



DESAFÍO Y PERSPECTIVAS ACTUALES DE LA PSICOLOGÍA EN EL MUNDO DE LA ADOLESCENCIA

ANTISOCIAL BEHAVIOUR, EMOTIONAL PROBLEMS AND SCHOOL DROPOUT IN PORTUGUESE ADOLESCENTS: ARE TEACHERS ASSESSMENTS GOOD PREDICTORS?¹

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ABSTRACT

Several sources (e.g., parents, teachers, peers or the children and adolescents themselves who were implicated in various problems) have been fundamental elements in the gathering of useful information about antisocial, emotional and school problems. Specifically investigating the usefulness of one of these sources, the present study aims to analyse the power of teachers' ratings in predicting adolescents' antisocial behaviour, emotional problems and school dropout.

The sample involves 448 children who were assessed at two periods of time eight years apart. In 1993 (Time 1), when these children were in the fourth-grade in state schools in the Coimbra region (Portugal), their teachers were asked to fill in the Achenbach's Teachers Report Form (1991) and a list of academic difficulties. In Time 2, students filled in the Youth Self-Report (Achenbach, 1991) and the Self-Reported Antisocial Behaviour (Loeber et al., 1989).

Teachers' ratings in elementary schools were only very modest predictors of antisocial behaviour and emotional problems at the end of adolescence. However, teachers' information about academic difficulties was a good predictor of early school dropout.

These findings strengthen the idea that for an accurate identification of children and adolescents at risk for behavioural or emotional problems several informants and multimethod assessment should be considered.

Key-words: antisocial behaviour; emotional problems; school dropout; teachers' assessments; adolescence.



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INTRODUCTION

For decades, numerous studies have been relating childhood behaviour problems with the occurrence of several ways of later social maladaptation in adolescence (e.g., Bachman, Green & Wirtanen, 1971; Coie, 1994; Loeber & Stouthamer-Loeber, 1987; Robins, 1969). Therefore, it is extremely important to detect such problems since an early age in order to better prevent them. In addition, it is also essential to know the effectiveness of the different sources that can contribute to such identification.

Among those sources, the teachers' evaluations have been frequently used to assess behavioural and emotional problems among students in general (e.g., Achenbach, Dumenci & Rescorla, 2002; Bérubé & Achenbach, 2002; Kamphaus et al., 2007). Recently, several studies (e.g., Fagot & Leve, 1998; Haile Mariam, Bradley-Johnson & Johnson, 2002; Lane, 2003; O'Shaughnessy, Lane, Gresham, & Beebe-Frankenberger, 2002; Petras, Chilcoat, Leaf, Jalongo & Kellam, 2004; Petras et al., 2005) have well demonstrated the relevance of teachers' ratings in the identification of young students at risk of behavioural disorders and emotional difficulties. This fact has conducted Kathleen Lane to the study of the usefulness of "teachers as tests" (2003). In this context, her purpose was to determine whether teachers are equally as effective in differentiating between students at risk of antisocial behaviour and those who are not at risk at an early age (first grade students). Results on 12 measures in academic, behavioural, and social domains indicate that teachers can successfully differentiate between at risk and typically developing learners. However, these findings don't tell us anything about the prediction of future problems.

Walker and Stieber (1998) investigated this question. In a longitudinal study over a 6-year period, they have found that teacher's ratings of social skills recorded in grade 5 were a significant predictor of long-term arrest status during middle and high school years. The relationship of social skills problems to several development outcomes such as school dropout, delinquency, interpersonal conflicts, etc., has also been well documented (e.g., Coie, 1994; Kamps & Tankersley, 1996). Furthermore, Olin et al. (1998) have shown that teacher's ratings of deviant behaviour were particularly useful in predicting serious emotional or psychiatric outcomes 10 and 25 years later. Although most of these studies focused on adolescence or late childhood, there are also a few that used younger samples. For instance Teisl, Mazzocco and Myers (2001) have studied the utility of kindergarten teachers' ratings for predicting low academic achievement in first grade. Among other findings, they have reported prediction-outcome correlations of .34 for math and .48 for reading. The research of Verhulst, Koot and Van der Ende (1994) with children originally aged 4 to 11 years has shown in diverse domains that across a 6-year period teachers' ratings were a powerful predictor of poor outcomes. Finally, Bethesda, Hecht and Greenfield (2001) provided strong support for the utility of teachers' ratings in predicting third grade levels of reading skills in a sample of young children exposed to poverty.

In short, several studies have, in different areas, revealed a significant predictive value of teachers' reports. However, some authors (e.g., Fletcher & Satz, 1984; Flynn & Rahbar, 1998, in Teisl et al., 2001) have criticized the usefulness of teachers' predictions when other screening instruments are not used. In particular, they have criticized teachers' predictions for their high rates of false negatives (e.g., Fletcher & Satz, 1984; Teisl et al., 2001). Moreover, the level of agreement between teachers' reports and other informants' reports has been only modest (e.g., Hudley, 1993; Verhulst et al., 1994). Yet, teachers at school are in a privileged position to signal child's behaviour problems. Indeed they can easily compare each child's behaviour and reactions with those of their age-mates at school.

Now that the debate is open, a question can be raised: is the predictive value of Portuguese teachers' ratings consistent with the findings reported above? It remains to be seen through longitudinal studies if, as has been shown in other countries, the teachers' precocious evaluations are



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good predictors of several maladaptation ways during adolescence. Specifically, the aim of this longitudinal research was to examine the predictive power of Portuguese teachers' ratings in adolescent antisocial behaviour, emotional problems and early school dropout without any professional qualification.

METHOD

Participants

The sample consisted of a large number of fourth-grade students from several state schools in the municipality of Coimbra (in the centre of Portugal) and their teachers. This sample was randomly extracted from the total population of students who attended the fourth-grade in the academic year of 1992-1993. It included boys and girls from rural and urban primary state schools.

The subjects included 448 children, 232 boys and 216 girls. Considering the data analysis, there was a little variation in this number due to some missing cases in a few of the measures.

The social-economic level of the students was defined by the occupation of their parents. In order to do this, the Portuguese classification system of Nunes and Miranda (1969) was used. The results showed that the majority of the children belonged to a medium or medium-low level.

Instruments

The teachers filled in:

- The Inventory of Child Behaviour for Teachers, TRF - Teachers Report Form (Achenbach, 1991a, 1991b; Achenbach & Edelbrock, 1983; Portuguese adaptation: Fonseca, Rebelo, Ferreira, Simões & Cardoso, 1995). This version of the Inventory of Child Behaviour was used to obtain reports of children's behavioural problems. The 120 problem items of this instrument are scored on a 3-point scale, 0 if the item is "not true", 1 if the item is "somewhat or sometimes true", and 2 if the item is "very true or often true". Achenbach (1991b) constructed 8 cross-informant narrow-band syndromes, labelled Withdrawn, Somatic Complaints, and Anxious/Depressed (which form the broad-band Internalizing scale or the Emotional Problems cluster); Delinquent Behaviour and Aggressive Behaviour (which form the broad-band Externalizing scale or the Behavioural Problems cluster, also named antisocial behaviour); and Social Problems, Thought Problems, and Attention Problems (considered as "mixed" scales);

- A list of Learning Difficulties concerning each student, indicating the level of learning difficulties, from 0 ("no difficulty") to 3 ("severe difficulties").

The students were asked to fill in:

- The Youth Self Report - YSR (Achenbach, 1991b, 1991c; Portuguese adaptation: Fonseca & Monteiro, 1999). This questionnaire is applicable to subjects from 11 to 18 years old. The same 8 cross-informant narrow-band syndromes constructed by Achenbach (1991b) can be scored on this self-report version of the Inventory of Child Behaviour. The questionnaire has two parts: 17 items related to social skills and social activities constitute the first part of this instrument; the second part has 119 items (103 of them related with specific behavioural problems). The items of this instrument are scored also on a 3-point scale ranging from 0 to 2, like in the TRF;

- The Self-Reported Antisocial Behaviour - SRA (Loeber, Stouthamer-Loeber, Van Kammen & Farrington, 1989; Portuguese adaptation: Fonseca, Simões, Rebelo, Ferreira & Cardoso, 1995). This self-report checklist assesses several antisocial behavioural problems in childhood and adolescence. It has different subscales: aggression, robbery, substance abuse, vandalism and vagrancy. Subjects were asked to rate each antisocial problem on a Likert-type scale from 1 (never) to 3 (seve-



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ral times) based on the frequency of the problem during the previous 12 months. The subjects were also asked if they had had already some time in life any of those behaviours (yes or no).

The instruments have been found reliable and valid by their authors. The information about validity and reliability in Portuguese samples is available in the studies of Portuguese adaptation and standardization (above mentioned). In these studies, the psychometric characteristics of the instruments, namely reliability and validity, were considered globally satisfactory.

Procedure

Data were collected at two points in time: when the subjects were in 4th grade (time 1) when they were on average 9 years old, and 8 years later (time 2) when they were on 17.

Time 1 - At the initial assessment, in 1993, teachers completed the TRF and a list about Learning Difficulties, two questionnaires that includes several questions regarding their students' emotional problems, antisocial behaviour and learning difficulties. The teachers were asked to complete the checklists concerning each one of the students. One week later, a member of the research team returned to the school to collect them.

Time 2 - Eight years later, participants in this study completed several questions, which covered several domains. Students filled in checklists (YSR and SRA) regarding their self-reported emotional problems and antisocial behaviour. Most of the adolescents were assessed in small groups at school. A considerable number of youths who meanwhile left school were assessed at home. The subjects also answered some complementary questions in a structured individual interview about school and the transition from school to work.

All the answers were anonymous or confidential.

RESULTS

Several logistic and linear regressions analyses were performed taking the teachers' ratings in Time 1 (global scores and scores of scales and clusters) as predictors and the self-reported information from Time 2 as criterion variables. Tables 1 to 5 summarize the significant results. For the purpose of this paper, particular attention was devoted to the following subjects' outcome measures during adolescence: school dropout (without professional qualification); antisocial behaviour (troubles with the police, juvenile delinquency and externalizing problems), and also internalizing or emotional problems.

1. Predicting school dropout

Logistic regression analysis showed that Failing the School Year (reported by the teachers) was a predictor of early School Dropout referred by the adolescents (Table 1). Data from the logistic regression analysis revealed that the risk or predicted probability for later School Dropout is higher in the case of the boys (odd ratio=26.7) than in the case of the girls (odd ratio=21.7) or the whole sample (odd ratio=15.8).

Logistic regression analysis also showed that boys with Somatic Problems reported by the teachers have some risk (odd ratio=.7) of School Dropout (Table 1).

Two other predictors of adolescent School Dropout were Learning Difficulties and Delinquent Behaviour (Table 1). The risk for later School Dropout is very similar for both predictors (odds ratios: 1.4 and 1.3).



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TABLE 1. Teachers' predictions of adolescent school dropout

Problems reported by the teachers	Boys	Girls	Whole sample
	Odds ratios	Odds ratios	Odds ratios
Failing the School Year (list)	26.7***	21.7***	15.8***
Learning Difficulties (list)			1.4*
Delinquent Behaviour (TRF)			1.3**
Somatic Problems (TRF)	.7*		

*p<.05; **p<.01; ***p<.001

TRF= Teachers Report Form

PREDICTING ANTISOCIAL BEHAVIOUR

To assess adolescents' antisocial behaviour we considered the self-reported occurrence or not of Problems with the Police and also two other measures. One of them corresponds to a most severe type (juvenile delinquency) of antisocial behaviour and was obtained considering the global score of SRA. A moderated type was obtained through the score in the Behavioural Problems (externalizing problems) cluster or antisocial behaviour cluster of YSR.

a) Predicting problems with the police

A set of logistic regression analyses, considering the adolescents' Problems with the Police as criterion variable, showed that the only significant predictor was the subscale Thought Problems (Table 2). Students with Thought Problems reported by the teachers in Time 1 (TRF) had a risk of adolescent Problems with the Police almost twice superior to the other ones. The accuracy rate in the prediction was 1.6 for the boys and for the whole sample.

TABLE 2. Teachers' predictions of adolescent problems with the police

Problems reported by the teachers	Boys Odd ratio	Girls Odd ratio	Whole sample Odd ratio
Thought Problems (TRF)	1.6***		1.6***

*p<.05; **p<.01; ***p<.001

TRF= Teachers Report Form

Several linear regressions were also conducted to determine the extent to which teachers' ratings could predict juvenile delinquency and future externalizing and internalizing adolescent problems. Results are presented in Tables 3, 4 and 5.

b) Predicting juvenile delinquency (SRA)

Linear regression analysis predicting Juvenile Delinquency showed that for the whole sample only two measures from Time 1 were good predictors (Table 3). Specifically, the scores on Withdrawal subscale of TRF accounted for 2% (determination coefficient or $R^2=.02$) of the variance in this criterion variable (whole sample). The standardized regression coefficient or Beta coefficient ($B=-.14$) suggests a negative relationship. Similarly, scores on the Attention Problems significantly predicted Juvenile Delinquency, explaining 2% ($R^2=.02$) of the variance of the criterion variable (whole sample), with a positive Beta coefficient ($B=.19$).

Finally, the scores on the cluster of Internalizing Problems were significant predictors of girls' Juvenile Delinquency, accounting also for 2% ($R^2=.02$) of the variance in this variable. Beta coefficient ($B=-.159$) indicates a negative relationship. This means that Internalizing Problems (as well as



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children's Withdrawal) work as protective factors regarding Juvenile Delinquency. Attention Problems reported by teachers work as a risk factor since the Beta coefficient (B=.19) is positive.

TABLE 3. Teachers' predictions of juvenile delinquency (evaluated by SRA)

Problems reported by the teachers	Boys			Girls			Whole sample		
	Beta	R ²	F	Beta	R ²	F	Beta	R ²	F
Withdrawal (TRF)							-.14**	.02	7.630**
Attention Problems (TRF)							.19**	.02	8.103***
Internalizing Problems (TRF)				-.159*	.02	4.498*			

*p<.05; **p<.01; ***p<.001

SRA = *Self-Reported Antisocial behaviour*

TRF= *Teachers Report Form*

c) Predicting externalizing problems (YSR)

The results of linear regression analysis in which the measures of Time 1 were the predictor variables, and the scores in the self-reported externalizing problems (Time 2) were the criterion variables revealed that Learning Difficulties, Withdrawal, Social Problems and Internalizing Problems (TRF) were significant in predicting the adolescents' Externalizing Problems (Table 4). Learning Difficulties (Beta=.17) accounted for 3% (R2=.03) of the variance in the whole sample's Externalizing Problems. The predictor Withdrawal showed a negative regression weight (Beta=-.11), accounting for a nominal amount (1%, R2=.01) of variance (whole sample). The predictor variable Social Problems revealed positive regression weights (girls: B=.24; whole sample: B=.15), explaining 5% (R2=.05) of the variance in the girls' Externalizing Problems and accounting for only 1% (R2=.01) of the variance in the whole sample's Externalizing Problems. Internalizing Problems showed a negative relationship (Beta=-.35) with the girls' Externalizing Problems, explaining 4% (R2=.04) of the variance in this criterion variable. This means that Internalizing Problems (as well as children's Withdrawal) work as protective factors regarding adolescent Externalizing Problems. Learning Difficulties and Social Problems reported by teachers work as risk factors (Beta coefficients are positive).

TABLE 4. Teachers' predictions of adolescent behaviour problems or externalizing problems (evaluated by YSR)

Problems reported by the teachers	Boys			Girls			Whole sample		
	Beta	R ²	F	Beta	R ²	F	Beta	R ²	F
Learning Difficulties (list)							.17***	.03	11.394**
Withdrawal (TRF)							-.11*	.01	7.702**
Social Problems (TRF)				.24***	.05	10.929**	.15*	.01	6.995***
Internalizing Problems (TRF)				-.35**	.04	9.890**			

*p<.05; **p<.01; ***p<.001

YSR= *Youth Self Report*

TRF= *Teachers Report Form*



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3. Predicting emotional or internalizing problems

Linear regression analysis revealed that the predictors Anxiety/Depression, Externalizing Problems, Social Problems and Learning Difficulties (TRF) were significant in predicting the adolescents' Emotional Problems or Internalizing Problems (Table 5). Anxiety/Depression accounted for 3% (R²=.03) of variance in the whole sample's Emotional Problems, Beta=.16. Externalizing Problems showed a negative relationship (Beta=-.12) with the whole sample's Internalizing Problems, explaining only 1% (R²=.01) of the variance in this criterion variable. The predictor Social Problems accounted for a minimal amount (R²=.008) of variance in the whole sample's Emotional Problems, Beta=.18, and explained 3% (R²=.03) of the variance in the boys' Emotional Problems, Beta=.18. Learning Difficulties predicted the girls' Emotional Problems (Beta=.16), accounting for 2% (R²=.02) of the variance in this variable.

The only negative standardized regression coefficient or Beta coefficient concerns to the predictor Externalizing Problems (TRF). This can be interpreted as indicating that the occurrence of Externalizing Problems in childhood is a protective factor against later Internalizing Problems. Anxiety/Depression, Social Problems and Learning Difficulties reported by teachers work as risk factors since the Beta coefficients are positive.

TABLE 5. Teachers' predictions of adolescent emotional or internalizing problems (YSR)

Problems reported by the teachers	Boys			Girls			Whole sample		
	Beta	R ²	F	Beta	R ²	F	Beta	R ²	F
Anxiety/depression (TRF)							.16**	.03	10.217**
Externalizing Problems (TRF)							-.12*	.01	7.715**
Social Problems (TRF)	.18*	.03	6.204*				.18*	.008	6.618***
Learning Difficulties (lista)				.16*	.02	4.715*			

* p<.05; ** p<.01; *** p <.001
 YSR= Youth Self Report
 TRF= Teachers Report Form

Summarizing, results showed that: 1- Teachers' ratings of children behavioural and emotional problems provide only very modest predictions of antisocial behaviour and emotional problems in adolescence; 2- However, teachers' ratings of academic difficulties such as failing the school year were good predictors of early school dropout.

DISCUSSION/CONCLUSIONS

Although the results point to some protective and risk factors, no good predictor was found for emotional problems, antisocial behaviour or delinquency in adolescence. So, this study doesn't support the relevance of teachers' ratings in the identification of students at risk for emotional and behavioural disorders as reported by other authors (e.g., Fagot & Leve, 1998; Haile Mariam, Bradley-Johnson & Johnson, 2002; Lane, 2003; O'Shaughnessy et al., 2002; Verhulst et al., 1994).

Several reasons can be reported to explain our findings. The first reason is that the large time interval (8 years) turned useless the teachers' information, perhaps because it is valid only for short time intervals. The second is that the predictive power of teachers' ratings decreases when we consider such different phases in the life cycle. At the end of childhood this predictive power could possibly increase. Finally, another reason is that some risk factors are difficult to observe and assess by



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teachers. In this sense there is a risk of false negatives (failure to detect a problem when one exists), as referred by other authors (e.g., Cabell, Justice, Zucker & Kilday, 2009; Fletcher & Satz, 1984; Teisl et al., 2001) that can be explained by the lack of awareness of the problems. Specifically, this interpretation is consistent with previous studies that revealed small or medium correlations between teacher-reported syndromes (TRF) and child-reported internalizing social-behavioural profiles (e.g., Mesman & Koot, 2000).

To sum up, our findings concerning the modest predictive power of teachers' ratings in the identification of young students at risk of emotional problems and antisocial behaviour in adolescence support the belief that an adequate assessment of the children and adolescent difficulties/problems requires information from several sources and instruments. Preferably, multimethod and multiagent assessment strategies (Verhulst et al., 1994; Walker & Severson, 1990; Walker & Stieber, 1998) must be chosen for the identification of potentially high-risk subjects and future problem prediction. Those strategies should attend to: teachers' and parents' information; direct observations of interpersonal interactions with different agents, such as peers, adults, teachers, family, etc.; sociometric and psychological assessments; and also school records, such as disciplinary problems and failing the school year. It is known that this is a valid but expensive process.

However, if we intend to specifically predict the adolescents' early school dropout our research pointed out a cost-effective option: the teachers' reported academic difficulties. In fact, consistent to previous studies (e.g., Bethesda & Greenfield, 2001; Torgesen & Wagner, 1998), teachers' information about academic difficulties (such as failing the school year) was a good predictor, after a large time period, of future poor outcomes such as early school dropout. This is not surprising, once teachers are particularly attentive to the academic factors.

This finding is very interesting. From our results, the predictive power of teachers' ratings of some academic difficulties can assume an important role in the selection and early identification of at-risk children for school dropout. The early identification can help to expand subsequent prevention and/or intervention programmes to face this problem that can seriously complicate the transition from adolescence to adulthood (e.g., Pierce, Reid & Epstein, 2004). Given the current investments being made in keeping the students connected to the schooling process, in order to eliminate the harms of school dropout, the important task of early identification may be given increasing attention in the next years.

REFERENCES

- Achenbach, T. M. (1991a). Manual for the Teacher's Report Form and 1991 Profile. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M. (1991b). Integrative Guide for the 1991 CBCL/4 18, YSR, and TRF Profiles. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M. (1991c). Manual for the Youth Self Report and 1991 Profile. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., Dumenci, L. & Rescorla, L. A. (2002). Is American Student Behavior Getting Worse? Teacher Ratings Over an 18-Year Period. *School Psychology Review*, 31(3), 428-442.
- Achenbach, T. M. & Edelbrock, C. (1983). Manual for the Child Behavior Checklist and Revised Child Behavior Profile. Burlington: University of Vermont.
- Bachman, J., Green, S. & Wirtanen, I. (1971). Dropping out – Problem or Symptoms? Vol. 3 of Youth in transition. Ann Arbor, Michi.: Univ. of Michigan, Institute for Social Research.
- Bérubé, R. & Achenbach, T. M. (2002). Bibliography of published studies using the Achenbach System of Empirically Based Assessment (ASEBA): 2002 edition. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.



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- Bethesda, Hecht, S. & Greenfield, D. (2001). Comparing the predictive validity of first grade teacher ratings and reading-related tests on third grade levels of reading skills in young children exposed to poverty. *School Psychology Review*, 30, 50-72.
- Cabell, S., Justice, L., Zucker, T. & Kilday, C. (2009). Validity of Teacher Report for Assessing the Emergent Literacy Skills of At-Risk Preschoolers. *Language, Speech, and Hearing Services in Schools*, Vol.40, 161-173.
- Coie, J. (1994, July). Antisocial behavior among children and youth. Keynote address presented at the OSEP National Research Directors Conference, Washington, DC.
- Fagot, B. I., & Leve, L. D. (1998). Teacher Ratings of Externalizing Behavior at School Entry for Boys and Girls: Similar Early Predictors and Different Correlates. *J. Child Psychol. Psychiat.*, 39(4), 555-566.
- Fletcher, J. & Satz, P. (1984). Test-based versus teacher-based predictions of academic achievement: A three year longitudinal follow-up. *Journal of Pediatric Psychology*, 9, 193-203.
- Flynn, J. & Rahbar, M. (1998). Improving teacher prediction of children at risk for reading failure. *Psychology in the Schools*, 35, 163-172.
- Fonseca, A. & Monteiro, C. (1999). Um inventário de problemas de comportamento para crianças e adolescentes: o Youth Self Report de Achenbach. *Psychologica*, 21, 79-96.
- Fonseca, A., Rebelo, J., Ferreira, J. A., Simões, A. & Cardoso, F. (1995). O inventário de comportamentos da criança para professores: Teacher's Report Form. *Revista Portuguesa de Pedagogia*, XXIX (2), 81-102.
- Fonseca, A., Simões, A., Rebelo, J., Ferreira, J. A. & Cardoso, F. (1995). Comportamentos anti-sociais referidos pelos próprios alunos: Novos dados para a população portuguesa do ensino básico. *Psychologica*, 14, 39-57.
- Haile Mariam, A., Bradley-Johnson, S., & Johnson, C. (2002). Pediatricians' Preferences for ADHD Information from Schools. *School Psychology Review*, 31(1), 94-105.
- Hudley, C. (1993). Comparing Teacher and Peer Perceptions of Aggression: An Ecological Approach. *Journal of Educational Psychology*, 85(2), 377-384.
- Kamphaus, R., Thorpe, J., Winsor, A., Kroncke, A., Dowdy, E. & VanDeventer, M. (2007). Development and Predictive Validity of a Teacher Screener for Child Behavioral and Emotional Problems at School. *Educational and Psychological Measurement*, 67, 342-356.
- Kamps, D. & Tankersley, M. (1996). Prevention of behavioral and conduct disorders: Trends and research issues. *Behavioral Disorders*, 22, 41-48.
- Lane, K. (2003). Identifying Young Students At Risk for Antisocial Behavior: The utility of "Teachers as Tests". *Behavioral Disorders*, 28(4), 360-369.
- Loeber, R., Stouthamer-Loeber, M., (1987). Prediction. In H. Quay (ed.). *Handbook of Juvenile Delinquency*. New York: Wiley.
- Loeber, R., Stouthamer-Loeber, M., Van Kammen, W. & Farrington, D. (1989). Development of a new measure of self-reported antisocial behavior for young children: prevalence and reliability. In M. W. Klein (ed.), *Cross national research and self-reported crime and delinquency*. Dordrecht: Kluwer-Nijhoff.
- Mesman, J. & Koot, H. (2000). Child Reported Depression and Anxiety in Preadolescence: I. Associations With Parent and Teacher Reported Problems. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(11), 1371-1378.
- Nunes, A. & Miranda, J. (1969). A composição social da população portuguesa: Alguns aspectos e implicações. *Análise Social*, VII, 333-376.
- Olin, S.-C. et al. (1998). School teacher ratings predictive of psychiatric outcome 25 years later. *British Journal of Psychiatry*, 172 (33), 7-13.



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- O'Shaughnessy, T., Lane, K. L., Gresham, F. M. & Beebe-Frankenberger, M. E. (2002). Students with or at-risk for learning and emotional behavioral disorders: An integrated system of prevention and intervention. In K. L. Lane, F. M. Gresham & T. E. O'Shaughnessy (Eds.), *Interventions for children with or at risk for emotional and behavioral disorders*. (pp. 3-17). Boston: Allyn & Bacon.
- Petras, H., Chilcoat, H., Leaf, P., Ialongo, N. & Kellam, S. (2004). Utility of TOCA R Scores During the Elementary School Years in Identifying Later Violence Among Adolescent Males. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 88-96.
- Petras, H., Ialongo, N., Lambert, S., Barrueco, S., Schaeffer, C., Chilcoat, H. & Kellam, S. (2005). The Utility of Elementary School TOCA R Scores in Identifying Later Criminal Court Violence Among Adolescent Females. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(8), 790-797.
- Pierce, C., Reid, R. & Epstein, M. (2004). Teacher-Mediated Interventions for Children with EBD and Their Academic Outcomes. *Remedial and Special Education*, 25 (3), 175-188.
- Robins, L. N. (1969). *Deviant Children Grow up: A sociological and psychiatric study of sociopathic personality*. Baltimore: Williams & Wilkins.
- Teisl, J., Mazzocco, M., & Myers G. (2001). The Utility of Kindergarten Teacher Ratings for Predicting Low Academic Achievement in First Grade. *Journal of Learning Disabilities*, 34(3), 286-293.
- Torgesen, J. & Wagner, R. (1998). Alternative diagnostic approaches for specific developmental reading disabilities. *Learning Disabilities Research & Practice*, 13, 220-232.
- Verhulst, F., Koot, H. & Van der Ende, J. (1994). Differential Predictive Value of Parents' and Teachers' Reports of Children's Problem Behaviors: A Longitudinal Study. *Journal of Abnormal Child Psychology*, 22(5), 531-545.
- Walker, H. & Severson, H. (1990). *Systematic Screening for Behaviour Disorders (SSBD)*. Longmont, CO: Sopris West.
- Walker, H. & Stieber, S. (1998). Teacher Ratings of Social Skills as Longitudinal Predictors of Long-Term Arrest Status in a Sample of At-Risk Males. *Behavioral Disorders*, 23(4), 222-230.