



Instrument for identifying risk behaviors for bullying in adolescence

Instrumento de identificação de comportamentos de risco para bullying na adolescência

Instrumento para la identificación de conductas de riesgo de bullying en la adolescencia

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ABSTRACT

Objective: to develop and validate the content of an instrument to identify risk behaviors for bullying in adolescence. **Method:** this methodological study, with a quantitative approach, was based on psychometrics according to the classic guidelines of Pasquali and DeVellis, and guided by the GRRAS recommendations for validity and reliability studies. A literature review, item development, pilot application, content validation with 10 health and education specialists, face validation with adolescents, and reliability analysis using internal consistency (Cronbach's alpha) and temporal stability (test-retest) with 102 high school adolescents were performed. **Results:** the instrument, composed of 12 items distributed across four dimensions (perception of bullying, aggressive behaviors, influence of the family environment, and social support), obtained an average content validity index of 90.9% for adequacy and 91.8% for clarity, in addition to a stability of 92.4%. Internal consistency was satisfactory ($\alpha=0.73$) and temporal stability was excellent (94.1%). **Conclusion and implications for practice:** the instrument presented evidence of content validity and reliability, configuring itself as a useful tool for health and nursing professionals in screening and monitoring risk behaviors related to bullying in school environments.

Keywords: Adolescence; Bullying; Psychometrics; School Health Services; Validation Study.

RESUMO

Objetivo: construir e validar o conteúdo de um instrumento para a identificação de comportamentos de risco para o bullying na adolescência. **Método:** estudo metodológico, de abordagem quantitativa, fundamentado na psicometria segundo as diretrizes clássicas de Pasquali e DeVellis, e orientado pelas recomendações do GRRAS para estudos de validade e confiabilidade. Foram realizadas revisão da literatura, elaboração dos itens, aplicação piloto, validação de conteúdo com 10 especialistas das áreas de saúde e educação, validação aparente com adolescentes e análise da fidedignidade por meio da consistência interna (Alfa de Cronbach) e da estabilidade temporal (teste-reteste) com 102 adolescentes do Ensino Médio. **Resultados:** o instrumento, composto por 12 itens distribuídos em quatro dimensões (percepção sobre o bullying, comportamentos agressivos, influência do ambiente familiar e apoio social), obteve índice médio de validade de conteúdo de 90,9% para adequação e 91,8% para clareza, além de estabilidade de 92,4%. A consistência interna foi satisfatória ($\alpha=0,73$) e a estabilidade temporal, excelente (94,1%). **Conclusão e implicações para a prática:** o instrumento apresentou evidências de validade de conteúdo e fidedignidade, configurando-se como uma ferramenta útil para profissionais de saúde e Enfermagem no rastreamento e monitoramento de comportamentos de risco relacionados ao bullying em ambientes escolares.

Palavras-chave: Adolescência; Bullying; Estudo de Validação; Psicometria; Saúde Escolar.

RESUMEN

Objetivo: desarrollar y validar el contenido de un instrumento para identificar conductas de riesgo de bullying en la adolescencia. **Método:** este estudio metodológico, con un enfoque cuantitativo, se basó en la psicometría según las directrices clásicas de Pasquali y DeVellis, y se guió por las recomendaciones GRRAS para estudios de validez y confiabilidad. Se realizó la revisión de la literatura, el desarrollo de los ítems, la aplicación piloto, la validación de contenido con 10 expertos en los campos de la salud y la educación, la validación facial con adolescentes y el análisis de confiabilidad mediante consistencia interna (Alfa de Cronbach) y estabilidad temporal (test-retest) con 102 adolescentes de secundaria. **Resultados:** el instrumento, compuesto por 12 ítems distribuidos en cuatro dimensiones (percepción de bullying, conducta agresiva, influencia del entorno familiar y apoyo social), obtuvo un índice de validez de contenido promedio de 90.9% para adecuación y 91.8% para claridad, además de una estabilidad de 92.4%. La consistencia interna fue satisfactoria ($\alpha=0.73$) y la estabilidad temporal fue excelente (94.1%). **Conclusión e implicaciones para la práctica:** el instrumento presentó evidencia de validez de contenido y confiabilidad, constituyéndose en una herramienta útil para los profesionales de salud y enfermería en la detección y monitoreo de conductas de riesgo relacionadas con el bullying en ambientes escolares.

Palabras clave: Acoso Escolar; Adolescencia; Estudio de Validación; Psicometría; Servicios de Salud Escolar.

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INTRODUCTION

Bullying, in its multiple forms (physical, verbal, psychological, and virtual), is characterized as intentional and repetitive violence, present in school environments and social interactions, with significant impacts on the biopsychosocial development of children and adolescents. It is a complex, persistent, and multifaceted phenomenon that has negative repercussions on public health, especially because it promotes mental illness, compromises interpersonal relationships, reduces school performance, and directly affects the construction of identity and self-esteem in developing individuals.^{1,2}

Adolescents involved in bullying situations, as aggressors, victims, or bystanders, are at greater risk of developing anxiety, depression, suicidal ideation, self-harm, substance abuse, conduct disorders, and difficulties in building healthy social bonds.³⁻⁵ These effects, often silent, extend beyond the school environment and affect the psychological and emotional well-being of these young people throughout their lives.⁴

Data from the 2019 National School Health Survey (PeNSE) reveal that 23% of students reported being victims of bullying, while 12% admitted to bullying their peers. The highest prevalence was observed among boys, private school students, and self-declared black and brown adolescents.¹ In response to this scenario, Law No. 14,811/2024 was enacted, which classified bullying and cyberbullying as crimes in the Brazilian Penal Code, reinforcing the urgency of preventive, educational, and intersectoral actions aimed at protecting adolescents.⁶

This issue is also aligned with the Sustainable Development Goals (SDGs), especially SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education), which aim, respectively, to ensure healthy lives and safe and welcoming school environments for all.⁷ In this sense, promoting mental health and preventing violence among adolescents are fundamental commitments of Primary Health Care (PHC), a field in which nursing plays a strategic role.

Nurses in PHC act as agents of care and health surveillance, with the potential to identify risky behaviors early on, promote acceptance, and develop educational actions with the school community.⁸ The absence of validated and specific instruments to track risk behaviors for bullying compromises the ability of nursing to intervene in a timely and informed manner, weakening the planning and execution of intersectoral strategies to address the issue.

Given this, there is a clear need for appropriate methodological tools to support professional practice and strengthen the response of primary health care to school violence. Thus, the present study aimed to construct and validate the content of an instrument for identifying risk behaviors for bullying in adolescence.

METHOD

This is a quantitative methodological study aimed at constructing and validating an instrument for identifying risk behaviors for bullying in adolescence. Psychometrics,

the science dedicated to measuring latent phenomena through observable indicators, was used as a methodological reference.⁹ The sample was intentionally selected, including experts on the subject and adolescents at different stages of the study. The sample size was defined based on psychometric recommendations, which indicate between six and 10 judges for content validation and five to 10 respondents per item of the instrument in quantitative phases.¹⁰

The study was structured in the following stages: (1) theoretical elaboration and construction of items; (2) pilot application; (3) content validation; (4) apparent validation; and (5) reliability assessment.¹⁰⁻¹² The methodological description followed the principles of the Guidelines for Reporting Reliability and Agreement Studies (GRRAS) for reliability and validity studies.¹³

Theoretical elaboration and construction of items

The theoretical construction of the instrument was based on an integrative review of national and international literature, guided by the guiding question: "What behaviors and risk factors associated with bullying in adolescents have been described in the scientific literature?" The search was conducted in the SciELO Virtual Library, in the LILACS and Medline/PubMed databases, using a combination of the controlled descriptors: "bullying," "adolescence," and "health risk behaviors." The inclusion criteria covered articles published between 2013 and 2023, in Portuguese, English, and Spanish, that addressed manifestations of physical, verbal, relational, and virtual bullying, as well as associated factors and coping strategies. The review was not previously registered on platforms such as PROSPERO or OSF, as it was an exploratory stage aimed at providing the theoretical basis for the instrument.

The review identified that bullying in adolescence can manifest itself in different ways, including intimidation, humiliation, direct aggression, and social exclusion,^{4,14-16} which highlights the need for an instrument that captures the nuances of this public health problem. It was also observed that different factors contribute to suffering related to bullying in adolescence, such as fragile intra-family relationships, incipient coordination between the health and education sectors, and lack of social support.¹⁷⁻²⁰

The evidence extracted allowed for the formulation of initial items and conceptual organization into four theoretical dimensions, aligned with the identified constructs: (1) Perception of Bullying, which concerns adolescents' recognition and judgment of situations of peer violence; (2) Aggressive Behaviors, representing hostile conduct of a physical or verbal nature; (3) Influence of the Family Environment, which covers parental educational practices, supervision, and the family climate as elements that modulate aggressive behaviors; and (4) Social Support, referring to adolescents' perception of the affective, emotional, and institutional support offered by adults, peers, and the school in situations of bullying.

The construction of each indicator addresses the need to capture attitudes and behaviors related to bullying, enabling the assessment of adolescents' awareness and involvement in

this practice. The Perception of Bullying dimension consisted of the following items: “I believe that bullying occurs at my school,” “I have witnessed someone being mistreated and did nothing,” and “I think that jokes between friends can sometimes hurt.” The Aggressive Behaviors dimension included the items: “I have made jokes about someone who was being excluded,” “I have pushed someone in a fight at school,” and “I have shared something negative about someone on social media.” In the Family Environment Influence dimension, the items were: “At home, we talk about how to treat people with respect,” “My parents or guardians discuss bullying and its consequences,” and “I have heard my family discussing bullying situations that happened at school.” Finally, the Social Support dimension included the following items: “I feel that my friends support me when I am sad,” “I think I can count on teachers to help me in difficult situations,” and “I have sought help from a friend when I saw someone being mistreated.”

The conceptual model was anchored in guidelines for the development of psychometric scales, which include the definition of the construct, the generation of items, the choice of response format, and review based on theoretical criteria.⁹

The preliminary version of the instrument resulted in 12 items formulated on a five-point Likert scale, with response options ranging from “Strongly disagree” (1 point) to “Strongly agree” (5 points), allowing the degree of agreement of respondents with the statements presented to be measured.

Pilot application

The pilot study was conducted with 32 adolescents, high school students from a public school in Rio de Janeiro. The objective was to evaluate the clarity, comprehensibility, and applicability of the instrument. The adolescents analyzed each item on a three-point ordinal scale (1 = does not meet, 2 = partially meets, 3 = fully meets) and were invited to record their suggestions in writing. Next, a group discussion was held, characterized as brainstorming, allowing for further discussion of the suggestions presented.

Content validation

The revised version was submitted for evaluation by 10 experts — five from the health field and five from education—with expertise in adolescence, mental health, and bullying prevention. The experts analyzed the clarity, relevance, and comprehensiveness of the items using a four-point ordinal scale (1 = not adequate, 2 = adequate with revision, 3 = adequate with minor revision, 4 = totally adequate).

The Content Validity Index (CVI) was calculated using the formula: $CVI = (\text{number of experts who assigned a score of 3 or 4}) \div (\text{total number of experts})$, considering a value ≥ 0.70 for each item to be satisfactory.¹²

The quantitative analyses were complemented by a qualitative examination of the suggestions presented by the experts, using criteria for grouping by thematic convergence.²¹ To ensure the consistency of the process, the revised version of the instrument was sent back to the experts for final confirmation of its suitability.^{22,23}

Apparent validation

The final version of the instrument was applied again to a group of 20 adolescents, students at a state public school, with the aim of assessing clarity and familiarity with the terms used. After completion, a roundtable discussion was held to gather general impressions, a strategy that allowed for the identification of terms that were difficult to understand and guided language adjustments. This process included the replacement of ambiguous expressions, the simplification of statements, and the inclusion of illustrative examples, aiming to ensure greater accessibility without compromising the theoretical coherence of the instrument.²¹

Reliability assessment

Reliability was assessed by analyzing internal consistency and temporal stability (test-retest). The instrument was applied at two different times, with a 14-day interval between applications.

Internal consistency was verified using Cronbach's alpha coefficient, whose value was considered satisfactory when ≥ 0.70 .²⁴ For the analysis of temporal stability, the Intraclass Correlation Coefficient (ICC) was adopted, with a bidirectional model of random effects and mean measures, using values equal to or greater than 0.70 as a reference. Additionally, the relative agreement rate between the responses obtained in the two applications was calculated.

The data were tabulated using Microsoft Excel® software and analyzed with the aid of the Statistical Package for the Social Sciences (SPSS), version 21.0. This platform was chosen to ensure greater statistical robustness for the proposed psychometric analyses.²³

The study was approved by the Research Ethics Committee (REC) of the Universidade do Estado do Rio de Janeiro (UERJ), under opinion No. 6,341,343, and complied with the ethical principles established in Resolution No. 466/12 of the National Health Council (NHC). All participants signed Terms of Agreement and Free and Informed Consent Terms signed by their legal guardians.

RESULTS

Instrument development phase

The pilot study was conducted with 32 adolescents aged 15 to 18 years, high school students from a public school in Rio de Janeiro, with the aim of assessing the clarity, comprehensibility, and applicability of the instrument. The adolescents evaluated the items for clarity on a three-point ordinal scale (1 = does not meet, 2 = partially meets, 3 = fully meets), obtaining an overall average of 2.83. This value, close to the maximum score, is considered very good, indicating that the participants understood the proposed items satisfactorily and recognized their relevance to their school experiences. The items related to peer support and teacher performance were considered easier to interpret, as they reflected concrete and familiar situations. Based on the suggestions recorded, linguistic adjustments

were made, replacing technical terms with more accessible expressions and restructuring statements to better suit the language of adolescents.

Content validation phase

Next, content validation was carried out with ten specialists in the areas of health and education, with expertise in adolescence, mental health, and bullying prevention. The specialists evaluated each item according to the criteria of clarity, appropriateness, and conceptual scope. Regarding the adequacy of the indicators for

the proposed dimensions, the average score was 89.7%, with all items scoring above 85.0% and five of them exceeding 90.0%. This performance indicates that the evaluators recognized the relevance of the indicators for assessing the defined constructs. Regarding the clarity of the items, the overall average was 91.4%, ranging from 86.5% to 93.6%, demonstrating that the wording of the items was considered clear and easy to understand. Based on the experts' recommendations, four items were reformulated and lexical adjustments were made throughout the instrument, with subsequent confirmation of the final version (Table 1).

Table 1. Evaluation of content, clarity, and reliability of the instrument "Risk Behaviors for Bullying in Adolescence"

Dimension	Indicator (Item)	Content Validity Index – Adequacy (%)*	Content Validity Index – Clarity (%)**	Reliability Index – Test-retest (%)***
Perception of bullying	1. There are instances of bullying at my school.	91.2	93.9	91.5
	2. I have witnessed someone being mistreated and did nothing.	92.2	88.8	90.8
	3. I believe that some jokes between classmates can be hurtful.	89.7	93.1	90.8
Aggressive behaviors	4. I have made jokes or comments that made someone uncomfortable.	87.8	94.2	92.2
	5. I have pushed, threatened, or hit someone at school.	92.8	91.2	94.4
	6. I have shared mean comments or gossip on social media.	93.7	92.4	93.5
Influence of the family environment	7. At home, we talk about how to treat people with respect.	90.5	91.7	92.0
	8. My parents or guardians often talk to me about bullying and its consequences.	88.6	89.9	91.8
	9. I have heard my family discussing bullying situations that have occurred at school.	89.4	90.3	92.6
Social support	10. I feel that I can count on my friends when I am sad or have a problem.	92.5	94.5	94.2
	11. I believe that I can ask teachers for help when I see or experience difficult situations.	91.6	92.1	93.7
	12. I have sought help for a friend who was being mistreated or excluded.	90.1	91.3	92.5
Overall average		90.9	91.8	92.4

*Percentage of experts who considered the indicator very appropriate or appropriate to the principle; **Percentage of experts who considered the indicator very clear or clear; ***Percentage of experts who agreed with the responses in the application replicas (test-retest).

Apparent validation phase

The refined version was then submitted to apparent validation, carried out with 20 adolescents between 15 and 18 years of age. After completing the instrument, a group discussion was conducted with the participants, who reported ease in reading and understanding the items. The adolescents confirmed that the topics covered reflected situations experienced in the school and social environment. Terms considered abstract, such as “social exclusion” and “difference of opinion,” were replaced by more common expressions, favoring language fluency and reinforcing the apparent validity and cultural adequacy of the instrument (Table 1).

Psychometric validation phase (reliability)

The final stage involved reliability assessment, conducted with 102 adolescents aged 15 to 18 years old from three classes at a public high school. Regarding gender, 54.9% identified as female ($n=56$) and 45.1% as male ($n=46$). Regarding self-declared color/race, 41.2% identified as brown, 34.3% as black, and 24.5% as white. Most participants (63.7%) lived with both parents, and 76.5% reported regular attendance at school activities. These data contribute to the contextualization of the sample and strengthen the psychometric analysis conducted.

All items in the instrument were answered by at least 101 of the 102 adolescents in both applications, resulting in a response rate of over 99% per item. This high completeness index ensures the suitability of the database for internal consistency analysis and reinforces the feasibility of applying the instrument in the school context.

The internal consistency of the instrument was verified using Cronbach's Alpha coefficient, which presented an overall value of $\alpha = 0.73$, considered satisfactory for instruments in the initial validation phase, according to psychometric parameters in the literature. Internal consistency by dimension was also calculated, revealing the following results: Perception of bullying (items 1 to 3): $\alpha = 0.71$; Aggressive behaviors (items 4 to 6): $\alpha = 0.76$; Influence of the family environment (items 7 to 9): $\alpha = 0.72$; Social support (items 10 to 12): $\alpha = 0.74$. All values were above the cutoff point of 0.70, indicating adequate internal correlation between the items of each dimension and theoretical consistency of the adopted model.

The temporal stability of the instrument was assessed using the test-retest technique, with a 14-day interval between applications. The results revealed an average agreement of 94.1% between the two responses of the participants, and reliability coefficients per dimension ranging from 91.1% to 97.1%, which indicates excellent stability of responses over time (Table 1).

Figure 1 presents the final version of the instrument developed, organized into four theoretical dimensions (perception of bullying, aggressive behaviors, influence of the family environment, and social support). Each dimension consists of three items, structured on a five-point Likert scale, which allows for the measurement of the degree of agreement of adolescents in relation to the proposed statements. The arrangement of the statements

reflects the systematization of the conceptual model adopted and consolidates the construction and validation process conducted in the previous stages.

The results presented in Table 1 and the configuration shown in Figure 1 complement each other by highlighting, in an integrated manner, the psychometric performance obtained and the final structure of the instrument, in line with the conceptual model that guided its construction.

DISCUSSION

The results obtained indicated that the instrument constructed presented content validity, apparent validity, and reliability within acceptable psychometric parameters, adding value to the methodological construction process and ensuring its applicability for identifying risk behaviors for bullying in adolescence in the school context. Psychometric validation, as a fundamental step in the construction of instruments of this nature, ensures that the items that compose it are capable of reliably representing the phenomena it aims to measure, especially when dealing with sensitive and multifactorial issues such as bullying.^{25,26}

The CVI analysis revealed that the items were considered adequate and clear by the experts, with an overall average of over 90% adequacy and over 85% clarity, demonstrating that the instrument has conceptual and theoretical consistency. This result is consistent with other studies focused on the construction of instruments in the field of health and psychology, which reinforced that the use of rigorous procedures, such as literature review, expert evaluation, and robust statistical analysis, favors the development of valid instruments applicable to different contexts.^{27,28}

It was found that the best performances in clarity and reliability were achieved in the dimensions of social support and aggressive behaviors, indicating that adolescents demonstrate greater ease in recognizing situations of direct interpersonal interaction, both in the context of violence practices and in access to social protection networks. These findings are consistent with the literature, which points out that strengthening social support—in the school, family, or peer environment—is a protective factor against bullying, mitigating its impact on adolescents' mental health.^{29,30}

On the other hand, the dimension dealing with the influence of the family environment obtained the lowest clarity scores, although within the expected parameters. This result reflects the complexity of family dynamics, an aspect widely discussed in national and international studies, which show that family contexts marked by dysfunctional communication, neglect, or fragile educational practices contribute significantly both to the occurrence of victimization and to the emergence of aggressive behaviors that can characterize bullying.^{31,32} Thus, there is a reinforced need for intersectoral strategies that coordinate actions in the fields of education and health to strengthen families in addressing this problem.

In terms of reliability, the instrument showed satisfactory internal consistency, with a Cronbach's alpha value of 0.73, and excellent temporal stability, with 94.1% agreement in the test-retest.

TOOL FOR IDENTIFYING RISK BEHAVIORS FOR BULLYING IN ADOLESCENCE		
<p align="center">INSTRUCTIONS</p> <p>The purpose of this instrument is to assist in identifying risky behaviors related to bullying in adolescence. It should be applied with adolescents in the school environment, with the aim of supporting health promotion and violence prevention actions.</p> <p>To respond to the instrument, read each statement and mark the option that best represents how much you agree or disagree, according to the following scale:</p> <p>1 - Strongly disagree, 2 - Disagree, 3 - Neither agree nor disagree, 4 - Agree, 5 - Strongly agree.</p>		
DIMENSION	ITEM	RESPONSE SCALE
Perception of bullying	1. There are instances of bullying at my school.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	2. I have witnessed someone being mistreated and did nothing.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	3. I believe that some jokes between classmates can be hurtful.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
Aggressive behaviors	4. I have made jokes or comments that made someone uncomfortable.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	5. I have pushed, threatened, or hit someone at school.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	6. I have shared mean comments or gossip on social media.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
Influence of the family environment	7. At home, we talk about how to treat people with respect.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	8. My parents or guardians often talk to me about bullying and its consequences.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	9. I have heard my family discussing bullying situations that have occurred at school.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
Social support	10. I feel that I can count on my friends when I am sad or have a problem.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	11. I believe that I can ask teachers for help when I see or experience difficult situations.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>
	12. I have sought help for a friend who was being mistreated or excluded.	<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div>

Figure 1. Instrument for identifying risk behaviors for bullying in adolescence.

These findings are in line with the psychometric criteria adopted in the literature, which consider values above 0.70 as indicative of good internal consistency in scale construction studies, especially when it comes to instruments in the initial validation phase.^{9,24} These results suggest that the instrument is stable and reproducible, capable of generating reliable measurements at different times of application.

The findings also converge with what has been observed in instruments that directly assess bullying behaviors. In the national context, the Forms of Bullying Scale (FBS) validated for Brazil has two subscales (perpetration and victimization; 10 items each) with adequate internal consistency ($\alpha=0.80-0.83$) and a confirmatory two-factor structure, indicating good accuracy in capturing typical peer aggression behaviors.³³ Internationally, the European Bullying Intervention Project Questionnaire (EBIP-Q), with 14 items (7 on victimization; 7 on aggression; responses 0 to 4 in the last two months), showed good fit and satisfactory psychometric properties in a Spanish sample, reinforcing its usefulness for monitoring involvement in bullying in school contexts.³⁴ In comparison, this instrument maintains satisfactory psychometric performance and incorporates contextual dimensions (perception, family environment, and social support) in addition to behaviors, which may increase its sensitivity to risk factors associated with bullying, while maintaining adequate levels of internal consistency and temporal stability.

Another relevant aspect of this study is that the instrument demonstrated sensitivity in capturing risk behaviors related to cyberbullying, a modality that is currently expanding, especially due to the increase in adolescents' exposure to digital environments. Some studies indicate that cyberbullying has repercussions as severe as face-to-face forms of violence, being associated with psychological distress, depression, anxiety, and, in more severe cases, suicide risk.^{35,36} Therefore, the incorporation of indicators that cover both face-to-face and virtual bullying dynamics represents a relevant methodological contribution to the surveillance of this condition. This innovation significantly expands the applicability of the instrument, differentiating it from other existing tools, which are often restricted to face-to-face bullying.²⁰

Furthermore, applying the instrument in different contexts, covering diverse geographical regions and socioeconomic conditions, is essential to assess its adaptability and cultural sensitivity. The variety of experiences and perceptions among young people can impact how bullying is experienced and reported, making it essential that the instrument be evaluated in multiple settings to ensure its effectiveness and relevance.

From a practical standpoint, the application of the instrument by health professionals, especially PHC and school health nurses, can facilitate the early detection of risk behaviors, support educational interventions, and guide care focused on adolescents and their social determinants. For education professionals, the instrument is a useful tool for identifying situations of vulnerability in the school environment, strengthening the role of the school as a promoter of health and safe environments.³⁷

In addition to its clinical and educational applicability, the instrument has the potential to support public policies aimed at preventing school violence and promoting mental health, and can be incorporated into health surveillance protocols, school situational diagnoses, and institutional practices.¹⁷

The consolidation of its use in different contexts requires the expansion of studies that consider diverse sociocultural realities, incorporating variables such as gender, race, social class, sexual orientation, and socioeconomic conditions, since these factors significantly impact the experience and outcomes related to bullying in adolescence.^{38,39}

In addition, it is recommended that future investigations deepen their methodology, considering strategies that minimize socially desirable response biases, such as the adoption of anonymous instruments and the use of complementary measures that assess the tendency toward socially acceptable responses, ensuring greater reliability of the data produced.⁴⁰

More advanced analyses are also necessary, such as construct and criterion validation, using exploratory and confirmatory factorial techniques in larger and more heterogeneous samples, in order to strengthen the psychometric robustness of the instrument. The inclusion of additional parameters, such as the Standard Error of Measurement (SEM), can provide greater accuracy in scores and consolidate reliability in different application scenarios.^{10,13,19,20}

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The study enabled the proposal of a novel instrument capable of identifying risk behaviors for bullying in adolescence, based on psychometric evidence that supports its consistency and applicability. This contribution expands the possibilities for analyzing and monitoring a phenomenon that is still little explored in its complexity in the context of school health and PHC.

Among the limitations identified, it is worth noting that the study was conducted in a single school setting, which limits the generalizability of the findings. It is also worth considering the possibility that responses may have been influenced by socially desirable patterns and the fact that this is an initial stage of validation, without construct or criterion analyses. These limitations reinforce the need for new studies conducted in different regions and sociocultural contexts, with larger and more heterogeneous samples, in addition to the adoption of advanced psychometric techniques that strengthen the accuracy and robustness of the instrument.

The evidence produced in this study offers significant support for professional practice, as it favors the early detection of vulnerabilities and supports the development of integrated health and education care strategies. It also has implications for teaching, as it provides a tool capable of stimulating more critical educational processes that are sensitive to the demands of adolescence; for research, by enabling multicenter investigations that consolidate its psychometric properties; and for health policy and care, by providing an empirical basis for planning intersectoral actions and formulating programs aimed at promoting mental health and preventing school violence.

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DATA AVAILABILITY RESEARCH

The contents underlying the research text are included in the article.

CONFLICT OF INTEREST

No conflict of interest.

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