

Students Teachers' Knowledge and Attitudes Toward Bullying: A Systematic Literature Review

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ABSTRACT

The potential future responsibility of Student Teachers to address bullying among their students remains uncertain. This article undertook a comprehensive investigation to evaluate the readiness of Student Teachers in fulfilling this crucial role. A systematic review was conducted to assess the knowledge, attitudes, sense of responsibility, and confidence of Student Teachers in dealing with bullying. Our review included a total of 32 studies that met the criteria for inclusion. The findings indicate that only a small proportion of Student Teachers possess a comprehensive understanding of the fundamental characteristics of bullying. Regarding their attitudes towards bullying, the majority of Student Teachers express concern about this issue, although a certain number still perceive it as a normal aspect of the developmental process. Student Teachers tend to perceive certain forms of bullying as more severe than others, with physical bullying being regarded as the most serious form by many. While most Student Teachers acknowledge their responsibility in addressing bullying, a considerable portion lacks confidence in their ability to do so. The implications of these findings for future research on Student Teachers, teacher preparation programs, and endeavors aimed at diminishing bullying in educational institutions are discussed.

KEYWORDS

student teachers,
bullying,
knowledge,
attitudes

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INTRODUCTION

Bullying is a distinctive manifestation of aggressive behavior that is linked to negative short- and long-term outcomes such as fear and anxiety for the individuals involved, including the perpetrators, victims, and bystanders (Espelage, 2003; Hawker & Boulton, 2000; McDougall & Vaillancourt, 2015; Midgett & Doumas, 2019). Bullying is defined as intention to harm, repetitive acts, and power imbalance (H. J. Thomas et al., 2017). Considering the detrimental effects of bullying and the alarming statistic that approximately one in three young individuals report experiencing bullying in schools (UNESCO, 2019), it is not surprising that bullying has emerged as a global public health crisis (Beltran-Catalan et al., 2018; Espelage, 2003; Salimi et al., 2019). Consequently, there has been a surge in the development of comprehensive prevention and intervention programs in educational settings (Farrington & Ttofi, 2009), with educators playing a crucial role in these anti-bullying initiatives (Romero Saletti et al., 2021; Ttofi & Farrington, 2011). Teachers are often the focus of antibullying intervention initiatives (Yoon et al., 2011), and their active involvement is essential for the successful implementation and effectiveness of such programs (Aydin et al., 2022; Durlak & DuPre, 2008). However, research indicates that teachers continue to face challenges when it comes to

effectively intervening in instances of bullying (Ngo et al., 2018; Rigby, 2014). Additionally, findings from a recent meta-analysis, which revealed that intervention programs have, at most, moderate effects on teachers' attitudes and their willingness to intervene, suggest that further action is necessary (Delgado-Rodríguez & Sillero-Arenas, 2018; van Verseveld et al., 2019).

One valuable approach entails assessing probationary educators before they commence their teaching duties. The purpose is to identify deficiencies in their understanding of bullying and ascertain the elements of training that can enhance their capacity to address this issue in the future. Prior to engaging with students, probationary educators are more inclined to embrace positive changes through suitable instruction (Michael J. Boulton, 1997), which could potentially shape their attitudes towards bullying and their preparedness to intervene. Nevertheless, no systematic analysis has been undertaken on this particular group of student teachers. Only two systematic analyses have been conducted thus far: one focusing on self-efficacy in preventing and intervening with bullying in educational institutions (Fischer et al., 2021), and another concentrating on perceptions and responses to cyberbullying (Macaulay et al., 2018). The absence of comprehensive analyses restricts the field's ability to draw appropriate conclusions regarding the requisite training in teacher preparation programs (Kolb & Kolb, 2022).

Classroom teachers play a crucial role in reducing bullying behavior and supporting victims (Colpin et al., 2021; Demol et al., 2020; Wachs et al., 2019). They can create anti-bullying classroom norms and encourage students to uphold them (Veenstra et al., 2014), which helps prevent future bullying. Teachers' response to bullying can influence students' willingness to report bullying (Demol et al., 2020), behavior, and the occurrence of bullying over time (Veenstra et al., 2014). Teachers also play a role in victims' self-adjustment in bullying incidents. When teachers intervene in bullying, they can provide emotional support and comfort victims, leading to more seeking help from adults (Blomqvist et al., 2020). However, evidence from systematic reviews suggests that student teachers may lack confidence in addressing cyberbullying (Macaulay et al., 2018), which is not universally accepted. Addressing discrepancies in knowledge and skills during initial teacher training programs can help teachers better deal with bullying situations for future students (Romero Saletti et al., 2021).

Theoretical Foundation

This systematic review aimed to assess the readiness of pre-service teachers to intervene in bullying situations in schools. The Bystander Intervention Model (Latané & Darley, 1970) and Theory of Planned Behavior (Ajzen, 2012, 2020) were used to predict teachers' intervention behavior. The model suggests that teachers' intervention behavior occurs when they notice, perceive an emergency, accept responsibility, know how to help, and take action. Training to understand bullying's characteristics and its various forms could increase the likelihood of teachers recognizing and intervening in bullying situations (Goddiner & Gumpel, 2024).

The Theory of Planned Behavior (TPB) suggests that behavior is influenced by intentions, attitudes, subjective norms, and self-efficacy. It has been applied to understanding school staff's intervention in bullying situations. Teachers are expected to intervene if they have negative attitudes, feel expected, and feel confident in their ability. This review focuses on student teachers' attitudes and confidence.

The Theory of Planned Behavior (TPB) and the Bystander Intervention Model both have components that influence teachers' actions. Attitudes about bullying can influence the first two steps of the Bystander Intervention Model, as antibullying attitudes can make teachers more alert and take action (Choi & Lee, 2019). Attitudes also relate to the third step, accepting responsibility to act (Taddeo & Blanchard, 2022). Teachers with normative beliefs about bullying may be less likely to intervene, as they may not believe they can help (Jiang et al., 2022). Self-efficacy also plays a role in determining whether teachers will intervene in bullying situations (Tsai et al., 2021).

To understand student teachers' likelihood of intervening in bullying situations, factors such as knowledge of bullying characteristics, beliefs, attitudes, sense of responsibility, and confidence were assessed, aiming to predict their intervention behavior.

Research Questions

1. What do student teachers know about the definition of bullying in terms of the key characteristics that delineate bullying from general aggressive behavior?
2. What are student teachers' beliefs and attitudes about bullying?

3. What are student teachers' attitudes toward different forms of bullying?
4. What are student teachers see themselves as responsible for intervening in bullying?
5. What are student teachers' level of confidence in their ability to deal with bullying among their future students?

Current Systematic Review

In recent years, there has been a growing interest in understanding how well student teachers comprehend the issue of bullying. This has led to a need for a comprehensive examination of the available information. Systematic reviews are important in advancing scientific progress because they bring together research, provide an overview of the existing evidence, identify areas for future study, and offer practical implications for education and policy (Shea et al., 2017). In our review, we focused on five research questions that served as our guiding framework. Additionally, we examined two potential factors that might influence teachers' perception of bullying: the teacher's gender and their personal experiences with bullying. The social information processing model and social cognitive theory explain how these variables can shape a teacher's interpretation of bullying episodes (Camilo et al., 2020). Understanding whether there are differences in student teachers' readiness to address bullying based on these factors is crucial for developing strategies to modify their reactions. Previous studies on both students and full-time teachers have indicated that there are variations in the attitudes and tolerance of male and female teachers towards bullying (Green et al., 2008). Moreover, teachers who have experienced victimization themselves during their own schooling tend to have more negative attitudes towards bullying and a stronger commitment to addressing it. Based on this information, it is anticipated that student teachers who have been victims of bullying in the past will also hold more negative attitudes towards bullying.

In order to better understand the attitudes and reactions of student teachers towards bullying, this study examines five research questions and considers the influence of two moderators: teacher gender and personal experiences with bullying. These factors have the potential to shape how instructors perceive and respond to instances of bullying (Maghbouleh et al., 2022). Research has shown differences in attitudes and tolerance towards bullying between female and male instructors. Female educators are expected to have a greater inclination towards negative sentiments towards bullying. Additionally, student teachers who have experienced victimization in the past tend to have more pessimistic views and a stronger commitment to providing assistance (Mishna et al., 2005). Therefore, it is anticipated that student teachers who have been victims of bullying may hold more unfavorable attitudes towards bullying. Understanding these distinctions is crucial for implementing effective strategies to modify student teachers' reactions to bullying.

METHOD

Search Strategy

In order to conduct this review, we followed a meticulous process known as a systematic review. This involved searching through various databases to find relevant research papers. We carefully selected papers based on specific criteria, considering both what to include and what to exclude. Once the papers were chosen, we analyzed and coded the information they contained. Throughout this entire process, we adhered to the PRISMA guidelines for systematic reviews (Page et al., 2021), which are widely recognized and respected in the research community. These guidelines provide a framework for developing and reporting systematic reviews, ensuring that the process is transparent and rigorous. To help visualize our review process, we have included a PRISMA figure, which outlines the identification, screening, and inclusion steps we took (Fig. 1).

Literature Search

The Web of Science (WOS) and Scopus database are renowned for their vast and diverse collection of subjects, encompassing even education, making them the largest databases of its kind worldwide. In October 2023, an in-depth exploration of these databases took place, aiming to retrieve all relevant information pertaining to the keywords 'preservice teachers' OR 'student teachers' AND 'bullying.' To guarantee a complete overview, the search was also extended to encompass the Web of Science and Scopus databases. This rigorous methodology was employed to ascertain that the resulting articles are not only informative but also highly pertinent to the subject matter being investigated.

Study Selection

In our extensive search for relevant literature, we utilized the WOS database and the Scopus database. This led to a total of 52 articles being selected from the WOS database and 173 articles from the Scopus database. After removing duplicates, we had a pool of 177 articles. A thorough examination of their abstracts allowed us to eliminate 132 papers that were not pertinent to our topic, leaving us with 45 papers for full-text screening. These papers were carefully assessed to determine their relevancy. After this screening process, we were able to identify 32 articles that met all of our inclusion criteria and were therefore chosen for further analysis. For more information on the specific criteria used for inclusion and exclusion.

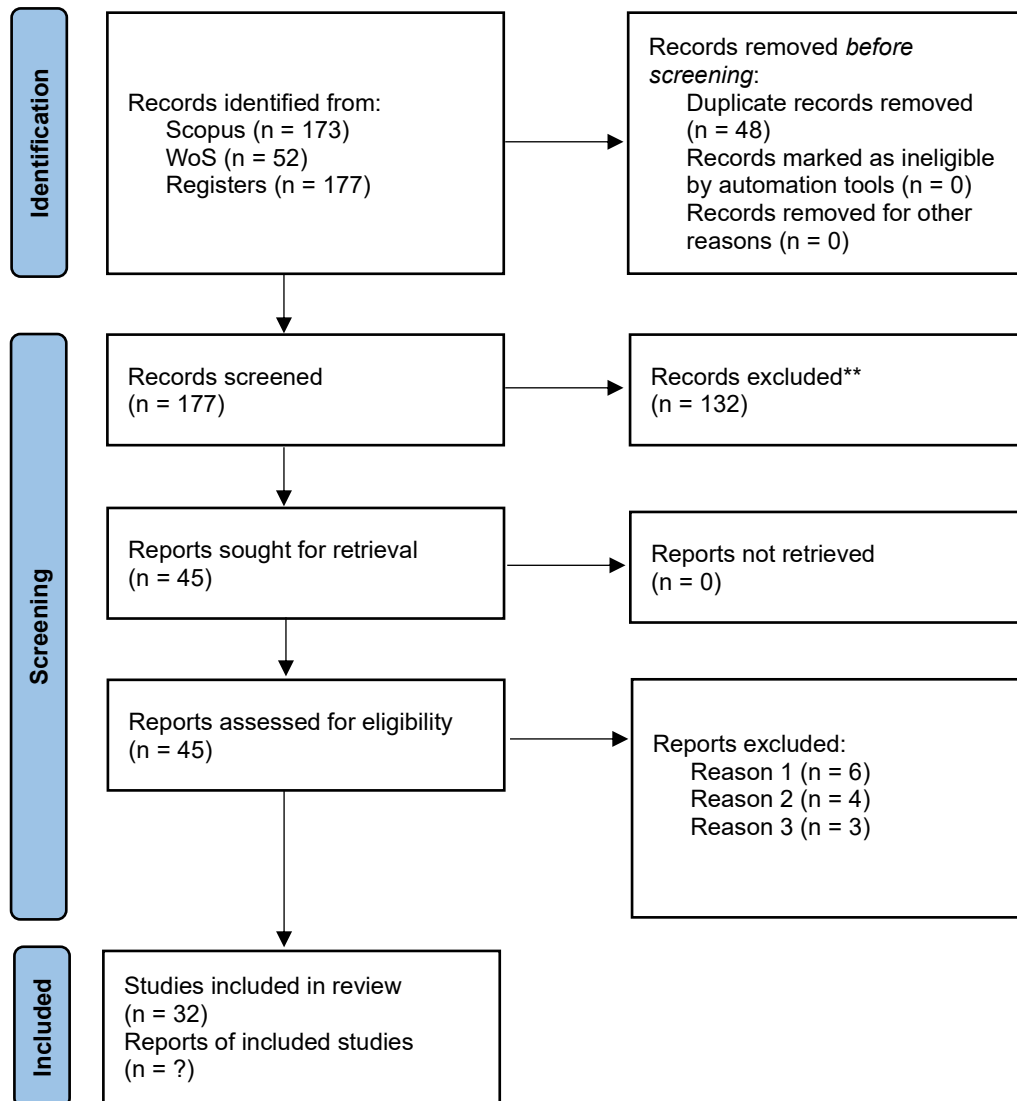


FIGURE 1. Flow diagram of the systematic review selection process studies included.

Inclusion and Exclusion Criteria

To be included in our review, articles had to meet the following criteria:

- published between 2005 and 2023;
- published in English;
- either peer-reviewed articles, conference papers, or review articles;
- studies involving student teachers who are not already teaching full-time;
- studies with measures that assessed bullying specifically;
- studies asking specifically about bullying between school-aged (PK–12) children;

- studies with results that addressed at least one of the five specific research questions.

The studies were excluded for the following reasons:

- involved in-service teachers already teaching full-time;
- measures did not include the term *bully or bullying*;
- did not involve bullying among school-aged children (e.g., work-place bullying);
- full texts were not available;
- the study did not address any of the five research questions;
- results specific to the subsample of student teachers could not be determined based on analyses performed.

Data Extraction

In the process of conducting the research, once the total number of studies was determined, two reviewers worked independently to gather data from all full-text articles. This involved identifying the publication type, such as peer-reviewed articles or dissertations, as well as extracting details about the study's location, sample size, gender distribution, and participant age. Additionally, information regarding the type of teacher preparation program, year of study, and the intended grade level to teach were gathered. Furthermore, details concerning whether student teachers had participated in teaching practicums or been exposed to bullying topics in their courses were recorded. For studies with an intervention design, specific information about the intervention length, activities, control group presence, randomization use, and the timeframe between pretest and posttest assessments was also collected. Descriptive and inferential statistics, as well as reported results from relevant analyses, were extracted from all studies. The inspection of interrater agreement indicated moderate to perfect agreement, and any discrepancies were resolved through discussion until mutual agreement was achieved.

Data Synthesis

In a study conducted by (J. Thomas & Harden, 2008), a narrative synthesis was employed to analyze the themes identified from the results, facilitating the identification of patterns across various methodologies to address research questions. The first step involved coding the results using both deductive and inductive codes, aligning with the researcher's predetermined questions and hypotheses, while also allowing for emergent themes to deepen the analysis. These codes were then consolidated into themes that encapsulated the patterns observed in the data relevant to their research inquiries. Finally, a narrative description was crafted for each theme, synthesizing the findings from all included studies to offer a comprehensive overview of student teachers' preparedness in addressing bullying.

RESULTS

Overview of Study Characteristics of Included Reports

The study analyzed bullying in student teachers across 14 countries, focusing on physical, verbal, relational, and cyberbullying. The majority of studies were published in peer-reviewed journals, with the majority having quantitative designs. Student teachers represented the majority of the sample, with 83.3% of the studies. The most common form of bullying was physical, followed by verbal, relational, and cyberbullying. The least common form was bias-based bullying. The majority of studies were from the USA, followed by Canada, and the UK. Student teachers were enrolled in undergraduate degree preparation programs, postgraduate degree programs, or alternative certificate/accreditation programs. They were trained to teach students at all levels, with most preparing for middle school, high school, or secondary level (43.8%). However, only 14 out of 32 studies explicitly stated what grade level participants intended to teach.

What Do Student Teachers Know About the Characteristics of Bullying?

In a comprehensive analysis of 32 studies, a substantial 21.9% focused on the crucial task of evaluating how student teachers conceptualized bullying. Remarkably, 7 of these studies delved into this topic, with 2 employing quantitative methodologies like surveys and 5 opting for qualitative approaches such as focus groups and interviews. Moreover, there were 2 intervention studies, one of which utilized a quantitative method, while the other employed a mixed-method approach. Surprisingly, none of the studies delved into the potential impact of participants' gender or prior experiences with victimization on their understanding

of bullying. This draws attention to the potential gaps in our understanding of the factors that shape individuals' perceptions of bullying.

TABLE 1
Summary of included articles that addressed research questions

Author	RQ1 <i>n</i> = 5	RQ2 <i>n</i> = 11	RQ3 <i>n</i> = 14	RQ4 <i>n</i> = 3	RQ5 <i>n</i> = 14
Amanaki & Galanaki (2013)		X			X
Banas (2014)					X
Bauman & Del Rio (2006): Study 1			X		
Bauman & Del Rio (2006): Study 2a			X		
Begotti et al. (2017)			X		
Begotti et al. (2018)			X		
Benitez et al. (2009)	X				X
Boulton et al. (2014)			X		
Cilliers & Chinyamurindi (2020)		X			
Craig et al. (2011)		X	X		X
Craig et al. (2000)			X		
Crooks et al. (2017)		X			
Fry et al. (2020)	X		X		X
Garner (2017)		X			X
Garner et al. (2013)			X		
Garner et al. (2017)		X			
Huang et al. (2018)			X		
Kahn et al. (2012)			X		
Kokko & Pörhölä (2009)					X
Kyriacou & Uhlemann (2011)				X	
Kyriacou et al. (2013)				X	
Lester et al. (2018)		X	X		X
Macaulay et al. (2020)	X				
Maynes & Mottonen (2017)					X
Nicolaides et al. (2002)		X			X
Psalti (2017)			X		
Purdy & Mc Guckin (2015)					X
Purdy & Mc Guckin. (2014)		X			X
Redmond et al. (2018)	X			X	
Rose et al. (2018)	X		X		
Ryan et al. (2011)		X			X
Yilmaz (2010)		X			X

Note. Articles that addressed research questions (RQs) are marked with an X.

Understanding and defining bullying poses a significant challenge for student teachers, as supported by various studies. Research conducted by Rose and colleagues in 2018 emphasizes the importance of three key characteristics of bullying: power imbalance, repetition, and intent to harm. However, it is evident from studies conducted by Fry et al. (2020), Macaulay et al. (2020), Redmond et al. (2018), and Small et al. (2013) that student teachers often fail to incorporate one or more of these critical characteristics in their definitions of bullying. For instance, power imbalance was frequently omitted, according to Fry et al. (2020) and Macaulay et al. (2020), while Macaulay et al. (2020) also revealed that repetition and intent to harm were commonly overlooked. Furthermore, Fry et al. (2020) and Macaulay et al. (2020) highlighted

inconsistencies among student teachers regarding the significance of repetition and intent to harm in defining bullying.

Two intervention studies on student teachers' knowledge of bullying yielded encouraging results, indicating that interventions can effectively enhance their understanding and awareness of this issue. The study conducted by Benitez Muñoz and colleagues (2009) revealed that participants who received the intervention displayed significant improvement in their comprehension of bullying compared to the control group. Notably, those in the intervention group exhibited a greater incorporation of key indicators, such as intentionality and repetition, in their definition of bullying.

What Are Student Teachers' Beliefs and Attitudes About Bullying?

The study delved into the beliefs and attitudes of student teachers regarding bullying, with a notable 35.7% of the studies employing quantitative methods. Specifically, six studies sought to uncover whether student teachers harbored normative beliefs about bullying, and findings from five out of the six indicated that student teachers do, to some extent, view bullying as a normal aspect of growing up (Pamela W. Garner, 2017; Pamela W. Garner et al., 2013). The research revealed that around one in three student teachers perceive bullying as an inherent part of adolescence, with a significant proportion agreeing that most young people will experience bullying at some point in their school years (Crooks et al., 2017). Furthermore, a substantial percentage of student teachers expressed the belief that youth would not learn how to independently resolve conflicts if adults intervened in every bullying incident (Crooks et al., 2017). Additionally, a smaller contingency of student teachers asserted that being bullied could equip victims with the ability to handle challenging situations in the future (Crooks et al., 2017).

Several studies have highlighted the prevalent concern among both primary and secondary teachers regarding the issue of bullying and cyberbullying (K. Craig et al., 2011). A consistent finding across these studies is the negative attitudes held by a majority of student teachers towards bullying, as well as their genuine concern for the well-being of their students in relation to these issues (Amanaki & Galanaki, 2014). In particular, when it comes to cyberbullying, the majority of student teachers are apprehensive about its impact, believing that children are indeed affected and acknowledging it as a significant problem within schools. This aligns with the broader concern for bullying, indicating a consistent pattern of worry and awareness among student teachers towards both traditional and cyberbullying (Ryan et al., 2011; Harun Yilmaz, 2010).

In a comprehensive review of 16 studies, researchers delved into the attitudes of teacher candidates toward bullying and cyberbullying. The findings revealed that gender plays a significant role in shaping these attitudes, with female student teachers demonstrating more concern for bullying and cyberbullying than their male counterparts. Specifically, female student teachers expressed a greater belief in the impact of cyberbullying (Amanaki & Galanaki, 2014; K. Craig et al., 2011; Harun Yilmaz, 2010) on children and identified it as a prevalent issue in schools. However, when it came to the willingness of teachers to support bullied students, gender differences were not observed. Moreover, the study also explored the influence of prior experience with victimization on teacher candidates' attitudes and concluded that such experiences did not lead to significant differences in their attitudes toward supporting bullied youth. These insights shed light on the complex interplay of gender, personal experiences, and attitudes in the context of addressing bullying in educational settings (Lester et al., 2018).

What Are Student Teachers' Attitudes Toward Different Forms of Bullying?

The perception of different forms of bullying among pre-service teachers has been the subject of numerous studies, with a total of 18 studies evaluating attitudes towards various types of bullying. These studies, primarily employing quantitative methods, have revealed that there are differences in the perceived seriousness or harm of different forms of bullying. Notably, 14 out of 18 studies indicated that student teachers held varying perceptions regarding the seriousness of bullying based on the specific form. The consistent finding across these studies was that physical bullying was generally regarded as more severe compared to other forms of bullying (Bauman & Del Rio, 2006; W. M. Craig et al., 2000; Pamela W. Garner et al., 2013; Huang et al., 2018; Small et al., 2013). This prevailing sentiment persisted even in comparisons with cyberbullying (M J Boulton et al., 2014; K. Craig et al., 2011), biased-based bullying targeting sexual minority youth (W. M. Craig et al., 2000), and combined social and verbal bullying (Kahn et al., 2012).

Studies exploring the perceived seriousness of different forms of bullying among student teachers have yielded mixed findings. While some studies indicated that verbal bullying was considered more serious than

physical bullying (Psalti, 2017), others did not report significant differences in perceived seriousness. Additionally, the inclusion of cyberbullying as a form of bullying further complicated the picture, with conflicting results emerging from different studies. The lack of a clear and consistent pattern across studies regarding the perceived seriousness of cyberbullying compared to other forms adds to the complexity of understanding the nuanced dynamics of bullying in educational settings (M J Boulton et al., 2014; K. Craig et al., 2011).

Four out of the 18 studies examined showed no significant variations in seriousness across various forms of bullying. In these studies, student teachers consistently rated similar levels of seriousness between overt (physical or verbal) and covert (social exclusion) bullying (Begotti et al., 2017, 2018), traditional and cyberbullying (Lester et al., 2018), as well as between physical, verbal, indirect, and sexual bullying (Rose et al., 2018). Furthermore, five studies investigated whether these perceptions were influenced by the gender of the student teachers, with most of them finding no significant gender moderation in ratings of seriousness or harm among different types of bullying (M J Boulton et al., 2014; W. M. Craig et al., 2000; Lester et al., 2018). However, one study did uncover a gender moderation effect, revealing that female student teachers perceived homophobic and cyberbullying to be more serious than their male counterparts (K. Craig et al., 2011).

Two studies delved into the potential influence of student teachers' previous experiences with victimization on their perceptions of the seriousness of different forms of bullying. In their research, Lester and colleagues (2018) found that student teachers' prior victim status did not significantly affect their perception of harm caused by traditional versus cyberbullying. This suggests that regardless of their own experiences as students, student teachers generally rated the seriousness of both forms of bullying similarly (Rose et al., 2018). This finding highlights the importance of understanding how individuals in educational roles perceive and respond to different forms of bullying, and the potential impact of their own past experiences on these perceptions.

What Is Student Teachers' Sense of Responsibility to Deal with Bullying?

The perception of student teachers regarding their responsibility to intervene in bullying was the focus of six studies, with a total of 14.3% of students taking part in the research. Half of the studies employed quantitative methods, while the remaining studies utilized qualitative approaches. Interestingly, none of the studies explored the potential impact of gender or prior victimization experiences on the perception of responsibility. Most of the research highlighted the recognition of responsibility among student teachers in addressing bullying within the school environment. Furthermore, the majority of student teachers expressed their agreement that managing bullying among their students would form a significant part of their future responsibilities (Curb, 2014). In addition, two studies emphasized the importance of teaching staff playing a significant role in addressing both bullies and victims (Kyriacou et al., 2013; Kyriacou & Uhlemann, 2011).

What Is Student Teachers' Level of Confidence to Address Bullying?

The research encompassed 20 studies, with nearly half of them employing qualitative methodologies, focused on exploring the confidence and self-efficacy of student teachers when it comes to addressing bullying. Across the studies, a prevalent theme emerged, indicating that student teachers generally lack a strong sense of assurance in their capacity to effectively navigate and intervene in instances of bullying. This sentiment was notably underscored in Garner's (2017) investigation, where findings revealed that student teachers expressed apprehension and reluctance in their ability to identify or mitigate bullying behavior. The collective body of evidence suggests that there is a noteworthy gap in the confidence levels of student teachers when it comes to dealing with bullying, signaling a critical area for further exploration and intervention.

Several studies have found that a minority of student teachers are not feeling confident in their ability to address and manage bullying in schools. Specifically, less than half of student teachers reported feeling confident in dealing with bullying, identifying or managing cyberbullying (Ryan et al., 2011; Harun Yilmaz, 2010), or addressing biased-based bullying against students with disabilities (Purdy & Guckin, 2015). This lack of confidence raises concerns about the preparedness of future educators in creating a safe and supportive learning environment. Additionally, some student teachers expressed a lack of confidence in knowing how to handle bullying situations (Purdy & Guckin, 2015), highlighting the need for comprehensive training and support in this area.

In examining the preparedness of student teachers to address bullying in educational settings, several studies have highlighted varying degrees of confidence among participants. Lester et al. (2018) noted that student teachers exhibited a certain level of confidence in their ability to address bullying, particularly in discussing, identifying, managing, and preventing such behavior. Similarly, Nicolaides et al. (2002) found that student teachers expressed some degree of confidence in their perceived skills to handle bullying situations. However, it is worth noting that a significant majority of the sample, comprising over 50% of the participants, reported feeling confident in their capacity to address bullying, as evidenced by the 65% confidence level recorded in the study by Purdy and Mc Guckin (2014).

The study focused on implementing interventions aimed at boosting the confidence of student teachers in confronting bullying incidents, and the findings indicated a positive impact. The interventions resulted in a noticeable increase in the self-efficacy and confidence of the student teachers when it came to dealing with bullying-related tasks, as observed from pretest to posttest. Notably, the study incorporated a control group, allowing for a comparison that demonstrated the effectiveness of the interventions. The analysis revealed that the intervention group exhibited a significant increase in their bullying self-efficacy, while the control group did not experience a similar change (Benitez Muñoz et al., 2009).

The impact of gender on the confidence levels of student teachers was the focus of eight studies, with the results yielding a mixed outcome. While three studies indicated that female student teachers reported lower levels of confidence, particularly in areas such as identifying bullying, managing bullying, and taking action against bullying, the remaining studies did not show a consistent trend. This disparity in findings suggests that the relationship between gender and confidence among student teachers is complex and multifaceted, warranting further investigation. Amanaki and Galanaki (2014) and Yilmaz (2010) were among the researchers who contributed to this body of knowledge.

Discussion

Student Teachers' Knowledge of the Characteristics of Bullying

Student teachers often struggle to articulate a clear understanding of bullying, overlooking crucial components such as the intention to harm, repetitive behavior, and power imbalances (Yamawaki et al., 2022). This failure to grasp the fundamental aspects of bullying points to a deficiency in foundational knowledge. It is important to approach these findings with caution, acknowledging the potential for selection bias in the studies (Lu et al., 2022). Despite this, the methods employed to gather student teachers' definitions of bullying appear to have minimized the risk of information bias, thus providing a more reliable insight into their perspectives on this pervasive issue.

The research findings indicate that defining bullying and recognizing its characteristics can be challenging for student teachers as well as some in-service teachers. This difficulty highlights the potential need for additional training to ensure that educators can effectively identify and respond to instances of bullying among their students. By providing targeted support, such as specific training on the defining features of bullying, educational institutions can better equip their teachers to address and prevent this harmful behavior in the classroom.

The discussion surrounding the essential attributes of bullying, particularly the need for repetition and intent to harm, has become a topic of interest in recent studies. Notably, in-service teachers have even disregarded repetition when defining bullying, highlighting the complexity of the issue (Mishna et al., 2005). The ongoing debate regarding the necessity of repetition and how it should be defined and recognized has been fueled by the growing prevalence of cyberbullying (Smith et al., 2012). This has led to a deeper examination of the nature of bullying and the potential impact of these specific characteristics on its prevalence and effects.

Student teachers are essential in creating a safe and supportive environment for their students, and understanding the characteristics of bullying is crucial in effectively addressing and intervening in bullying situations. Research has shown that young people who are victims of bullying are at a higher risk for negative consequences, emphasizing the need for teachers to be knowledgeable and proactive in their response (Kowalski et al., 2014; Ybarra et al., 2014). It is important for educators to not only address clear bullying behaviors but also to respond to the plight of all victims, regardless of the specific characteristics of their victimization experiences. This holistic approach can help create a more inclusive and supportive school environment for all students.

Student Teachers' Beliefs and Attitudes About Bullying

The study on student teachers' attitudes toward bullying revealed that while some student teachers hold normative beliefs about bullying, it may not be representative of the entire population of student teachers (Espelage et al., 2023). Various studies have reported conflicting findings, with some indicating that only one in three teachers agree with these beliefs, while others suggested that only a few hold such views. It is important to note, however, that nearly all the studies identified in the research exhibited a high risk for selection bias and information bias. This underscores the need for caution when interpreting student teachers' attitudes toward bullying, as these biases could potentially skew the findings.

The influence of normative beliefs on teachers' responses to bullying is a paramount concern in the field of education. Research has indicated that these beliefs may result in teachers advising victims to handle the situation independently, contradicting established best practices for addressing bullying (Ttofi & Farrington, 2011). To combat this trend, there is a clear need for further efforts to challenge and change these normative beliefs among student teachers. It is crucial for them to grasp the importance of actively supporting victims and addressing bullying incidents directly within their classrooms. This shift in perspective is essential in promoting a safer and more inclusive learning environment for all students.

A recent study by Cilliers and Chinyamurindi (2020) revealed that a majority of student teachers are deeply concerned about the prevalence of bullying, particularly cyberbullying, in schools. The study found that over 90% of student teachers acknowledged the significance of cyberbullying as an issue within the educational environment. This widespread concern highlights the growing recognition of the detrimental impact of bullying on students, and emphasizes the need for effective strategies to address and prevent such behavior. The findings underscore the importance of creating a safe and inclusive school environment where all students feel valued and supported.

The issue of bullying presents itself with two contrasting perspectives: one suggesting that it is a normative behavior, and the other highlighting its concerning nature. Interestingly, these perspectives are not mutually exclusive. Research indicates that a significant percentage of student teachers hold a normative belief about bullying, with about one in four endorsing this view. However, a striking 90% of the same sample emphasized the seriousness and importance of addressing bullying within the school environment (Crooks et al., 2017). This dichotomy underscores the complexity of the issue and the need for a multifaceted approach to addressing bullying in educational settings.

It is important for student teachers to recognize that the coping skills they may think victims acquire from being bullied (Compas et al., 2001) are unlikely to manifest within the context of a victimization experience (Kanetsuna & Smith, 2002). Research has indicated that fostering antibullying attitudes among teachers can be highly beneficial in reducing bullying behavior and encouraging victims to seek help. When students perceive that their teachers unequivocally oppose bullying, instances of bullying decrease, and victims are more inclined to reach out to adults for support (Blomqvist et al., 2020; Saarento et al., 2015). Therefore, advocating for antibullying attitudes within the educational setting can have a significant impact on creating a safer and more supportive environment for students.

Student Teachers' Attitudes Towards Different Forms of Bullying

The perception of seriousness in bullying among student teachers was found to differ based on the type of bullying in a recent study. Physical forms of bullying were generally considered more serious than verbal and relational forms, and verbal bullying was viewed as more serious after physical bullying. However, the study also revealed that there were no clear patterns for other forms of bullying, such as cyberbullying. While some studies indicated no differences in perceived seriousness based on the form of bullying, this was more of an exception than a rule (Zhou et al., 2022)(Begotti et al., 2017, 2018; Lester et al., 2018; Rose et al., 2018).

The perception of the seriousness of different forms of bullying plays a pivotal role in shaping intervention responses. When a form of bullying is deemed as serious, it signifies that the resulting harm is significant and necessitates immediate attention. However, it becomes problematic when educators undervalue the seriousness of certain types of bullying, as this may hinder their ability to effectively respond to such incidents. For instance, physical bullying is often viewed as more serious than relational bullying, potentially due to the misconception that relational bullying is less harmful to its victims (Bauman, 2008). Nevertheless, research indicates that social exclusion and any form of bullying that jeopardizes a victim's acceptance

among peers can inflict considerable harm. This underscores the importance of recognizing and addressing the impact of all forms of bullying, as they all have the potential to cause significant harm to their victims (Adler & Adler, 2000).

The discovery that student teachers diminish the severity of certain types of bullying implies a potential lack of understanding about child development or an inability to integrate their knowledge to properly assess the harmful impact of different bullying behaviors (Hadar et al., 2020). It highlights the crucial need to provide comprehensive training for future educators in the areas of child development and bullying. By equipping them with the necessary knowledge and tools, we can ensure that they recognize all forms of bullying as equally serious and are better prepared to intervene when necessary. This underscores the importance of emphasizing the role of education in addressing and preventing bullying in schools.

Student Teachers' Sense of Responsible for Intervening in Bullying

Studies suggest that most student teachers recognize some responsibility to address bullying incidents in their classrooms. However, concerns over confounding, selection, and information bias exist in these studies. Teachers are responsible for promoting the social development of their students (Farmer et al., 2011) and should monitor and manage bullying incidents to help students develop positive peer roles, reputations, and relationships. Teachers can create opportunities for students with few friends to interact with prosocial peers to foster positive peer relationships.

Educators are faced with the challenging task of navigating the social dynamics and peer experiences of their students (Gest et al., 2014), yet some may feel ill-equipped to address these issues, choosing instead to concentrate solely on the academic aspects of their role. However, research suggests that dismissing the impact of peer victimization on students' well-being can have far-reaching consequences, with links to academic struggles (Gardella et al., 2017) and detrimental effects on mental health. Therefore, taking a holistic approach to education that encompasses both academic instruction and the social-emotional well-being of students is crucial for fostering a positive learning environment and promoting well-adjusted citizenship (Schonert-Reichl & Hymel, 2007).

In the realm of addressing bullying in schools, there exists a notable ambiguity regarding who holds the primary responsibility for addressing this pressing issue. This uncertainty has led to a lack of clarity in defining roles and responsibilities within the school environment. It is imperative to have clear and precise policies that clearly outline the party responsible for addressing bullying, as well as the guidelines for when teachers should involve other school personnel. Fry et al. (2020) emphasize the importance of ensuring that all teachers are well-versed in these policies. While it is acknowledged that other stakeholders also play a role in addressing bullying, Bellmore (2016) highlights that teachers are the initial line of defense within the school system.

Student Teachers' Confidence to Address Bullying

The majority of student teachers struggle with confidence when it comes to addressing bullying, and this lack of assurance varies widely across different measures of confidence. The reliability and validity of these measures have also been called into question, casting doubt on the accuracy of the findings (Henseler et al., 2015). Studies on confidence in dealing with bullying are susceptible to information bias, which undermines the certainty of the results. Some studies delve into various aspects of addressing bullying, including identification, management, and working with both victims and bullies. Student teachers have expressed greater confidence in managing general bullying situations compared to instances of bias-based bullying, particularly those involving students with disabilities (Purdy & Guckin, 2015). Moving forward, there is a need for more detailed research to pinpoint the specific areas in which student teachers require support to enhance their sense of efficacy in addressing bullying.

The issue of confidence in addressing bullying is not limited to student teachers, as some in-service teachers also express a lack of confidence in their ability to handle bullying situations (Michael J. Boulton, 1997; Gedik Bal, 2023; Macaulay et al., 2018). Researchers have highlighted the importance of examining whether the confidence gained during teacher preparation programs can be maintained once teachers are in-service, and to what extent this confidence translates into effective competence when dealing with bullying incidents. Additionally, student teachers have voiced concerns about the adequacy of their current preparation programs in equipping them to address bullying (Beran, 2005). Therefore, it is crucial to provide comprehensive training that not only prepares teachers to deliver lessons, but also empowers them to foster students' overall well-being across various domains.

CONCLUSION

The issue of bullying in schools is a significant concern, and it is essential for future educators to be prepared to intervene and manage these incidents effectively. Research indicates that student teachers often lack the necessary knowledge and confidence to address bullying, some even considering it a normal part of growing up. This lack of preparedness can have serious consequences, as it may lead to inaction or inappropriate responses to bullying incidents. Inaction from teachers can send the message that they tolerate bullying, undermining efforts to create a safe and respectful environment for all students. The potential impact of inadequate intervention is far-reaching, affecting not only the victims but also bystanders and the overall classroom dynamic. To address this, it is crucial to provide comprehensive training for student teachers so that they can effectively contribute to antibullying efforts once they assume teaching roles. It is our responsibility to ensure that student teachers are equipped to create a supportive and secure environment for their future students.

REFERENCES

- Adler, P., & Adler, P. (2000). *Peer power: Preadolescent culture and identity*.
- Ajzen, I. (2012). The theory of planned behavior. In P. M. Van Lange, A. W. Kruglanski, & E. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 438–459). SAGE Publications Inc.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>
- Amanaki, E., & Galanaki, E. P. (2014). Prospective teachers' knowledge, attitudes and beliefs about school bullying. *Monduzzi Editore*, 1.
- Aydin, G., Margerison, C., Worsley, A., & Booth, A. (2022). Australian Teachers' Perceptions and Experiences of Food and Nutrition Education in Primary Schools: A Qualitative Study. *Australian Journal of Teacher Education*, 47(2), 61–75. <https://doi.org/10.14221/ajte.2022v47n2.5>
- Bauman, S. (2008). The Role of Elementary School Counselors in Reducing School Bullying. *The Elementary School Journal*, 108(5), 362–375. <https://doi.org/10.1086/589467>
- 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>
- Begotti, T., Tirassa, M., & Acquadro Maran, D. (2017). School bullying episodes: attitudes and intervention in pre-service and in-service Italian teachers. *Research Papers in Education*, 32(2), 170–182. <https://doi.org/10.1080/02671522.2016.1158857>
- Begotti, T., Tirassa, M., & Acquadro Maran, D. (2018). Pre-Service Teachers' Intervention in School Bullying Episodes with Special Education Needs Students: A Research in Italian and Greek Samples. *International Journal of Environmental Research and Public Health*, 15(9), 1908. <https://doi.org/10.3390/ijerph15091908>
- Bellmore, A. (2016). Whose Responsibility Is It to Stop Bullying? *Policy Insights from the Behavioral and Brain Sciences*, 3(1), 92–97. <https://doi.org/10.1177/2372732215624218>
- Beltran-Catalan, M., Zych, I., Ortega-Ruiz, R., & Llorent, V. J. (2018). Victimisation through bullying and cyberbullying: Emotional intelligence, severity of victimisation and technology use in different types of victims. *PSICOTHEMA*, 30(2), 183–188. <https://doi.org/10.7334/psicothema2017.313>
- Benitez Muñoz, J. L., García Berbén, A. B., & Fernández-Cabezas, M. (2009). *The impact of a course on bullying within the pre-service teacher training curriculum*.
- Beran, T. (2005). A new perspective on managing school bullying: Pre-service teachers' attitudes. *Journal of Social Sciences*, 8(3), 43–49.

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- Blomqvist, K., Saarento-Zaprudin, S., & Salmivalli, C. (2020). Telling adults about one's plight as a victim of bullying: Student- and context-related factors predicting disclosure. *Scandinavian Journal of Psychology, 61*(1), 151–159. <https://doi.org/10.1111/sjop.12521>
- 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> WE - Social Science Citation Index (SSCI)
- Boulton, Michael J. (1997). Teachers' views on bullying: definitions, attitudes and ability to cope. *British Journal of Educational Psychology, 67*(2), 223–233. <https://doi.org/10.1111/j.2044-8279.1997.tb01239.x>
- Camilo, C., Garrido, M. V., & Calheiros, M. M. (2020). The social information processing model in child physical abuse and neglect: A meta-analytic review. *Child Abuse & Neglect, 108*, 104666.
- Choi, E., & Lee, S. (2019). The Relations among Perceived Parental Support for Violence, Teacher Intervention, Classroom Norms, and Bullying Perpetration among Elementary School Students by Gender, focusing on the Mediating Role of Antibullying Attitudes. *Korean Journal of Youth Studies, 26*(3), 117–141. <https://doi.org/10.21509/KJYS.2019.03.26.3.117>
- Cilliers, L., & Chinyamurindi, W. (2020). Perceptions of cyber bullying in primary and secondary schools among student teachers in the Eastern Cape Province of South Africa. *THE ELECTRONIC JOURNAL OF INFORMATION SYSTEMS IN DEVELOPING COUNTRIES, 86*(4). <https://doi.org/10.1002/isd2.12131>
- Colpin, H., Bauman, S., & Menesini, E. (2021). Teachers' responses to bullying: Unravelling their consequences and antecedents. Introduction to the special issue. *European Journal of Developmental Psychology, 18*(6), 781–797.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*(1), 87–127. <https://doi.org/10.1037/0033-2909.127.1.87>
- Craig, K., Bell, D., & Leschied, A. (2011). Pre-service teachers' knowledge and attitudes regarding school-based bullying. *Canadian Journal of Education/Revue Canadienne de l'éducation, 34*(2), 21–33.
- Craig, W. M., Henderson, K., & Murphy, J. G. (2000). Prospective Teachers' Attitudes toward Bullying and Victimization. *School Psychology International, 21*(1), 5–21. <https://doi.org/10.1177/0143034300211001>
- Crooks, C. V., Jaffe, P. G., & Rodriguez, A. (2017). Increasing knowledge and self-efficacy through a pre-service course on promoting positive school climate: the crucial role of reducing moral disengagement. *Advances in School Mental Health Promotion, 10*(1), 49–64. <https://doi.org/10.1080/1754730X.2016.1249383>
- Curb, L. A. (2014). *Perceptions of bullying: A comparison of pre-service and in-service teachers*. Oklahoma State University.
- Delgado-Rodríguez, M., & Sillero-Arenas, M. (2018). Systematic review and meta-analysis. *Medicina Intensiva, 42*(7), 444–453. <https://doi.org/10.1016/j.medin.2017.10.003>
- Demol, K., Verschueren, K., Salmivalli, C., & Colpin, H. (2020). Perceived Teacher Responses to Bullying Influence Students' Social Cognitions. *Frontiers in Psychology, 11*. <https://doi.org/10.3389/fpsyg.2020.592582>
- Durlak, J. A., & DuPre, E. P. (2008). Implementation Matters: A Review of Research on the Influence of Implementation on Program Outcomes and the Factors Affecting Implementation. *American Journal of Community Psychology, 41*(3–4), 327–350. <https://doi.org/10.1007/s10464-008-9165-0>
- Espelage, D. L. (2003). Research on School Bullying and Victimization: What Have We Learned and Where Do We Go from Here? [Mini-Series]. *Social Sciences, 5*(3).
- Espelage, D. L., Rose, C., Nickodem, K., Robinson, L. E., Sheikh, A. El, Hanebutt, R. A., Forber-Pratt, A., Graves, K., Valido, A., & Ingram, K. (2023). Pilot Evaluation of Disability Anti-BuLlying (DIAL) Training for Elementary Special and General Education Teachers: Impact on Teacher Self-Efficacy Attitudes Toward Bullying and Student Outcomes. *International Journal of Bullying Prevention, 1–15*.

- Farmer, T. W., McAuliffe Lines, M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology, 32*(5), 247–256. <https://doi.org/10.1016/j.appdev.2011.04.006>
- Farrington, D. P., & Ttofi, M. M. (2009). School-Based Programs to Reduce Bullying and Victimization. *Campbell Systematic Reviews, 5*(1). <https://doi.org/10.4073/csr.2009.6>
- 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*(3), 196–212. <https://doi.org/10.1007/s42380-020-00079-y>
- Fry, D., Mackay, K., Childers-Buschle, K., Wazny, K., & Bahou, L. (2020). "They are teaching us to deliver lessons and that is not all that teaching is ...": Exploring teacher trainees' language for peer victimisation in schools. *Teaching and Teacher Education, 89*, 102988. <https://doi.org/10.1016/j.tate.2019.102988>
- Gardella, J. H., Fisher, B. W., & Teurbe-Tolon, A. R. (2017). A Systematic Review and Meta-Analysis of Cyber-Victimization and Educational Outcomes for Adolescents. *Review of Educational Research, 87*(2), 283–308. <https://doi.org/10.3102/0034654316689136>
- Garner, P. W. (2017). The Role of Teachers' Social-Emotional Competence in Their Beliefs About Peer Victimization. *JOURNAL OF APPLIED SCHOOL PSYCHOLOGY, 33*(4), 288–308. <https://doi.org/10.1080/15377903.2017.1292976> WE - Emerging Sources Citation Index (ESCI)
- Garner, Pamela W. (2017). The Role of Teachers' Social-Emotional Competence in Their Beliefs About Peer Victimization. *Journal of Applied School Psychology, 33*(4), 288–308. <https://doi.org/10.1080/15377903.2017.1292976>
- Garner, Pamela W., Moses, L. K., & Waajid, B. (2013). Prospective Teachers' Awareness and Expression of Emotions: Associations with Proposed Strategies for Behavioral Management in the Classroom. *Psychology in the Schools, 50*(5), 471–488. <https://doi.org/10.1002/pits.21688>
- Gedik Bal, N. (2023). In-Service Teachers' Intercultural Sensitivity. *TESL-EJ, 27*(2), n2.
- Gest, S. D., Madill, R. A., Zadzora, K. M., Miller, A. M., & Rodkin, P. C. (2014). Teacher Management of Elementary Classroom Social Dynamics. *Journal of Emotional and Behavioral Disorders, 22*(2), 107–118. <https://doi.org/10.1177/1063426613512677>
- Godtiner, V., & Gumpel, T. P. (2024). Bystander intervention style and motivational factors influencing behavior in bullying situations. *Psychology in the Schools, 61*(2), 631–646. <https://doi.org/10.1002/pits.23075>
- Green, S. P., Shriberg, D., & Farber, S. L. (2008). What's Gender Got To Do With It? Teachers' Perceptions Of Situation Severity And Requests For Assistance. *Journal of Educational and Psychological Consultation, 18*(4), 346–373. <https://doi.org/10.1080/10474410802463288>
- Hadar, L. L., Ergas, O., Alpert, B., & Ariav, T. (2020). Rethinking teacher education in a VUCA world: student teachers' social-emotional competencies during the Covid-19 crisis. *European Journal of Teacher Education, 43*(4), 573–586. <https://doi.org/10.1080/02619768.2020.1807513>
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty Years' Research on Peer Victimization and Psychosocial Maladjustment: A Meta-analytic Review of Cross-sectional Studies. *Journal of Child Psychology and Psychiatry, 41*(4), 441–455. <https://doi.org/10.1111/1469-7610.00629>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Huang, H., Liu, Y., & Chen, Y. (2018). Preservice Preschool Teachers' Responses to Bullying Scenarios: The Roles of Years of Study and Empathy. *Frontiers in Psychology, 9*. <https://doi.org/10.3389/fpsyg.2018.00175>
- Jiang, H., Liang, H., Zhou, H., & Zhang, B. (2022). Relationships Among Normative Beliefs About Aggression, Moral Disengagement, Self-Control and Bullying in Adolescents: A Moderated Mediation Model. *Psychology Research and Behavior Management, Volume 15*, 183–192. <https://doi.org/10.2147/PRBM.S346658>

- Kahn, J. H., Jones, J. L., & Wieland, A. L. (2012). Preservice teachers' coping styles and their responses to bullying. *Psychology in the Schools, 49*(8), 784–793. <https://doi.org/10.1002/pits.21632>
- Kanetsuna, T., & Smith, P. K. (2002). Pupil Insights into Bullying, and Coping with Bullying. *Journal of School Violence, 1*(3), 5–29. https://doi.org/10.1300/J202v01n03_02
- Kolb, A. Y., & Kolb, D. A. (2022). Experiential Learning Theory as a Guide for Experiential Educators in Higher Education. *Experiential Learning and Teaching in Higher Education, 1*(1), 38. <https://doi.org/10.46787/elthe.v1i1.3362>
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: a critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin, 140*(4), 1073.
- Kyriacou, C., Avramidis, E., Stephens, P., & Werler, T. (2013). Social pedagogy in schools: student teacher attitudes in England and Norway. *International Journal of Inclusive Education, 17*(2), 192–204. <https://doi.org/10.1080/13603116.2011.629689>
- Kyriacou, C., & Uhlemann, A. (2011). Swiss student-teachers' views of social pedagogy. *Pastoral Care in Education, 29*(1), 25–33. <https://doi.org/10.1080/02643944.2010.548394>
- Latané, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?*. Appleton-Century-Crofts.
- Lester, L., Waters, S., Pearce, N., Spears, B., & Falconer, S. (2018). Pre-service teachers: Knowledge, attitudes and their perceived skills in addressing student bullying. *Australian Journal of Teacher Education (Online), 43*(8), 30–45.
- Lu, H., Cole, S. R., Howe, C. J., & Westreich, D. (2022). Toward a clearer definition of selection bias when estimating causal effects. *Epidemiology, 33*(5), 699–706.
- Macaulay, P. J. R., Betts, L. R., Stiller, J., & Kellezi, B. (2018). Perceptions and responses towards cyberbullying: A systematic review of teachers in the education system. *Aggression and Violent Behavior, 43*, 1–12.
- Macaulay, P. J. R., Betts, L. R., Stiller, J., & Kellezi, B. (2020). "It's so fluid, it's developing all the time": pre-service teachers' perceptions and understanding of cyberbullying in the school environment. *Educational Studies, 46*(5), 590–606. <https://doi.org/10.1080/03055698.2019.1620693>
- Maghbouleh, N., Schachter, A., & Flores, R. D. (2022). Middle Eastern and North African Americans may not be perceived, nor perceive themselves, to be White. *Proceedings of the National Academy of Sciences, 119*(7), e2117940119.
- McDougall, P., & Vaillancourt, T. (2015). Long-term adult outcomes of peer victimization in childhood and adolescence: Pathways to adjustment and maladjustment. *American Psychologist, 70*(4), 300–310. <https://doi.org/10.1037/a0039174>
- Midgett, A., & Doumas, D. M. (2019). Witnessing Bullying at School: The Association Between Being a Bystander and Anxiety and Depressive Symptoms. *School Mental Health, 11*(3), 454–463. <https://doi.org/10.1007/s12310-019-09312-6>
- Mishna, F., Scarcello, I., Pepler, D., & Wiener, J. (2005). Teachers' Understanding of Bullying. *Canadian Journal of Education / Revue Canadienne de l'éducation, 28*(4), 718. <https://doi.org/10.2307/4126452>
- Ngo, T. D., Kashani, A., Imbalzano, G., Nguyen, K. T. Q., & Hui, D. (2018). Additive manufacturing (3D printing): A review of materials, methods, applications and challenges. *Composites Part B: Engineering, 143*, 172–196. <https://doi.org/10.1016/j.compositesb.2018.02.012>
- Nicolaidis, S., Toda, Y., & Smith, P. K. (2002). Knowledge and attitudes about school bullying in trainee teachers. *British Journal of Educational Psychology, 72*(1), 105–118. <https://doi.org/10.1348/000709902158793>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ, n71*. <https://doi.org/10.1136/bmj.n71>

- Psalti, A. (2017). Greek In-Service and Preservice Teachers' Views About Bullying in Early Childhood Settings. *Journal of School Violence, 16*(4), 386–398. <https://doi.org/10.1080/15388220.2016.1159573>
- Purdy, N., & Guckin, C. M. (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>
- Purdy, N., & Mc Guckin, C. (2014). Disablist bullying in Northern Ireland and the Republic of Ireland: an investigation of student teachers' knowledge, experience and confidence. *EUROPEAN JOURNAL OF SPECIAL NEEDS EDUCATION, 29*(4), 446–456. <https://doi.org/10.1080/08856257.2014.952914> WE - Social Science Citation Index (SSCI)
- Redmond, P., Lock, J. V., & Smart, V. (2018). Pre-service teachers' perspectives of cyberbullying. *Computers & Education, 119*, 1–13. <https://doi.org/10.1016/j.compedu.2017.12.004>
- Rigby, K. (2014). How teachers address cases of bullying in schools: a comparison of five reactive approaches. *Educational Psychology in Practice, 30*(4), 409–419. <https://doi.org/10.1080/02667363.2014.949629>
- Romero Saletti, S. M., Van den Broucke, S., & Chau, C. (2021). The effectiveness of prevention programs for problematic Internet use in adolescents and youths: A systematic review and meta-analysis. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 15*(2). <https://doi.org/10.5817/CP2021-2-10>
- Rose, C. A., Monda-Amaya, L. E., & Preat, J. L. (2018). Pre-service Special and General Educators' Perceptions of Bullying. *Exceptionality Education International, 28*(2). <https://doi.org/10.5206/eei.v28i2.7764>
- Ryan, T., Kariuki, M., & Yilmaz, H. (2011). A comparative analysis of cyberbullying perceptions of preservice educators: Canada and Turkey. *Turkish Online Journal of Educational Technology, 10*(3), 1–12. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-79960088998&partnerID=40&md5=896c219937f54605f07a9e58b97e75dd>
- Saarento, S., Boulton, A. J., & Salmivalli, C. (2015). Reducing Bullying and Victimization: Student- and Classroom-Level Mechanisms of Change. *Journal of Abnormal Child Psychology, 43*(1), 61–76. <https://doi.org/10.1007/s10802-013-9841-x>
- Salimi, N., Karimi-Shahanjarini, A., Rezapur-Shahkolai, F., Hamzeh, B., Roshanaei, G., & Babamiri, M. (2019). The Effect of an Anti-Bullying Intervention on Male Students' Bullying-victimization Behaviors and Social Competence: A Randomized Controlled Trial in 'Deprived Urban Areas. *Journal of Research in Health Sciences, 19*(4), e00461.
- Schonert-Reichl, K. A., & Hymel, S. (2007). Educating the heart as well as the mind social and emotional learning for school and life success. *Education Canada, 47*(2), 20–25.
- Shea, B. J., Reeves, B. C., Wells, G., Thuku, M., Hamel, C., Moran, J., Moher, D., Tugwell, P., Welch, V., & Kristjansson, E. (2017). AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *Bmj, 358*.
- Small, P., Neilsen-Hewett, C. M., & Sweller, N. (2013). *Individual and contextual factors shaping teachers' attitudes and responses to bullying among young children: Is education important?*
- Smith, P. K., Del Barrio, C., & Tokunaga, R. S. (2012). Definitions of bullying and cyberbullying: How useful are the terms? In *Principles of cyberbullying research* (pp. 26–40). Routledge.
- Taddeo, M., & Blanchard, A. (2022). Accepting Moral Responsibility for the Actions of Autonomous Weapons Systems—a Moral Gambit. *Philosophy & Technology, 35*(3), 78. <https://doi.org/10.1007/s13347-022-00571-x>
- Thomas, H. J., Connor, J. P., Baguley, C. M., & Scott, J. G. (2017). Two sides to the story: Adolescent and parent views on harmful intention in defining school bullying. *Aggressive Behavior, 43*(4), 352–363. <https://doi.org/10.1002/ab.21694>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology, 8*(1), 45. <https://doi.org/10.1186/1471-2288-8-45>
- Tsai, F.-J., Hu, Y.-J., Chen, C.-Y., Tseng, C.-C., Yeh, G.-L., & Cheng, J.-F. (2021). Using the health belief model to

Rahman – Students Teachers' Knowledge and Attitudes Toward Bullying

- explore nursing students' relationships between COVID-19 knowledge, health beliefs, cues to action, self-efficacy, and behavioral intention. *Medicine*, 100(11), e25210. <https://doi.org/10.1097/MD.00000000000025210>
- Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: a systematic and meta-analytic review. *Journal of Experimental Criminology*, 7(1), 27–56. <https://doi.org/10.1007/s11292-010-9109-1>
- UNESCO. (2019). *Behind the numbers: ending school violence and bullying*. UNESCO Digital Library. <https://unesdoc.unesco.org/ark:/48223/pf0000366483>
- van Verseveld, M. D. A., Fekkink, R. G., Fekkes, M., & Oostdam, R. J. (2019). Effects of antibullying programs on teachers' interventions in bullying situations. A meta-analysis. *Psychology in the Schools*, 56(9), 1522–1539. <https://doi.org/10.1002/pits.22283>
- Veenstra, R., Lindenberg, S., Huising, 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>
- Wachs, S., Bilz, L., Niproschke, S., & Schubarth, W. (2019). Bullying Intervention in Schools: A Multilevel Analysis of Teachers' Success in Handling Bullying From the Students' Perspective. *The Journal of Early Adolescence*, 39(5), 642–668. <https://doi.org/10.1177/0272431618780423>
- Yamawaki, N., Green, J., Wang, A. N.-Y., Nohagi, Y., Macias, Z., Martinez, J., & Umphress, R. (2022). The effects of right-wing authoritarianism and aggression on individuals' intention to harm Asian Americans during the COVID-19 pandemic. *Psychology*, 13(9), 1425–1442.
- Ybarra, M. L., Espelage, D. L., & Mitchell, K. J. (2014). Differentiating youth who are bullied from other victims of peer-aggression: The importance of differential power and repetition. *Journal of Adolescent Health*, 55(2), 293–300.
- Yilmaz, H. (2010). An examination of preservice teachers' perceptions of cyberbullying. *Eurasia Journal of Mathematics, Science and Technology Education*, 6(4), 263–270. <https://doi.org/10.12973/ejmste/75248>
- Yilmaz, Harun. (2010). An Examination of Preservice Teachers' Perceptions about Cyberbullying. *EURASIA Journal of Mathematics, Science and Technology Education*, 6(4). <https://doi.org/10.12973/ejmste/75248>
- Yoon, J., Bauman, S., Choi, T., & Hutchinson, A. S. (2011). How South Korean teachers handle an incident of school bullying. *School Psychology International*, 32(3), 312–329. <https://doi.org/10.1177/0143034311402311>
- Zhou, H., Wang, Q., Yu, S., & Zheng, Q. (2022). Negative Parenting Style and Perceived Non-Physical Bullying at School: The Mediating Role of Negative Affect Experiences and Coping Styles. *International Journal of Environmental Research and Public Health*, 19(10), 6206. <https://doi.org/10.3390/ijerph19106206>