## Exploring Ethnicity-Based Factors of Bullying Involvement: A Social-Ecological Systems Approach

Student: Ana Lampret

<sup>1</sup> Faculty of Arts, Koroška cesta 160, University of Maribor, 2000 Maribor, Slovenia ana.lampret@student.um.si

Mentors: Katja Košir , Tanja Špes

<sup>2</sup> Faculty of Arts, University of Maribor, Koroška cesta 160, 2000 Maribor, Slovenia {katja.kosir, tanja.spes1}@um.si

Abstract. In recent years, educational institutions in Europe have been experiencing a significant increase in classroom ethnic diversity. This prompted social scientists to shift their focus to understanding how students' ethnic identity shapes classroom social dynamic, namely bullying involvement. This article provides a brief overview of state-of-the-art research on ethnicity-based factors of bullying involvement. It describes the potential pitfalls of researching individual ethnicity characteristics, such as ethnic identity and ethnic status, in isolation of other individual and contextual factors. A comprehensive but seldom used social-ecological approach to studying bullying involvement is further explored. At the end, the benefits and limitations of aforementioned approach are highlighted, and a call-to-action is made for more empirical research applying this framework.

**Keywords.** Classroom ethnic diversity, bullying, victimisation, social-ecological systems approach, multiculturality



## 1 Introduction

In recent years, a combination of various environmental, socio-political, and economic factors has led to mass migrations of groups with different cultural, historical and ethnic backgrounds to the EU member states [1]. In 2019, non-European migrants accounted for 23.7 million of the EU's 447.2 million population, which roughly translates to one migrant per 19 people [2], [3].

The growing ethnic diversity of the population in Europe poses a challenge for many public institutions, especially those in the education sector [4]. Indeed, a significant proportion of migrants are children who attend educational institutions in their country of settlement as part of their integration into a foreign cultural environment [2].

Consequently, educational institutions are experiencing a significant increase in classroom ethnic diversity [5]. In recent years, a number of studies have attempted to address these changes and their potential to alter the classroom social dynamic [6].

# 2 Individual ethnicity-based factors of bullying involvement

One of the leading research trends on the topic of ethnic diversity in education is to study how ethnic diversity relates to bullying involvement (i.e., bullying perpetration and victimisation)[6]. Bullying can be described as violent and repetitive behaviour that is performed with an intention to harm another individual and occurs in a relationship characterized by an imbalance of power [7].

Many authors argue that this topic is particularly important in understanding ethnically based bullying (i. e. violent behaviour aimed at harming another because of their ethnic identity or origin) [8], as well as power imbalances in social dynamics that emerge in such classroom contexts as a projection of the inequality of the minority ethnic group at the societal level [6].

Bullying in ethnically diverse school contexts has been extensively researched in the USA and Canada, but mainly at the individual level - that is, in relation to ethnicity or ethnic status of the student [9], [10]. Students' ethnicity is operationalized in different ways depending on the area the study was conducted in. In Europe, studies define ethnic identity in terms of students' immigrant background, while studies in North America and Canada focus primarily on race [11].

As the present article focuses primarily on studies conducted in Europe ethnicity will be referred to as an individual's self-defined or ascribed membership of a particular ethnic group [8], while ethnic status refers to an ethnic group's standing in a given population, namely that of ethnic majority or minority [12].

Studies examining individual ethnic differences in the prevalence of bullying involvement, however, have yielded largely inconsistent results. Some findings suggest that ethnic minority status is a risk factor for victimisation [13], [14], [15] some that it is a protective factor that buffers against it [10], [16], [17], while others report no differences in victimisation between

ethnic majority and minorities [18], [19]. Ethnic differences in prevalence of bullying perpetration seem to show similarly inconsistent results. Some studies report a higher prevalence among ethnic minority students [15], [20] while others find a higher prevalence of bullying perpetration among ethnic majority youth [17], [21].

Such inconsistencies were further underlined by results of two prominent meta-analyses that in a sample of almost 700 000 children and adolescents, found that, ethnic majority and minority students do not differ significantly in their reporting of victimisation [22], nor in their reporting of bullying perpetration [23].

Recent studies suggest that bullying is a complex social phenomenon, highly dependent on the broader social context and the presence of other students, whose response and behaviour can have a significant impact on the bullying dynamic [24]. In a similar vein the relationship between a student's ethnic identity and their involvement in peer violence is strongly influenced by contextual factors at the classroom, school and even societal level [9], [23]. Studies suggest ethnic minorities might be disproportionately affected by contextual risk factors related to bullying perpetration and victimisation, which may in turn moderate the effects of individual risk and protective factors related to bullying involvement. Therefore, researching individual ethnicity-based factors as predictors of bullying involvement in isolation from other individual, classroom, school or societal-level variables proves to be insufficient [6].

Facing difficulty while focusing exclusively on ethnicity-based factors on the individual researchers started implementing ethnicity-based contextual factors, namely school/classroom ethnic diversity, to explain inconsistencies in the results mentioned above [11]. Classroom/school ethnic diversity co-determines potential power imbalances between particular ethnic groups [9], an important prerequisite of bullying involvement [7], and could thus explain how students' ethnicity affects the role they play in bullying in a given context. Some studies operationalize classroom/school ethnic diversity as the proportion of immigrant students in a given classroom or school [25], while others define it as a composite index taking into account the number of different ethnic groups as well as their representation in a classroom or school [26]. The latter operationalization is more comprehensive although seldomly implemented [11]. One such index, that has been successfully applied in previous studies [27], is Simpsons' diversity index [26] displayed below.

$$SID = 1 - \sum_{i=1}^{g} p_i^2$$

 $\textit{SID}=1-\textstyle\sum_{i=1}^g p_i^2$  The abbreviation SID represents the classroom/school ethnic diversity as calculated by Simpsons' diversity index, p represents the proportion of students in the classroom/school that belong to ethnic group i, while q refers to the number of all ethnic groups within the classroom/school [26].

Simpsons' diversity index calculates the likelihood that any two randomly selected students from a classroom or school will be members of different ethnic groups. It ranges from 0 to 1, with higher scores denoting greater probability of students being from different ethnic groups, thus indicating greater classroom/school ethnic diversity [11]. While some studies suggest classroom/school ethnic diversity explains bullying involvement depending on the students' ethnic status, most indicate the relationship to be complex and dependent on other factors [11], [27], [28].

In response to this, research incorporating a multitude of relevant factors relating to the student's classroom, school and wider cultural as well as social environment, have become more numerous and prominent in the field [8].

## 3 Social-Ecological Systems Approach to Bullying Involvement Research

Research findings suggest that bullying is a multifaceted social phenomenon that can only be comprehensively understood through a socio-ecological perspective, addressing both individual and contextual factors that interact to shape social dynamics within the classroom and students' involvement in bullying [8].

In order to study the complex interplay of individual and contextual factors and bullying involvement, researchers are increasingly turning to an ecosystemic approach. The ecosystemic or social-ecological approach highlights the interaction between distal (i.e., societal-level factors that have an indirect impact on individuals) and proximal factors (i.e., interpersonal and individual-level factors that have a direct impact on individuals), which shape child's development as well as the functioning of the whole community [29], [30].

According to this theory, child's environment comprises several dynamically changing and interconnected subsystems. Proximal subsystems include factors that directly affect the child. These include [29]:

- The microsystem, which represents the social environment with which the child is
  in direct contact (e.g., parents, siblings, teachers and the classroom community).
   The relationship between the child and the environment is bidirectional and interdependent, which means that the child significantly shapes the environment, just as
  the environment significantly influences the child.
- The mesosystem includes the relationships or interactions between the child's microsystems, such as the interactions between the child's parents and teachers. The quality of the relationships between a child's microsystems has an important influence on the child's development.

Distal subsystems include social and community influences that indirectly shape the child's development. These include [29]:

- The exosystem, which encompasses the wider community in which the child is situated but does not directly influence them. It includes, for example, the child's neighbourhood, the working environment of the child's parents and the mass media.
- The macrosystem, which includes the social and cultural context in which the child is situated, such as the (cultural) ideologies, values and prevailing behavioural patterns of the social group (i.e., ethnic/national group, social class) to which the child belongs.
- The chronosystem that includes all environmental changes during the course of an
  individual's life that affect their development, including significant (normative or
  non-normative) historical events and milestones (e.g., transition from primary to
  secondary school).

In a social-ecological framework, student's involvement in bullying is both a result of individual's (cultural) characteristics, skills and beliefs, as well as their involvement in the different subsystems that influence them directly or indirectly. Ecosystemic approach has been successfully applied in systematic literature reviews to explain the bullying phenomenon and the different roles that individual students play in the context of their ethnic identity and cultural background [6].

Certain ethnic minority students for example might on the macrosystemic level be disproportionately affected by marginalisation and poverty, which might in turn affect their exosystem by predisposing them to living in adverse environments, such as violent neighbourhoods. Living in low-income neighbourhoods with high crime rate might influence their microsystem, contributing to non-supportive family or school environment, which has been linked to classroom bullying involvement [6].

Even though systematic synthesis of the studies suggest ecosystemic approach to researching the relationship between bullying, individual's ethnicity and cultural environment is crucial, there is still a considerable lack of studies empirically testing the model [6]. A potential reason for lack of research might be due to the complexity of the model, which makes it difficult to empirically test. Incorporating ecosystemic framework in a study requires multilevel research, as it encopasses variables at the individual, classroom/school and societal level. This proves to be a challenging task, as it involves operationalizing abstract macrosystemic variables and using advanced statistical methods, such as multilevel structural equation modelling or hierarchical linear modelling [31].

Although incorporating such a complex framework can be challenging, it has already been successfully applied in bullying research [32]–[34] and has proven to be crucial for the development of comprehensive and systematic solutions to bullying.

#### 4 Conclusion

Recent research findings suggest that bullying involvement should be conceptualized as a systemic phenomenon shaped by a wide range of individual and contextual factors. In this article we have shown how social-ecological theory provides a useful framework for studying the complex interplay between individual's ethnicity, cultural characteristics of their immediate and distant environment and bullying involvement.

An ecosystemic approach proves to be challenging yet crucial when examining bullying involvement from the perspective of a student's ethnic identity, as the effect of the latter is largely dependent on the wider cultural environment and society [25]. Furthermore, applying ecosystemic approach to bullying research also provides us with an opportunity to design comprehensive and effective anti-bullying programs and interventions, as addressing contextual-level factors has proven to be key to interventions' effectiveness [6].

Empirical studies have yet to take full opportunity of the proposed model, as of now, there is a considerable lack of studies carried out in Europe [6].

### References

- [1] Y.-D. Kang, 'Refugee crisis in Europe: determinants of asylum seeking in European countries from 2008–2014', *J. Eur. Integr.*, vol. 43, no. 1, pp. 33–48, Jan. 2021, doi: 10.1080/07036337.2020.1718673.
- [2] 'Migration and migrant population statistics'. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration\_and\_migrant\_population\_statistics (accessed May 05, 2023).

- [3] 'Supporting refugee students from Ukraine in host countries.' 2022.
- [4] M. Jelen Madruša and I. Majcen, Predlog programa dela z otroki priseljenci za področje predšolske vzgoje, osnovnošolskega in srednješolskega izobraževanja., vol. 2018. ISA Institut. [Online]. Available: http://www.medkulturnost.si/wp-content/uploads/2018/09/Predlog-programa-dela-z-otroki-priseljenci.pdf
- [5] U. N. H. C. for Refugees, 'UNHCR Global Trends 2017', UNHCR. https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html (accessed May 05, 2023).
- [6] M. Xu, N. Macrynikola, M. Waseem, and R. Miranda, 'Racial and ethnic differences in bullying: Review and implications for intervention', Aggress. Violent Behav., vol. 50, p. 101340, Jan. 2020, doi: 10.1016/j.avb.2019.101340.
- [7] A. A. Volk, R. Veenstra, and D. L. Espelage, 'So you want to study bullying? Recommendations to enhance the validity, transparency, and compatibility of bullying research', *Aggress. Violent Behav.*, vol. 36, pp. 34–43, Sep. 2017, doi: 10.1016/j.avb.2017.07.003.
- [8] S. Kuldas, M. Foody, and J. O'Higgins Norman, 'Does Ethnicity of Victims and Bullies Really Matter? Suggestions for Further Research on Intra-Ethnic Bullying/Victimisation', Int. J. Bullying Prev., vol. 4, Jan. 2021, doi: 10.1007/s42380-021-00088-5.
- [9] S. Graham, 'Peer Victimization in School: Exploring the Ethnic Context', Curr. Dir. Psychol. Sci., vol. 15, no. 6, pp. 317–321, Dec. 2006, doi: 10.1111/j.1467-8721.2006.00460.x.
- [10] W. L. G. Hoglund and N. E. Hosan, 'The Context of Ethnicity: Peer Victimization and Adjustment Problems in Early Adolescence', J. Early Adolesc., vol. 33, no. 5, pp. 585– 609, Jun. 2013, doi: 10.1177/0272431612451925.
- [11] M. C. Basilici, B. E. Palladino, and E. Menesini, 'Ethnic diversity and bullying in school: A systematic review', *Aggress. Violent Behav.*, vol. 65, 2022, doi: 10.1016/j.avb.2022.101762.
- [12] Z. Ülger, D. E. Dette-Hagenmeyer, B. Reichle, and S. L. Gaertner, 'Improving outgroup attitudes in schools: A meta-analytic review', *J. Sch. Psychol.*, vol. 67, pp. 88–103, Apr. 2018, doi: 10.1016/j.jsp.2017.10.002.
- [13] D. Kisfalusi, J. Pál, and Z. Boda, 'Bullying and victimization among majority and minority students: The role of peers' ethnic perceptions', Soc. Netw., vol. 60, pp. 48–60, Jan. 2020, doi: 10.1016/j.socnet.2018.08.006.
- [14] Y. Bjereld, K. Daneback, and M. Petzold, 'Differences in prevalence of bullying victimization between native and immigrant children in the Nordic countries: a parent-reported serial cross-sectional study', *Child Care Health Dev.*, vol. 41, no. 4, pp. 593–599, Jul. 2015, doi: 10.1111/cch.12184.

- [15] P. W. Jansen et al., 'Bullying and Victimization Among Young Elementary School Children: The Role of Child Ethnicity and Ethnic School Composition', Race Soc. Probl., vol. 8, no. 4, pp. 271–280, Dec. 2016, doi: 10.1007/s12552-016-9182-9.
- [16] J. J. Blake, Q. Zhou, O.-M. Kwok, and M. R. Benz, 'Predictors of Bullying Behavior, Victimization, and Bully-Victim Risk Among High School Students With Disabilities', Remedial Spec. Educ., vol. 37, no. 5, pp. 285–295, Sep. 2016, doi: 10.1177/0741932516638860.
- [17] D. Strohmeier and C. Spiel, 'Immigrant Children in Austria: Aggressive Behavior and Friendship Patterns in Multicultural School Classes', J. Appl. Sch. Psychol., vol. 19, pp. 99–116, 2003, doi: 10.1300/J008v19n02\_07.
- [18] N. M. Connell, S. El Sayed, J. M. R. Gonzalez, and N. M. Schell-Busey, 'The intersection of perceptions and experiences of bullying by race and ethnicity among middle school students in the United States', *Deviant Behav.*, vol. 36, pp. 807–822, 2015, doi: 10.1080/01639625.2014.977159.
- [19] J. Wang, R. J. Iannotti, J. W. Luk, and T. R. Nansel, 'Co-occurrence of Victimization from Five Subtypes of Bullying: Physical, Verbal, Social Exclusion, Spreading Rumors, and Cyber', J. Pediatr. Psychol., vol. 35, no. 10, pp. 1103–1112, Nov. 2010, doi: 10.1093/jpepsy/jsq048.
- [20] K. E. Carlyle and K. J. Steinman, 'Demographic differences in the prevalence, co-occurrence, and correlates of adolescent bullying at school', J. Sch. Health, vol. 77, no. 9, pp. 623–629, Nov. 2007, doi: 10.1111/j.1746-1561.2007.00242.x.
- [21] Y. Kawabata and N. Crick, 'The Significance of Cross-Racial/Ethnic Friendships: Associations With Peer Victimization, Peer Support, Sociometric Status, and Classroom Diversity', Dev. Psychol., vol. 47, pp. 1763–75, Sep. 2011, doi: 10.1037/a0025399.
- [22] I. Vitoroulis and T. Vaillancourt, 'Meta-analytic results of ethnic group differences in peer victimization', *Aggress. Behav.*, vol. 41, no. 2, pp. 149–170, Mar. 2015, doi: 10.1002/ab.21564.
- [23] I. Vitoroulis and T. Vaillancourt, 'Ethnic Group Differences in Bullying Perpetration: A Meta-Analysis', J. Res. Adolesc. Off. J. Soc. Res. Adolesc., vol. 28, no. 4, pp. 752–771, Dec. 2018, doi: 10.1111/jora.12393.
- [24] K. Košir, 'Socialni odnosi v šoli.', in *Pedagoška psihologija za učitelje: izbrane teme*, Univerzitetna založba Univerze v Mariboru, pp. 57–75. [Online]. Available: https://dk.um.si/Dokument.php?id=132115&lang=slv
- [25] F. Alivernini, E. Cavicchiolo, L. Girelli, I. Di Leo, S. Manganelli, and F. Lucidi, 'Gli effetti della composizione e della grandezza della classe sul bullismo e la vittimizzazione per gli studenti italiani e immigrati nella scuola secondaria di secondo grado. [The effects of classroom composition and size on bullying and victimization of Italian and immigrant high school students.]', Rassegna Psicol., vol. 36, no. 1, pp. 5–20, 2019.
- [26] D. V. Budescu and M. Budescu, 'How to measure diversity when you must', Psychol. Methods, vol. 17, no. 2, pp. 215–227, 2012, doi: 10.1037/a0027129.

- [27] A. Bellmore, A. Nishina, J.-I. You, and T.-L. Ma, 'School Context Protective Factors Against Peer Ethnic Discrimination Across the High School Years', Am. J. Community Psychol., vol. 49, no. 1–2, pp. 98–111, 2012, doi: 10.1007/s10464-011-9443-0.
- [28] O. Agirdag, J. Demanet, M. Van Houtte, and P. Van Avermaet, 'Ethnic school composition and peer victimization: A focus on the interethnic school climate', *Int. J. Intercult. Relat.*, vol. 35, no. 4, pp. 465–473, Jul. 2011, doi: 10.1016/j.ijintrel.2010.09.009.
- [29] U. Bronfenbrenner, The Ecology of Human Development: Experiments by Nature and Design. Harvard University Press, 1979. doi: 10.2307/j.ctv26071r6.
- [30] V. A. Earnshaw et al., 'Stigma-based bullying interventions: A systematic review', Dev. Rev., vol. 48, pp. 178–200, Jun. 2018, doi: 10.1016/j.dr.2018.02.001.
- [31] E. C. Dunn, K. E. Masyn, M. Yudron, S. M. Jones, and S. V. Subramanian, 'Translating multilevel theory into multilevel research: challenges and opportunities for understanding the social determinants of psychiatric disorders', Soc. Psychiatry Psychiatr. Epidemiol., vol. 49, no. 6, pp. 859–872, Jun. 2014, doi: 10.1007/s00127-013-0809-5.
- [32] C. Yang, M.-K. Chan, and T.-L. Ma, 'School-wide social emotional learning (SEL) and bullying victimization: Moderating role of school climate in elementary, middle, and high schools', J. Sch. Psychol., vol. 82, pp. 49–69, Oct. 2020, doi: 10.1016/j.jsp.2020.08.002.
- [33] C. Yang, J. D. Sharkey, C. Chen, and S. Jimerson, 'Teacher-Home Communication and Bullying Victimization: Do Parents' Perceptions of Fairness of Rules Matter?', Sch. Psychol. Rev., vol. 48, no. 3, pp. 251–266, Sep. 2019, doi: 10.17105/SPR-2018-0060.V48-3.
- [34] J. S. Hong, S. C. Hunter, J. Kim, A. R. Piquero, and C. Narvey, 'Racial Differences in the Applicability of Bronfenbrenner's Ecological Model for Adolescent Bullying Involvement', *Deviant Behav.*, vol. 42, no. 3, pp. 404–424, Mar. 2021, doi: 10.1080/01639625.2019.1680086.