

Bullying Risk factors; A narrative review

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Abstract

Background: Bullying is defined as any aggressive behavior that incorporates three core elements, namely: (1) an intention to harm; (2) repetitive in nature; and (3) a clear power imbalance between perpetrator and victim. Bullying behaviors can occur in many contexts, for example, in schools, in the workplace, between siblings, and most recently, online. Notably, bullying is a matter of public health, impacting the life outcomes of both bullies and victims, in varying ways. School-bullying is a strong risk marker for several negative behavioral, health, social, and/or emotional problems. **Aim:** To identify school bullying risk factors, to understand how individual characteristics of students interact with environmental contexts or systems and to prevent victimization and perpetration, and provide recommendations for future interventions and research, **Methods:** A study of MEDLINE was made, all scientific literature published from May2020until April 2023 in PubMed & Web of Science [Science Citation Index Expanded), Social Sciences Citation Index, & Emerging Sources Citation Index] were included, **Summary:** It is clear that school bullying is an important target for effective intervention and prevention. Bullying is an ethical problem as well as a developmental one: targeting school bullying facilitates the process of optimal psychological development but it also addresses the question of human rights, especially the rights of the child.

Keywords: bullying; risk factors; socioecological model.

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Introduction:

Factors that predict bullying behavior in school require a close examination of the complex inter-relationships between the individual and the environment. There is no, one single causal factor for bullying. In fact, it is the interaction between multiple contexts defined as the social-ecology in which bullying and victimization unfold. The ecological model of bullying perpetration and victimization includes micro-, meso-, exo-, macro-, and chronosystem levels in addition to the individual factors (1).

In the area of school bullying, this model has been used in understanding how individual characteristics of students interact with environmental contexts or systems and to prevent victimization and perpetration (2). It consists of five levels

Microsystem; these include peers, family, community, and schools.

Meso-system; is the interaction between components of the microsystem. Examples of mesosystem include the interrelations between the family and school, such as parental involvement in their child's school.

Exo-system; is the social context with which the child does not have direct contact, but which affects him or her indirectly through the microsystem. Examples include teacher or staff perceptions of the school environment and opportunities for professional development around bullying, school violence, or school climate.

Macrosystem; refers to cultural blueprint, which determine the social structures and activities in the various levels. This level includes organizational, social, cultural, and political contexts, which influence the interactions within other system levels (e.g., state legislation, discipline policies).

Chronosystem level, includes consistency or change of the individual and the environment over the life course (e.g., changes in family structure through divorce, displacement, or death).

Individual Risk Factors

Age:

Whereas the prevalence of female bullies decreases steadily with age, the prevalence of male bullies remained roughly constant from the ages of eight to 16. In later adolescence, bullying becomes more relational, culminating in forms such as racial and sexual harassment in adulthood (3).

Gender:

While both girls and boys are involved in bullying perpetration and victimization, it was found that boys are involved in bullying at greater rates than girls (4). While Girls experience more indirect bullying, boys more often experience direct forms (5)

Grade level:

Bullying has generally been shown to be most prevalent in middle school and it peaks during school transition (i.e., between elementary and middle school and between middle and high school) as adolescents are negotiating new peer groups and use bullying as a means to achieve social dominance and popularity (6,7).

Ethnicity:

Despite the lack of consensus on prevalence of bullying involvement among racial and ethnic minorities, there is consistent evidence that racial and ethnic minority youth and immigrants are more likely than majority and native-born youth to experience bullying, Minority students also have higher risk for poor health and behavioral outcomes as a result of victimization (8).

Religious orientation:

From nationally representative sample of 5,000 middle and high students across America to investigate bullying *based on religion*, it was found that 34.3% of Muslim students, 25% of Jewish students, and 23.1% of Hindu students have been bullied over the last 30 days because of their faith (9).

Sexual orientation:

Bullying (traditional, cyber bullying and homophobic bullying) occurs more frequently among lesbian, gay, bisexual, and question (LGBTQ) youth in schools than youth who identify as heterosexual. It was also found that LGBQ females, LGBQ males, and heterosexual females experience each type of victimization at higher rates than heterosexual male (10).

Socioeconomic status:

Victimization is positively related to low socioeconomic status (SES), and negatively associated with high SES. Bully-victim status was related to low SES, but not to high SES. SES is a poor predictor of bullying others, suggesting that bullying perpetration did not appear to be socially patterned and occurred across all socioeconomic strata at fairly similar rates (11).

Poor social skills:

Victims, bully-victims, and some bullies display deficits in social skills. Bullies and bully-victims are less likely to adhere to social rules and politeness. Both bullies and victims were less aware of the physiological reactions of their emotions, and were less able to apply social rules in social interaction (12).

The victims generally have poor social skills that hinder the establishment and maintenance of friendships because they are anxious, shy, submissive and insecure (13).

Academic achievement:

Victims and bully victims do poorly in school. The academic performance of students is proportionally affected when bullying takes place. Victims do not concentrate in the class and they also feel afraid to attend classes because of this very same reason (14).

Health status and Disability:

Disability exerts a great effect on adolescent mental health, and a large proportion (about 46%) of this effect appears to operate through bullying. Children and adolescents with chronic physical

illness or disability are more likely to be victims of bullying in general, particularly physical bullying, relational bullying, verbal bullying, cyberbullying, and illness-specific teasing. They were also more likely to be bullies, physical and relational bullies (15).

Students with disabilities are also involved in other bullying roles. Generally, having a disability was associated with increased victimization, assisting, and defending behavior. Students with an emotional disability reported more assisting, victimization, and outsider behaviors; students with other health impairment reported more assisting, victimization, and defending; students with autism reported less defending and outsider behaviors; and students with a learning disability reported more defending behavior (16).

Depression and anxiety:

Studies consistently report that psychosocial problems, such as depression and anxiety are commonly experienced by victims of bullying. Interestingly, it was found that students with depression, social anxiety and loneliness were significantly more likely to be victimized by their peers than students without these symptoms. Researchers theorized that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable and the perpetrators fear less revenge from them (17).

Peer Group Risk Factors

peer support:

Bullying occurs within a group of peers who adopt different participant roles and experience a range of emotions. Bullies do not act alone but rely on reinforcement from their immediate group of friends as well as the tacit approval of the onlookers. Peer support empowers bystanders to take action against bullying (18).

Presence of peer support has consistent advantages, such as reassuring to students who are not bullied to have a system of support in place in case they, or a friend, should need it. Peer supporters usually report that they benefit from the helping process, that they feel more confident in themselves and that they learn to value other people more. For vulnerable students, the peer support is a critical part of the process of feeling more positive about themselves and dealing with difficulties such as victimization. It also makes the school environment safer and more caring (19).

Finally, increased peer acceptance and social support is associated with decreased bullying rates, and anti-bullying strategies which adopt peer support system is one of the most successful interventions in reducing bullying, mitigating its effect and improving quality of life of victims (20).

Peer norms:

Bullying and victimization in schools are inherently relational processes, relying on domination, subjugation, and bystander apathy, all presumably shaped by peer norms. This type of violence is a demonstration of “peer group power” in which a whole peer group participates in the bullying with individuals fulfilling different roles and acting as moderators of such behavior, so peer norm can moderate the individual classroom behaviors with peer acceptance. Cyber bullying is also associated with the norms prevalent within the adolescent’s peer group (21).

Misperception of the peer norm for bullying is associated with high rates bullying perpetration and attitudes. Social norms intervention is a promising strategy to help reduce bullying. For example, using print media posters displaying accurate peer norms regarding bullying lead to reductions in perceptions of peer bullying and probullying attitudes, personal bullying of others and victimization and increased support for reporting bullying to adults at school and in one’s family (22).

Delinquency:

Negative peer influence was found to predict involvement in bullying and victimization. the strongest predictor of both bullying and victimization was delinquency measured as engaging in vandalism, being a member of a gang, and carrying a weapon onto school property (23).

Alcohol/Drug use. The relationship between alcohol/substance use and bullying is well-documented. Alcohol use is high among bullies and bully victims and so, it is a strong predictor of bullying. Involvement in bullying is related to concurrent alcohol/substance use as well as future alcohol/substance use. Thus, early evaluation of bullying behavior is important as part of alcohol-use prevention programs among young adolescents (24).

School Risk Factors

School climate:

Positive School climate includes the following list of defining characteristics: “(a) order, safety, and discipline; (b) academic supports; (c) personal and social relationships; (d) school facilities; and (e) school connectedness” (25).

Research has shown a negative association between positive school climate and bullying behavior, therefore schools that have a negative and punitive school climate, have higher rates of traditional bullying and cyber bullying. Unhealthy and unsupportive school climate (e.g., negative relationship between teachers and students, positive attitudes towards bullying) provides a social context that allows bullying behavior to occur (26).

Teacher attitudes:

When adults in the school system ignore bullying or feel that bullying is just “kids being kids,” then higher levels of bullying will exist. In order to battle bullying, it is important for students to

have teachers who take an active stand against bullying, propagate anti-bullying norms and have an effective approach to decrease bullying. Unfortunately, cyber bullying and other indirect or covert forms of bullying may be more prevalent in classrooms where students perceive their teacher's ability to intervene in bullying as high (27).

Classroom characteristics:

Schools are comprised of classrooms and it stands to reason that healthy school and classroom environments will have less bullying and victimization. There are four classroom characteristics that have been found to be associated with greater levels of bullying and victimization: (1) negative peer friendships, (2) poor teacher-student relationships, (3) lack of self-control, and (4) poor problem-solving among students. The risk of bullying and victimization is associated with characteristics of the organizational cultures adopted by adults at school. For example, positive relations between the children and adults at school, which encourage student engagement and provide students with social support, serve as a buffer against the problems. Attention should also be paid to teachers' ways of relating to students involved in, or at risk for, bullying and their beliefs and attitudes regarding bullying, which in turn influence their efforts to intervene. Furthermore, classroom cohesion is directly associated with students' willingness to intervene in bullying situations (28).

Academic engagement:

When students are challenged and motivated to do well in school, engagement in bullying and victimization is lower. Students involved in bullying and victimization are less academically engaged. High academic engagement buffered the risk of bullying for youth who are exposed to community violence. The negative associations between student-level bullying victimization and engagement were intensified in more positive school climates (29).

School belonging:

Higher victimization is linked with feeling less safe and less belonging in middle and high school students. High level of school belonging partially buffers fighting and bullying behaviors for students with and without disabilities (29)

Family Risk Factors

Parental characteristics:

Bullies typically come from families with low cohesion, little warmth, absent fathers, high power needs, permit aggressive behavior, physical abuse and poor family functioning.

Bully-victims come from families with physical abuse, domestic violence, hostile mothers, powerless mothers, uninvolved parents, neglect, low warmth, inconsistent discipline, and negative environment. Male victims had mothers who were overprotective, controlling, restrictive,

coddling, overinvolved, and warm while their fathers were distant, critical, absent, uncaring, neglectful, and controlling. Female victims had mothers who were hostile, rejecting, withdrawing love, threatening, and controlling, while their fathers were uncaring and controlling (30).

Research has indicated that parental style is a strong predictor of various forms of bullying/victimization in children and adolescents; it is either a protective or risk factor to involvement in bullying. The results two recent meta-analysis studies. supported that specific parental styles and practices act either as protective or as risk factors concerning both conventional and cyber forms of bullying and victimization. The permissive parental style best predicts bullying and victimization, but it relates more strongly with victimization than bullying.

Moreover, children of permissive parents are vulnerable to cyber bullying, as they are exposed to internet space without supervision. Permissive parents are usually over-protective and as a result, they do not let their children to develop basic social skills, so the children may become dependent on them and they cannot defend themselves in peer victimization instances (31).

Authoritarian parenting is also related to Engagement in bullying and victimization. However, Bullying seems to have a stronger relation with authoritarian parenting than victimization. Furthermore, authoritarian parental style is also closely related to both cyber bullying and cyber victimization. Punitive and harsh practices applied to the children of authoritarian parents, whereas they are not responsive to their children's needs, learn the children to be aggressive towards less powerful others, by watching these interactions among their family members (32).

On the other hand, research has consistently indicated that authoritative/flexible parenting is a protective factor for both conventional and cyber types of bullying and victimization.

Family discord:

There is strong evidence that the role of contextual family variables (parental mental health and domestic violence) and of relational family variables (in particular child abuse and neglect, maladaptive parenting, communication, parental involvement and support) can predict both bully perpetration and victimization. Students who bully others consistently report family conflict and poor parental supervision (33).

Community Risk Factors

Neighborhoods:

The unsafe neighborhood environment can influence bullying behavior due to inadequate adult supervision and negative peer influences. Moreover, there is a documented relation between community violence and externalizing behaviors i.e., conduct problems, delinquency. On the other hand, living in a safe and connected neighborhood predicted less bullying and victimization (34).

Societal Risk Factors

Media:

The prevalence of school bullying is correlated with easy access to violent media and violent video game playing is also linked with early adolescents' bullying. Exposure to anti-social media content is significantly associated with being a perpetrator, as well as being a victim, of cyber bullying and bullying. Aggressive behavior and bullying increase in children and adolescents who are exposed to glorified, rewarded violence or Child preferences for violent videogames (35).

Prolonged exposure to violent media portrayals can increase the acceptance of violence as an appropriate means of solving problems and achieving one's goals. It can also increase impulsivity and decrease cognitive control. However, Resilience and parenting styles are important socio ecological factors influencing the relationship between adolescent exposure to media violence and school bullying (36).

Intolerance:

All types of intolerance including sexism, ageism, classism, racism, religious intolerance, and sexual prejudice, are correlated positively with the victimization of others in school; relational-verbal bullying, cyber bullying, physical bullying, culture-based bullying (37).

Conclusion:

The emergence and continuation of bullying perpetration and victimization are best explained through the social–ecological model given the complexity of how individual characteristics such as aggression are largely influenced by social contextual environments that children and adolescents are exposed to. The impact of school-bullying can occur concurrently with perpetration and/or victimization, but also later in life. Previous studies have found that bullying victimization is often followed by negative mental health outcomes such as: increased suicidal ideation; generalized or social anxiety, low self-esteem and loneliness; psychotic symptoms; depression; sleeping problems; and other psychosomatic symptoms.

Bullying is emerging as a significant but preventable mental health risk factor for young people. Once detected, a partnership involving the child, the parents, health professionals, teachers, and schools is more likely to lead to a positive outcome.

Reference:

1. Hong, J.S. and Espelage, D.L., 2012. A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and violent behavior*, 17(4), pp.311-322.
2. Espelage, D.L., 2014. Ecological theory: Preventing youth bullying, aggression, and victimization. *Theory into Practice*, 53(4), pp.257-264.

3. **Turkel, A.R. (2007).** Sugar and spice and puppy dog's tails: The psychodynamics of bullying. *Journal of the American Academy of Psychoanalysts and Dynamic Psychiatry*, 35(2) 243–258.
4. **Mitsopoulou E and Giovazolias T., (2015).** Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior* 21 (2015) 61–72.
5. **Pells, K., Portela, M. O., & Revollo, P. E. (2016).** Experiences of Peer Bullying among Adolescents and Associated Effects on Young Adult Outcomes: Longitudinal Evidence from Ethiopia, India, Peru and Viet Nam. India, Peru and Viet Nam Florence: UNICEF Office of Research-Innocenti.
6. **Duffy, A. L., Penn, S., Nesdale, D., & Zimmer-Gembeck, M. J. (2017).** Popularity: Does it magnify associations between popularity prioritization and the bullying and defending behavior of early adolescent boys and girls?. *Social Development*, 26(2), 263–277.
7. **Reijntjes, A., Vermande, M., Olthof, T., Goossens, F. A., Vink, G., Aleva, L., & van der Meulen, M. (2018).** Differences between resource control types revisited: A short term longitudinal study. *Social Development*, 27(1), 187–200.
8. **Xu M, Macrynika N, Waseem M, Miranda R. (2020).** Racial and Ethnic Differences in Bullying: Review and Implications for Intervention. *Aggress Violent Behav.*50:101340.
9. **Hinduja and Patchin, (2019).** Bullying Because of Religion: Our Latest Findings and Best Practices, cyber bullying research center. Available at <https://cyberbullying.org/bullying-and-religion>.
10. **Kahle, L., (2020).** Are sexual minorities more at risk? Bullying victimization among lesbian, gay, bisexual, and questioning youth. *Journal of interpersonal violence*, 35(21-22), pp.4960-4978.
11. **Tippett N, Wolke D., (2014)** Socioeconomic status and bullying: a meta-analysis. *Am J Public Health*. 2014;104(6):e48-e59.
12. **Silva, J. L. D., Komatsu, A. V., Zequinão, M. A., Pereira, B. O., Wang, G., & Silva, M. A. I. (2019).** Bullying, social skills, peer acceptance, and friendship among students in school transition. *Estudos de Psicologia (Campinas)*, 36.
13. **Da Silva, J. L., De Oliveira, W. A., Braga, I. F., Farias, M. S., da Silva Lizzi, E. A., Gonçalves, M. F. C., ... & Silva, M. A. I. (2016).** The effects of a skill-based intervention for victims of bullying in Brazil. *International journal of environmental research and public health*, 13(11), 1042.
14. **PC, K.N. and Madhavan, V., (2018).** Bullying and academic performance among school children. *International Journal of Pure and Applied Mathematics*, 118(5), pp.587-602.
15. **King, T., Aitken, Z., Milner, A., Emerson, E., Priest, N., Karahalios, A., Kavanagh, A. and Blakely, T., (2018).** To what extent is the association between disability and mental health in adolescents mediated by bullying? A causal mediation analysis. *International journal of epidemiology*, 47(5), pp.1402-1413.

16. Malecki, C.K., Demaray, M.K., Smith, T.J. and Emmons, J., (2020). Disability, poverty, and other risk factors associated with involvement in bullying behaviors. *Journal of school psychology*, 78, pp.115-132.
17. Acquah, E.O., Topalli, P.Z., Wilson, M.L., Junttila, N. and Niemi, P.M., (2016). Adolescent loneliness and social anxiety as predictors of bullying victimisation. *International Journal of Adolescence and Youth*, 21(3), pp.320-331.
18. Cowie, H., (2014). Understanding the role of bystanders and peer support in school bullying. *International Journal of Emotional Education*, 6(1), pp.26-32.
19. Cowie, H. & Smith, P. K. (2012). La Ayuda entre Iguales como Instrument para la Mejora de la Seguridad en los Centros Educativos y para le Reduccion del Bullying y la Violencia. In A. Ovejero, P. K. Smith & S. Yubero (Eds.), *El Acoso Escolar y Su Prevencion*. Madrid: Biblioteca Nueva (pp. 263-285).
20. D'Urso, G. and Pace, U., (2019). Homophobic bullying among adolescents: the role of insecure-dismissing attachment and peer support. *Journal of LGBT Youth*, 16(2), pp.173-191.
21. Sasson, H. and Mesch, G., (2017). The role of parental mediation and peer norms on the likelihood of cyberbullying. *The Journal of genetic psychology*, 178(1), pp.15-27.
22. Dillon, C.E. and Lochman, J.E., (2019). Correcting for norm misperception of anti-bullying attitudes. *International Journal of Behavioral Development*, p.0165025419860598
23. Swearer Napolitano, S.M., 2011. Risk factors for and outcomes of bullying and victimization.
24. Maniglio, R., (2017). Bullying and other forms of peer victimization in adolescence and alcohol use. *Trauma, Violence, & Abuse*, 18(4), pp.457-473
25. Boswell, M.A., (2016). School level predictors of bullying among high school students.
26. Espelage, D.L. and Hong, J.S., (2019). School climate, bullying, and school violence.
27. Veenstra, R., Lindenberg, S., Huitsing, G., Sainio, M. and Salmivalli, C., (2014). The role of teachers in bullying: The relation between antibullying attitudes, efficacy, and efforts to reduce bullying. *Journal of Educational Psychology*, 106(4), p.1135.
28. Wachs, S., Bilz, L., Fischer, S.M., Schubarth, W. and Wright, M.F., (2018). Students' willingness to intervene in bullying: Direct and indirect associations with classroom cohesion and self-efficacy. *International journal of environmental research and public health*, 15(11), p.2577.
29. Li, L., Chen, X. and Li, H., (2020). Bullying victimization, school belonging, academic engagement and achievement in adolescents in rural China: A serial mediation model. *Children and Youth Services Review*, p.104946.
30. Rajendran, K., Kruszewski, E., & Halperin, J. M. (2016). Parenting styles influences bullying: A longitudinal study comparing children with and without behavioural problems. *Journal of Child Psychology and Psychiatry*, 57(2), 188–195.
31. Charalampous, K., Demetriou, C., Tricha, L., Ioannou, M., Georgiou, S., Nikiforou, M. and Stavriniades, P., (2018). The effect of parental style on bullying and cyber bullying

- behaviors and the mediating role of peer attachment relationships: A longitudinal study. *Journal of adolescence*, 64, pp.109-123.
32. **Stavrinides, P., Nikiforou, M., & Georgiou, S. (2015).** Do mothers know? Longitudinal associations between parental knowledge, bullying and victimization. *Journal of Social and Personal Relationships*, 32(2), 180–196.
 33. **Stavrinides, P., Nikiforou, M., & Georgiou, S. (2015).** Do mothers know? Longitudinal associations between parental knowledge, bullying and victimization. *Journal of Social and Personal Relationships*, 32(2), 180–196.
 34. **Swearer, S.M. and Hymel, S., (2015).** Understanding the psychology of bullying: Moving toward a social-ecological diathesis–stress model. *American Psychologist*, 70(4), p.344.
 35. **Abu Baker, N. and Ayyd, S., (2018).** The Relationship Between Exposure to Media Violence and School Bullying in Jordan. *Global. J. Health Sci*, 10(5), pp.154-166.
 36. **Moon, H. and Lee, S., (2020).** Moderating effects of socio-ecological factors on the relationship between adolescent exposure to media violence and attitudes towards school bullying. *Journal of Advanced Nursing*.
 37. **Goodboy, A.K., Martin, M.M. and Rittenour, C.E., (2016).** Bullying as an expression of intolerant schemas. *Journal of Child & Adolescent Trauma*, 9(4), pp.277-282.