

Studying School Bullying and Cyberbullying of Students with Intellectual Disabilities

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Abstract: On a global scale, bullying is a diffuse phenomenon in the school community, which is constantly taking on greater dimensions, undermining the inalienable right to learning and development of every child. However, nowadays it is taking on even more alarming proportions in the form of cyberbullying among young students, for whom the extensive use of the Internet and technology devices is an integral part of their daily lives. The aim of this paper is to investigate the factors that predict the frequent victimization of students with intellectual disabilities in the school environment and in cyberspace, but also to present its detrimental consequences, which may, possibly, lead them to commit bullying. The results of the study showed that a holistic school policy, which develops a safe and resilient school climate and elaborates an inclusive and supportive learning environment, alongside perceived social support and the creation of protective social networks, prevents the manifestation of school bullying and cyberbullying of students with intellectual disabilities, while through consistent training, mediation and coping strategies it effectively suppresses such negative phenomena.

Keywords: School bullying, cyberbullying, intellectual disabilities, emotional difficulties, social deficits, inclusive learning environment, supportive social networks

1. Introduction

The multiple attempts to conceptualize bullying demonstrate that it is a disturbing phenomenon, of major social and scientific interest, due to its high frequency of manifestation among young people and its adverse consequences for victims and bullies [1]. On the other hand, in recent decades, the educational systems of many countries, worldwide, are removing their separating barriers and transforming into inclusive environments, providing quality educational services that optimize the learning and development of a heterogeneous student population, while the greater diversity of learning environment maximizes academic performance and social interactions among its members [2].

However, the school environment is often not particularly welcoming to students with intellectual disabilities, as their atypical appearance, cognitive constraints, social deficits, and maladaptive behavior lead to their targeting and isolation from their typically developing peers, making them easy victims of school bullying. Hence, the accumulated feelings of anger and indignation, due to their bullying, but also the misinterpretation of some social stimuli of the classroom environment, reinforce the manifestation of their reactivity and aggression, as a result of which they get involved in bullying situations [3].

In this direction, the daily use of ICTs has introduced a new form of bullying into the lives of young students, through the Internet and technology devices, which extends beyond the school premises, allowing the anonymity of the perpetrator and its uncontrolled dispersion, making it significantly more dangerous than “traditional” forms of bullying [1],[4]. Thus, while the world of technology provides multiple opportunities for entertainment, interaction, learning and development to modern young people, at the same time it also presents many risks, such as that of cyberbullying, as it has been found that 7 out of 10 have been victims [5].

The negative effects of any form of bullying of students with intellectual disabilities are reflected through their low academic performance, frequent school absences, physical symptoms, self-harm and suicidal tendencies, which in combination with the lack of the required cognitive and socio-emotional resources to manage their victimization, have long-term detrimental effects on their physical and mental health and should, therefore, be encouraged to report their involvement in bullying incidents, in order to be provided with appropriate support [4].

The present literature study aims to investigate the predictors of school and online bullying of students with intellectual disabilities, as well as the reasons for their possible perpetration, aiming at a deeper understanding of its social and psychological effects in their lives. Furthermore, an attempt is made to present a comprehensive school policy to prevent and address this worrying phenomenon, by developing an inclusive, safe and supportive school environment, as well as the role of protective social networks of teachers, parents and friends.

2. Clarification of concepts

2.1. Bullying / Cyberbullying

“Bullying” is a deliberate and repeated aggressive behavior by a person or group in a position of power, with the aim of domineeringly oppressing and manipulating a victim, who is at a disadvantage compared to the bully. These characteristics differentiate it from any other manifestation of adolescent aggression [6]. It is manifested as a. direct bullying: i. physical, with overt acts of physical violence, coercion into unwanted demeaning actions, removal or destruction of personal items ii. verbal, with taunts, insults, mocking nicknames, threats and b. indirect bullying: i. social and ii. psychological, with the emotional manipulation and breaking of the child’s social relations with his/her classmates, through the spreading of false rumors or his/her humiliation, with the aim of extorting and marginalizing him/her [7], [8], [9].

Recently, cyberbullying has been added to these forms, which is a deliberate, repeated, systematic display of aggression, by an individual or group, with the aim of harassing or intimidating a vulnerable victim, using the Internet and technology tools [1], [3], [10].

The people involved in the negative vortex of bullying are: a. bullies, possessing muscle power, self-confidence, influence, impulsivity, innate aggression, explosiveness, reactivity, school refusal, manipulateness, responsibility phobia, lack of empathy b. victims, who are introverted, hesitant, visibly anxious, insecure about their appearance and performance, isolated, with low self-esteem, strong feelings of failure and shame [10] c. bullies-victims or “provocative” victims, who are irritable, impulsive, hyperactive with distraction, emotionally immature and escalate the cycle of bullying, displaying, at the same time, anxious and violent behavior, internalized and externalized mental distress and significant difficulties adjusting to the school environment [9], [11] and d. bystanders, who may be apathetic spectators, encouraging the abuser with their indifference, or defenders, who disapprove of the bully or/and intervene directly on behalf of the victim [12].

2.2. Intellectual disability

The term “intellectual disability”, which replaced the former “mental retardation” or the newly proposed term “intellectual developmental disorders” describes a condition characterized by a spectrum of developmental disorders, with deficits in cognitive skills and consequences for learning, reasoning, problem solving, the development of social and practical skills, which affect functionality and adaptive behavior.

In recent years, researchers have debated whether it is a health condition or a disability, which affects the selection of people who fall into this category and the type of appropriate services - health, education, social - that should be provided to them [13]. It manifests itself during the person's developmental period, before the age of 18, with a frequency of 1% in developed countries and 2% in developing countries, while the level of impairment of his general mental ability ranges from borderline, mild, moderate, severe to profound [14].

3. Students with intellectual disabilities as victims and perpetrators of school bullying and cyberbullying

3.1. The rates and the effects of their bullying

The worrying phenomenon of school bullying was first studied in Norway, by Olweus, in 1973 [1] and over time, many studies have investigated its nature and effects, as it constantly takes on new forms and intensity, which make it increasingly dangerous.

However, little research has examined bullying in relation to students with intellectual disabilities and its devastating effects, such as emotional difficulties - depression, anxiety, withdrawal - inability to concentrate, lack of motivation, low academic performance, school dropout, self-harm tendencies and sometimes suicidal ideation [15] but also existing or subjective health problems such as headaches, stomach pains, lack of appetite, skin problems and sleep difficulties [16]. These serious consequences, combined with externalizing difficulties - failure to form quality relationships with their peers, aggression, antisocial behavior - undermine the possibility of successful social interaction in the school environment, but also outside it, making them, quite often, victims or even perpetrators of bullying, with a negative impact on their adult life as well [3].

Sources of information, about their involvement in bullying situations and its overwhelming impact on their lives, are the reports of teachers, parents and sometimes the children themselves, through observation, questionnaires and interviews [8].

The few research data concerning students with intellectual disabilities, focusing mainly on their victimization, is characterized by inconsistency, as some, in relation to their typically developing peers, present comparable rates of their bullying [12], while most report a significantly higher frequency of their victimization [2], [17], although all of them refer a gradual decrease as they move from childhood to adolescence [15]. More specifically, they reveal that this population is mainly victims of bullying (36.3%), but several times acts as bullies (15.1%) or more often as "provocative" victims (25.2%). This evidence suggests that they bully other students to the same extent as their typically developing peers, but that they are victims or bullies at higher rates than them. Despite these differences, which are due to socio-cultural perceptions and different forms of this negative phenomenon, the studies converge that students with intellectual disability are bullied mainly verbally (50.2%), online (38.3%), socially ostracized (37.4%) and accepted fewer physical attacks (33.3%) as they get older [8].

3.2. Predictors of bullying victimization and perpetration

The discrepancy between researchers on the victimization rates of students with intellectual disabilities extends to whether the type of school setting predicts a higher frequency of bullying. Thus, Reiter & Lapidot-Lefler (2007) report similar percentages for both contexts, while Morrison, et al., (1994) provide evidence of more frequent victimization in general schools, where their indirect, mainly, bullying finds a fertile ground, due to insufficient supervision of their interactions with their typically developing peers [12]. Hence, they argue that segregated

educational environments, where they usually experience physical violence or sexual harassment [11], offer limited opportunities for the development of their socialization, while inclusive schools multiply the prospects of socialization and improvement of their academic performance, enhancing acceptance by their peers and the validating appropriate behaviors and social skills [4]. However, if they fail to develop protective networks of friendship, their bullying can reach uncontrollable proportions, although at the elementary level, they are less often isolated from younger children, as they do not focus, so much, on external characteristics or are not able to perceive the cognitive deficits of students with intellectual disabilities [12].

It seems, therefore, that the severity of their mental disability is a primary predictor of their victimization, as it affects the characteristics of their atypical external appearance and is responsible for the failure to develop socioculturally acceptable behavior patterns in the school environment. Indeed, the lower the mental quotient of these children, the more often they are victims or commit bullying, while most become perpetrators of bullying, having previously been victims [10].

There is no doubt that the emotional difficulties they experience, such as depression, anxiety, low self-esteem, negative self-concept, isolation tendencies, and increased internalizing symptoms of their traumatic experiences, due to rejection and victimization, make them more vulnerable to bullying [14]. This situation is exacerbated by their reduced social skills, such as timidity, passivity, lack of assertiveness, gullibility, ignorance of risk, difficulty joining peer groups, limited social networks and unstable friendships, which corrode the quality of social interactions with their classmates and leave them defenseless against their bullying behaviors [7], [18]. Furthermore, their reduced critical ability, lack of self-determination and self-defense, their low levels of independence, security, adaptation to new environments and conflict resolution put them in the high-risk group of victimization [6]. It is also noteworthy that, from their self-reports, it appears that they have a more expanded perception of bullying, perceiving as bullying rude, indifferent or bossy behaviors towards them [7].

Another important factor is the attitude of teachers and the practices they develop, as a component of their awareness, information and vigilance, as, in several cases, their perceived sense of the dimensions of school bullying does not reflect the reality. This happens because they perceive physical attacks as a serious form of bullying, in which they are obliged to intervene immediately, while they do not recognize or not pay attention to covert forms of bullying. Thus, victims do not seek support for their frequent incidents of indirect bullying, because they possibly fear that an outside intervention may further escalate the difficult situation [12]. Additionally, it has been observed that a very small percentage of teenagers will report their online victimization to an adult - a teacher or a parent - as they question their technological sufficiency or are unsure of their possible reactions or even because of their desperate desire to acquire a friendship, considering those who bully them as their "friends" [18]. As they enter adolescence, they experience even greater emotional difficulties and, combined with their negative self-perception, lead to self-limitation and passive acceptance of negativity against them. In general, they rarely report their unpleasant experiences to others, internalizing them, which discourages their academic and social participation in the school environment and erodes their physical and mental health in the long term, degrading their quality of life [17].

On the other hand, students with severe or profound intellectual disabilities or those who move from inclusive to segregated school contexts often adopt the role of "provocative" victims and display increased aggression, bullying other students [12]. It seems that this is a behavior related to their inherent personality traits, their hyperactivity and social adaptation difficulties, as a consequence of their low mental potential, leading to a misinterpretation of their intentions.

Given their low levels of emotional self-regulation, the constraints in their language expression, information processing and problem solving, they resort to an egocentric communication and, having accumulated strong feelings of anger, resentment, mental discomfort and pressure, manifest increased aggression, as a reaction and revenge mechanism to their prolonged bullying, which disrupts their thinking and behavior and continues the vicious cycle of bullying [11], [19]. Furthermore, it may reflect violent behavior towards them from conflictual or abusive family or other intimate social environments. However, they have been found to deny committing bullying, possibly because they do not remember or are not fully aware of their behavior or because they may feel embarrassed to discuss it [15]. However, it cannot be overlooked that, although they sometimes react with unacceptable aggression and reduced self-control, misinterpreting social stimuli - teasing, intense games - due to their difficulty in processing social information, these exaggerated perceptions of their victimization are likely to be accompanied by painful effects [8].

3.3. Cyberbullying and its characteristics

For today's young people, growing up in the era of technological development, the Internet and technology devices are an integral part of their daily life, although their improper use entails a multitude of risks, with the most typical case being cyberbullying [19]. This is a more dangerous form of bullying by sending and receiving abusive messages via mobile phones or emails, using online chat sites, blogs and digital games, aiming to psychologically harm their classmates [1]. Some of its manifestations are verbal bullying, making threats, racist comments, social humiliation and isolation, deliberately ignoring phone calls, intercepting confidential personal information, sharing inappropriate photos or videos on social media, and sexual harassment [5], [19].

Researchers disagree whether this is another form of bullying or a typical manifestation of adolescent peer aggression, as it appears to involve similar actions and behaviors to other forms of bullying, although it extends outside the school environment and differs in malicious repetition and its widespread dissemination [18]. Therefore, the main characteristics of cyberbullying are: a. the anonymity of the bully, who is difficult to identify as he uses a fake profile, which makes him insolent and increases the victim's distress and anxiety b. the ability of the bully to cause harm to the victim with an action, the negative effects of which are repeated sequentially c. the minimal bully-victim interaction and d. the increased mental distress of the victim, who is clearly more vulnerable than any other form of bullying, due to the highly pervasive nature of cyberbullying [1], [5], [18].

Although it is proven that young people with intellectual disabilities use technology less, however, due to social exclusion from their typical peer groups, which minimize their physical interactions, the world of virtual reality seems ideal for achieving their social networking, acquiring friendly relationships and developing their positive self-concept, which often encourages them to reveal their personal information, thus exposing themselves more to the risk of online victimization [16], [19], [20]. Thus, despite the limited access and use of ICTs and social media by students with intellectual disabilities, their rates of cyberbullying prove to be comparable or higher to their normally developing peers [5]. In addition, some researchers consider that, in segregated educational environments, they are more often involved in acts of cyberbullying, compared to students with intellectual disabilities, who attend inclusive school structures [4]. Other studies, however, report less frequent and different use of the Internet by young people with intellectual disabilities attending special education schools, due to their appropriate information and training [20].

Cyberbullying, in a Dutch study, was associated with high levels of social well-being, finding its highest rates in early adolescence (11-15 years). At the same time, it seems to be mainly practiced by the 14-15 age group, who use the internet more and go to online chat sites, looking to chat with strangers, who usually victimize them, finding that both the victims and the perpetrators are teenagers, who often use technology media [10]. In this critical developmental period, when relationships with peers are considered the most important, affecting their self-esteem and contact with the other sex, online victimization negatively affects their self-concept, creating a strong sense of insecurity, inadequacy, incompetence and lack of trust in others [18]. Their vulnerability is enhanced, in addition to the factors mentioned above, by the inability to predict the consequences of their actions and to check the reliability of online information and understand the ambiguous social messages of the Internet [5], the high tendency to conform and agree, but also, the difficulty of expressing their emotions and recognizing abusive behaviors.

At the same time, seeking to establish relationships with strangers in chatrooms, or to talk to them as a coping mechanism for their depressive symptomatology, exposes them to a higher risk of sexual harassment than their typically developing peers, by sending inappropriate comments and exerting pressure to share personal photos of themselves and engage in sexualized online acts, which, however, may, then, extend offline. The adolescent's need to explore their sexual identity, the minimal interactions with their typically developing peers that would provide them with informal information or opportunities for contact with the opposite sex, their limited knowledge and experiences regarding sex education issues that would help them to understand their sexuality, as well as to distinguish consensual situations from abusive behaviours, combined with parental neglect and ignorance of the relevant legislation for their online protection, maximizes their vulnerability to online sexual harassment [20]. The harmful consequences for their mental health are similar to their typical peers, but because of their cognitive and socioemotional limitations, they experience them with significantly higher intensity, fear, and distress because, as a rule, they internalize responsibility for their cyberbullying [18]. But in addition to their victimization, they can become uninvolved bystanders of cyberbullying, which leads them to a state of co-victimization, worrying about becoming its next weak marks, experiencing intense psychological distress [16].

3.4. Strategies to prevent and manage bullying behaviors

Therefore, it is clear that the bullying of students with intellectual disabilities has social as well as psychological dimensions, although the latter are overlapped by the negative consequences of their victimization [7].

In the direction of preventing bullying, preventive programs are indicated with the aim of empowering them and increasing their self-awareness and self-determination, so that they acquire mental resilience in the face of challenging situations and develop defense strategies to avoid their victimization [11]. Such strategies are the effort to achieve satisfactory academic performance, gaining positive self-esteem and the acceptance of their classmates, as well as understanding their diversity, in order to develop the necessary social connections, which will contribute to building trust and a positive perception of the school environment. Also, the strategies of emotional self-regulation and showing indifference towards bullying behaviors minimize the chances of their victimization [6].

To eliminate this devastating phenomenon, educational policy makers should include in curricula, bullying prevention and treatment programs, supported by ongoing research on its dimensions and characteristics, and include direct instruction, video demonstration and

inclusion activities [21]. Furthermore, students with intellectual disability need individualized multifaceted intervention programs concerning their physical safety, the support of their emotional needs and the development of their social skills, which will limit their maladaptability. In this line, the children, who have been either bullies or victims of bullying, need appropriate pedagogical and therapeutic intervention that includes a. mental health counseling, for the acquisition of mental empowerment and resilience b. their anger management and self-control techniques and c. modeling appropriate behaviors and ways to resolve conflicts [12]. Given that these students with atypical development, due to their reduced social skills, have difficulty decoding the emotions and verbal and non-verbal behaviors of others, they need appropriate training to understand bullying behaviors, by providing them specific examples of their manifestation in different contexts, adapted to their mental level and to acquire the ability to react with particular practices and report their personal experiences of bullying [21]. Such training will allow them to develop relationships of mutual understanding with their peers and recognize which behaviors constitute bullying, encouraging them not to remain silent, but to react immediately, asking for external support [8].

Similarly, there is a need to design programs to prevent their cyberbullying by teaching them ways to use technology tools safely and in a controlled manner, since it has been found that they become both perpetrators and victims of cyberbullying the more often they surf the Internet or visit chatrooms, inside and outside the school [10]. Moreover, their perceived social support, from school teachers, parents and peers, can act as a deterrent or mitigating factor for online victimization and its negative psychosocial effects, when they perceive that they are accepted and belong to a social group that cares for them and respects their diversity, contributing to their social and mental empowerment and boosting their self-esteem, as they feel that they have people nearby, available, whenever they need them, to provide them with the appropriate support, in the event that they experienced the negative experience of cyberbullying [16], [19].

Above all, however, a holistic school policy and commitment is required, at the school unit level, which contributes to the formation of a safe and resilient school climate, with a supportive structure, which prevents the manifestation of bullying behaviors, through social awareness actions, with an emphasis on acceptance of dissimilarity, by cultivating empathy, sharing experiences among its members [7] and providing them specific information on how to navigate safely in cyberspace, and at the same time with a disciplinary structure, operating with a clear and consistent code of conduct and disciplinary measures to combat bullying [2]. The holistic approach of this dangerous phenomenon requires the participation of the entire educational community in systematic training for acquiring prevention strategies and a sufficient understanding of its dimensions and overwhelming effects, both for the victim and the bully, recognizing, mediating and decisively responding to bullying, but, mostly, assuming specific roles to change the “culture of silence”. A very effective practice is also the consistent informing of the educational community about the school’s anti-bullying policy and the publicizing of such issues, which will encourage self-reports of bullying by students with intellectual disabilities [21].

Teachers, as equal participants in decision-making, must take an active role by suitably modifying teaching and behavior management strategies, observing concerns, supporting individualized needs, and being aware of all interactions in their classroom. Thus, they will contribute to the creation of an organized, welcoming and protective learning environment, adapted to the unique characteristics of their students, which promotes equal learning opportunities, the acceptance of diversity, the development of prosocial skills by rewarding proper behaviors, thus minimizing the chances of manifestation bullying [2]. The same goals are supported by providing students with intellectual disabilities opportunities for group

activities - sports, music, art - by channeling their energy into creative actions, which will contribute to the recognition of their value and abilities by their typically developing peers, and they will encourage them to be equally involved in the whole of school life [11]. In the same vein, the risk of school phobia is removed, through effective ways of communicating, assuring them that their concerns will be heard and that they will be provided with the necessary support. Bystanders of the phenomenon - students, teachers - can also contribute to this, who should not perpetuate bullying with their indifference, but report it and provide immediate support to the victims [21].

Practices of cooperation and coordinated action by school psychologists, teachers, students, parents and the local community prove to be equally effective. In fact, the role of parents can prove to be extremely helpful, communicating regularly with the school community and providing it accurate and objective information about observed changes in their children's behavior [8]. An important protective factor is parental mediation that includes targeted actions by parents to limit online risks for their children. Such practices include monitoring their online activities either by their physical presence or by checking their children's browser history or linking their children's Facebook account to their own account. As effective methods should also be indicated the safe use settings which limit their access to ambiguous websites and online applications and the placement of a visual reminder on their computer screen to seek support from an adult, in the case they face any danger [18]. At the same time, it is necessary to counsel parents to learn to set safeguards in the use of the Internet and to focus their attention on cyber experiences, especially of early adolescence, in order to control and monitor their activities, providing them with guidance on the risks of potentially sharing their personal information in cyberspace and how to avoid online situations that could turn into traumatic experiences [10], [20].

Finally, the design of strategies to deal with bullying must take into account the seriousness of the situation and be carefully implemented, removing the possibility of its escalation, while constant vigilance and observation of the school environment is required to assess the effectiveness and readjust management policies and procedures of open bullying issues handling [21]. Likewise, the continuous support and discreet supervision of their family environment is required, given that every form of bullying, like the cyberbullying, is born from the loneliness of a vulnerable mark, that the insufficient protective social network around him/her, makes it easier for the "predator" to bully him/her with all convenient means [18].

4. Discussion & Conclusions

Finally, we must underline the role of digital technologies in education domain that is very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via Mobiles [26-38], various ICTs applications [39-72], AI & STEM ROBOTICS [73-86], and games [87-94]. Additionally, the combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [95-141] as well as with environmental factors and nutrition [22-25], accelerates and improves more over the educational practices and results, especially for students with learning and other disabilities. Beyond the positive consequences of the usage of digital technologies in education domain, we should take into serious consideration the cyberbullying phenomenon especially for the student with intellectual disabilities.

Undoubtedly, students with intellectual disabilities, like any child, have the right to learn and develop in a safe and supportive school environment. In the same vein, supporting their equal access to the world of digital reality, which bridges the digital divide between heterogeneous

student populations, it is necessary to educate them on the appropriate and safe use of the Internet, which reduces the potential risks involved.

The social and scientific concern about their school bullying and cyberbullying is justified as it has an overwhelming impact on their academic learning and socio-emotional development, undermining the quality of social interactions not only with their peers, but also during their adult life. Moreover, the interaction of biological, psychological and social factors, within a disorganized school environment, make them easy marks for all forms of bullying, threatening their mental well-being and quality of life. Due to the internalization of painful symptoms and social withdrawal, they find it difficult, to a greater extent than their typically developing peers, to cope with such painful situations, minimizing the prospects of receiving social support and intervention. For these reasons, they need a holistic school approach, immediate intervention, perceived social support, parental mediation, professional attention and support, either to effectively manage the serious consequences of their victimization or to identify the underlying causes of their aggressive behavior.

In a discriminatory society, the intellectual disability alone of these children is sufficient to increase their social stigmatization, verifying the finding of Whitney et al. (1994) that a person's obvious difference multiplies his/her chances of being bullied. In this direction, the isolation from their peers and the online contact with unknown people, dictated by their need, at all costs, to establish friendly relations, multiplies the chances of their cyberbullying. Hence, it is a shared responsibility of the entire educational community to create a resilient school climate, with an inclusive orientation and respect for diversity, that promotes quality interactions between its members and removes malicious behaviors and a legal framework for schools, regarding cyberbullying and its negative consequences for their safety and learning within the school environment. In the light of above, school intervention programs to prevent and successfully deal with bullying must provide training on how to seek and receive support, but also for the acquisition of self-determination and mental resilience skills, making it clear that the "culture of silence" that nurtures the "beast" of bullying must be broken down.

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