarnia, P., Morin, A. J. S., Houle, S. A., Dubé, C., Tracey, D., & Maïano, C. (2020). The moderating role of teacher-student relationships on the association between peer

victimization and depression in students with intellectual disabilities. *Research in Developmental Disabilities*, 98, 103572.

Pitsia, V., & Mazzone, A. (2021). The association of individual and contextual variables with bullying victimisation: A cross-national comparison between Ireland and Lithuania. *European Journal of Psychology of Education*, 36(4), 1095–1115. <https://doi.org/10.1007/s10212-020-00514-0>

Poteat, V. P., Scheer, J. R., DiGiovanni, C. D., & Mereish, E. H. (2014). Short-term prospective effects of homophobic victimization on the mental health of heterosexual adolescents. *Journal of Youth and Adolescence*, 43, 1240–1251. <https://doi.org/10.1007/s10964-013-0078-3>

Poteat, V. P., Watson, R. J., & Fish, J. N. (2021). Teacher support moderates associations among sexual orientation identity outness, victimization, and academic performance among LGBQ+ youth. *Journal of Youth and Adolescence*, 50(8), 1634–1648. <https://doi.org/10.1007/s10964-021-01455-7>

Price, M., Hill, N. E., Liang, B., & Perella, J. (2019). Teacher relationships and adolescents experiencing identity-based victimization: What matters for whom among stigmatized adolescents. *School Mental Health*, 11(4), 790–806. <https://doi.org/10.1007/s12310-019-09327-z>

Puhl, R. M., Latner, J. D., O'brien, K., Luedicke, J., Forhan, M., & Danielsdottir, S. (2016). Cross-national perspectives about weight-based bullying in youth: Nature, extent and remedies. *Pediatric obesity*, 11(4), 241–250. <https://doi.org/10.1111/ijpo.12051>

Purdy, N., & Mc Guckin, C. (2015). Disablist bullying in schools: Giving a voice to student teachers. *Journal of Research in Special Educational Needs*, 15(3), 202–210. <https://doi.org/10.1111/1471-3802.12110>

Quittkat, H. L., Hartmann, A. S., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body dissatisfaction, importance of appearance, and body appreciation in men and women over the lifespan. *Frontiers in Psychiatry*, 10, 484829. <https://doi.org/10.3389/fpsyg.2019.00864>

Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse and Neglect*, 34(4), 244–252. <https://doi.org/10.1016/j.chab.2009.07.009>

Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, 32(2), 114–130. <https://doi.org/10.1177/0741932510361247>

Ryan, A. M., Kuusinen, C. M., & Bedoya-Skoog, A. (2015). Managing peer relations: A dimension of teacher self-efficacy that varies between elementary and middle school teachers and is associated with observed classroom quality. *Contemporary Educational Psychology*, 41, 147–156. <https://doi.org/10.1016/j.cedpsych.2015.01.002>

Saarento, S., Karna, A., Hodges, E., & Salmivalli, C. (2013). Student-, classroom-, and school-level risk factors for victimization. *Journal of School Psychology*, 51, 421–434. <https://doi.org/10.1016/j.jsp.2013.02.002>

Sapouna, M., De Amicis, L., & Vezzali, L. (2023). Bullying victimization due to racial, ethnic, citizenship and/or religious status: A systematic review. *Adolescent Research Review*, 8(3), 261–296. <https://doi.org/10.1007/s40894-022-00197-2>

Schoeler, T., Duncan, L., Cecil, C. M., Ploubidis, G. B., & Pingault, J. B. (2018). Quasi-experimental evidence on short-and long-term consequences of bullying victimization: A meta-analysis. *Psychological Bulletin*, 144(12), 1229. <https://doi.org/10.1037/bul0000171>

Seelman, K. L., Forge, N., Walls, N. E., & Bridges, N. (2015). School engagement among LGBTQ high school students: The roles of safe adults and gay-straight alliance characteristics. *Children and Youth Services Review*, 57, 19–29. <https://doi.org/10.1016/j.childyouth.2015.07.021>

Shackleton, N. L., & Campbell, T. (2014). Are teachers' judgements of pupils' ability influenced by body shape? *International Journal of Obesity*, 38(4), 520–524. <https://doi.org/10.1038/ijo.2013.210>

Smith, P.K., Kwak, K., Toda, Y. (2016). *School Bullying in Different Cultures: Eastern and Western Perspectives*. Cambridge University Press.

Sokol, N., Bussey, K., & Rapee, R. M. (2016). The impact of victims' responses on teacher reactions to bullying. *Teaching and Teacher Education*, 55, 78–87. <https://doi.org/10.1016/j.tate.2015.11.002>

Starosta, L. (2022). *Understanding bullying among secondary students* (Doctoral dissertation, University of British Columbia). <https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0422513>. Accessed 10 July 2023

Strohmeier, D., & Gradinger, P. (2021). Teachers' knowledge and intervention strategies to handle hate-postings. *European Journal of Developmental Psychology*, 18(6), 865–879. <https://doi.org/10.1080/17405629.2021.1877130>

Strohmeier, D., Solomontos-Kountouri, O., Burger, C., & Doğan, A. (2021). Cross-National evaluation of the ViSC social competence programme: Effects on teachers. *European Journal of Developmental Psychology*, 18(6), 948–964. <https://doi.org/10.1080/17405629.2021.1880386>

Swearer, S. M., Espelage, D. L., Vaillancourt, T., & Hymel, S. (2010). What can be done about school bullying? Linking research to educational practice. *Educational Researcher*, 39, 38–47. <https://doi.org/10.3102/0013189X09357622>

Thornberg, R., & Delby, H. (2019). How do secondary school students explain bullying? *Educational Research*, 61(2), 142–160. <https://doi.org/10.1080/00131881.2019.1600376>

Thornberg, R., Tenenbaum, L., Varjas, K., Meyers, J., Jungert, T., & Vanegas, G. (2012). Bystander motivation in bullying incidents: To intervene or not to intervene? *The Western Journal of Emergency Medicine*, 13(3), 247–252. <https://doi.org/10.5811/westjem.2012.3.11792>

Tippett, N., Houlston, C., & Smith, P. K. (2010). Prevention and response to identity-based bullying among local authorities in England, Scotland and Wales. The Equality and Human Rights Commission, Research report 64.

Tolmatcheff, C., Veenstra, R., Roskam, I., & Galand, B. (2023). Examining the link between implementation fidelity, quality, and effectiveness of teacher-delivered anti-bullying interventions in a randomized controlled trial. *Prevention Science*. <https://doi.org/10.1007/s11121-023-01580-8>

Troop-Gordon, W., & Ladd, G. W. (2015). Teachers' victimization-related beliefs and strategies: Associations with students' aggressive behavior and peer victimization. *Journal of Abnormal Child Psychology*, 43, 45–60. <https://doi.org/10.1007/s10802-013-9840-y>

Tucker, J. S., Ewing, B. A., Espelage, D. L., Green, H. D., de la Haye, K., & Pollard, M. S. (2016). Longitudinal associations of homophobic name-calling victimization with psychological distress and alcohol use during adolescence. *Journal of Adolescent Health*, 59(1), 110–115. <https://doi.org/10.1016/j.jadohealth.2016.03.018>

United Nations. (1989). Convention on the rights of the child. *Treaty Series*, 1577, 3–178. https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-14%20AM/Ch_IV_11p.pdf. Accessed 11 Feb 2024

van Gils, F. E., Verschueren, K., Demol, K., ten Bokkel, I. M., & Colpin, H. (2023). Teachers' bullying-related cognitions as predictors of their responses to bullying among students. *British Journal of Educational Psychology*, 93(2), 513–530. <https://doi.org/10.1111/bjep.12574>

Veenstra, R., Lindenberg, S., Huitsing, G., Sainio, M., & Salmivalli, C. (2014). The role of teachers in bullying: The relation between antibullying attitudes, efficacy, and efforts to reduce bullying. *Journal of Educational Psychology, 106*(4), 1135–1143. <https://doi.org/10.1037/a0036110>

Vergara, G. A., Stewart, J. G., Cosby, E. A., Lincoln, S. H., & Auerbach, R. P. (2019). Non-suicidal self-injury and suicide in depressed adolescents: Impact of peer victimization and bullying. *Journal of Affective Disorders, 245*, 744–749. <https://doi.org/10.1016/j.jad.2018.11.084>

Vitoroulis, I., & Georgiades, K. (2017). Bullying among immigrant and non-immigrant early adolescents: School- and student-level effects. *Journal of Adolescence, 61*, 141–151. <https://doi.org/10.1016/j.adolescence.2017.10.008>

Walton, L. M. (2018). The effects of “Bias Based Bullying”(BBB) on health, education, and cognitive–social–emotional outcomes in children with minority backgrounds: Proposed comprehensive public health intervention solutions. *Journal of Immigrant and Minority Health, 20*(2), 492–496. <https://doi.org/10.1007/s10903-017-0547-y>

Watson, R. J., Fish, J. N., Poteat, V. P., Wheldon, C. W., Cunningham, C. A., Puhl, R. M., & Eaton, L. A. (2021). Teacher support, victimization, and alcohol use among sexual and gender minority youth: Considering ethno-racial identity. *Prevention Science, 22*, 590–601. <https://doi.org/10.1007/s11121-021-01216-9>

Wright, M. F. (2017). Cyber victimization and depression among adolescents with intellectual disabilities and developmental disorders: The moderation of perceived social support. *Journal of Mental Health Research in Intellectual Disabilities, 10*(2), 126–143. <https://doi.org/10.1080/19315864.2016.1271486>

Xu, M., Macrynikola, N., Waseem, M., & Miranda, R. (2020). Racial and ethnic differences in bullying: Review and implications for intervention. *Aggression and Violent Behavior, 50*, 101340. <https://doi.org/10.1016/j.avb.2019.101340>

Yoon, J. S. (2004). Predicting teacher interventions in bullying situations. *Education and Treatment of Children, 27*(1), 37–45.

Yoon, J., & Bauman, S. (2014). Teachers: A critical but overlooked component of bullying prevention and intervention. *Theory into Practice, 53*(4), 308–314. <https://doi.org/10.1080/00405841.2014.947226>

Yoon, J., Sulkowski, M. L., & Bauman, S. A. (2016). Teachers' responses to bullying incidents: Effects of teacher characteristics and contexts. *Journal of School Violence, 15*(1), 91–113. <https://doi.org/10.1080/15388220.2014.963592>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.