

PHYSICAL FIGHTING IN PORTUGUESE SCHOOLS: RISK AND PROTECTIVE FACTORS FOR ADOLESCENT WELL-BEING

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ABSTRACT

Introduction: Physical fighting among adolescents remains a public health concern, impacting academic achievement, psychosocial development, and school climate. This study aims to characterize the involvement in school fights among Portuguese students, identifying risk and protective factors to inform strategies for prevention and intervention.

Methods: Based on the 2024 national study of the Psychological Health and Well-Being Observatory, a total of 3,083 students from lower and upper secondary schools in Portugal participated. Sociodemographic data, psychological symptoms, socio-emotional skills (SSES), perceived well-being, and school environment variables were assessed. Statistical analysis included Chi-square tests and linear regression.

Results: About 17.1% of students reported involvement in physical fights, with boys and younger students (5th–7th grade) more frequently involved. Protective factors included emotional control, self-control, cooperation, creativity, positive relationships with teachers, and perceived well-being. Bullying emerged as a major risk factor. Regression analysis identified gender, school grade, bullying, and several socio-emotional skills as significant predictors, explaining 25.5% of the variance.

Conclusions: A multifactorial approach is essential in addressing physical fighting in schools. Strategies should target individual regulation skills, social relationships, and systemic supports in the educational context.

Keywords: school violence, physical fighting, adolescents, socio-emotional skills, bullying, well-being, youth development

1.0 INTRODUCTION

Violence in school settings represents a pervasive global issue with significant implications for students' physical, emotional, and academic well-being (UNESCO, 2019; WHO, 2020). Amongst the various expressions of school violence, physical fighting stands out as a particularly visible and disruptive behaviour, frequently rooted in complex interactions between individual, relational, and contextual factors. While often dismissed as a developmental rite of passage, evidence increasingly supports the need to treat physical aggression as a significant psychosocial risk factor, particularly in adolescence—a period marked by emotional volatility, identity development, and peer influence (Espelage & Swearer, 2003; Matos et al., 2009).

From an ecological systems perspective (Bronfenbrenner, 1979), adolescent aggression must be understood through the dynamic interactions between microsystemic (e.g., family, peers), mesosystemic (e.g., school environment), and macrosystemic (e.g., societal norms, media) influences. In particular, gender has consistently emerged as a robust predictor of physical aggression, with boys being more likely to engage in fights, often due to prevailing masculine norms associating violence with strength and dominance (Connell, 2005; Duru & Balkis, 2018). Social learning theory (Bandura, 1977) further elucidates how such behaviours are observed, modeled, and reinforced within peer groups, particularly in school environments with weak adult supervision or low social cohesion.

International data, such as from the Health Behaviour in School-aged Children (HBSC) study, estimate that between 20% and 30% of adolescents have engaged in at least one physical fight in the past year (Cosma et al., 2024). Although Portuguese adolescents report slightly lower prevalence, the rates are still concerning (Matos et al., 2018). Importantly, fighting in school is not merely a disciplinary issue—it is often symptomatic of broader emotional distress, such as anxiety, depression, and lack of a sense of connection (Shaikh et al., 2020; Gaspar et al., 2019). Conversely, protective factors such as emotional regulation, strong teacher-student relationships, and perceived school safety can reduce the likelihood of violence (OECD, 2021).

Evidence also points to the efficacy of systemic school-based interventions promoting social and emotional learning (SEL) and Positive Youth Development (PYD), which focus on fostering key developmental assets and a nurturing school climate (Geldhof et al., 2014; Tomé et al., 2024). Thus, the present study seeks to characterize the involvement in school fights among Portuguese adolescents by identifying associated risk and protective factors—laying the groundwork for more targeted preventive strategies.

2.0 CONCEPTUAL FRAMEWORK: VIOLENCE AS A MULTIDIMENSIONAL CONSTRUCT

Violence among youth, particularly in school settings, has been increasingly recognised not as a singular phenomenon but as a multidimensional construct encompassing physical, emotional, psychological, and relational dimensions (Krug et al., 2002; UNESCO, 2019). It reflects the interplay of systemic, contextual, and individual vulnerabilities and must be understood within a broader socio-ecological framework.

The World Health Organization (2002) defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation." This definition highlights not only the physical manifestations but also the structural and psychological consequences of violence, underlining the importance of analysing the broader spectrum of aggressive behaviours in youth.

2.1 Dimensions and Determinants of School Violence

School violence can be manifested through direct actions (e.g., fights, bullying, verbal abuse) or more hidden mechanisms (e.g., exclusion, intimidation, systemic discrimination). These expressions are often underpinned by multiple layers of determinants:

- **Individual factors** such as age, gender, impulsivity, emotional dysregulation, and trauma exposure.
- **Relational factors**, particularly peer group norms, bullying dynamics, and teacher-student interactions.
- **Institutional/school-level variables** such as school climate, perception of safety, levels of cohesion, and the presence (or lack) of preventive policies.
- **Cultural and societal norms**, especially those that tolerate or glamorise aggressive behaviours and limit emotional expression, particularly amongst boys (Connell, 2005).

Involvement in physical fights is often the tip of the iceberg—a visible expression of more complex psychosocial difficulties. It tends to co-occur with symptoms of internalization (e.g., anxiety, depression) and externalization (e.g., conduct problems) difficulties, leading to increased academic disengagement, relational conflict, and risk-taking behaviours (Shaikh et al., 2020; Gaspar et al., 2019).

3.0 THE INTERRELATIONSHIP BETWEEN VIOLENCE, DEVELOPMENT AND MENTAL HEALTH

The adolescent period is marked by intense biopsychosocial changes and heightened vulnerability. Neurodevelopmental transformations, the search for autonomy, identity formation, and peer validation all increase susceptibility to risk behaviours, particularly when protective factors are lacking. When adolescents lack adequate internal resources for emotional and behavioural regulation, or when they operate in unsupportive environments, the likelihood of aggressive responses to conflict increases.

Conversely, social-emotional competencies—such as emotional regulation, empathy, problem-solving, and perspective-taking—serve as crucial buffers against the emergence of violence. These competencies are not innate; they are learned and can be effectively fostered through school-based interventions (OECD, 2021; Geldhof et al., 2014).

Within the framework of Positive Youth Development (PYD), involvement in physical fights is understood not only as a behavioural issue but as a reflection of developmental challenges.

PYD shifts the focus from risk to potential, identifying how supportive environments can foster thriving, resilience, and contribution amongst youth (Lerner et al., 2005; Tomé et al., 2024).

Thus, understanding the complex interdependencies between developmental needs, mental health, and violent behaviours is fundamental to designing effective prevention and intervention strategies. Recognizing physical fighting as a multidetermined symptom opens up opportunities for systemic, inclusive, and developmentally appropriate responses.

4.0 AIM OF THE STUDY

This study aims to understand and characterise the involvement in physical fights amongst Portuguese school-aged adolescents by identifying both risk and protective factors associated with this behaviour. The goal is to inform evidence-based strategies that promote safer and more supportive school environments, while contributing to adolescents' mental health and positive development.

4.1 Method

The 2nd National Study of the Psychological Health and Well-being Observatory (Matos et al., 2024) began in October with the aim of monitoring the psychological health and well-being of different groups within the school ecosystem. This included students from preschool to 12th grade, as well as parents/guardians, teachers, school leaders, psychologists, and other professionals. In January 2024, school clusters were randomly selected by NUTS III regions and subsequently contacted by email or telephone. The questionnaires were administered online between 23 January and 9 June 2024, under the coordination of teachers and psychologists appointed by each school or school cluster.

For the present study, a total of 3,083 students from lower and upper secondary education participated (2nd and 3rd cycles and secondary education). Of these, 49.5% identified as male and 50.5% as female, with a mean age of 13.64 years ($SD = 2.53$), ranging from 9 to 20 years old. Regarding school grade distribution: 11.7% were in 5th grade, 13.6% in 6th grade, 13.7% in 7th grade, 12.7% in 8th grade, 14.3% in 9th grade, 10.6% in 10th grade, 12.9% in 11th grade, and 10.6% in 12th grade (see Table 1).

Table 1 Frequencies by Gender and School Grade

| | | N | % |
|--------------|------------------------|------|-------|
| Gender | Male | 1493 | 49.5% |
| | Female | 1524 | 50.5% |
| School grade | 5 th grade | 359 | 11.7% |
| | 6 th grade | 418 | 13.6% |
| | 7 th grade | 421 | 13.7% |
| | 8 th grade | 392 | 12.7% |
| | 9 th grade | 442 | 14.3% |
| | 10 th grade | 327 | 10.6% |
| | 11 th grade | 396 | 12.9% |
| | 12 th grade | 326 | 10.6% |

The full description of the instrument can be found in the study report (Matos et al., 2024), and for this in-depth study the following questions were used: gender, grade, HBSC symptoms of psychological distress scale, HBSC who-5 perceived quality of life, SSES scale | socio-emotional skills, DASS-21 scale, Positive Youth Development (PYD) scale, and school environment perception, namely the fight involvement.

4.2 Data Analysis

The data were analyzed using IBM SPSS Statistics (Version 29). Descriptive statistics were first calculated to summarize the demographic characteristics of the sample and the distribution of variables related to socio-emotional skills, psychological well-being, school environment, and fight involvement. Chi-square tests were conducted to examine associations between fight involvement and gender, as well as school grade. Finally, a multiple linear regression analysis was performed to identify significant predictors of students' involvement in physical fights at school. Independent variables included socio-emotional skills, psychological symptoms, perceived well-being, and school environment indicators. Statistical significance was set at $p < .05$ for all analyses.

5.0 RESULTS

Table 2 shows the descriptive statistics of the variables used in the study, including the number of participants (N), percentages, means, standard deviations (SD), and maximum and minimum values. The variables cover socio-emotional competences (SSES), indicators of psychological well-being (HBSC_WHO-5), symptoms of psychological malaise (HBSC), levels of stress, anxiety and depression (DASS-21), indicators of positive development (PYD), perception of the school environment and involvement in fights at school.

The vast majority of students reported never having been involved in fights (82.9%).

Table 2 General Descriptions | SSES, Symptoms (HBSC), DASS-21, PYD, School Climate, and Involvement in school fights

| | N | Mean/ % | SD | Max | Min |
|---------------------------------|------|---------|------|-----|-----|
| SSES Optimism | 3033 | 2.70 | 0.77 | 4 | 0 |
| SSES Emotional Control | 3020 | 2.15 | 0.73 | 4 | 0 |
| SSES Resilience/Resistance | 3015 | 2.05 | 0.86 | 4 | 0 |
| SSES Confidence/Trust | 3011 | 2.12 | 0.73 | 4 | 0 |
| SSES Curiosity | 3000 | 2.63 | 0.69 | 4 | 0 |
| SSES Sociability | 2998 | 2.48 | 0.72 | 4 | 0 |
| SSES Persistence/Perseverance | 3003 | 2.59 | 0.70 | 4 | 0 |
| SSES Creativity | 2989 | 2.53 | 0.66 | 4 | 0 |
| SSES Energy | 2980 | 2.37 | 0.70 | 4 | 0 |
| SSES Cooperation | 2980 | 2.91 | 0.64 | 4 | 0 |
| SSES Self-control | 2981 | 2.50 | 0.65 | 4 | 0 |
| SSES Relation with Teachers | 2964 | 2.32 | 0.78 | 3 | 0 |
| SSES Academic Evaluation | 2971 | 2.49 | 1.05 | 4 | 0 |
| Anxiety | | | | | |
| SSES Bullying | 2962 | 0.45 | 0.68 | 3 | 0 |

| | | | | | |
|------------------------------------|------|-------|------|----|---|
| SSES Sense of school belonging | 2969 | 2.47 | 0.53 | 4 | 1 |
| HBSC_WHO-5 well-being index | 2961 | 15.70 | 5.04 | 25 | 0 |
| HBSC (Symptoms index) | 2966 | 6.48 | 5.02 | 20 | 0 |
| DASS-21 Stress | 2883 | 4.93 | 4.46 | 21 | 0 |
| DASS-21 Depression | 2913 | 4.21 | 4.53 | 21 | 0 |
| DASS-21 Anxiety | 2734 | 3.84 | 4.18 | 21 | 0 |
| PYD Competence | 2981 | 14.34 | 4.75 | 24 | 0 |
| PYD Confidence (self-confidence) | 2993 | 15.13 | 5.46 | 24 | 0 |
| PYD Connection | 2997 | 18.81 | 5.74 | 30 | 0 |
| PYD Contribution | 2976 | 8.87 | 4.42 | 20 | 0 |
| School Climate | 2858 | 17.03 | 5.96 | 28 | 0 |
| Involvement in school fights | 2957 | | | | |
| Never involved in fights | 2451 | 82.9 | | | |
| Involved in fights at least once | 506 | 17.1 | | | |

There were statistically significant differences between genders in relation to involvement in school fights ($\chi^2 (1) = 132.232$; $p < 0.001$), with boys (25.2%) more frequently reporting involvement in school fights compared to girls (9.2%).

Table 3: CHI-SQUARE | Involvement in school fights by Gender

| | Male | | Female | | χ^2 | <i>p</i> |
|----------------------------------|------|------|--------|------|----------|----------|
| | N | % | N | % | | |
| Involvement in school fights | | | | | | |
| Never involved in fights | 1060 | 74.8 | 1345 | 90.8 | 132.232 | <.001*** |
| Involved in fights at least once | 358 | 25.2 | 136 | 9.2 | | |

Note. ***<0.001; **<0.010; *<0.05

Table 4 illustrates statistically significant differences in school fight involvement across school grades ($\chi^2(7) = 56.877$; $p < 0.001$), with younger students (5th, 6th and 7th graders - 75.3%, 75.7% and 78.8%, respectively) reporting higher levels of involvement in school fights compared to older students, while older students (9th, 10th, 11th and 12th grades – 86.2%, 88.3%, 86.7%, and 89.7%, respectively) more frequently reported never being involved in fights.

Tabela 4: CHI-SQUARE | Involvement in school fights by School Grade

| | Never involved in fights (n/ %) | Involved in fights at least once (n/ %) | χ^2 | <i>p</i> |
|------------------------|------------------------------------|--------------------------------------------|----------|----------|
| 5 th grade | 244 / 75.3 | 80 / 24.7 | | |
| 6 th grade | 309 / 75.7 | 99 / 24.3 | | |
| 7 th grade | 324 / 78.8 | 87 / 21.2 | | |
| 8 th grade | 313 / 83.7 | 61 / 16.3 | | |
| 9 th grade | 370 / 86.2 | 59 / 13.8 | | |
| 10 th grade | 280 / 88.3 | 37 / 11.7 | | |
| 11 th grade | 325 / 86.7 | 50 / 13.3 | | |

12th grade 286 / 89.7 33 / 10.3

Note. ***p < 0.001

A multiple linear regression analysis was conducted to identify variables associated with school fight involvement, using a multivariate model (Table 5 and Figure 1). The adjusted model was statistically significant, explaining 25.5% of the variance in involvement in school fights (R²=0.255; F (27.2193) =27.809; p<0.001).

Amongst the variables analysed, gender and school grade emerged as significant negative predictors of involvement in school fights (B= -0.13; t=-6.07; p<0.001; B=0.07; t=-3.39; p<0.001), indicating that boys and younger students reported greater levels of involvement in fights.

Other variables relevant to the model include bullying (B=0.32; t=15.00; p<0.001) and indicators of psychological well-being (HBSC_WHO-5) (B=0.09; t=3.00; p=0.03) in which there is a significant positive association with involvement in fighting at school, suggesting that higher levels of bullying and perceived psychological well-being are associated with greater involvement in fights.

In the area of socio-emotional skills assessed by the SSES, emotional control (B=-0.07; t=-2.47; p<0.001), creativity (B=-0.06; t=-2.31; p=0.02), co-operation (B=-0.06; t=-2.36; p=0.02), self-control (B=-0.10; t=-3.64; p<0.001) and relationships with teachers (B=-0.06; t=-2.85; p=0.004), stand out as a significant negative predictor, suggesting that students who are more involved in fighting have less emotional control, less creativity, less co-operation, less self-control and worse relationships with teachers.

Resilience (B = 0.09; t = 3.16; p = 0.002) was positively associated with fight involvement, and in the context of Positive Youth Development (PYD), there is a significant positive association for contribution (B=0.05; t=2.40; p<0.02), suggesting that higher levels in these dimensions may contribute to reduced involvement in fights.

Other variables included in the model did not show statistically significant associations (p > 0.05).

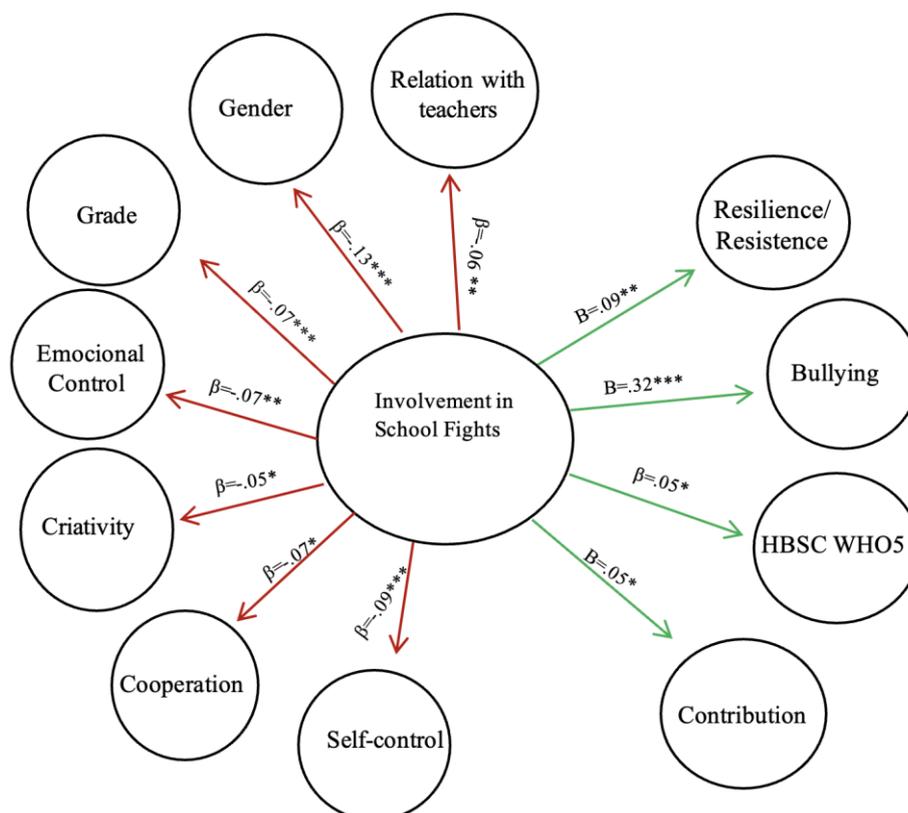
Table 5: Linear Regression | Involvement in school fights

| Involvement in school fights | B | SE | β | t | p | R ² | F (27.2193) |
|------------------------------------|-------|------|-------|-------|-----------------|----------------|-------------|
| Constant | 1.468 | 0.08 | | 19.46 | <0.001 | | |
| Grade | -0.01 | 0.00 | -0.07 | -3.39 | <.001 | | |
| Gender | -0.10 | 0.02 | -0.13 | -6.07 | <.001 | | |
| SSES Optimism | -0.01 | 0.01 | -0.03 | -1.04 | 0.30 | | |
| SSES Emotional Control | -0.03 | 0.01 | -0.07 | -2.47 | 0.01 | | |
| SSES Resilience/Resistance | 0.04 | 0.01 | 0.09 | 3.16 | 0.002 | 0.255 | 27.809*** |
| SSES Confidence /Trust | -0.00 | 0.01 | -0.00 | -0.13 | 0.89 | | |
| SSES Curiosity | -0.01 | 0.01 | -0.02 | -0.86 | 0.39 | | |
| SSES Sociability | 0.01 | 0.02 | 0.02 | 0.93 | 0.35 | | |
| SSES Persistence/Perseverance | 0.00 | 0.01 | 0.01 | 0.38 | 0.71 | | |

| | | | | | |
|------------------------------------|-------|------|-------|-------|-----------------|
| SSES Creativity | -0.03 | 0.01 | -0.06 | -2.31 | 0.02 |
| SSES Energy | 0.03 | 0.02 | 0.05 | 1.73 | 0.80 |
| SSES Cooperation | -0.04 | 0.01 | -0.07 | -2.36 | 0.02 |
| SSES Self-control | -0.06 | 0.02 | -0.10 | -3.64 | <.001 |
| SSES Sense of School Belonging | -0.02 | 0.02 | -0.03 | -0.91 | 0.36 |
| SSES Bullying | 0.18 | 0.01 | 0.32 | 15.00 | <.001 |
| SSES Relations with Teachers | -0.03 | 0.01 | -0.06 | -2.85 | 0.004 |
| SSES Academic Evaluation Anxiety | -0.01 | 0.01 | -0.02 | -0.99 | 0.32 |
| HBSC_WHO-5 well-being index | 0.00 | 0.00 | 0.06 | 2.12 | 0.03 |
| HBSC (Symptoms Index) | 0.00 | 0.00 | 0.05 | 1.92 | 0.55 |
| DASS-21 Stress | 0.00 | 0.00 | 0.04 | 1.05 | 0.29 |
| DASS-21 Depression | -0.00 | 0.00 | -0.01 | -0.31 | 0.75 |
| DASS-21 Anxiety | 0.00 | 0.00 | 0.04 | 1.13 | 0.25 |
| PYD Competence | 0.00 | 0.00 | 0.04 | 1.33 | 0.18 |
| PYD Confidence (self-confidence) | 0.00 | 0.00 | 0.00 | 0.05 | 0.96 |
| PYD Connection | 0.00 | 0.00 | 0.03 | 0.92 | 0.36 |
| PYD Contribution | 0.00 | 0.00 | 0.05 | 2.40 | 0.02 |
| School Environment | 0.00 | 0.00 | 0.01 | 0.58 | 0.57 |

Note. ***<0.001

Figure 1: Linear Regression Model with Statistically Significant Variables | Involvement in School Fights



Legend: red – risk factors; green – protective factors

***<0.001; **<0.01; *<0.05

6.0 DISCUSSION

The present study provides a comprehensive examination of involvement in physical fights amongst Portuguese adolescents, identifying both risk and protective factors within a broad ecological and developmental framework. Our findings highlight the multifactorial nature of this behaviour, revealing associations with individual characteristics (e.g., gender, age), psychosocial risk indicators (e.g., bullying), and developmental assets (e.g., socio-emotional competences, relationships with teachers).

In line with previous research (Cosma et al., 2024; Matos et al., 2018), the prevalence of physical fighting in this Portuguese sample (17.1%) is slightly below international averages. Nonetheless, the phenomenon remains a significant concern, especially given its developmental implications. As consistently documented, boys were more likely than girls to report involvement in fights (25.2% vs. 9.2%), which reinforces prior findings about gendered socialisation and norms around aggression (Connell, 2005; Duru & Balkis, 2018).

Furthermore, younger students (5th to 7th grade) were more frequently involved in fights, suggesting a potential developmental trajectory in which emotional regulation and behavioural control improve with age and educational level. These findings are consistent with evidence linking adolescent maturation with increased capacity for self-regulation (OECD, 2021; Lerner et al., 2005).

The regression analysis offers deeper insight into predictive factors. Bullying stands out as the most robust risk factor, strongly associated with fight involvement ($B = 0.32$), corroborating prior studies that establish a reciprocal link between being involved in bullying and engaging in physical fights (Carvalho et al., 2018; 2019; Shaikh et al., 2020). Notably, socio-emotional skills such as self-control, emotional control, creativity, and cooperation emerged as protective factors. This aligns with SEL-based frameworks suggesting that these skills buffer against externalising behaviours (Geldhof et al., 2014; OECD, 2021).

Contrary to expectations, resilience/resistance and perceived well-being were positively associated with fight involvement. While this may appear paradoxical, it is possible that certain dimensions of resilience—such as assertiveness or emotional toughness—may be interpreted or enacted as confrontational behaviour in some contexts. Alternatively, students with high resilience might be more socially engaged or exposed to high-conflict environments. This warrants further investigation.

Additionally, stronger relationships with teachers were significantly associated with lower levels of fighting, reinforcing the importance of teacher-student bonds as a protective mechanism. Such relationships may foster connectedness and perceived safety, discouraging aggressive behaviour (Tomé et al., 2024).

Interestingly, Positive Youth Development indicators such as "contribution" also predicted reduced involvement in fights. This supports the PYD paradigm, which posits that fostering

prosocial engagement contributes to reduced problem behaviour and promotes thriving (Lerner et al., 2005).

Overall, the study reiterates the value of systemic approaches targeting socio-emotional learning and developmental supports. However, the absence of significant associations with some psychological symptoms (e.g., depression, anxiety, stress) suggests that physical fighting may be more closely linked to behavioural and environmental dimensions than to internalising symptoms alone (Carvalho et al., 2016; 2021).

7.0 CONCLUSION AND IMPLICATIONS

This study confirms that physical fighting among adolescents is a multifaceted issue, influenced by individual, relational, and systemic variables. The findings underscore the critical role of socio-emotional competences, bullying prevention, and supportive school relationships in mitigating violent behaviour. While younger male students are at higher risk, these behaviours are not inevitable. They can be addressed and reduced through targeted educational and psychological interventions.

The implication for schools and policymakers is clear: fostering positive youth development, investing in SEL programmes, and cultivating safe, inclusive school environments are foundational to violence prevention. Furthermore, teacher-student relationships must be strengthened as relational buffers against aggression.

7.1 Recommendations

1. Gender-sensitive approaches: Implement interventions tailored to address masculine norms and promote emotional literacy among boys.
2. Early prevention: Focus on early school years (5th to 7th grades) to address aggressive behaviours before they consolidate.
3. Bullying reduction: Implement whole-school strategies to identify, monitor, and intervene in bullying dynamics.
4. Promote socio-emotional skills: Integrate SEL programmes to enhance emotional regulation, cooperation, creativity, and self-control.
5. Strengthen teacher-student relationships: Train educators in relational practices and student engagement.
6. Foster developmental assets: Encourage youth participation, leadership, and community involvement to promote the PYD dimensions.
7. Monitor psychosocial well-being: While not predictive in this sample, continuous monitoring of stress and mental health remains important.

REFERENCES

- Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Carvalho, A., Almeida, C., Amann, G., Leal, P., Marta, F., Moita, M., Pereira, F., Ladeiras, L., Lima, R., Lopes, I. (2016). *Saúde Mental em Saúde Escolar. Manual para a Promoção*

de Aprendizagens Socioemocionais em Meio Escolar. Lisboa| DGS,IPS/ESS, PV, DGE

Carvalho, M., Branquinho, C., & Matos, M.G. (2018). Emotional Symptoms and Risk Behaviors in Adolescents: Relationships With Cyberbullying and Implications on Well-Being. *Violence and Victims*, 33(5), 1-15. doi: 10.1891/0886-6708

Carvalho, M., Branquinho, C., & Matos, M. G. (2019). Bullying, cyberbullying e problemas de comportamento: o género e a idade importam? *Revista de Psicologia da Criança e do Adolescente*, 10 (1), 197-205

Carvalho, M., Branquinho, C., Gaspar, S., Reis, M., Loureiro, V., Loureiro, N. & Matos, M.G. (2021). *Ative a sua escola: Violência e Lesões*. Instituto Politécnico de Beja.

Cosma, A., Molcho, M., Pickett, W. (2024). A focus on adolescent peer violence and bullying in Europe, central Asia and Canada. *Health Behaviour in School-aged Children international report from the 2021/2022 survey. Volume 2*. Copenhagen: WHO Regional Office for Europe. Licence: CC BY-NC-SA 3.0 IGO.

Duru, E., & Balkis, M. (2018). Exposure to school violence at school and mental health of victimized adolescents: The mediation role of social support. *Child Abuse & Neglect*, 76, 342–352. Doi: 10.1016/j.chiabu.2017.11.016

Gaspar, S., Botelho Guedes, F., Cerqueira, A., Oliveira, R., & Matos, M. G. (2019). Physical Health from Highlights: Behaviours' Adolescents /HBSC (Children Aged-School in Behaviours' Adolescent and Setting School in Fights) - WHO Behaviours. *Primary Care Epidemiology and Global Health*, 2019(1), 30-39.

Tomé, G., Reis, M., Branquinho, C., Almeida, A., Ramiro, L., Gaspar, T., & Matos, M.G. (2024). Chapter 8 - The whole-school ecosystem approach for promoting health and satisfaction with life among adolescents, Editor(s): Osvaldo Santos, Ricardo R. Santos, Ana Virgolino, *Environmental Health Behavior*, Academic Press, <https://doi.org/10.1016/B978-0-12-824000-7.00015-5>.

Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., ... Lerner, R. M. (2014). Creation of short and very short measures of the five Cs of positive youth development. *Journal of Research on Adolescence*, 24(1), 163-176. <https://doi.org/10.1111/jora.12039>

Adaptação portuguesa: Tomé, G., Matos, M. G., Camacho, I., Gomes, P., Reis, M., Branquinho, C., Gomez-Baya, D., & Wiium, N. (2019). Positive youth development (pyd-sf): Validação para os adolescentes portugueses. *Psic., Saúde & Doenças*, 20(3), 556-568. <https://doi.org/10.15309/19psd200301>

Inchley, J., et al. (Eds.). (2016). *Growing up unequal: Gender and socioeconomic differences in young people's health and well-being*. Health Behaviour in School-aged Children (HBSC) study: International report from the 2013/2014 survey. Copenhagen: WHO Regional Office for Europe (Health Policy for Children and Adolescents, No. 7).

- Krug, E.G. et al., eds (2002). World report on violence and health. Geneva, World Health Organization.
- Lovibond, S. H., & Lovibond, P. F. (1995). Manual for the Depression, Anxiety, Stress Scales. Austrália. Disponível em: <http://www2.psy.unsw.edu.au/dass/>.
- Adaptação portuguesa: Pais-Ribeiro, J. L., Honrado, A., & Leal, I. (2004). Contribuição para o estudo da adaptação portuguesa das escalas de Ansiedade, Depressão e Stresse (EADS) de 21 itens de Lovibond e Lovibond. *Psicologia, Saúde & Doenças*, 5(1), 229-239.
- Matos, M. G. (2022). Adolescentes. Oficina do Livro.
- Matos, M. G., & Equipa Aventura Social. (2018). A saúde dos adolescentes portugueses após a recessão – Dados nacionais do estudo HBSC 2018. Lisboa: Equipa Aventura Social.
- Matos, M. G., Branquinho, C., Moraes, B., Domingos, L., Noronha, C., Raimundo, M., Cerqueira, A. R., Tomé, G., Guedes, F. B., Gaspar, T., & Rodrigues, N.N. (2024). Saúde Psicológica e Bem-estar relatório do segundo estudo nacional, em 2024 | Observatório de Saúde Psicológica e Bem-estar: Monitorização e Ação. DGEEC.
- Matos, M. G., Branquinho, C., Noronha, C., Moraes, B., Santos, O., Gaspar, T., & Rodrigues, N. (com colaboração OPP e Fundação Calouste Gulbenkian) (2022). Saúde Psicológica e Bem-estar | Observatório de Saúde Psicológica e Bem-estar: Monitorização e Ação. DGEEC. <https://www.dgeec.mec.pt/np4/1357.html>
- Matos, M. G., Negreiros, J., Simões, C., & Gaspar, T. (2009). Violência, Bullying e Delinquência – Gestão de Problemas de Saúde em Meio Escolar. Lisboa: Coisas de Ler.
- OECD. (2021). Beyond academic learning: First results from the survey of social and emotional skills. OECD Publishing, Paris. <https://doi.org/10.1787/92a11084-en>
- Organização das Nações Unidas. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. <https://sdgs.un.org/2030agenda>
- Organização das Nações Unidas. (2024). The Sustainable Development Goals report 2024. <https://unstats.un.org/sdgs/report/2024/The-Sustainable-Development-Goals-Report-2024.pdf>
- Shaikh, M. A., Abio, A. P., Adedimeji, A. A., & Lowery Wilson, M. (2020). Involvement in Physical Fights among School Attending Adolescents: A Nationally Representative Sample from Kuwait. *Behavioral sciences* (Basel, Switzerland), 10(1), 29. <https://doi.org/10.3390/bs10010029>
- UNESCO (2019). School Violence and Bullying: Global Status Report. <https://unesdoc.unesco.org/ark:/48223/pf0000368092>