

**icCSBs 2020****The Annual International Conference on Cognitive - Social, and Behavioural Sciences****AGGRESSIVE BEHAVIOUR OF ADOLESCENTS AND ITS PREVENTION IN THE RUSSIAN SCHOOL SOCIETY**

Inessa V. Usoltseva (a)\*, Tatyana S. Borisova (b), Julia B. Berlyand (c), Irina V. Wagner (d), Viktor P. Golovanov (e), Aleksey A. Shemshurin (f)

\*Corresponding author

- (a) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, iv-usoltseva@yandex.ru  
(b) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, borisova@institutdetstva.ru  
(c) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, berlyand @institutdetstva.ru  
(d) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, wagner.iidsvrao@mail.ru,  
(e) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, golovanov @institutdetstva.ru  
(f) The Federal State Budget Scientific Institution «Institute of Study of Childhood, Family and Education of the Russian Academy of Education», Zhukovsky st., 16, Moscow, Russia, shemshurin@institutdetstva.ru

***Abstract***

Recently, aggressive behaviour in school society has become an increasingly significant problem. And countries, society, and the pedagogical community are aimed to make a great effort of it's solving. The article provides an analysis of the most famous cases of school violence in Russia over the past decade (from open sources), describes the results of an empirical study of the characteristics of psychological conditions for the emergence of aggressive behaviour and bullying in a typical training school for teachers (130 persons). We identified different types and forms of aggression in students of this training school. According to high rates of verbal aggression which were identified, we may suggest that negatively tinged relationships among students would take the form of bullying of rejected students. Moreover, to understand how Russian school society is dealing with these challenges, the educational prevention programs (157 reports on school activities from school websites) are analyzed from the point of view of the identified features of the aggressive behaviour of modern adolescents. Content analysis showed that 157 sites mention 303 types of informational and theoretical materials posted in different sections of the school websites. Most of all, it is alarming that 61.1% of all analysed sites do not mention a single practical event dedicated to the prevention of aggressive and/or deviant behaviour of schoolchildren. 28.7% of them mention one event. And only 10.2% websites indicated 2 or more practical measures to prevent aggression in the school environment.

2672-815X © 2020 Published by European Publisher.

**Keywords:** Aggressive behaviour, adolescents, school society, prevention.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

The modern school is faced with various forms and types of school violence, such as student aggression towards other students, teachers, vandalism and crimes against property. Aggressive behaviour is one of the most common problems, and researchers note differences in it among boys and girls (Lansford, et al., 2012; Martinez, Rojas, Duque, Tovar, & Klevens, 2008), schoolchildren in rural, suburban and urban schools (Flynn, McDonald, D'Alonzo, Tam, & Wiebe, 2018). Aggressive behavior of school children not only damages school property, makes the emotional atmosphere at school unmanageable, but also causes significant harm to the cognitive, personal and social development of aggressive children. Many studies note that aggressive children are rejected by their peers (Buelga, Musitu, & Murgui, 2009) and have difficulty adapting to school society (Estévez & Jiménez, 2015; Ovcharenko, 2015).

Studies have noted a variety of reasons for the aggressiveness of children and adolescents. First of all, these include observing aggressive behaviour of adults, for example, men towards women Almeida, Gonçalves, & Sani, 2008), teachers towards students (Bekiari & Manoli, 2016) and etc. According to the social cognitive theory of Albert Bandura (Bandura, 1973), learning through observation strengthens aggressiveness in culture. Equally important are the school climate (Benbenishty, Astor, Roziner, & Wrabel, 2016; Novikova & Rean, 2019; Peterson & Skiba, 2000), school failure (Benbenishty et al., 2016; Estévez & Jiménez, 2015), and the lack of positive socio-cultural experience in modern children (Borisova et al., 2019; Wagner, 2018).

Many of these reasons overlap and amplify their effect. School society could compensate for some kinds of school failure, rejection by peers and lack of positive socio-cultural experience in schoolchildren. Researches propose methods for educating teachers in therapeutic interventions (Volungis & Goodman, 2017), creating a special school atmosphere (Peterson & Skiba, 2000). In addition, are discussed the importance of improving school performance of children (Benbenishty et al., 2016), development of cognitive abilities (Calvete & Orue, 2010; Mager & Nowak, 2012), increasing their social status among peers is emphasized (Belyayeva, 2018; Buelga, Musitu, & Murgui, 2009). However, the development of successful prevention programs is fraught with several difficulties, such as the teachers' unreadiness to implement these programs (Dashuk, Nikolayev, & Dashuk, 2019), insufficient organizational conditions (Glazyrina, 2016), and the lack of clarity in the principles and methodological foundations of prevention programs (Nation et al., 2003). In addition, there are more and more voices in favour of the fact that programs for the prevention of aggressive behaviour among adolescents should not be only informational and developmental in nature, but should be aimed at direct or indirect control of students' behaviour (Pittaro, 2007; Warren, Schoppelrey, Moberg, & McDonald, 2005).

All the above-mentioned matters sharpens the problem of the organisation and content of the prevention of aggressive behaviour in school society, which determined the relevance of the research reflected in this article.

## 2. Problem Statement

Recently, the brutal aggressive behaviour of schoolchildren in Russia has increased in school society and beyond. As a result, preventive work in schools is intensifying and needs revision.

### **3. Research Questions**

- 3.1. What are the features of the school aggressive behaviour of modern adolescents?**
- 3.2. What are the strengths and shortcomings of school preventive programs against the aggressive and destructive behaviour of schoolchildren?**

### **4. Purpose of the Study**

Examining the features of school aggressive behaviour of adolescents and considering the experience of its prevention in Russian schools in contemporary socio-cultural conditions.

### **5. Research Methods**

Analysis of incidents of aggression in schools (from open sources). Study of the psychological conditions for the emergence of aggressive behaviour and bullying in a pedagogical vocational school (Buss-Durkee Hostile Inventory, BDHI, adapted by Khvan, Zaytsev, and Kuznetsova (2006), Bullying risk questionnaire by Bochaver et al. (2015), Sociometric method by J. Moreno, 130 persons). Content analysis of educational activities aimed at preventing aggression in Russian schools (157 reports on activities on school websites, from open sources).

### **6. Findings**

Cases of extreme aggressive behaviour in Russian schools are remarkably increasing in the last decade. Aggressive behaviour in schools takes the form of school violence by students towards other students (fights with or without weapons, attacks), as well as towards teachers, in addition, there may be threats, crimes against property and personality. There are cases of violent actions of school teachers against students..

Russian schools faced the facts of aggressive behaviour of schoolchildren with the use of firearms in February 2014 (Moscow, secondary school). Since that time, disturbing facts about attacks on their classmates and teachers appeared regularly.

The most famous are cases of shooting in schools and vocational training schools in Tomsk (2015), Usinsk, Republic of Komi (2017), Nizhnekamsk, Republic of Tatarstan (2017), Ivanteyevka, Moscow region (2017), Komsomolsk-on-Amur, Khabarovsk Territory (2017), Barabinsk, Novosibirsk region (2018), Shadrinsk, Kurgan region (2018), Kerch, Republic of Crimea (2018), Blagoveshchensk (2019). We have cited only cases in which an element of the occasion can be excluded, when a teenager brings a pistol to school and fires the weapon, presumably with no intention of harming the victims. Although the number of such cases is also considerable. Besides firearms, schoolchildren also used edged weapons (Perm and Sterlitamak, Buryatia, 2018, knives were used, the village of Sosnovy Bor, Republic of Buryatia, 2018, an attack with an axe). The most "bloody" of them even received special names. These are "Kerch shooting" and "Perm massacre".

In 2017-2018, according to the Secretary of the Security Council of the Russian Federation, Nikolai Patrushev, 24 incidents involving the use of weapons and explosive devices occurred in educational institutions in Russia. The uniformed services prevented about 4 more cases like those in 2020.

In Russian schools, according to data from open sources, 26 people were killed when using weapons in schools over 6 years. Is it a lot or a little? Compared to school shootings in the United States, where over 200 school firearms have occurred in the past decade, there are few such cases in Russia. Some incidents of school violence in the United States have resulted in violent deaths. According to the National Centre for Education Statistic, which interviews principals of USA public schools, in the 2015/2016 school year alone, there were 30 murders, 7 suicides and 1 death for law enforcement interference. The deaths of children and adolescents from the use of firearms, although not only because of school shootings, are second in the United States after death in car accidents (Cunningham, Walton, & Carter, 2018).

Among the reasons, both in cases of shooting in schools in Russia and in other countries, the investigators named mental disorders in the attackers. But according to the analysis of publications, it is also possible to establish poor relationships with classmates, with bullying to some attackers, family difficulties, school failure, everyday conflicts, personal hostility, etc.

However, the most alarming reason is the imitation of Columbiners, Eric Harrison and Dylan Klebold, who in 1999 at Columbine High School, USA, Colorado killed 13 people (12 students and one teacher), injured 23 more people, and then shot themselves. At least two cases of shooting in schools in Russia may be related to the "columbiners". On the Vkontakte social network, the attacker from the Ivanteevsk school had the nickname Mike Klebold. One of the organizers of the "Perm massacre" posted videos mentioning "Columbine" on the VKontakte social network. Harris and Klebold fans who create fandom groups around the world, believe that the massacre Harrison and Klebold carried out was a political act in the name of oppressed students affected by peer abuse, intimidation, social isolation and social rituals of humiliation.

As part of educational activities that require the regular assessment, negative psychological phenomena arise, caused by the individual's unwillingness to accept his or hers social position, which is spontaneously formed in the process of multiple social contacts between adults and children. Latent internal objections or asocial behaviour in adolescents towards more successful peers are not uncommon. Studies show that many adolescents have difficulties communicating with both peers and adults, which can also provoke aggression in them. Lack of attention in adults to the problem of communication between adolescents leads to a violation of the psychological well-being of schoolchildren and often initiates aggressive manifestations.

To examine this prediction, we surveyed 130 students (aged 15 to 17 years, 74.6% of young women and 2.4% of young men) using Buss-Durkee Hostile Inventory (Khvan, Zaytsev, & Kuznetsova, 2006), Sociometry (Moreno, 2001), Bullying Risk Questionnaire (Bochaver et al., 2015). The study was conducted in the 2019-2020 academic year at the Svetlograd pedagogical training school (Stavropol Territory, Russia).

The results of research using Buss-Durkee Hostile Inventory allow us to identify different types and forms of aggression in students of this training school. Physical aggression is manifested in 10% of the test subjects, and verbal aggression is demonstrated by 21%. Aggression in an indirect form manifests itself in 25%. Suspiciousness was noted by 20%, and resentment was mentioned by 12% of the persons examined. Students experience irritation much less often (it was noted by only 6% of all respondents) than negativism

(13%). According to high rates of verbal aggression which were identified, we may suggest that negatively tinged relationships among students would take the form of bullying of rejected students.

The features of the status of a teenager in the collective (Sociometry) is alarming. It was found that the leaders among the first-year students are 14%, 16% fall into the number of rejected and 4.3% are classified as "outcasts" among their schoolmates. Unfortunately, ostracism (ignorance) is widespread in many vocational training schools. A teenager can be ignored by peers for various reasons, for example, if a teenager is from a family with a low material income and does not dress fashionably, etc. Excellent students can also be ignored. It all depends on the developing relationships between peers in the first year of a study. Studies of ostracism have recorded, firstly, its relationship with an aggressive response, and, secondly, that social ostracism itself can take the form of aggression.

One of the most prominent and demonstrative forms of manifestation of social ostracism detailed with aggression is bullying (Rigby, 2004). Based on the results of our diagnostics, it was found that among the adolescents we surveyed, there is no type 1 of bullying (direct and systematic bullying and violence). But type 2 of bullying was revealed, that is, single events in a teenager's life which he or she assessed as an unfair, cruel attitude towards him/her. Thus, 18.5% of all respondents indicated that they had experienced systematic bullying and violence from their peers at least once.

In our previous study were found a link of ostracism with the peculiarities of adolescents' legal consciousness. The manifestations of aggression on the part of schoolchildren can be largely caused by an underestimation of legal responsibility before the law (Dementyeva, Borisova, & Sartakova, 2020). A survey of 340 young people (15 to 18 age) showed a low level of schoolchildren's understanding of the permissibility of disrupting normal functioning. 28.3% are ready to break laws for the sake of loved ones. Another 11.7% may break the law if no one finds out, and 4.6% believe such actions are possible if it prevents them from getting what they want.

In total, 157 school websites were analysed, which posted information about the activities carried out at the school to prevent aggression and provided information on various violations of behaviour (deviant, aggressive, participation in extremist activities, etc.). The data were collected by (Berlyand, 2020).

The results of the content analysis of this database carried out by I.V. Usoltseva, the following empirical indicators were identified, such as the number of theoretical and informational materials (calculated separately for schoolchildren, parents, teachers), their types and number of practical events, their options.

Content analysis showed that 157 sites mention 303 types of informational and theoretical materials posted in different sections of the school site. The average number of such materials on the site is 1.93. The largest number (24 materials) was posted on the website of the Municipal Secondary School No. 92 in Mogocho, Transbaikal Territory. The smallest amount (the only informational material) is posted on 88 sites (50.1% of all analysed sites). On the ten websites (6.4%) this type is absent, the school administration shows only practical activities.

We have identified 16 options for informational and theoretical materials on deviant behaviour, including aggressive one. Among them, first of all, materials and information about the activities and plans of the school (55.4% of all materials of the type). Then plans for various events (9.6%), memos (9.2%), and booklets (3.9%). The remaining eleven species are mentioned less often than in 4% of cases. 46.2% of all

materials are aimed at informing parents; for schoolchildren, their share is 42.4%. 11.4% of information and theoretical materials are intended for teachers.

The number of practical activities mentioned on school websites is almost three times less. These are 106 events, among which class hours, seminars, the work of the Reconciliation Services, Councils for Prevention (10.3% each of the practical events) are leading. Less often mentioned are parents' evening (8.8%), training (7.4%), group sessions without specifying their form, parenting schools or clubs and teachers' councils (5.9% each of the practical events). The rest of the events are mentioned less often than in 5% of cases.

Most of all, it is alarming that 96 school sites (61.1% of all analysed sites) do not mention a single practical event dedicated to the prevention of aggressive and/or deviant behaviour of schoolchildren. 45 websites (28.7%) mention one event. And only 16 websites (10.2%) indicated 2 or more practical measures to prevent aggression in the school environment. On average, one school website has 0.68 mentions of this type of event..

## 7. Conclusion

Our data convincingly shows the need to renovate the prevention system in Russian educational institutions. On the one hand, we have shown that the number of cases of school violence with the use of weapons and physical violence has increased in Russian schools. In addition, we received data on a high probability of being bullied and verbal aggression, especially for young people rejected by their peers. On the other hand, an analysis of the activities in schools aimed at preventing aggressive behaviour showed their insufficient connection with aggressive behaviour and the reasons that cause them in modern school society.

In conclusion, we suggest that progress in the preclusion of aggressive behaviour by schoolchildren will require a change in approaches to prevention in Russian schools, making them more practical and less informative in nature.

## Acknowledgments

Information about a state assignment or a grant, within which the study was carried out. The article was prepared within the framework of the state task № 073-00032-20-00 of 2020 for the Federal State Budget Scientific Institution "Institute of Study of Childhood, Family and Education of the Russian Academy of Education".

## References

- Almeida, T. C., Gonçalves, R. A., & Sani, A. I. (2008). La Agresividad en niños que testimonian la violencia de género. *Anuario de psicología jurídica*, 18, 113-118.
- Bandura, A. (1973). *Aggression: a social learning analysis*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bekiari, A., & Manoli, P. (2016). The Influence of Teacher Aggressive Communication on Student Affective Learning and Strategy Use. *Journal of Teacher Education and Educators*, 5(2), 154 – 171.
- Belyayeva, V. S. (2018). Konflikty mezhdu uchениkami v obshcheobrazovatel'nom uchrezhdenii i puti ikh razresheniya. [Conflicts between students in an educational institution and ways to resolve them]. *Byulleten' nauki i praktiki*, 4(8), 293-297. [in Rus].

- Benbenishty, R., Astor, R. A., Roziner, I., & Wrabel, S. L. (2016). Testing the Causal Links Between School Climate, School Violence, and School Academic Performance: A Cross-Lagged Panel Autoregressive Model. *Educational Researcher*, 45(3), 197–206. <https://doi.org/10.3102/0013189X16644603>
- Bochaver, A. A., Kuznetsova, V. B., Bianki, E. M., Dmitrievskii, P. V., Zavalishina, M. A., Kaporskaia, N. A., & Khlomov, K. D. (2015). Oprosnik riska bullinga (ORB). *Voprosy psikhologii*, (5), 146-157.
- Borisova, T. S., Kaznacheyeva, N. N., Metlik, I. V., Savotina, N. A., Usoltseva, I. V., & Wagner, I. V. (2019). Development of the childrens socio-cultural experience as a problem of modern education. In Ivanova S.V., Elkina I.M. (Eds.). *Conference processing of the Annual International Conference on Cognitive - Social, and Behavioural Sciences*, 277-284.
- Buelga, S., Musitu, G., & Murgui, S. (2009). Relaciones entre la reputación social y la agresión relacional en la adolescencia. [Relations between social reputation and relational aggression in adolescence]. *International Journal of Clinical and Health Psychology*, 9(1), 127-141. [in Span.].
- Berlyand, Yu. B. (2020). Opyt profilaktiki detskoy i podrostkovoy agressii v obshcheobrazovatel'nykh organizatsiyakh Rossiyskoy Federatsii (obzor). [The experience of preventing aggression of children and adolescents in educational institutions of the Russian Federation (review)]. In Wagner I.V. (ed.) *Podkhody k profilaktike agressivnogo povedeniya detey i podrostkov v obrazovatel'noy srede. Sbornik nauchnykh statey*. (Pp. 22-41). Moscow, FGBNU "IIDSV RAO".
- Calvete, E., & Orue, I. (2010). Cognitive Schemas and Aggressive Behavior in Adolescents: The Mediating Role of Social Information Processing. *The Spanish Journal of Psychology*, 13(1), 190-201. <https://doi.org/10.1017/S1138741600003772> [in Span.].
- Cunningham, R. M., Walton, M. A., & Carter, P. M. (2018). The major causes of death in children and adolescents in the United States. *New England Journal of Medicine*, 379(25), 2468-2475. <https://doi.org/10.1056/NEJMSr1804754>
- Dashuk, I. N., Nikolayev, V. A., & Dashuk, K. V. (2019). Professional'naya podgotovka budushchikh sotsial'nykh pedagogov k predotvrashcheniyu shkol'nogo bullinga. [Professional training of future social educators to prevent school bullying]. *Uchenyye zapiski Orlovskogo gosudarstvennogo universiteta. Seriya: Gumanitarnyye i sotsial'nyye nauki*, 1(82), 217-222. [in Rus].
- Dementyeva, I. F., Borisova, T. S., & Sartakova, E. E. (2020). Osobennosti vospitatel'nogo vliyaniya ottsa i materi na formirovaniye zhiznennykh oriyentirov detey. [Features of the educational influence of the father and mother on the formation of children's life orientations]. *Nauchno-pedagogicheskoye obozreniye*, 3(31), 191-199. <http://doi.org/10.23951/2307-6127-2020-3-191-200> [in Rus].
- Estévez, E., & Jiménez, T. I. (2015). Conducta agresiva y ajuste personal y escolar en una muestra de estudiantes adolescentes españoles. [Aggressive behavior and personal and school adjustment in a sample of Spanish adolescent students]. *Universitas Psychologica*, 14(1), 111-124. <http://doi.org/10.11144/Javeriana.upsy14-1.caap> [in Span.].
- Flynn, K., McDonald, C. C., D'Alonzo, B. A., Tam, V., & Wiebe, D. J. (2018). Violence in Rural, Suburban, and Urban Schools in Pennsylvania. *The Journal of School Nursing*, 34(4), 263–269. <https://doi.org/10.1177/1059840518765086>.
- Glazyrina, L. A. (2016). Neobkhodimost' profilaktiki nasiliya v obrazovatel'nykh organizatsiyakh. [The need to prevent violence in educational institutions]. *Vestnik Chelyabinskogo gosudarstvennogo pedagogicheskogo universiteta*, 10, 20-23. [in Rus].
- Khvan, A. A., Zaytsev, Yu. A., & Kuznetsova, Yu. A. (2006). *Standartizirovannyi oprosnik izmereniya agressivnykh i vrazhdennykh reaktsiy A. Bassa i A. Darki. Metodicheskiye rekomendatsii*. [A standardized questionnaire for measuring aggressive and hostile reactions by A. Bass and A. Darky. Methodological guideline]. Kemerovo: KRIPKiPRO. [in Rus].
- Lansford, J. E., Skinner, A. T., Sorbring, E., Giunta, L. D., Deater-Deckard, K., Dodge, K. A., ... & Uribe Tirado, L. M. (2012). Boys' and girls' relational and physical aggression in nine countries. *Aggressive behavior*, 38(4), 298-308.
- Mager, U., & Nowak, P. (2012). Effects of student participation in decision making at school: a systematic review and synthesis of empirical research. *Educational Research Review*, 7(1), 38–61.

- Martinez, J. W., Rojas, C., Duque, A., Tovar, R., & Klevens, J. (2008). ¿Son los niños más agresivos que las niñas? Comportamiento de la agresividad en niños y niñas de escuelas públicas de Pereira. *Revista Médica de Risaralda*, 14(1), 23-30. [in Span.].
- Moreno, J. (2001). *Sotsiometriya: Eksperimental'nyy metod i nauka ob obshchestve*. Perevod s angl. A. Bokovikova. [Sociometry: An Experimental Method and the Science of Society. Translation from English. A. Bokovikova]. Moskva: Akademicheskii proyekt. [in Rus].
- Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American psychologist*, 58(6-7), 449.
- Novikova, M. A., & Rean, A. A. (2019). Vliyaniye shkol'nogo klimata na vozniknoveniye travli: otechestvennyy i zarubezhnyy opyt issledovaniya. [The influence of the school climate on the occurrence of bullying: domestic and foreign research experience]. *Voprosy obrazovaniya*, 2, 78–97. <https://doi.org/10.17323/1814-9545-2019-2-78-97> [in Rus].
- Ovcharenko, L. Yu. (2015). Problemy uspekhnosti sotsial'no-psikhologicheskoy adaptatsii podrostkov v sovremennoy srede. [Problems of the success of the social and psychological adaptation of adolescents in the modern environment]. *Sistemnaya psikhologiya i sotsiologiya*, 1(13), 44-56. [in Rus].
- Peterson, R. L., & Skiba, R. (2000). Creating School Climates That Prevent School Violence, Preventing School Failure. *Alternative Education for Children and Youth*, 44(3), 122-129. <https://doi.org/10.1080/10459880009599794>
- Pittaro, M. L. (2007). School violence and social control theory: An evaluation of the Columbine massacre. *International Journal of Criminal Justice Sciences*, 2(1), 1 – 12.
- Rigby, K. (Ed.) (2004). *Bullying in schools: How successful can interventions be?* Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511584466.005>.
- Volungis, A. M., & Goodman, K. (2017). *School Violence Prevention: Teachers Establishing Relationships With Students Using Counseling Strategies*. SAGE Open. <https://doi.org/10.1177/2158244017700460>
- Wagner, I. V. (2018). *Sotsiokul'turnyy opyt shkol'nikov i yego razvitiye v protsesse vospitaniya*. [Social and cultural experience of schoolchildren and its development in the process of upbringing]. Moscow. [in Rus].
- Warren, K., Schoppelrey, S., Moberg, D. P., & McDonald, M. (2005). A Model of Contagion Through Competition in the Aggressive Behaviors of Elementary School Students. *Journal of Abnormal Child Psychology*, 33(3), 283–292. <https://doi.org/10.1007/s10802-005-3565-5>