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Bullying and school disruption assessment: studies with Portuguese adolescent students

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Abstract

Problem Statement: The question of bullying and school disruptive behavior has emerged as a powerful issue in Portuguese educational context. The lack of evaluation instruments, with studied psychometric characteristics, has constituted a problem.

Purpose of Study: School disruption and bullying assessment, in Portuguese adolescents, was the focus of this research.

Research Methods: The psychometric qualities — internal consistency and the external validity — were analyzed in different scales.

Findings: The analyses carried out confirm the scales as reliable and valid instruments. Conclusions: These instruments may be a useful avenue for teachers, psychologists and other education professionals.

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Keywords: School disruption; bullying; peer victimization; assessment; adolescent students; Portugal.

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1. Introduction

In 1989 the European Council declared that violence in schools constituted a school problem and proclaimed the need for education systems to educate for peace. In Portuguese studies (Alves-Pinto, 2002), indiscipline is cited as the top cause of discontent and stress by teachers, although violence is not yet considered a systematic problem, given that it occurs only sporadically. However, an increase in violence justifies an analysis to assess acts of bullying and school disruption, and these aspects have become the object of study. Such occurrences have been assessed in a variety of ways and at different degrees and types of structuring, either through initiatives in individual schools, through actions more closely linked to central authorities (several countries have school violence observatories), or carried out by specific research centers. In this background, this paper includes, initially, information about the assessment of school disruption in general, with the Disruptive Behavior Scale Inferred by the teachers (DBSIT and DBSIT-2006) and the Disruptive Behavior Scale Professed by the Students (DBSPS). It then presents new items to adapt the Peer Victimization Scale, in Portuguese adolescents.

2. Assessment of disruptive behavior

The concept of school disruption has been discussed in the scientific circles (Lawrence et al., 1984; 1986; Lourenço e Paiva, 2004; Tattum, 1986; Veiga, 2007, 2008), and although frequently referenced in the specific literature, it is still something of a new field in Portugal. The frequent use, in the scientific literature, of the expression disruptive behavior has led to its equivalents in the Portuguese language and has given rise to the acceptance of the concept of school disruption as the breaching of school rules and the hindering of the learning conditions, the teaching environment or personal relationships in schools.

Some researchers have sought to develop tools to assess the behaviors and social competencies of school students (Comer et al., 1987; Loranger & Arsenault, 1989). Many studies are based on the supposition that social behavior at school is closely linked to academic performance, adaptation to tasks, delinquency and mental health problems in adulthood (Bednar et al., 1989; Cartledge & Milburn, 1978; Gresham, 1981).

Assessment tools more geared towards measuring specific behavioral problems rather than school disruption have been used, such as the Infant Rating Scale (Lindsay, 1981), the Swansea Behavior Checklist (Chazan et al., 1983), the Bristol Social Adjustment Guide (Stott, 1974), the Behavior Checklist (Coulby & Harper, 1985) and the Behavior Problem Checklist, which are more appropriate for assessing the sociability and emotions (Ludwig & Cullinan, 1984); the Rathus Assertiveness Schedule (RAS), which is more appropriate for clinical use and to study assertiveness (Cunha & Schoner, 1989; 1990; Rathus, 1973), the Child Behavior Checklist (Rutter et al., 1970), which is recommended to study students with special problems (Van Hasselt, 1986), and which is at the basis of the Teacher’s Report Form of the Child Behavior Checklist, used in primary schools (Pryor et al., 1989); the Walker Problem Behavior Identification Checklist, which as well as presenting sub-scales which are of little use to assess disruption, also incorporates problems as regards the construct validity (Moon & Marlowe, 1987); the Children’s Behavior Rating Scale, for the study of specific problems presented by the students (Neeper & Lahey, 1986); the Behavior Rating Index for Children, used in the research of behavioral problems in clinical practice (Stiffman et al., 1984); the Social Behavior Assessment (Stephens, 1979) and the Teacher Rating of Social Skills (Gresham, 1981; 1985), which are especially geared towards the assessment of socio-school relationship competences.

The lack of instruments that can give teachers or students the opportunity to pronounce on school disruption has led to the progressive construction of an assessment instrument (Veiga, 1996, 2007, 2008), drawn up within the scope of the multi-dimensional study of the construct in teachers. It was in this background that the DBSIT study was carried out, which is presented below.

2.1. Disruptive Behavior Scale Inferred by the teachers: The one-dimensional DBSIT

The process to draw up items was based on the literary review and closely followed the “spoken reflection” methodology (Lawrence et al., 1986; Veiga, 1996, 2008; Wolfgang & Glikman, 2008). After the preparation and pilot study of the items, the version of the scale (DBSIT) was applied, with several 3rd-cycle students (23 in total) classified by one of their teachers (N=23). A factorial analysis of the main components using varimax rotation showed that there was a single general factor, with 16 items. The internal validity analysis was carried out analyzing the main components using varimax rotation, whereby only one general factor emerged (the solution was not rotated), which represented 97.3% of the total variance percentage and an eigenvalue of 15.57. The internal
consistency coefficients varied between 0.79 and 0.88 for different groups. The results highlighted the psychometric qualities of the scale, despite its one-dimensionality. As a suggestion, new studies using this scale could be of interest, seeking to find the multi-dimensionality of the school disruption construct, as observed in the DBSPS scale (Veiga, 1991; 1996). The information below focuses on this suggestion, intending to bridge the gap detected in the research.

2.2. Disruptive Behavior Scale Inferred by the teachers: The multi-dimensional DBSIT

In the previous studies, the DBSIT items gathered the teachers’ opinion about the behaviors of each of the students from a specific class; for example, in relation to a given student, item 1 was written as “Intentionally destroys or spoils the school material” and item 5 is “Physically attacks the teachers”. In the version presented (see Appendix A), the items were introduced with the following text: “The following questionnaire is linked to the behavior of your students. We ask you to respond in line with what happens in your lessons.” The aforementioned items are here respectively worded as follows “They intentionally destroy or spoil the school material” and “They physically attack the teachers”. We now outline the details of the sample, reliability and validity of the version of the scale, which we have named DBSIT-2006.

Sample. Among the teachers involved in the study, out of a total of 302, most were female (77.2%) and did not exercise any management role (69.3%).

Reliability. The alpha coefficients for the overall sample and various groups, relative to each of the factors (resulting from the factorial analysis) and the total punctuation in the scale were appropriate (>0.75) in all the groups, apart from in the distraction-transgression perceived by the female group and by the first cycle; in general the other cases returned high values of alpha, especially in the total disruption. The internal validity analysis was carried out by analyzing the main components with varimax rotation. While, in the initial DBSIT study, only one factor arose (the solution was not rotated), here the items were distributed among the three expected factors – and already found in the DBSPS (Veiga, 1996; 2008). The explained total variance percentage was 62.14%, in a distribution of specific and eigenvalue percentages through the different factors. The interpretation of the factors that arose falls within a concept that best seems to summarize the topic of the selected items for each of the factors: distraction-transgression (items: 4, 8, 9, 12, 13, 14); attack against schoolmates (items: 1, 2, 3, 15, 16); attack against school authority (items: 5, 6, 7, 10, 11). As suggested by the bibliography and previously supposed, the school disruption construct is multi-dimensional, with three specific factors that explain 62.14% of the total variance of the results. One can therefore conclude that the internal validity hypothesis was proven.

External Validity. The external validity was assessed by correlating the DBSIT scores with the results in specific variables of the teachers, in the supposition that the teachers’ perceptions regarding the disruptive school behavior of their students, taking into account what happens in their lessons, would be linked to variables like: the teachers’ lesson management skills, the teachers’ professionalism, self-esteem and satisfaction with life, the kind of authority exercised (authoritarian, participatory, permissive, inconsistent), the teachers’ training (initial, ongoing), the satisfaction in the profession and also their skills at dealing with indiscipline. It was noted that in most situations the coefficients were statistically significant and as expected.

2.3. Disruptive Behavior Scale Professed by the Students: The DBSPS Scale

We now look at a set of studies carried out with DBSPS scale. In a study about the students’ rights in Portuguese schools (Veiga, 2007, 2008), in a sample made up of 294 students from the 7th to the 9th school year, of both sexes, and from various zones of the country, the analysis of the DBSPS results allowed significant relationships to be found between the representations of the rights and violence in schools, with fewer rights in the most violent students. In another block of studies, the goal was to investigate the effects of the teachers’ use of intervention programmes in the students’ school disruption (Veiga, 2007, 2008, 2009). In the studies carried out, the intervention programme was based on the “eclectic communicational model” (Veiga, 2007, 2008), about the school disruption of the students, assessed using the DBSPS. A group of teachers, after having received training in the eclectic communicational programme, took part in this study which involved students from the 6th school year. The eclectic communicational intervention was applied to an experimental group (N=90), while the control group (N=92) continued to be the object of the type of teacher-student relationship that had been practiced until then. The intervention lasted for approximately 17 weeks of lessons. The results obtained highlight the existence of statistically significant differences in the experimental group, between the pre-test situation and the post-test situation, without
the same occurring in the control group. The study carried out highlights the benefits for the students, with a drop in
the “distraction-transgression” level. In another similar study, the programme was based on the “psychodynamic
model” and the intervention lasted 21 weeks of lessons, whereby there was a significant reduction in aggressive
behavior. This study (Veiga, 2007, 2008) describes other interventions, implementing the humanist model and
carrying out the transactional analysis, leading to positive effects on the reduction of the specific dimensions of
school disruption assessed using the DBSPS.

The results in the DBSPS scale are in line with previous similar research projects, which emphasize the
relationship between the adaptability of the young to school and the participatory family education style (Carlson,
1990; Scott et al., 1991; Wells, 1987), family cohesion (Noble, 1985; Tschan et al., 1989), the perception of
parental support (Antunes, 1995) regardless of whether or not there has been a divorce (Capaldi, 1989; Hetherington
et al., 1989), and also the students’ socio-economic level (Farrington, 1989; Marohn, 1992; Veiga, 1995). The results
highlight the idea that any violence prevention programmes for students in school must focus on broadening the
sources of support, especially the parents and the siblings, but also the teachers.

3. Assessment of Bullying: The Peer Victimization Scale

In the more specific scope of the assessment of bullying, the most commonly used instruments are the Olweus
questionnaire, which has benefited from a successive reformulation and perfecting process (1978; 1993; 1998),
seeking a better definition of the phenomenon and the inclusion of bullying behaviors. Derived from this
questionnaire, others have come about, such as the Ortega questionnaire (2000) and the Avilés questionnaire (2006)
which brings together items from the previous questionnaires, adapting them and introducing new items, which in
turn gave rise to a version for students, teachers, parents and guardians. The research has spawned other
questionnaires on bullying (Arora, 1996; Cerezo, 2001; Musitu & Cava, 2002; Pereira, 2002; 2004) that enable
identification of the aggressor, the victim or the spectator, as well as different aspects of how the school functions.

Coming to the fore in the research is the Peer Victimization Scale (PVS), created by (Mynard & Joseph, 2000). It
is a questionnaire with a self-report scale, with three possible answers relative to the specific frequency of
victimization (0 = never, 1 = once, 2 = twice or more). In the study carried out to draw up the Peer Victimization
Scale (Mynard & Joseph, 2000), the factorial analysis of the main components concluded the existence of 4 factors
in which the internal consistency (Cronbach’s alpha) was satisfactory: “physical victimization” (0.85), “social
victimization” (0.77), “verbal victimization” (0.75) and “attack on property” (0.73). It is pointed out that differences
in victimization were found according to gender and age in all the sub-scales, apart from in the “verbal
victimization”. Within the scope of a cultural validation research project, a study was carried out of the psychometric
properties of the Peer Victimization Scale (PVS). The same four factors were observed that had arisen in the original
study, with Cronbach’s alpha of 0.78 and an explained variance percentage, accumulated for all the factors, of
46.60% (Balogun & Olapegba, 2007).

In a study recently carried out, in which a sample made up of 279 primary school students who attended schools
on the outskirts of Lisbon was used, the Peer Victimization Scale was adapted for Portugal (Veiga, 2008) – see
version in the Appendix B. The scale returned good internal consistency indices. Four factors or dimensions of
victimization were identified: “physical victimization”, “social victimization”, “verbal victimization” and
“victimization relative to property”. The results obtained were similar to those found in other countries by different
researchers, which confers the Peer Victimization Scale good psychometric qualities that make it relevant in the
research, to assess the victimization among peers in school. In the external validity study a correlation was found
between the factors of this scale and the items of the “Disruptive Behavior Scale Professed by the Students”
(DBSPS).

In a study of 133 students (Velez, 2010), significant differences were found between the students of the 8th and
10th school years (Science-Humanities Courses) for the vast majority of the items, with greater victimization in the
8th year students than those in the 10th year. The biggest differences were found in the following items: 06 (“They
tried to make my friends against me”), 07 (“They made fun of me because my appearance”), 10 (“They refused to
talk to me”), 14 (“They made other people not talk to me”) and 15 (“They insulted me with swear words”). There
were no significant differences in the following items: 03 (“They called me names”), 04 (“They took something of
mine without perdition”) and 12 (“They stole something from me”).

4. Conclusions
This paper includes information about assessment of school disruption, describes how the Disruptive Behavior Scale Inferred by the teachers (DBSIT) is drawn up, presents the studies carried out with the DBSIT scale and the DBSPS scale, as well as with the Peer Victimization Scale. Whatever the methods or instruments used to assess school disruption and bullying, the goal is to diagnose the problem and to intervene in a structured manner which is educationally appropriate. The lack of instruments that may be administered both on teachers and on students to give them the opportunity to talk about school disruption led to progressive work to build an assessment instrument (Veiga, 1996, 2008), now considered within the scope of the multi-dimensional study of the construct for teachers. It was in this background that the study on the DBSIT scale took place, with the presentation of specific items and its multi-dimensionality, the corroboration of which gave rise to the new version. Therefore, the study on the previous version of the scale was resumed, with items newly formulated and a broader and more differentiated sample, analysing the psychometric qualities of the scale. The hypothesis of multi-dimensionality of the school disruption construct was confirmed through the factorial analysis of the results. This analysis revealed the existence of 3 factors. The psychometric qualities were analyzed at the level of the internal consistency coefficients for the different factors and the external validity. The analyses carried out confirm the DBSIT-2006 scale as a reliable and valid instrument, which returns psychometric qualities that allow it to be used in educational research in general, and for the disruptive behavior inferred by the teachers in particular.

The work to adapt the Peer Victimization Scale carried out previously is now added to with specific items that broaden its external validity, in a study carried out on Portuguese adolescents. The existence of instruments to assess disruptive school behavior may be a useful avenue for teachers and other education professionals to gain more knowledge about the students. Finally, one can appraise the interest in new studies with the DBSIT-2006, inasmuch as confirming the multi-dimensionality of the school disruption construct, as observed now, in addition to its external validity in important psycho-educational projects. This is indeed suggested for the Peer Victimization Scale, in its use in subsequent studies.

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References


### Appendix A. Disruptive Behaviour Scale Inferred by Teachers (DBSIT-2006)

This questionnaire is anonymous. It is linked to the behaviour of your students. Please answer taking into account what happens in your lessons. The answers go from 1 to 6, depending on the level of agreement with each phrase, where 1 is completely disagree and 6 is completely agree, as shown below: Completely disagree 1, strongly disagree 2, disagreed more than agree 3, agree more than disagree 4, strongly agree 5, completely agree 6.

01. They intentionally destroy or break school material.
02. They physically attack their schoolmates.
03. They are obedient towards the teachers. *
04. They speak without permission, disrupting the classes.
05. They physically attack the teachers.
06. They swear in the classroom.
07. They come to school under the influence of alcohol or drugs.
08. They leave their places, make noise and others disturbance, disrupting the lesson.
09. They forget to bring their material to the lessons.
10. They steal things in the school.
11. They verbally attack the teachers.
12. They arrive punctually at the classrooms. *
13. They miss lessons because of lack of interest.
14. They get distracted in the lessons.
15. They verbally attack their schoolmates.
16. They threaten people at school.
* Inverse items.
  Factors: distraction-transgression (items: 4, 8, 9, 12, 13, 14); attack on class-mates (items: 1, 2, 3, 15, 16); attack on school authority (items: 5, 6, 7, 10, 11).

Appendix B. Peer Victimization Scale (PVS)

In the questionnaire below, all the sentences are linked to possible bullying that you have been the victim of, which your school-mates have inflicted on you, over the last month of lessons. Choose one of the following options: Never 0, once 1, twice or more 2.

1. I was punched.
2. They tried to get me into trouble with my friends.
3. They called me names.
4. They took something of mine without perdition.
5. I was kicked.
6. They tried to make my friends against me.
7. They made fun of me because my appearance.
8. They tried to break something of mine.
9. They physically hurt me.
10. They refused to talk to me.
11. They made fun of me for some reason.
12. They stole things from me.
13. They beat me up.
14. They made other people not talk to me.
15. They insulted me with swear words.
16. They deliberately damaged some property of mine.

Factors: Physical victimization (items: 1, 5, 9, 13); Social victimization (items: 2, 6, 10, 14); Verbal victimization (items: 3, 7, 11, 15) and attacks against property (items: 4, 8, 12, 16).