

School bullying and cyberbullying in academically gifted students: A systematic review

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ABSTRACT

The objective of this study was to carry out a systematic review of the research works that have analyzed school bullying and cyberbullying in academically gifted students. The search was carried out in the main psychology databases (Scopus, Web of Science, and Psych Info), considering works from the past 22 years (2000–2022). One hundred and sixty-five documents were analyzed, of which fifteen studies complied with the inclusion criteria. Seven of these made comparisons between gifted and non-gifted students, classified according to three perspectives: (a) studies concluding that gifted students have a greater risk of being victims than non-gifted students and have a lower risk of being a bully, due to the characteristics of this group; (b) studies that affirm that gifted students have a lower risk of being a bully or victim, as compared to non-gifted students since their high cognitive level allows them to effectively handle social and emotional challenges, thereby contributing to a lower level of participation in bullying or victimization behavior; (c) and studies concluding that gifted students have a similar risk of being a bully or victim as non-gifted students. Studies that only use samples of gifted students reveal a high prevalence of bullying and cyberbullying, and very negative consequences on this group. Although the limited number of studies does not allow for a definitive confirmation of a greater vulnerability to bullying by academically gifted students, it does confirm the need to recommend that the educational community offer preventive elements and specific interventions for this group.

1. Introduction

School bullying is one of the most common and challenging problems in education. It is the physical or psychological persecution by a student (or group of students) toward another, who is selected as the victim of repeated attacks (Olweus, 2013). In addition, the ever-increasing use and abuse of information technologies have taken bullying into virtual environments (cyberbullying). Cyberbullying is defined as «an aggressive and intentional behavior that is repeated frequently over time through the use, by an individual or group, of electronic devices on a victim that is unable to easily defend him/herself» (Smith et al., 2008, p. 376). Thus, cyberbullying shares certain characteristics with traditional bullying (intentionality and repetition) while also having its own characteristics such as anonymity and a virtual environment.

International reviews have indicated a prevalence of traditional bullying, with between 10 % and 33 % of students recognizing that they have been victims. Between 4 % and 15 % stated that they have acted as bullies (Hong & Espelage, 2012; Hymel & Swearer, 2015; Modecki et al.,

2014; Monks et al., 2009; Stassen-Berger, 2007). As for cyberbullying, its prevalence is situated between 4 % and 36 % for cyberbullies and between 16 and 18 % for cyberbullies (Patchin & Hinduja, 2012; Suzuki et al., 2012). In a meta-analysis, Modecki et al. (2014) revealed variations of prevalence ranging from 5 to 32 % for cyberbullies (mean of 16 %) and between 2 and 56 % for cyberbullying victims (mean of 15 %). These high levels of variation may be due to the distinct conceptualizations of bullying and cyberbullying, the distinct cutoff points used to establish its frequency, the time framework used (an incident occurring during the past 2 months, the last year, at any time, etc.), the type of methodology used, age ranges of the sample, etc. Despite these major variations in prevalence rates, empirical evidence suggests that school bullying and cyberbullying are some of the most concerning and common problems of the educational environment, having devastating consequences for the individuals implicated in them (Delgado et al., 2019).

Thus, numerous studies have corroborated the negative consequences of school bullying and cyberbullying on both victims and bullies

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(Delgado et al., 2019; Garaigordobil & Aliri, 2013; Wachs, 2012). Victims have received more attention, with respect to the consequences of bullying or cyberbullying. Numerous studies have found that victims of bullying may experience anxiety, depression, stress, fear, low self-esteem, feelings of anger and frustration, defenselessness, nervousness, irritation, sleeplessness, sleeping disorders, suicidal thinking, and difficulties in concentrating, all of which may ultimately affect their scholastic performance (González-Cabrera, Machimbarrena, Ortega-Barón, & Álvarez-Bardón, 2019; Kowalski et al., 2014; Sampasa & Hamilton, 2015; Trompeter et al., 2018; Van Geel et al., 2014). Bullies, on the other hand, are more likely to experience moral disconnection, a lack of empathy with victims, problems caused by their aggressive behavior, criminal conduct, drug and alcohol consumption, abusive use of the internet and social media, and school absenteeism (Bergmann & Baier, 2018; Cañas et al., 2020; Gradinger et al., 2009; Kowalski & Limber, 2007). As for sex and the distinct types of bullying, in general, boys are more likely to bully their victims in a physical and direct manner, while girls tend to resort to indirect verbal and relational abuse (Carrera et al., 2013; Popp & Peguero, 2011). In terms of age, studies confirm a higher prevalence of physical and direct aggression during the lower grades, being substituted, during adolescence, by indirect aggression types, with verbal and social exclusion bullying increasing significantly (Hasekiu, 2013).

Most of the studies on school bullying and cyberbullying looked at the general population, with few works considering these phenomena in students having special educational needs. However, studies have confirmed a very high probability that children and adolescents with special educational needs will be bullied (Carter & Spencer, 2006; Flynt & Morton, 2007; Oliveira & Barbosa, 2012), since a large percentage of this population has deficits in social skills, increasing their probability of suffering peer rejection.

However, students with special educational needs constitute a particularly heterogeneous group that encompasses a range of students, from those with intellectual disabilities to those identified as being gifted. Research has suggested that students are typically bullied because they are perceived by their peers as being different. Academically gifted students, especially, may be perceived as different from their classmates in a variety of aspects (Dalosto & Alençar, 2013; Erwin, 2015; MacFarlane & Mina, 2018). Not only do these students have higher intellectual levels as compared to their peers, they also tend to present asynchronous social and emotional development, and therefore, they may be subjected to bullying by other students. The studies researching bullying and cyberbullying that use samples of students with special educational needs are generally very scarce. What is particularly concerning is the lack of research on academically gifted students. An explanation of this lack of attention toward these students in this context may be due to the belief that this student group does not present specific emotional or social needs, with there being a predominance of stereotypes that show them as being confident, motivated, and able to face developmental challenges with ease (Conolly, 2018; Peterson, 2009). This situation may lead to teachers and other adults not recognizing or addressing the social and emotional needs of these students. Superior academic ability does not necessarily imply adequate social skills. Some academically gifted students may lack social skills, which implies a higher risk of isolation and bullying from peers (Peterson, 2009), as well as other variables such as jealousy from classmates, which may contribute to negative attitudes toward gifted students. Occasionally, the lack of knowledge that adults have about the specific characteristics of academically gifted students may lead to devastating consequences, such as the suicide of an 18-year-old gifted student (Hyatt, 2010). Although the student had mentioned to their classmates that she was considering suicide, she did not feel able to confide in an adult. These events suggest that academic giftedness does not guarantee protection from bullying and cyberbullying behavior. Woods and Wolke (2004), using a sample of 1016 gifted students, found that gifted students were more likely to be the subject of social exclusion by their peers as

compared to non-gifted students.

Currently, however, the scientific literature suggests three distinct perspectives with regard to bullying and cyberbullying in academically gifted students. The first suggests that gifted students have specific characteristics that increase their risk of being victimized, such as perfectionism, sensitivity, asynchronous development, high awareness of moral and ethical issues, a strong sense of individualism, motivation, early development of their internal locus of control, a passion to learn, and outstanding academic performance (Clark, 2002; Cross, 2001; Fornia & Frame, 2001; Hargrove, 2010; Peterson, 2009; Peterson & Ray, 2006a; Schuler, 2002; Silverman, 2002; Webb et al., 2005). One common characteristic of academically gifted students is their asynchronous development, in which their cognitive development is not usually accompanied by their social or emotional development. These students may lack appropriate social skills, making them, therefore, more vulnerable to bullying and rejection by their classmates (Christopher & Shewmaker, 2010; Gross, 2002; Hyatt, 2010; Oliver & Candappa, 2003; Peterson, 2009; Richard et al., 2011; Thomson & Gunter, 2006). Peers may perceive them as being too smart, having a vocabulary that is overly extensive, or being desperate for attention. This may lead to their being ridiculed by other students, referring to them as “know-it-alls”, “nerds”, or “idiots” (Alvino, 1991; Peterson & Ray, 2006a). On the other hand, gifted children typically are embarrassed to admit that they cannot control the situation (Hargrove, 2010; Vavre-Douret, 2011). Therefore, their academic advantage does not prevent them from suffering the consequences of bullying. From this perspective, these characteristics also mean that the probability of gifted students acting as bullies is lower than that of non-gifted students.

On the other hand, a second perspective defends the idea that academically gifted students are not especially vulnerable to bullying. It suggests that their high cognitive levels help them to effectively confront social and emotional challenges, thereby contributing to a lower participation in bullying or victimization behavior (Bain & Bell, 2004; Estell et al., 2009; Francis et al., 2016; Litster & Roberts, 2011). Preuss and Dubow (2004) corroborated that gifted students tend to use active resolution approaches in socially stressful situations. Cohen et al. (1994) found that these students had higher socio-metric scores than non-gifted students, suggesting that gifted students are generally accepted by their classmates. They concluded that gifted students were less likely to bully or be bullied by their peers as compared to non-gifted students. Thus, from this perspective, it is suggested that gifted students have excellent social skills, using effective confrontation mechanisms and presenting pro-social behavior, and are suitably integrated with their peers. These factors relate negatively to victimization and participation in bullying behavior.

Finally, a third perspective suggests that academically gifted students engage in bullying behavior and are bullied by their classmates in the same proportion as their non-gifted peers. It implies that a high cognitive development is not related to participation in bullying behavior or victimization (Mitchell, 2011; Peters & Bain, 2011).

The disparity of findings with respect to bullying and cyberbullying in academically gifted students highlights the complexity of this issue. No rigorous systematic reviews currently exist to update the findings in this area. Therefore, the objective of this work is to bring together and update the scientific information in order to increase our understanding of this issue. By unifying consistent findings, a characteristic profile may be created. This may assist in determining the needs of gifted students, helping to identify potential areas of prevention and intervention for school bullying with regard to this group.

2. Methods

2.1. Design

The review was carried out in line with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses; Moher

et al., 2009) guidelines. The criteria created for the PRISMA ensure that the studies included have been thoroughly reviewed. Fig. 1 presents a flow chart with the four phases recommended by PRISMA, specifying the inclusion and exclusion process of each article.

A systematic review was carried out on scientific publications related to gifted children and bullying or cyberbullying in the scholastic environment over the past 22 years (2000–2022). Searches were conducted in the main psychology databases: Scopus, Web of Science, and Psych Info. The search strategy was carried out in each database, using the following combination of terms: “gifted*” AND “bully*” OR “cyber*” OR “victim*” OR “aggress*” OR “cybervictim*” OR “cyberaggress*” OR “cyberbully*” OR “cyber-bullying” OR “School violence” OR “peer victimization” OR “peer aggression” OR “school aggression” OR “school harassment” OR “internet harassment” OR “internet bullying” OR “electronic bullying”. The search fields used were title, abstract and keywords.

First, duplicated documents were eliminated from the total number of records found in the diverse databases. Then, the titles and abstracts of the documents were analyzed, excluding those articles that did not comply with the previously established inclusion criteria. Inclusion criteria were: (1) studies whose objectives (at least one) included the study of the relationship between gifted students and school bullying or cyberbullying; (2) study participants included students diagnosed as being gifted; (3) studies in the English or Spanish language; and (3) scientific studies having transverse or longitudinal designs. Other article types, such as reviews, theoretical articles, systematic reviews, books, or unique cases were excluded.

Subsequently, the 20 selected articles were read in-depth, checking that they met the established inclusion criteria and removing those that did not meet them. Finally, studies that complied with the inclusion criteria were selected (15 articles).

3. Results

The first study on school bullying in academically gifted students that was published in a high-impact journal was conducted by Peterson and Ray (2006a). Since then, there has been a succession of publications, although over recent years the number has only slightly increased. Seven of the 15 articles selected used samples from the United States (Estell et al., 2009; Peairs et al., 2019; Pelchar & Bain, 2014; Peters & Bain, 2011; Peterson & Ray, 2006a; Peterson & Ray, 2006b; Ryoo et al., 2017), while three used Spanish samples (González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Sureda et al., 2020), two were conducted in Turkey (Ogurlu & Sariçam, 2018; Sariçam & Çetinkaya, 2018), one used Brazil samples (Rondini & Almeida, 2022) and two, in Ireland (Conolly, 2018; Laffan et al., 2022).

Six of the studies used samples from primary and secondary education (González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Ogurlu & Sariçam, 2018; Peairs et al., 2019; Rondini & Almeida, 2022; Ryoo et al., 2017); five studies used secondary and baccalaureate student samples (Conolly, 2018; Laffan et al., 2022; Peters & Bain, 2011; Sariçam & Çetinkaya, 2018; Sureda et al., 2020); two studies used primary education samples (Estell et al., 2009; Pelchar & Bain, 2014); and two used early childhood, primary, and secondary student samples (Peterson & Ray, 2006a; Peterson & Ray, 2006b). Forteen of the 15 studies analyzed victimization and bullying (Estell et al., 2009; González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Laffan et al., 2022; Ogurlu & Sariçam, 2018; Peairs et al., 2019; Pelchar & Bain, 2014; Peters & Bain, 2011; Peterson & Ray, 2006a; Peterson & Ray, 2006b; Rondini & Almeida, 2022; Ryoo et al., 2017; Sariçam & Çetinkaya, 2018; Sureda

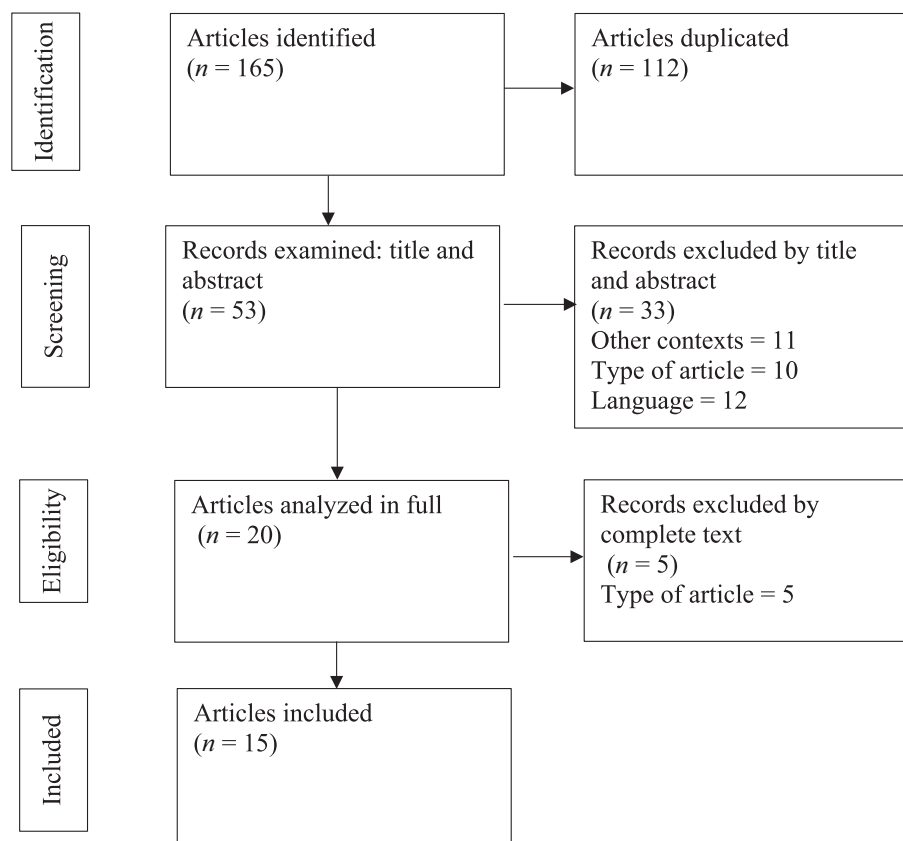


Fig. 1. Flow chart of selection of articles.

et al., 2020), one study, by Conolly (2018), analyzed victimization alone. Furthermore, only the study by Conolly (2018), Rondini and Almeida (2022) and that of Peterson and Ray (2006b) used a qualitative methodology.

Seven of the 15 documents selected compared bullying and victimization between gifted and non-gifted students (Estell et al., 2009; Ogurlu & Sariçam, 2018; Peairs et al., 2019; Peters & Bain, 2011; Ryoo et al., 2017; Sariçam & Çetinkaya, 2018; Sureda et al., 2020). The other studies analyzed bullying with samples consisting of academically gifted students. Table 1 details the socio-demographic characteristics, objectives, and main findings of the selected studies. Table 2 below offers information about the cross-sectional or longitudinal design of the study, the instrument used for the evaluation of bullying and cyberbullying, the timeframe with which bullying and cyberbullying were evaluated, the cut off for the categorization of bullying and cyberbullying, and finally, how gifted students were identified or diagnosed in each of the studies.

3.1. Do gifted students have a higher or lower risk of being victims or perpetrators of bullying?

Of the studies comparing gifted and non-gifted students, the research may be categorized into one of the three proposed theoretical perspectives mentioned in the introduction: (1) academically gifted students having a higher risk of being victims than non-gifted students and a lower risk of being a bully; (2) academically gifted students having a lower risk of being a bully or victim than non-gifted students; and (3) academically gifted students having similar risks of being a bully or victim as non-gifted students.

As for the first perspective, suggesting that gifted students have a higher risk of being a victim of bullying due to certain characteristics of this group (perfectionism, sensitivity, asynchronous development, high awareness of moral and ethical issues, strong sense of individuality, motivation, early development of the internal locus of control, passion for learning or outstanding academic performance), two of the analyzed studies (Ogurlu & Sariçam, 2018; Sariçam & Çetinkaya, 2018) considered this perspective. Sariçam and Çetinkaya (2018) found that gifted students had significantly higher means on victimization ($M = 70.38$; $SD = 25.43$) than non-gifted students ($M = 62.84$; $SD = 24.92$) and significantly lower means on aggression ($M = 55.23$; $SD = 22.06$) than non-gifted students ($M = 62.08$; $SD = 23.56$). Furthermore, gifted students had significantly higher means on the revenge variable ($M = 77.13$; $SD = 24.77$) than non-gifted students ($M = 70.09$; $SD = 28.57$). The authors used a sample of 318 Turkish students (159 gifted) in secondary education. Along the same lines, Ogurlu and Sariçam (2018), using a sample of 284 Turkish adolescents (142 identified as gifted), found statistically significant differences on victimization and bullying behavior between students who were and were not gifted. Gifted students obtained lower means on perpetration of bullying ($M = 83.83$) than non-gifted students ($M = 94.15$). However, the mean for victimization for gifted students was significantly higher ($M = 106.06$) than the mean obtained by non-gifted students ($M = 95.75$). Moreover, it was found that gifted students had lower means on submissive behavior than non-gifted students, although these differences were not statistically significant. It was also found that gifted students had higher means on the ability to forgive variable than non-gifted students, with these differences being statistically significant. As for differences based on sex, gifted boys were found to have much higher bullying levels than girls, however, the girls had much higher means for victimization than the boys.

The second perspective is found in studies in which academically gifted students are at a lower risk of engaging in bullying behavior or being victimized due to their higher cognitive level, which helps them to effectively confront social and emotional challenges, thereby contributing to their lower degree of participation in bullying or victimization behavior. Along these lines, the results of two selected studies are

Table 1
Summary of selected studies.

Authors	Sample	Objective	Main findings
Conolly (2018)	N = 59 gifted adolescents Age range = 13–17 Ireland	To analyze the experience of cyberbullying, its impact, and the main reason for not informing on victimization.	Students suffering from depression, anger, and frustration. Girls had a lower emotional and academic adjustment. Reasons for not denouncing were related to self-efficacy, control, perceived risks, past experiences when denouncing, sex, and age.
Estell et al. (2009)	N = 484; 369 general education students; 74 gifted students; 41 students with mild disabilities. Age range = 10–11 USA	To analyze the perceptions of peers and teachers on the probability of being a bully or a victim, comparing gifted students with those having mild disabilities and those with no problematics.	Gifted students were perceived by their peers as being less likely to be bullied than their peers having mild disabilities. Teachers perceived gifted students as being less likely to be victims or bullies.
González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al. (2019)	N = 255 gifted adolescents. Age range = 9–18 Spain	To analyze prevalence, its distribution in distinct roles and consequences.	25.1 % of the students classified themselves as pure cybervictims, 3.9 % as pure cyberbullies, and 6.6 % as cybervictims-cyberbullies. The group classified as cybervictims and as cybervictims-cyberbullies had lower scores on quality of life with regard to health, depression, satisfaction with life and stress than those that were not involved.
González-Cabrera, Tourón, Machimbarrena, León-Mejía, and Gutiérrez-Ortega (2019)	N = 285 gifted students. Age range = 9–18 Spain	To analyze prevalence, its distribution in distinct roles and consequences.	50.9 % were involved in bullying behavior, with 39.6 % being victims, 1.1 % being bullies, and 10.2 % being victims-bullies. Victims and victims-bullies had lower scores on quality of life with regard to health, depression, stress, and anxiety than those that were not involved.
Laffan et al. (2022)	N = 195 gifted students; Age range = 14–18 Ireland	To analyze the prevalence rates of bullying and cyberbullying.	55.4 % had been victims of bullying at some point in their lives. 31.3 % had been victims of cyberbullying at

(continued on next page)

Table 1 (continued)

Authors	Sample	Objective	Main findings
			some point in their lives. Bullying in the last 3 months: no-involvement (67.7 %), victim only (27.2 %), bully only (3.1 %), and bully/victims (2.1 %). Cyberbullying in the last 3 months: no-involvement (71.8 %), victim only (18.5 %), bully only (4.1 %) and bully/victim (5.6 %). Higher figures compared to an all-Ireland national prevalence rate. Gifted students obtained lower means on bullying perpetration than non-gifted students. Gifted students obtained higher means on victimization than non-gifted ones. Gifted students had higher means on the ability to forgive variable than non-gifted students. Boys had higher means on bullying than girls and girls had higher means on victimization as compared to boys.
Ogurlu and Sariçam (2018)	N = 284 142 gifted students 142 non-gifted students Age range = 11–14 Turkey	To compare bullying, the ability to forgive, and submissive behavior amongst gifted and non-gifted students.	Gifted students were perceived as being less aggressive and more prosocial and had higher academic performance than students who were not gifted. Gifted students were perceived as experiencing similar levels of victimization as nonidentified students.
Peairs et al. (2019)	N = 327; 141 gifted students; 186 non-gifted students. Age range = 11–14 USA	To compare the socio-metric status (social preference and perception of popularity) and the adjustment between gifted and non-gifted students.	The 4th graders (9–10 years of age) had significantly higher means than the 5th graders (10–11-year-olds) on perpetration of bullying. No significant differences were found between the prevalence of victimization by grade or sex.
Pelchar and Bain (2014)	N = 47 gifted students. Age range = 9–11 USA	To identify the prevalence of bullying and victimization of gifted students that were in transition from primary to secondary school. Also, to analyze the levels of distress associated with bullying and victimization.	

Table 1 (continued)

Authors	Sample	Objective	Main findings
Peters and Bain (2011)	N = 90 students; 47 gifted; 43 high academic achievement; Age range = 14–18 USA	To compare the prevalence of bullying and victimization between students identified as gifted and those with high academic performance.	As the level of a child's participation as a bully increased, their exteriorized distress also increased, and as the level of victimization increased, the child's exteriorized and interiorized distress also increased. The prevalence of bullying and victimization was not significantly different between students diagnosed as gifted and those with high academic performance. No statistically significant differences were found with regard to sex.
Peterson and Ray (2006a)	N = 432 gifted students. Age range = 4–14 USA	To analyze the prevalence and consequences of being a bully or a victim from early childhood education to 8th grade (2nd year of Mandatory Second Education). Retrospective study	67 % of the students had been bullied at some time during their education. The lowest prevalence was found for Early Childhood Education while the highest was in 6th grade (11–12 years of age). 28 % reported having bullied other peers at some time during their education. The highest prevalence was in 6th grade. The greatest emotional damage was found to take place during 5th grade (10–11 years), decreasing in 6th grade (11–12 years).
Peterson and Ray (2006b)	N = 57 gifted students. Age range = 4–14 USA	To analyze the experience of being a bullying victim or perpetrator.	Victims suffered from bullying in silence, attempting to understand it, assuming responsibility for detaining it, becoming desperate when it continued and having violent thoughts. Their intelligence helped them to be aware of the bullying. Many students believed that not being known contributed to school bullying.

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Table 1 (continued)

Authors	Sample	Objective	Main findings
			Helping them to be socially adjusted, especially during the first years of secondary school, may be critical to their wellbeing and so that they feel safe in the school.
Rondini and Almeida (2022)	N = 10 gifted students; Age range = 10–15 Brazil	To analyze whether gifted students were bullied for being considered different and whether the beliefs about being gifted could lead to violent actions.	Characteristics and beliefs do not seem to influence a higher degree of victimization and perpetuation of bullying in gifted students.
Ryoo et al. (2017)	N = 988; 299 gifted students; 689 non-gifted students. Age range = 10–15 USA	To use a longitudinal study (from 5th to 9th grade; 3 wave) to examine the experiences of victimization and bullying in gifted and non-gifted students.	There was no difference between the experiences of victimization between the gifted students and the non-gifted ones. Gifted students identified as frequent victims in primary education were more likely to be bullies themselves in secondary education (time 1 – time 3).
Sarıçam and Çetinkaya (2018)	N = 318; 159 gifted students; 159 non-gifted students. Secondary education Turkey	To analyze the relationship between bullying, victimization, and revenge.	Gifted students had significantly higher means on victimization and revenge and significantly lower means on aggression than non-gifted students.
Sureda et al. (2020)	N = 122; 61 gifted students; 61 non-gifted students. Age range = 13–17 Spain	To analyze differences between gifted and non-gifted students with regard to cyberbullying (as bully or victim) and to Internet addiction.	No significant differences were found between students who were or were not gifted in terms of the incidence of cyberbullying and addiction to the Internet.

relevant (Estell et al., 2009; Peairs et al., 2019). Estell et al. (2009) analyzed the perceptions of students and teachers on the probability of being a bully or a victim, with regard to gifted students, students with mild disabilities, and students from the general population. The researchers used a sample of 484 students aged 10 to 11 (74 students with mild disabilities and 74 gifted students). They concluded that peers perceived gifted students as being less likely to be bullied than students with mild disabilities. Along the same line, teachers also perceived gifted students as being less likely to be victims or bullies, as compared to students with mild disabilities or the other students. Similarly, classmates nominated gifted students as being the most loved of the class, as compared to the students with mild disabilities or the other students. Therefore, they concluded that gifted students intimidate others and are less intimidated than their non-gifted peers. Similar results were found by Peairs et al. (2019). These authors compared the socio-metric status

(social preference and perception of popularity) and adjustment of 327 students aged 11 to 14. Of these, 141 were identified as gifted and 186 were considered non-gifted. It was found that gifted students were perceived as less aggressive (overt and relational) and more prosocial than non-gifted students, indicating that gifted students, as a group, were perceived as experiencing similar levels of victimization as non-identified students. Moreover, it was found that when gifted students were aggressive, they displayed this behavior in a more relational than direct way, showing that they used their outstanding cognitive skills to carry out such relational aggressions.

Finally, the results of three of the studies support the third proposed perspective, that is, the one that considers that gifted students engage in bullying and are intimidated by their peers in the same proportion as other non-gifted students (Peters & Bain, 2011; Ryoo et al., 2017; Sureda et al., 2020). Peters and Bain (2011) compared the prevalence of victimization and bullying obtained for 90 secondary school students (14 to 18 years of age) who were identified as having high academic performance ($n = 43$) and students identified as gifted ($n = 47$). The authors did not find statistically significant differences between these groups with regard to the prevalence of victimization or bullying. However, the prevalence of victimization was higher than that of intimidation. In the sample of gifted students, 4.3 % were classified as bullies and 12.8 % as victims, whereas in the high academic performance sample, 4.7 % of these students were classified as bullies and 16 % as victims. Similarly, no differences were found between boys and girls with respect to the prevalence of victimization or bullying. The study attempted to compare students diagnosed as gifted with those sharing a similar academic environment (high academic performance), but who had not been identified as gifted, and were not considered to have special needs based on an academic diagnosis. Both groups of students had considerable academic achievements, however, the gifted students had been labeled as such and received specialized services due to their diagnosis. Ryoo et al. (2017) considered a sample of 299 gifted students and 689 students from the general population, with a mean age of 12.2 years, examining the victimization and bullying experiences of both groups in a longitudinal study (from 5th to 9th grade). The researchers identified four latent classes of victimization: 4.8 %–5.2 %, frequent victims; 7.4 %–12.2 %, frequent victims of relational bullying; 28.7 %–35.8 %, occasional victims; 46.8 %–59.2 %, infrequent victims; and three latent classes for the perpetration of bullying: 3.9 %–5.6 %, frequent bullies; 22.2 %–29.7 %, frequent relational bullies; 66.4 %–72.2 %, infrequent bullies. No differences were found for victimization between both groups; however, there were statistically significant differences in the prevalence rates of aggression in both groups, and in the transition patterns between academic school years. Therefore, between 2.6 % and 5.9 % of the non-gifted students and between 2.7 and 6.9 % of the gifted students were identified as being frequent bullies, between 20.1 % and 30.7 % of the non-gifted students and between 20 % and 28.7 % of the gifted students were identified as frequent relational bullies; between 66.8 % and 74 % of the non-gifted students and between 67.8 % and 73.2 % of the gifted students were identified in the infrequent bully group. Likewise, it was found that gifted students identified as frequent victims in primary education were more likely to be bullies during secondary education. Sureda et al. (2020) analyzed whether or not there were differences between gifted and non-gifted students with regard to cyberbullying and Internet addiction. The study was carried out using a sample of 122 Spanish adolescents aged 13 to 17, with half of these being considered gifted ($n = 61$). The authors did not find statistically significant differences between both groups of students.

Of the works that did not carry out comparative studies between gifted and non-gifted students, it is not possible to determine which of the three proposed perspectives would be confirmed (Conolly, 2018; González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Pelchar & Bain, 2014; Peterson & Ray, 2006a;

Table 2
Summary of selected studies (continued).

Authors	Design	Instrument to assess bullying or cyberbullying	Timeframe	Cut off	Gifted identification
Conolly (2018)	Cross-sectional	Interviews	–	–	Centre for Talented Youth–Ireland (CTYI). Summer course.
Estell et al. (2009)	Cross-sectional	Survey	–	–	Students who were in the top 15 % of their class in achievement were considered academically gifted.
González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al. (2019)	Cross-sectional	Cyberbullying Screening of Peer Harassment (Garaigordobil, 2013).	–	Occasional cybervictims, cyberaggressors, or cyberbystanders: those who suffered, performed, or observed any cyberbullying behavior “sometimes”. Severe: those who suffered, performed, or observed cyberbullying behavior from “fairly often” to “always.”	Official diagnosis of giftedness; belonging to one of the associations of giftedness officially registered in Spain.
González-Cabrera, Tourón, Machimbarrena, León-Mejía, and Gutiérrez-Ortega (2019)	Cross-sectional	European Bullying Intervention Project Questionnaire (EBIP-Q; Ortega, Del Rey, y Casas, 2016).	Past 7 months	Victim: scores of 2 or above on any of the victimization items. Aggressor: scores of 2 or higher on any of the aggression items. Aggressor-victim: scores of 2 or higher on at least one item of the aggression or victimization scales.	Spanish associations related to students with high abilities. IQ of 130 or above or, in some cases, being at the 75th percentile or above on a battery of differential aptitudes of intelligence (commonly the BADYG, Yuste, 1989); belonging to one of the officially registered associations of high abilities in Spain.
Laffan et al. (2022)	Cross-sectional	Olweus Bully/Victim Questionnaire (OBVQ) (Olweus, 1996) Cyberbullying and Online Aggression Survey Instrument (COAS; Patchin & Hinduja, 2015)	Some point in their lives and in the past 3 months	–	Recruited through their admittance to the <i>Centre for Talented Youth Ireland</i> (CTYI). Prospective gifted CTYI students met the <i>CTYI Talent Search</i> criteria in order to take the School and College Aptitude Test for giftedness, which involves: (1) outstanding demonstrable aptitude in either mathematical and/or verbal reasoning, and (2) a previous standardized aptitude score within the 95th percentile or above on a standardized aptitude assessment such as the Drumcondra Reasoning Test
Ogurlu and Sariçam (2018)	Cross-sectional	Peer Bullying Scale-Child Form (Pişkin and Ayas 2011).	–	–	Gifted students were attending the Science and Art Center (BILSEM). BILSEM is a state-funded after-school program providing special education for gifted students. Gifted students in these centers attend both their normal schools and the centers after their schools.
Peairs et al. (2019)	Cross-sectional	Social Behaviors. Students in the study were asked to make unlimited nominations of peers. Four social behaviors: aggression, relational aggression, prosocial behavior, and victimization.	–	–	North Carolina state guidelines, which require students to “exhibit high performance capability in intellectual areas, specific academic fields, or in both intellectual areas and specific academic fields” (Stephens & Karnes, 2000, p. 232). Scores on an aptitude test, achievement tests in math and reading, grades, and teacher checklists.
Pelchar and Bain (2014)	Cross-sectional	Reynolds Bully Victimization Scale (BVS; Reynolds, 2003).	During the past month	–	All participants received special education services for giftedness. Two conditions to receive such services: 1. They had to meet specific criteria as outlined in a matrix based on three areas: educational performance, creativity, and cognition. 2. Students had to demonstrate a need for special education services.
Peters and Bain (2011)	Cross-sectional	Reynolds Bully Victimization Scale for Schools (BVS; Reynolds, 2003).	During the past month	Bullying scores: Below 57: normal range. Scores of 58–65: clinically significant. Scores 66–74: Moderate. Scores >75: severe. Victimization scale: Scores of 55 and below: normal range. Scores of 56–63: Clinically significant. Scores of 64–68: Moderate.	Gifted students in this study were identified based on state guidelines that delineated educational performance, creativity, and cognitive criteria (Tennessee Department of Education, 2007).

(continued on next page)

Table 2 (continued)

Authors	Design	Instrument to assess bullying or cyberbullying	Timeframe	Cut off	Gifted identification
Peterson and Ray (2006a)	Cross-sectional	Structured interview	At some point during their school years	–	Scores >69: severe. Bully-victims: Clinically significant scores on both scales (bully and victims). Identified to carry out a school program for gifted pupils (regardless of the characteristics of the program). Identified to carry out a school program for gifted pupils (regardless of the characteristics of the program). Centers for the Development of Potential and Talent (CEDET). If a student is identified in two or more grades, they are invited to join CEDET (Centers for the Development of Potential and Talent), for curriculum enrichment activities. Domains of human capacity, whether combined or isolated: signals of general intelligence (G Domain); intelligence with depth and non-linear thinking (GM Domain); intelligence with verbal capacity (GV Domain); creativity and creative potential (C Domain); and socio-affective capacity (S Domain). Standardized achievement scores in the ninth stanine and IQ score of 130. Gifted students in this study spent most of their time in general education classrooms. Gifted/talented students were attending the Science and Art Centre (BILSEM) where there are places in which students who have an IQ score above 130 and high level of performance in leadership, intelligence capacity, creativity, art, or specific academic areas than their peers are educated outside the school time (Special Education Legislation, 2012). Students identified by the education administration as gifted. Protocol related questions pertaining to creativity, social and emotional development, motivation, academic performance, and intellectual ability, besides confirming an IQ higher than or equal to 130.
Peterson and Ray (2006b)	Cross-sectional	Structured interview	–	–	
Rondini & Almeida (2022)	Cross-sectional	Semi-structured interview	Some point in their lives	–	
Ryoo et al. (2017)	Longitudinal	Pacific-Rim Bullying Measure (Konishi et al., 2009).	Past 2 months	–	
Sarıçam and Çetinkaya (2018)	Cross-sectional	Peer Bullying Scale Child Form (Pişkin and Ayas, 2011).	–	–	
Sureda et al. (2020)	Cross-sectional	Adaptation of the Cyberbullying Questionnaire (CBQ; Calvete et al., 2010).	–	–	

Peterson & Ray, 2006b). However, these studies suggest very negative prevalences and consequences in this student group, suggesting support of the first perspective, the one that places gifted students at a higher risk of suffering from bullying. Peterson and Ray (2006a), using an extensive sample of 432 gifted students attending 16 school districts from eleven US states, retrospectively analyzed victimization and bullying experiences of these students from early childhood education until 8th grade (13–14 years of age). They found that 67 % of the students had been bullied at some point during their education. The prevalence of victimization was lower during Early Childhood Education (27 %), reaching its maximum prevalence in 6th grade (54 %). For boys, the prevalence of bullying reached its peak in 6th grade (54 %), decreasing slightly by 8th grade (46 %). For girls, the prevalence remained constant between 5th and 8th grade (38 %–39 %). Insults were the most common type of intimidation used during all of the academic years, followed by the mocking of appearance, intelligence, and grades, and pushing and shoving. Physical bullying (pushing and shoving, beating, hits, punches) was infrequent, but was a relevant problem for some 6th and 8th-grade students. On the other hand, these students also reported on their participation in bullying behavior during these nine years of their education. A total of 28 % (33 % boys and 22 % girls) stated that they had bullied other classmates. Between 14 % and 16 % were bullies between 6th and 8th grade. Just as 6th grade was the year in which the peak of

victimization was found, it was also the peak year for the perpetration of bullying by these students. Therefore, 46 % of the students bullied their peers in 6th grade (54 % boys and 12 % girls). Once again, insulting was the most common type of intimidation used (35 %) followed by mocking of appearance (24 %). Gifted students also revealed that differences in intellectual ability, as compared to their peers, may have contributed to their being more vulnerable to bullying in school. On the other hand, the authors assessed the emotional impact of bullying, finding that greater emotional harm occurred in the 5th grade, subsequently decreasing. Therefore, although 6th graders revealed a higher prevalence of bullying, they suffered a lower emotional impact. Likewise, the authors interviewed 57 gifted students, verifying that, in general, students did not report victimization, assuming the responsibility to detain the bullying themselves (Peterson & Ray, 2006b).

Pelchar and Bain (2014) found that 4th graders had significantly higher means on engaging in bullying than 5th graders. The study was carried out using a sample of 47 gifted students. On the other hand, no statistically significant differences were found between boys and girls on victimization or bullying, in either of the examined years. Finally, they analyzed the relationship between distress (anguish) and bullying, finding that as the child’s level of participation as a bully increased, their exteriorized distress also increased. They also found a high correlation between victimization and exteriorized or interiorized distress.

Conolly (2018) interviewed 59 gifted Irish adolescents aged 13 to 17. The objective of the interviews was to obtain information on their cyberbullying experiences, the impact of the same, and the main reasons for not reporting the victimization to adults (including teachers). Conolly (2018) concluded that the consequences of cyberbullying in these students were especially serious and long-lasting. Students referred to depression, anger, and frustration, with boys and girls experiencing similar emotions. However, it was found that the emotional and academic impact was more pronounced in girls, who had poorer academic performance, a higher level of school absenteeism, and a lower class participation rate. The main reasons for not reporting the cyberbullying behavior were related to self-efficacy, control, perceived risks, past reporting experiences, sex, and age.

González-Cabrera, Tourón, Machimbarrena, León-Mejía, and Gutiérrez-Ortega (2019) analyzed school bullying using a sample of 285 gifted adolescents. They found that 50.9 % of these students were involved in distinct bullying roles: 39.6 % as victim, 1.1 % as bully and 10.2 % as victim-bully. Similarly, they corroborated a more negative impact on psychological wellbeing in the victim and victim-bully group, having a poorer quality of life, stress, anxiety, and depression. In parallel, González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al. (2019) identified different profiles of participation in bullying in 255 gifted Spanish adolescents. The results indicated that 25.1 % of the students classified themselves as pure cybervictims, 3.9 % as pure cyberbullies, and 6.6 % as cybervictims-cyberbullies. The group classified as cybervictims and cybervictims-cyberbullies had lower scores on quality of life with regard to health, depression, satisfaction with life, and stress, as compared to those that were not involved. The authors concluded that gifted students had higher rates of cybervictimization and lower rates of cyberbullying than those observed in other studies using a general population sample.

Using semi-structured interviews, Rondini and Almeida (2022), analyzed whether gifted students were bullied for being considered different and whether the beliefs about giftedness led to violent actions against these students. The authors used a sample of 10 Brazilian students (5 girls and 5 boys) aged 10 to 15. The authors concluded that characteristics and beliefs did not seem to influence the higher degree of victimization and bullying experienced by gifted students.

Using a sample of 195 gifted Irish adolescents aged 14–18, Laffan et al. (2022) analyzed the prevalence of school bullying and cyberbullying. They found that 55.4 % and 31.3 % of gifted students had experienced bullying and cyberbullying, respectively, at some point in their lives. The frequency of traditional bullying in the last 3 months was as follows: no-involvement (67.7 %), victim only (27.2 %), bully only (3.1 %), and bully/victims (2.1 %). Cyberbullying involvement frequencies in the 3-month school period were reported as follows: no-involvement (71.8 %), victim only (18.5 %), bully only (4.1 %) and bully/victim (5.6 %). The authors concluded that these figures were considerably higher than compared to an all-Ireland national prevalence rate.

4. Discussion

This study presents a systematic review of school bullying and cyberbullying in gifted students. The objective was to systematically analyze the empirical research existing on the relationship between school bullying and cyberbullying in samples of gifted students, in order to offer more understanding of this group. Based on the results obtained (15 studies included in the review) it is possible to distinguish between three research groups. The first research group concluded that gifted students were at a greater risk of being a victim, as compared to non-gifted students, and had a lower risk of being a bully, given the characteristics of this group (perfectionism, sensitivity, asynchronous development, high awareness of moral and ethical issues, strong sense of individualism, motivation, early development of the internal locus of control, passion for learning, or outstanding academic performance) (Ogurlu & Sariçam, 2018; Sariçam & Çetinkaya, 2018). A second group

of studies affirmed that gifted students had a lower risk of being a bully or a victim as compared to non-gifted students, since their high cognitive level allowed them to effectively take on social and emotional challenges, thereby leading to a lower level of participation in bullying or victimization behavior (Estell et al., 2009; Peairs et al., 2019). Finally, a third research perspective concluded that gifted students have a similar risk of being a bully or a victim as non-gifted students (Peters & Bain, 2011; Ryoo et al., 2017; Sureda et al., 2020). The classification of these studies has been carried out by only considering works that compared samples of gifted and non-gifted students. Based on this classification, studies in the third group predominate, that is, those in which it is concluded that gifted students have a similar risk of being a victim and bully, with three studies corroborating these results, in contrast to the first and second group, which had only two studies supporting them. The scarcity of relevant studies prevents us from clearly confirming the predominance of this perspective as compared to the others. And even more so given that in seven studies, comparisons were not made between gifted and non-gifted students, and indicated a high prevalence of bullying with very negative consequences in gifted students. Thus it may be concluded that these studies are more in line with the first perspective (greater risk of being victimized and lower risk of being a bully) (Conolly, 2018; González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Laffan et al., 2022; Pelchar & Bain, 2014; Peterson & Ray, 2006a; Peterson & Ray, 2006b). Therefore, given the empirical research available, it is clearly necessary to further examine the relationship between school bullying and this student group. This disparity of results may be due to distinct factors: (a) lack of unanimity amongst the scientific community regarding the definition of the term gifted and the diversity of theoretical frameworks explaining this gifted group; (b) the variety of geographical and social contexts with their respective socio-cultural realities and distinct educational systems; (c) the age of the sample considered; (d) measurement instruments. These and other factors may hinder the comparison of results, and the findings of the analyzed studies should be interpreted with caution.

On the other hand, the studies analyzed the prevalence rates of school bullying and cyberbullying in gifted students (González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Laffan et al., 2022; Peterson & Ray, 2006a) with higher prevalence rates than those typically found in reviews considering the general population (Hymel & Swearer, 2015; Monks et al., 2009; Stassen-Berger, 2007). This suggests the trend for gifted students to suffer from more bullying due to their unique characteristics. However, these results should also be subject to a more in-depth analysis.

Therefore, although this systematic review does not allow us to definitively conclude that bullying or cyberbullying is more prevalent in gifted students and that this condition is not inexorably related to suffering greater levels of victimization, we can recommend that the education community include preventive elements and specific interventions for this group. As such, in response to the prevalences found in the present review, we suggest the need to reinforce coexistence strategies that prevent or mitigate bullying or cyberbullying in this specific group of students. Moreover, the analysis of the different studies has outlined the negative consequences of bullying and cyberbullying for these students (anxiety, depression, stress, rage, frustration) (Conolly, 2018; González-Cabrera, Tourón, Machimbarrena, Gutiérrez-Ortega, et al., 2019; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Pelchar & Bain, 2014), which reinforces the need for prevention and intervention activities, for example, providing an adult or peer mentor for gifted students can help reduce their anxiety (Benson, 2009), and grouping gifted students throughout the school day can help reduce feelings of social isolation or low self-esteem (Bar-On, 2007). Moreover, in light of the results, it is necessary to reflect on those studies that have corroborated that gifted students present a lower risk of displaying bullying or victimization

behaviors because their high cognitive level helps them to cope effectively with social and emotional challenges, thus contributing to a lower degree of involvement in bullying or victimization (Estell et al., 2009; Peairs et al., 2019). Perhaps the contradictory results found in the different studies call for a deeper analysis of the variables that help in understanding why some gifted students suffer and carry out bullying and cyberbullying behaviors and why others do not seem to be more exposed to this problem. It is possible that the different degrees of social and emotional skills in this group of students are the reason for these differences, thus making it necessary for the development of these skills to be addressed (Peairs et al., 2019). Teachers should consider the vulnerability and unique characteristics of gifted students and should help them to develop socio-emotional and problem-solving skills to confront the victimization of their peers. Casino-García et al. (2019) emphasized the importance of developing emotional intelligence (recognizing and being able to express feelings or handle emotions) in this group. Other aspects that can be developed, such as problem resolution, self-concept, coping strategies, or social skills, may also help in the managing of stressful classroom situations. Therefore, in the school environment, it is necessary to go beyond the strictly cognitive assessment of gifted students. It is also necessary to consider the affective and social dimensions of these students.

Furthermore, even those studies that did not find a higher level of bullying with these students indicate that they are not immune to victimization. Therefore, other contextual aspects should also be considered (school environment, belonging to the group, etc.) which may protect gifted and non-gifted students. Some studies concluded that the experiences of these gifted students depend on the social environment of the classroom, including how they are valued and treated by teachers and peers (Cross, 2001; Peterson & Ray, 2006b). Thus, in light of the analysis carried out in this present study, another aspect to consider is the type of bullying that these students generally experience. Insults that refer to their intelligence, teasing about their appearance, or about their academic qualifications (Peterson & Ray, 2006a; Peterson & Ray, 2006b) show the need to create a positive scholastic environment that accepts individual differences of students, including high cognitive skills and others that are characteristic of gifted students (perfectionism, interests, academic performance, etc.) (Peterson & Ray, 2006b; Ryoo et al., 2017). Therefore, teachers should attempt to create an environment that positively values high academic performance. Likewise, it is relevant to widen the training of teachers to ensure the early identification of bullying indicators and provide them with resources to avoid conflicts as they arise. In addition, some of the research analyzed in this review shows that these students are often reluctant to report bullying and do not inform parents or teachers (Conolly, 2018; González-Cabrera, Tourón, Machimbarrena, León-Mejía, & Gutiérrez-Ortega, 2019; Peterson & Ray, 2006b). Ensuring a school climate in which they feel protected and trust authority figures to report bullying can also be key. Therefore, it is believed to be necessary for the educational community to include school bullying prevention elements and programs to improve attitudes toward gifted students, promoting the development of empathy and prosocial behavior in the scholastic environment.

This study has its limitations. First, the established exclusion criteria may have biased the results obtained. However, it should be noted that the development of a protocol and specific inclusion and exclusion criteria has increased the solidity of the research. On the other hand, the search in a limited number of databases specializing in psychology and education may have excluded results from other disciplines that would have offered robustness to the study. Moreover, the distinct experimental designs used in the different studies hinder the comparison of results. The distinct conceptualizations of being gifted, as well as of school bullying and cyberbullying and its assessment prevent the rigorous contrasting of the studies. Similarly, most of the studies analyzed are transversal in nature, preventing the determination of a cause-effect between being gifted and bullying. It should also be noted that few multi-reporting studies were available, with most works only

assessing student perceptions. Finally, given the diversity of the geographic and cultural contexts of the studies analyzed, the results should be interpreted with caution. Despite these limitations, this work offers a greater understanding of school bullying and cyberbullying in gifted students, collecting empirical evidence on this issue. To date, no other similar systematic review is available; therefore, it may be considered the basis for further scientific study in this area.

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Declaration of competing interest

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

Data availability

No data was used for the research described in the article.

References

- Alvino, J. (1991). An investigation into the needs of gifted boys. *Roeper Review*, 13(4), 174–180. <https://doi.org/10.1080/02783199109553352>
- Bain, S. K., & Bell, S. M. (2004). Social self-concept, social attributions, and peer relationships in fourth, fifth, and sixth graders who are gifted compared to high achievers. *Gifted Child Quarterly*, 48, 167–178. <https://doi.org/10.1177/001698620404800302>
- Bar-On, R. (2007). The impact of emotional intelligence on giftedness. *Gifted Education International*, 23(2), 122–137. <https://doi.org/10.1177/026142940702300203>
- Benson, M. (2009). Gifted middle school students transitioning to high school: How one teacher helped his students feel less anxious. *Gifted Child Today*, 32(2), 29–33. <https://doi.org/10.4219/gct-2009-876>
- Bergmann, M. C., & Baier, D. (2018). Prevalence and correlates of cyberbullying perpetration. Findings from a German representative student survey. *International Journal of Environmental Research and Public Health*, 15(2), 274. <https://doi.org/10.3390/ijerph15020274>
- Cañas, E., Estévez, E., Martínez-Monteaquedo, M. C., & Delgado, B. (2020). Emotional adjustment in victims and perpetrators of cyberbullying and traditional bullying. *Social Psychology of Education*, 23, 917–942.
- Carrera, M. V., Fernández, M. L., Castro, Y. R., Failde, J. M., & Otero, M. C. (2013). Bullying in Spanish secondary schools: Gender-based differences. *Spanish Journal of Psychology*, 16, 1–14. <https://doi.org/10.1017/sjp.2013.37>
- Carter, B. B., & Spencer, V. G. (2006). The fear factor: Bullying and students with disabilities. *International Journal of Special Education*, 21(1), 11–23.
- Casino-García, A. M., García-Pérez, J., & Llinares, I. (2019). Subjective emotional well-being, emotional intelligence, and mood of gifted vs. unidentified students: A relationship mode. *International Journal of Environmental Research and Public Health*, 16, 3266. <https://doi.org/10.3390/ijerph16183266>
- Christopher, M. M., & Shewmaker, J. (2010). The relationship of perfectionism to affective variables in gifted and highly able children. *Gifted Child Today*, 33(3), 20–30. <https://doi.org/10.1177/107621751003300307>
- Clark, B. (2002). *Growing up gifted*. Columbus, OH: Charles E. Merrill.
- Cohen, R., Duncan, M., & Cohen, S. (1994). Classroom peer relations of children participating in a pull-out enrichment program. *Gifted Child Quarterly*, 38, 33–38. <https://doi.org/10.1177/001698629403800105>
- Conolly, J. P. (2018). Exploring the factors influencing gifted adolescents' resistance to report experiences of cyberbullying behavior: Toward an improved understanding. *Journal for the Education of the Gifted*, 41(2), 136–159. <https://doi.org/10.1177/0162353218763869>
- Cross, T. L. (2001). The many faces of bullies. *Gifted Child Today*, 24(4), 36–37.
- Dalosto, M. D. M., & Alençar, E. M. (2013). Manifestações e prevalência de bullying entre alunos com altas habilidades/superdotação. *Revista Brasileira de Educação Especial*, 19(3), 363–378.
- Delgado, B., Martínez-Monteaquedo, M. C., Ruíz-Esteban, C., & Rubio, E. (2019). Latent class analysis of school refusal behavior and its relationship with cyberbullying during adolescence. *Frontiers in Psychology*, 10, 1916. <https://doi.org/10.3389/fpsyg.2019.01916>
- Erwin, J. (2015). *Prevalence and impact of peer victimization among gifted adolescents (Doctoral Dissertation)*. Berkeley, United States: University of California.
- Estell, D. B., Farmer, T. W., Irvin, M. J., Crowther, A., Akos, P., & Boudah, D. J. (2009). Students with exceptionalities and the peer group context of bullying and

- victimization in late elementary school. *Journal of Child and Family Studies*, 18(2), 136–150. <https://doi.org/10.1007/s10826-008-9214-1>
- Flynt, S. W., & Morton, R. C. (2007). Bullying prevention and students with disabilities. *National Forum of Special Education Journal*, 19(1), 1–6.
- Fornia, G. L., & Frame, M. W. (2001). The social and emotional needs of gifted children: Implications for family counseling. *The Family Journal*, 9(4), 384–390. <https://doi.org/10.1177/1066480701094005>
- Francis, R., Hawes, D. J., & Abbott, M. (2016). Intellectual giftedness and psychopathology in children and adolescents: A systematic literature review. *Exceptional Children*, 82, 279–302. <https://doi.org/10.1177/0014402915598779>
- Garaigordobil, M., & Aliri, J. (2013). Ciberacoso (cyberbullying) en el País Vasco: diferencias de sexo en víctimas, agresores y observadores. *Behavioral Psychology*, 21(3), 461–474.
- González-Cabrera, J., Machimbarrena, J. M., Ortega-Barón, J., & Álvarez-Bardón, A. (2019). Joint association of bullying and cyberbullying in health-related quality of life in a sample of adolescents. *Quality of Life Research*, 29, 941–952. <https://doi.org/10.1007/s11136-019-02353-z>
- González-Cabrera, J., Tourón, J., Machimbarrena, J. M., Gutiérrez-Ortega, M., León-Mejía, A., Álvarez-Bardón, A., & Garaigordobil, M. (2019). Cyberbullying in gifted students: Prevalence and psychological well-being in a Spanish sample. *International Journal of Environmental Research and Public Health*, 16, 2173. <https://doi.org/10.3390/ijerph16122173>
- González-Cabrera, J., Tourón, J., Machimbarrena, J. M., León-Mejía, A., & Gutiérrez-Ortega, M. (2019). Estudio exploratorio sobre acoso escolar en alumnado con altas capacidades: prevalencia y afectación psicológica. *Revista de Educación*, 386, 187–214.
- Gradinger, P., Strohmeier, D., & Spiel, C. (2009). Traditional bullying and cyberbullying: Identification of risk groups for adjustment problems. *Zeitschrift für Psychologie/ Journal of Psychology*, 217(4), 205–213. <https://doi.org/10.1027/0044-3409.217.4.205>
- Gross, M. U. M. (2002). Social and emotional issues for exceptionally intellectually gifted students. In M. Neihart, S. M. Reis, N. M. Robinson, & S. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. 19–30). Washington: Prufrock Press.
- Hargrove, K. (2010). Stop school bullying: A tale of two girls. *Gifted Child Today*, 33(4), 39–40. <https://doi.org/10.1177/107621751003300409>
- Hasekiu, F. (2013). Learning of bullying's acts through social learning. *Journal of Educational and Social Research*, 3(7), 131. <https://doi.org/10.5901/jesr.2013.v3n7p131>
- Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior*, 17, 311–322.
- Hyatt, L. (2010). A case study of the suicide of a gifted female adolescent. *Journal for the Education of the Gifted*, 33, 514–535.
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist*, 70, 300–310. <https://doi.org/10.1037/a0038928>
- Kowalski, R., & Limber, S. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health*, 41, 22–30. <https://doi.org/10.1016/j.jadohealth.2007.08.017>
- 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, 1073–1137. <https://doi.org/10.1037/a0035618>
- Laffan, D. A., Slonje, R., Ledwith, C., O'Reilly, C., & Foody, M. (2022). Scoping bullying and cyberbullying victimisation among a sample of gifted adolescents in Ireland. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-022-00134-w>
- Litster, K., & Roberts, J. (2011). The self-concepts and perceived competencies of gifted and non-gifted students: A meta-analysis. *Journal of Research in Special Education Needs*, 11, 130–140. <https://doi.org/10.1111/j.1471-3802.2010.01166.x>
- MacFarlane, B., & Mina, K. (2018). Cyberbullying and the gifted: Considerations for social and emotional development. *Gifted Child Today*, 41(3), 130–135. <https://doi.org/10.1177/1076217518768362>
- Mitchell, M. S. (2011). *Cyberbullying and academic achievement: Research into the rates of incidence, knowledge of consequences, and behavioral patterns of cyberbullying*. USA: University of Connecticut.
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *The Journal of Adolescent Health*, 55, 602–611. <https://doi.org/10.1016/j.jadohealth.2014.06.007>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine*, 151(4), 264–269. <https://doi.org/10.7326/0003-4819-151-4-200908180-00135>
- Monks, C. P., Smith, P. K., Naylor, P., Barter, C., Ireland, J. L., & Coyne, I. (2009). Bullying in different contexts: Commonalities, differences and the role of theory. *Aggression and Violent Behavior*, 14(2), 1359–1789. <https://doi.org/10.1016/j.avb.2009.01.004>
- Ogurlu, U., & Sarıçam, H. (2018). Bullying, forgiveness and submissive behaviors in gifted students. *Journal of Child and Family Studies*, 27, 2833–2843. <https://doi.org/10.1007/s10826-018-1138-9>
- Oliveira, J. C., & Barbosa, A. J. G. (2012). Bullying among students with and without characteristics of giftedness. *Psicologia: Reflexão e Crítica*, 25(4), 747–755. <https://doi.org/10.1590/S0102-79722012000400014>
- Oliver, C., & Candappa, M. (2003). *Tackling bullying: Listening to the views of children and young people (Research Report No. 400)*. London: Department for Education and Skills.
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, 9, 751–780. <https://doi.org/10.1146/annurev-clinpsy-050212-185516>
- Patchin, J. W., & Hinduja, S. (2012). *Preventing and responding to cyberbullying: Expert perspectives*. Thousand Oaks, CA: Routledge.
- Pearis, K. F., Putallaz, M., & Costanzo, P. R. (2019). From a (aggression) to v (victimization): Peer status and adjustment among academically gifted students in early adolescence. *Gifted Child Quarterly*, 63, 1–16. <https://doi.org/10.1177/0016986219838973>
- Pelchar, T. K., & Bain, S. K. (2014). Bullying and victimization among gifted children in school-level transitions. *Journal for the Education of the Gifted*, 37, 319–336. <https://doi.org/10.1177/0162353214552566>
- Peters, M. P., & Bain, S. K. (2011). Bullying and victimization rates among gifted and high achieving students. *Journal for the Education of the Gifted*, 34, 624–643. <https://doi.org/10.1177/016235321103400405>
- Peterson, J. S. (2009). Myth 17: Gifted and talented individuals do not have unique social and emotional needs. *Gifted Child Quarterly*, 53, 280–282. <https://doi.org/10.1177/0016986209346946>
- Peterson, J. S., & Ray, K. E. (2006a). Bullying and the gifted: Victims, perpetrators, prevalence, and effects. *Gifted Child Quarterly*, 50, 148–168. <https://doi.org/10.1177/001698620605000206>
- Peterson, J. S., & Ray, K. E. (2006b). Bullying among the gifted: The subjective experience. *Gifted Child Quarterly*, 50, 252–273. <https://doi.org/10.1177/001698620605000305>
- Popp, A. M., & Peguero, A. A. (2011). Routine activities and victimization at school: The significance of gender. *Journal of Interpersonal Violence*, 26, 2413–2436. <https://doi.org/10.1177/0886260510383021>
- Preuss, L. J., & Dubow, E. F. (2004). A comparison between intellectually gifted and typical children in their coping responses to a school and a peer stressor. *Roeper Review*, 26, 105–111. <https://doi.org/10.1080/02783190409554250>
- Richard, J. F., Schneider, B. H., & Mallet, P. (2011). Revisiting the whole-school approach to bullying: Really looking at the whole school. *School Psychology International*, 33, 263–284. <https://doi.org/10.1177/0143034311415906>
- Rondini, C. A., & Almeida, A. (2022). Bullying and giftedness in school environment. *Gifted and Talented International*, 37(1), 14–24. <https://doi.org/10.1080/15332276.2021.1978351>
- Ryoo, J. H., Wang, C., & Swearer, S. M. (2017). Investigation of transitions in bullying/victimization statuses of gifted and general education students. *Exceptional Children*, 83(4), 396–411. <https://doi.org/10.1177/0014402917698500>
- Sampasa, H., & Hamilton, H. A. (2015). Use of social networking sites and risk of cyberbullying victimization: A population-level study of adolescents. *Cyberpsychology, Behavior and Social Networking*, 18, 704–710. <https://doi.org/10.1089/cyber.2015.0145>
- Sarıçam, H., & Çetinkaya, C. (2018). Exploring revenge as a mediator between bullying and victimization in gifted and talented students. *Current Issues in Personality Psychology*, 6(2), 102–111. <https://doi.org/10.5114/cipp.2018.72267>
- Schuler, P. A. (2002). Teasing and gifted children. *The SENG Newsletter*, 2(1), 3–4.
- Silverman, L. K. (2002). Asynchronous development. In M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. 31–37). Waco, TX: Prufrock Press.
- Smith, P., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature an impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376–385. <https://doi.org/10.1111/j.1469-7610.2007.01846.x>
- Stassen-Berger, K. (2007). Update on bullying at school: Science forgotten? *Developmental Review*, 27(1), 90–126. <https://doi.org/10.1016/j.dr.2006.08.002>
- Sureda, I., López-Penades, R., Rodríguez-Rodríguez, R., & Sureda, J. (2020). Cyberbullying and internet addiction in gifted and nongifted teenagers. *Gifted Child Quarterly*, 64(3), 192–203. <https://doi.org/10.1177/0016986220919338>
- Suzuki, K., Asaga, R., Sourander, A., Hoven, C. W., & Mandell, D. (2012). Cyberbullying and adolescent mental health. *Journal Adolescent Medicine and Health*, 24(1), 27–35. <https://doi.org/10.1515/ijamh.2012.005>
- Thomson, P., & Gunter, H. (2006). Researching bullying with students: A lens on everyday life in an “innovative school.”. *International Journal of Inclusive Education*, 12, 185–200. <https://doi.org/10.1080/13603110600855713>
- Trompeter, N., Bussey, K., & Fitzpatrick, S. (2018). Correction to: Cyber victimization and internalizing difficulties: The mediating roles of coping self-efficacy and emotion dysregulation. *Journal of Abnormal Child Psychology*, 46, 1141. <https://doi.org/10.1007/s10802-018-0405-y>
- Vaivre-Douret, L. (2011). Developmental and cognitive characteristics of “high-level potentialities” (highly gifted) children. *International Journal Of Pediatrics*, 2011, Article 420297. <https://doi.org/10.1155/2011/420297>
- Van Geel, M., Vedder, P., & Taniol, J. (2014). Relationship between peer victimization, cyberbullying, and suicide in children and adolescents. *JAMA Pediatrics*, 168, 435. <https://doi.org/10.1001/jamapediatrics.2013.4143>

- Wachs, S. (2012). Moral disengagement and emotional and social difficulties in bullying and cyberbullying: Differences by participant role. *Emotional and Behavioural Difficulties*, 17, 347–360. <https://doi.org/10.1080/13632752.2012.704318>
- Webb, J. T., Amend, E. R., Webb, N. E., Goerss, J., Beljan, P., & Olenchak, F. R. (2005). *Misdiagnosis and dual diagnosis of gifted children and adults*. Scottsdale, AZ: Great Potential Press.
- Woods, S., & Wolke, D. (2004). Direct and relational bullying among primary school children and academic achievement. *Journal of School Psychology*, 42(2), 135–155. <https://doi.org/10.1016/j.jsp.2003.12.002>