



School bullying: consequences, risk and protective factors and successful school interventions worldwide.

Eleni Papamichalaki

MSc Program "Strategies of Developmental and Adolescent Health", 2nd Department of Pediatrics, "P. & A. Kyriakou" Children's Hospital, School of Medicine, National and Kapodistrian University of Athens, Greece

ABSTRACT

Bullying and victimization in the school environment have been a major concern in recent years for students, parents, teachers and state authorities. The purpose of this article is to describe the multidimensional phenomenon and its short- and long-term social and emotional consequences on all parties, whether directly or indirectly involved, and to examine the risk and protective factors through Bronfenbrenner's ecological systems theory, focusing on one of the main "systems", during adolescence, that of the school. The cultivation of social skills, coupled with a consistently positive school climate, are identified as key protective factors against bullying. In addition, two particularly successful approaches to preventing and tackling school bullying internationally are presented, namely social-emotional learning (SEL) and peer support programs. Social-emotional learning is based on the cultivation of social and emotional skills, while peer support capitalizes on the key role of "bystanders". As evidenced by the existing literature, a significant number of meta-analyses have demonstrated the multiple benefits that result from the systematic implementation of social-emotional learning programs at all levels of education. Also, empirical research has shown that the proven success of peer support programs needs further documentation, as their diversity and complex structure require systematic and long-term implementation prior to their final evaluation.

Key Words: *bullying; risk-protective factors; socio-emotional learning; peer support*

Corresponding Author: Eleni Papamichalaki email: elpapami@gmail.com

Introduction

The first definition of bullying was provided by the pioneer Dan Olweus, who defined school bullying as the exposure to intentionally negative behaviors perpetrated by one or more classmates, which occur repeatedly and over long periods of time [1]. A characteristic of this phenomenon is the imbalance of power [2], and the victim's defenselessness [1] leading to significant physical, psychological, social or academic complications. Olweus [1] also distinguished this construct from unintentional "teasing", which often occurs among peers in the context of jokes, but which may turn into bullying if continued for long periods of time [3], as well as other forms of aggression [4].

A meta-analysis of the prevalence of bullying between 1999 and 2006 found a rate of 20% for bullies, 23% for victims and 8% for bully victims [5]. However, prevalence rates reported between countries differed substantially, which likely occurred due to different frequency requirements in the operational definitions employed. In a more recent meta-analysis of 80 studies and 335,519 adolescents, Modecki et al. [6] estimated the prevalence of traditional bullying at 35%, and of cyber-bullying at 15%. Also, Junoven & Graham [7] estimated that 20-25% of youth have an involvement in bullying, whether that occurs in the form of bullying, victimization or both. Finally, the cross-national HBSC 2013-2014 study [8] found bullying to be 11% for boys and 6% for girls, operationally defining it as an experience occurring 2 to 3 times a month, in the last 2 to 3 months. In Greece, the prevalence of bullying was 10.6% among boys and 4.3% among girls [8].

The most "traditional" expressions of bullying are seen in direct behaviors, in the form of physical aggression, such as hitting, punching, slapping, biting, pulling or kicking, or verbal aggression which may include cursing, mocking, insulting, irony, sarcasm, name-calling, teasing, threatening, as well as sexist, racist, homophobic and transphobic comments [9,10]. These behaviors aim to humiliate, reduce, hurt or coerce the victim [11,12]. Indirect bullying, also described as "emotional" or "relational" bullying, is a form of bullying that often passes unnoticed by parents and teachers [13].

In this situation, which is driven by the need to maintain or achieve a position in the school's social hierarchy, the victim experiences fear, insecurity or social exclusion. In the case of social exclusion, victims are intentionally left out of activities of a group of peers or are continuously avoided [14]. Relational aggression occurs most often in the developmental period of early adolescence, when students move from primary to secondary school. During this period, the social environment becomes adolescents' priority, and the restructuring of the school's social hierarchy often places strain on peer groups. Nevertheless, bullying is a common phenomenon across age groups, rather than age-specific [15, 16].

In recent years, the development of new internet technologies and their presence as an integral part of an adolescent's socialization process has been parallel to the emergence of cyberbullying [17]. Cyberbullying involves intentional aggressive behaviors which occur through technological means [18]. This may include sending aggressive and threatening messages, excluding someone online, spreading rumors or using social network systems to publish private or humiliating information [18,19].

Social and Emotional Consequences of Bullying

For the past decade, bullying has been officially acknowledged as an important public health concern that requires the collaboration of the health, educational and family institutions for its resolution [20]. Bullying involvement has been associated with a series of negative consequences on the physical, emotional and social health of adolescents [21], some of which extend into later adulthood [22, 23]. There is a strong link between bullying involvement and poor mental health [24, 25], such as low mood and depression [26-28], as well as irritability [29].

In addition, victimized students are more likely to experience loneliness and a limited support network, evident in the absence of close interpersonal relationships [30], and poor academic performance [31]. Importantly, apart from the long-

term socio-emotional consequences bullying involvement may have on victims, exposure to victimization in the environment of bystanders has also been found to negatively impact mental health, increasing risk for aggressive behavior on their part, anxiety and somatic complaints [32].

An alternative theoretical hypothesis worth mentioning suggests that certain preexisting child socioemotional vulnerabilities or pathologies can function as precipitating conditions or trigger bullying. Namely, children with both internalizing and externalizing problems, when compared with children without these pathologies, have shown to present higher risk of involvement in bullying practices. A study conducted in 2006 [33] examined both this hypothesis and its alternative causal hypothesis (bullying as cause of pathology), by investigating exposure history. This revealed only the causal effect of bullying experience at the later stages of psychopathologic behaviors, not the opposite direction. The study offers further evidence that experiencing bullying causes the onset of symptoms that later mark psychopathologic behaviors. Of course, the process may very well be bi-directional, because, for example, pathological shyness or social isolation may function both as a cause for and a consequence of victimization. Adolescents with related problems appear to be socially inept and unpopular and, as such, more likely to fall victims of bullying, which in turn isolates them from the social group and further diminishes their social exposure and positive social interactions, making them all the more isolated and socially anxious.

Risk and Protective Factors

A bio-ecological model [34-36] of development provides the theoretical ground required to study the multi-systemic factors that contribute to the development and wellbeing of adolescents. Different systems of a child's life interact in predicting bullying and victimization, and these include, but are not limited to, national legislation on the phenomenon of bullying, social norms on the behaviors and expectations of adolescents.

Multiple studies have supported that relational bullying and cyberbullying victimization are more

common among girls than boys [37-39]. However, a recent systematic review of 85 studies demonstrated that boys have consistently higher odds of perpetrating bullying than girls [40]. Regarding age, the period of early adolescence, and the transition from primary to secondary school, is a period characterized by increased risk for bullying and victimization [1,2,41-44]. Growing up, following a series of maturational brain developments, children's social abilities improve, acting protectively against bullying experiences [44]. However, during this developmental period, there is a reduction of support provided by parents and teachers, and an increase in social and academic demands, making the period of early adolescence especially demanding [41].

While the family environment is a pivotal factor for a healthy child and adolescent development, during adolescence the family loses a big part of its influence, as attention is shifted to the school environment. As such, social skills become one of the psychosocial characteristics that shape vulnerability and resilience to bullying. Poor social skills, the experience of rejection and the potential feelings of loneliness are all risk factors associated with bullying victimization in schools [30,45,46]. On the contrary, highly attuned social skills and the development of social relationships can act protectively [47,48].

As the school becomes a central arena for adolescent socialization, this "microsystem" [36] can have a substantial influence in protecting teenagers from bullying victimization [49]. Connection with one's school refers to the emotions a student may have towards his/her peers and teachers, but also a sense of safety and acceptance that is forged in such a setting. A strong school connection acts as a protective element in an array of difficulties encountered in adolescence, such as perilous behaviors, and is also associated with improved academic performance [50,51].

As mentioned in the relevant literature, a positive school climate is one of the most important protective factors in the life of an adolescent. It is described as a supportive and encouraging environment, with strong pastoral and nurturing characteristics. As such, it has been proven that it functions as a preventative mechanism against a student being involved in bullying, becoming estran-

-ged from the school environment and eventually dropping out [52].

While a universal definition of what a positive school environment should entail has not been reached to date, the consensus view of what a positive school environment should entail includes a supportive and caring attitude on the part of the teachers, support and respect amongst students, and student attachment and dedication to the school as well as a general sense of safety, deriving from an explicit and updated set of school rules [53-56]. It has been demonstrated that, when the school climate is negative, instances of bullying increase, become repetitive and become long-term engrained behaviors [57-59]. On the contrary, in a positive and supportive environment of cooperation and safety, students develop higher levels of assertiveness, empathy and socialization, while the odds of being involved in bullying decrease significantly [60,61].

According to Daily and colleagues [62], empirical research consistently demonstrates that promoting a positive school environment can be used as a very promising intervention strategy, both for the improvement of student's academic performance, but also for the wellbeing of students, through the development of "satisfaction with school" [63]. Satisfaction with school has been associated with increased levels of wellbeing [63-65] and academic success [66,67].

School Based Programs to Combat Bullying

Social and Emotional Learning (SEL)

Multiple programs and interventions have been developed globally to prevent and target the phenomenon of school bullying in recent decades. The most successful interventions are believed to employ the pre-existing positive elements of the school environment [68-70], focusing on the development of social and emotional skills of children and adolescents, and promoting the creation of supportive relationships among peers [71].

Intervention by Social and Emotional Learning (SEL) has become one of the most successful and globally established educational tools to target bullying [72,73]. Based on the theory of emotional, or "multiple" intelligence, SEL is an educational intervention which can be applied to all age groups, aiming at reducing risky behaviors, increasing resilience during transitions which take place at scho-

-ol and improving academic performance [74-78]. SEL consists of five central, interrelated social and emotional skills [79] which are fostered through SEL programs [80-82].

First, self-awareness refers to an individual's ability to recognize and differentiate his or her emotions, personal competencies, interests and values, while keeping a realistic yet confident life stance.

Second, social awareness refers to an individual's ability to recognize the emotions and needs of others, and to act upon those needs, by being able to use empathic abilities to "put himself/herself in the other person's shoes" [83]. Through this skill comes the ability to value and achieve a positive interaction with different social groups, and to value the presence of differences and similarities.

Self-management is the third ability, referring to the self-regulation of emotions, stress, and impulsivity, but also to perseverance, positive expression of emotions, and the ability to set and maintain personal and academic goals.

Relationship skills refers to the capacity to create and maintain healthy and satisfying relationships, based on collaboration, and the ability to help when necessary, instead of resorting to poor coping strategies.

Finally, responsible decision making refers to the ability to make decisions based on values, safety and respect for others.

Meta-analyses support the success of this intervention in improving adolescent socio-emotional skills and wellbeing, while fostering positive attitudes and reducing divergent behaviors [84-87]. Following the evaluation of the findings of various studies, prominent researchers on social and emotional learning, have concluded that these programs should be implemented in an organized, consistent and systematic way, from kindergarten to secondary education, in order for these to deliver the best possible results [81,88-90]. Even though more follow-up studies are still needed, existing data powerfully point to the long-lasting positive effects of such programs.

Peer support programs

As bullying is a social, rather than dyadic phenomenon, an important factor to address when designing a successful school intervention is the role of bystanders [91]. Empirical studies suggest that the

best way to incorporate children not involved in bullying, but present in the school culture where the phenomenon unravels, is to encourage them to participate in different peer support programs, educate them on the phenomenon and provide them with an active role as supporters within the school environment [92,93]. Peer support programs are the provision, in some way, of support from students to other students, usually in the context of an existing support scheme and under the supervision of a trained member of staff. They are founded on the notion that students will feel more comfortable receiving support from peers than adults, and are used extensively both as prevention and intervention strategies in primary and secondary but also higher education [94].

The fundamental components of peer support [92,95] are the education of adolescents in the ability to cooperate outside of one's group of friends, independent of social and racial prejudices; the ability for emotional self-management and social functioning; and finally, the education of adolescents in handling conflicts using strategies that are beneficial and less violent. Such practices include befriending schemes for vulnerable or isolated students [92,93], which often take place in primary school, and have been found to increase students' sense of safety [96]. A more complex model of peer support is peer mediation [97], or school-based mediation, wherein two or more students resolve their conflict with the help of a mediator, through a process of communication between all parties. This aims to achieve something positive out of the situation, in contrast with teachers' likely use of punishment as an immediate response to peer problems. Other programs involve active listening, where peers become trained in counseling skills [98] and cybermentoring [99], both of which are practices appropriate to older youth.

The effectiveness of peer support interventions has been described by Brady and colleagues [100], based on the outcomes of a large nationwide peer mentoring program in Ireland, the "Big Brothers Big Sisters (BBBS)". This program benefited students by creating a culture of support in school, increasing access to support to a larger number of students, even for more minor everyday issues. A systematic review by Baginsky [101] highlighted that peer mentoring can have multiple benefits for students and the school community, such as skills which will prepare students

to live healthy social relationships in their adult lives. Thompson and Smith [99] found that 1273 among 1378 participating schools used at least one type of support schemes, often adapted to the needs of the school and students. Overall, despite the disparities in their application, the peer support programs reported prevented and improved situations of bullying, with "buddy schemes" and peer mentoring turning out to be the most successful.

While extensive research on general bullying prevention is available, evidence on the effectiveness of peer support programs specifically, is still relatively limited. This calls for further documentation, as the results of various peer support interventions have not delivered the anticipated outcomes [100]. Nevertheless, focus should be placed on the high potential of these programs. Empirical research has shown that a proper, systematic and long-term application of such programs can deliver very positive results [93,95,98,99].

Peer support programs require a considerable amount of time for them to be integrated into the school culture before they start bearing fruit, first in terms of perceptions and, thereafter, in attitudes [102]. It is essential to have clear goals, a well-organized framework, and to ensure the active participation of all stakeholders: teaching and administrative staff, parents and guardians.

Conclusion

This review presented the short- and long-term social and emotional consequences of bullying at an international level on both adolescent victims and perpetrators, as well as on peer bystanders, based on the available literature. Moreover, the risk and protective factors were examined in the light of Bronfenbrenner's *ecological systems theory* [34-36], while two successful types of school programs for preventing and tackling bullying, namely, social and emotional learning (SEL) and peer support, were presented. Furthermore, this review revealed that there is scope for further research into the ecology of bullying, as well as into the effectiveness of social and emotional and peer support programs in the long term, and always with a view to children protection and well-being, in accordance with the Convention on the Rights of the Child (UNCHR) [103].

References

1. Olweus D. *Bullying at school: What we know and what we can do*. Oxford: Blackwell Publishing. 1993.
2. Griffin RS, Gross AM. Childhood bullying: Current empirical findings and future directions for research. *Aggress Violent Behav* 2004;9(4):379-400. Available from: [https://doi.org/10.1016/S1359-1789\(03\)00033-8](https://doi.org/10.1016/S1359-1789(03)00033-8) [accessed 2020 March 10].
3. Olweus D. School bullying: Development and some important challenges. *Annu Rev Clin Psychol* 2013;9:751-780.
4. Tsitsika AK, Barlou E, Andrie E, Dimitropoulou C, Tzavela EC, et al. Bullying behaviors in children and adolescents: "an ongoing story". *Front Public Health* 2014;2:7.
5. Cook CR, Williams KR, Guerra NG, Kim TE, Sadek S. Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *Sch Psychol Q* 2010;25(2):65.
6. Modecki KL, Minchin J, Harbaugh AG, Guerra NG, Runions KC. Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *J Adolesc Health* 2014;55(5):602-611.
7. Juvonen J, Graham S. Bullying in schools: The power of bullies and the plight of victims. *Annu Rev Psychol* 2014;65:159-185.
8. HBSC. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. International report from the 2013/2014 survey. Available from: http://www.euro.who.int/_data/assets/pdf_file/0003/30343/8/HSBC-No.7-Growing-up-unequal-Full-Report.pdf [accessed 2020 Feb 16].
9. Van Niekerk AS. The school bully. *Education and Culture* 1993;16:35-36.
10. Sharp S, Smith P. *School bullying: Insights and perspectives*. London: Routledge. 2002.
11. Barone FJ. Bullying in school: It doesn't have to happen. *Phi Delta Kappan* 1997;79(1):80-82.
12. Byrne BJ. Bullies and victims in a school setting with reference to some Dublin schools. *Ir J Psychol* 1994;15(4):574-586.
13. Lee C. *Preventing Bullying in Schools: A Guide for Teachers and Other Professionals*. Thousand Oaks, CA: SAGE. 2004.
14. Coloroso B. *The bully, the bullied, and the bystander: From preschool to high school: How parents and teachers can help break the cycle of violence*. New York: Harper Resource. 2003.
15. Krige H, Pettipher R, Squelch J, Swart E. *A teacher's and parent's guide to bullying*. Johannesburg: Rand Afrikaans University. 2000.
16. Whitney I, Smith PK. A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educ Res J* 1993;35(1):3-25. Available from: <https://doi.org/10.1080/0013188930350101> [accessed 2020 March 09].
17. Athanasiou K, Melegkovits E, Andrie EK, Magoulas C, Tzavara CK, Richardson C, et al. Cross-national aspects of cyberbullying victimization among 14-17-year-old adolescents across seven European countries. *BMC Public Health* 2018;18(1):800.
18. Hinduja S, Patchin JW. Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior* 2008; 29(2):129-156.
19. Tokunaga RS. Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Comput Human Behav* 2010;26(3): 277-287.
20. Srabstein JC, Leventhal BL. Prevention of bullying-related morbidity and mortality: a call for public health policies. *Bull World Health Organ* 2010;88(6):403-403. doi:10.2471/blt.10.077123
21. Vreeman RC, Carroll AE. A systematic review of school-based interventions to prevent bullying. *Arch Pediatr Adolesc Med* 2007;161(1):78-88.
22. Georgiou SN, Stavrinides P. Bullies, victims and bully-victims: Psychosocial profiles and attribution styles. *Sch Psychol Int* 2008;29(5):574-589.
23. Gini G, Pozzoli T. Association between bullying and psychosomatic problems: A meta-analysis. *Pediatrics* 2009;123(3):1059-1065.
24. Gini G, Pozzoli T. Bullied children and psychosomatic problems: a meta-analysis. *Pediatrics* 2013;132(4):720-729.
25. Stavrinides P, Georgiou S, Theofanous V. Bullying and empathy: a short-term longitudinal investigation. *J Educ Psychol* 2010;30(7):793-802.
26. Ttofi MM, Farrington DP, Losel F, Loeber R. Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *JACPR* 2011;3(2):63-73.
27. Klomek AB, Kleinman M, Altschuler E, Marrocco F, Amakawa, Gould MS. High school bullying as a risk for later depression and suicidality. *Suicide Life Threat Behav* 2011;41(5):501-516.
28. Kaltiala-Heino R, Fröjd S. Correlation between bullying and clinical depression in adolescent patients. *Adolesc Health Med Ther* 2011;2:37.
29. Barker ED, Salekin RT. Irritable oppositional defiance and callous unemotional traits: is the association partially explained by peer victimization? *J Child Psychol Psychiatry* 2012;53(11):1167-1175.
30. Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton B, Scheidt P. Bullying Behaviors Among US Youth: Prevalence and association with psychosocial adjustment. *JAMA* 2001;285(16):2094-2100. doi:10.1001/jama.285.16.2094
31. Glew GM, Fan MY, Katon W, Rivara FP, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Arch Pediatr Adolesc Med* 2005;159(11):1026-1031.

32. Rivers I, Poterat VP, Noret N, Ashurst N. Observing bullying at school: The mental health implications of witness status. *Sch Psychol Q* 2009; 24(4):211.
33. Kim YS, Leventhal BL, Koh Y, Hubbard A, Boyce WT. School Bullying and Youth Violence: Causes or Consequences of Psychopathologic Behavior? *Arch Gen Psychiatry*. 2006;63(9):1035-1041. Available from: <https://doi.org/10.1001/archpsyc.63.9.1035> [accessed 2021 Feb 23].
34. Bronfenbrenner U. *The ecology of human development*. New York: Harvard University Press. 1979.
35. Bronfenbrenner U. Ecology of the family as a context for human development: Research perspectives. *Dev Psychol* 1986;22(6):723.
36. Bronfenbrenner, U. Ecological systems theory. In: Vasta R, editor. *Annals of Child Development*. Greenwich, CT: JAI Press.1989. pp.187-249.
37. DeVoe JF, Bauer L. Student Victimization in U.S. Schools: Results From the 2009 School Crime Supplement to the National Crime Victimization Survey (NCES 2012-314). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office. 2011. Available from: <https://nces.ed.gov/pubs2012/2012314.pdf> [accessed 2020 Feb 16].
38. Vaillancourt T, Brittain H, Bennett L, Arnocky S, McDougall P, Hymel S, et al. Places to avoid: Population-based study of student reports of unsafe and high bullying areas at school. *Can J Sch Psychol* 2010;25(1):40-54. Available from: <https://doi.org/10.1177/0829573509358686> [accessed 2020 March 10].
39. Reid P, Monsen J, Rivers I. Psychology's contribution to understanding and managing bullying within schools. *Educ Psychol Pract* 2004; 20(3):241-258. Available from: <https://doi.org/10.1080/0266736042000251817> [accessed 2020 Jan 10].
40. Álvarez-García D, García T, Núñez JC. Predictors of school bullying perpetration in adolescence: A systematic review. *Aggress Violent Behav* 2015; 23:126-136. Available from: <https://doi.org/10.1016/j.avb.2015.05.007> [accessed 2020 Jan 15].
41. Pellegrini AD, Long JD. A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *Br J Dev Psychol* 2002;20(2):259-280. Available from: <https://doi.org/10.1348/026151002166442> [accessed 2020 Jan 05].
42. Pepler DJ, Craig WM, Connolly JA, Yuile A, McMaster L, Jiang D. A developmental perspective on bullying. *Aggress Behav* 2006;32(4):376-384.
43. Salmivalli C. Is there an age decline in victimization by peers at school? *Educa Res* 2002;44(3):269-277. Available from: <https://doi.org/10.1080/00131880210135331> [accessed 2020 Feb 07].
44. Smith PK, Morita Y, Junger-Tas J, Olweus D, Catalano R, Slee P. *The nature of school bullying: A cross-national perspective*. London, New York: Routledge. 1999.
45. Scheithauer H, Hayer T, Petermann F, Jugert G. Physical, verbal, and relational forms of bullying among German students: Age trends, gender differences, and correlates. *Aggress Behav* 2006;32(3):261-275. Available from: <https://doi.org/10.1002/ab.20128> [accessed 2020 Feb 11].
46. James A. *School bullying*. London: NSPCC. 2010. [online]. Available from: https://s/384_NSPCC%20Briefing.pdf [accessed 2020 Feb 08].iamnotscared.pixelonline.org/data/database/publication.
47. Haskett ME, Nears K, Ward CS, McPhersonAV. Diversity in adjustment of maltreated children: Factors associated with resilient functioning. *Clin Psychol Rev* 2006;26(6):796-812. Available from: <https://doi.org/10.1016/j.cpr.2006.03.005>.
48. Schultz D, Tharp-Taylor S, Haviland A, Jaycox L. The relationship between protective factors and outcomes for children investigated for maltreatment. *Child Abuse Negl* 2009;33(10):684-698. Available from: <https://doi.org/10.1016/j.chiabu.2009.04.004> [accessed 2020 Feb 20].
49. Catalano RF, Oesterle S, Fleming CB, Hawkins JD. The importance of bonding to school for healthy development: Findings from the Social Development Research Group. *J Sch Health* 2004;74(7):252-261.
50. Espelage DL, Hong JS, Rao MA, Thornberg, R. Understanding ecological factors associated with bullying across the elementary to middle school transition in the United States. *Violence Vict* 2015;30(3):470-487.
51. Rose CA, Nickerson AB, Stormont M. Advancing bullying research from a social-ecological lens: An introduction to the special issue. *Sch Psychol Rev* 2015;44(4):339-352. Available from: <https://doi.org/10.17105/15-0134.1> [accessed 2020 Feb 21].
52. Eliot M, Cornell D, Gregory A, Fan X. Supportive school climate and student willingness to seek help for bullying and threats of violence. *J Sch Psychol* 2010;48(6):533-553.
53. Acosta J, Chinman M, Ebener P, Malone PS, Phillips A, Wilks A. Understanding the relationship between perceived school climate and bullying: A mediator analysis. *J Sch Violence* 2019;18(2):200-215. doi:10.1080/15388220.2018.1453820
54. Baker JA. Teacher-student interaction in urban at-risk classrooms: Differential behavior, relationship quality, and student satisfaction with school. *Elem School J* 1999;100(1):57-70.
55. Croninger RG, Lee VE. Social Capital and Dropping Out of High School: Benefits to At-Risk Students Of Teachers' Support and Guidance. *Teach Coll Rec* 2001;103(4):548-581. doi:10.1111/0161-4681.00127.
56. Klem AM, Connell JP. Relationships matter: Linking teacher support to student engagement and achievement. *J Sch Health* 2004;74(7):262-273. Available from: <https://doi.org/10.1111/j.1746-1561.2004.tb08283.x> [accessed 2020 Feb 22].
57. Gendron BP, Williams KR, Guerra NG. An analysis of bullying among students within schools: Estimating the effects of individual normative beliefs, self-esteem, and school climate. *J Sch Violence* 2011;10(2):150-164. Available from: <https://doi.org/10.1080/15388220.2010.539166> [accessed 2020 Feb 23].