

EDU WORLD 2022**Edu World International Conference Education Facing Contemporary World Issues****SWPBS-BASED STUDY ON TEACHERS' EFFICACY AND THEIR
PERCEPTION ON STUDENTS' BEHAVIOUR**

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Abstract

School-wide positive behaviour support (SWPBS) is a proactive and preventive approach created to support the development of safe & supportive learning environments in schools, to increase students' social and emotional well-being and teachers' efficacy. This paper presents findings from a research study performed in 30 Romanian schools, with the aim to investigate the relation between teachers' efficacy and the way they perceive students' behaviour. The study was implemented in the framework of the 3-year project "Building School-Wide Inclusive, Positive and Equitable Learning Environments through a Systems-Change Approach" (SWPBS) with reference number 606687-EPP-1-2018-2-CY-EPPKA3-PI-POLICY, financed by the European Commission through the Erasmus+ Programme. The quantitative research that we implemented (descriptive statistical analysis) was achieved during first year of SWPBS project, through informed questionnaire containing two scales: (1) 'Problem behaviours in school' scale (Beh); (2) 'Teacher collective efficacy' scale (Tcef). We applied the questionnaire to a purposive sample composed of 945 primary teachers. The analysis and interpretation of results revealed which are the most frequent disruptive student behaviours (e.g. being noisy when entering school areas, verbal abuse towards other students, etc.) and showed there is a correlation between teachers' efficacy and how teachers perceive & manage students' behaviour. This study contributes to understanding teachers' collective efficacy and its relation to teachers' ability in efficiently approaching and managing problematic behaviours of their students.

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1. Introduction

School-wide Positive Behaviour Supports (SWPBS) is “an implementation framework for maximizing the selection and use of evidence-based prevention and intervention practices along a multi-tiered continuum that supports the academic, social, emotional, and behavioural competence of all students” (U.S. Office of Special Education Programs [OSEP], 2018). Extensive research knowledge base has been established in USA, where SWPBS has been researched and implemented for more than three decades reaching out to more than 26,000 schools (OSEP, 2018), acquiring valuable results on its implementation, scalability and sustainability. So far, three meta-analyses have been conducted giving support to SWPBS positive impact on school outcomes (Chitiyo et al., 2012; Horner et al., 2010; Mitchell et al., 2018).

Research on SWPBS expand from descriptive, quasi-experimental, experimental single-case design studies to large-scale randomized experimental field trials in the U.S. and Canada. Evidence from this research methodology spectrum demonstrated:

- reduced problem behaviours in schools (Horner et al., 2009; Sprague et al., 2017; Waasdorp et al., 2012);
- Improvements in aggressive behaviours, concentration, social competencies and emotional regulation inside and outside of classroom (Bradshaw, Reinke et al., 2008; Lewis et al., 2000, 2002);
- Improved school climate (Bradshaw et al., 2009);
- Improvements in academic achievement (Algozzine et al., 2011; Bradshaw et al., 2010; McIntosh et al., 2011; Simonsen et al., 2012);
- enhanced perception of organizational health and safety (Bradshaw, Koth et al., 2008; Bradshaw et al., 2010);

Recently, a growing body of European researchers has started investigating the effectiveness of SWPBS across European school settings. Findings, so far, corroborate evidence from American colleagues documenting decreases in school problem violations, increases in student social competences (Ogden et al., 2012; Sørli & Ogden, 2007; Sørli et al., 2018) and improved classroom climate (e.g., Närhi et al., 2015; Sørli, & Ogden, 2015). However, further research is needed to document the impact of SWPBS across European countries. Additionally, experimental methodology is also critical to demonstrate causality between SWPBS and school outcomes, given a recent synthesis review on school-based interventions that found much fewer European randomized experimental studies are documented in the literature compared to the U.S. (Valdebenito et al., 2018).

2. Problem Statement

Many studies and researches promote School-Wide Positive Behaviour Support (SWPBS) as an effective preventive framework to foster prosocial behaviours and simultaneously reduce problem behaviours in schools. Recently, a growing body of European researchers has started investigating the effectiveness of SWPBS across European school settings. This paper presents the findings from a study implemented in Romania during the Erasmus+ Project SWPBS: “Building School-Wide Inclusive, Positive and Equitable Learning Environments Through a Systems-Change Approach”. Disruptive

behaviours are still raising concerns for most of the educators and it is needed to investigate the phenomenon and explore the effects of a preventive, positive-approach to effectively manage problematic behaviours and increase teachers' efficacy.

3. Research Questions

Our research aimed to answer the following research questions:

(1) What are the teachers' perceptions towards type and intensity of students' disruptive behaviors in their school settings?

(2) Is there any correlation between teachers' efficacy and their perception on students' behavior?

4. Purpose of the Study

Our study was performed in Romania in the framework of the project "Building School-Wide Inclusive, Positive and Equitable Learning Environments through a Systems-Change Approach" (SWPBS, ref. no.: 606687-EPP-1-2018-2-CY-EPPKA3-PI-POLICY), a project financed by the European Commission through the Erasmus+ Programme, KA3 action.

The aim of the project is to implement the SWPBS framework and intervention across four participating countries (Romania, Cyprus, Greece & Finland) and to establish an inclusive non-discriminatory social culture and necessary socio-emotional and behavioural supports for all children in a school. The project asserts that the SWPBS approach enhances the capacity of schools, families and communities to design effective and efficient learning environments that (a) address student needs by providing a continuum of supports; (b) monitor regularly the implementation of evidence-based practices (EBPs) and outcomes, and (c) follow data-based decision making through continuous data-collection process (Horner & Sugai, 2015).

The purpose of our study was to investigate, in 30 Romanian schools participating in SWPBS project, the relation between teachers' efficacy and the way they perceive students' behaviour, and thus to identify potential 'problem behaviours in school - teacher collective efficacy' correlations.

5. Research Methods

5.1. Research design

We used a quantitative research method (descriptive statistical analysis) based on validated questionnaire, which allowed us meaningful comparison of responses across participants and calculation of statistical indicators. The method served well in answering our research questions. The questionnaire for teachers that we used contained several scales, but for the current study we used only two: (1) Problem behaviours in school (Beh); (2) Teacher collective efficacy (Tcef).

5.2. Key informants

To answer the research questions, we applied questionnaire to a purposive sample of Romanian teachers who teach in primary education to students in 3rd and 4th grades. The teachers participating in

the study (N = 945) were both males and females, aged 21 to 67 years, with a teaching experience between 1 and 45 years. The selected key informants were highly committed to SWPBS approach and thus provided our research relevant inputs.

5.3. Research instruments

The questionnaire we addressed to teachers was designed by SWPBS project consortium and was informed by Grey & Sime, 1989 (“Problem behaviours in school” (Beh) (Grey & Sime, 1989 - teacher version) and Malinen and Savolainen (2016) (“Teacher collective efficacy: Collective teacher Beliefs Scale (Tcef)”, Malinen & Savolainen, 2016). The questionnaire was composed of two parts with 13 respectively 12 items, aiming to identify (a) students’ behaviours observed in school and (b) how effective teachers are (split in two subscales - Instructional Strategies (Inststrategy) and Student Discipline (Studdiscipline)). The 13 close-ended questions in the ‘Problem behaviours in school’ scale requested answer-options on a 5-point Likert-type scale (‘Not once during the last week’; ‘Once during the last week’; ‘Several times during the last week’; ‘Daily during the last week’; ‘Several times each day during the last week’). The 12 close-ended questions in the ‘Teacher collective efficacy’ scale have been also answered on a 6-point Likert-type scale (from ‘Not at all’ to ‘To a great extent’).

5.4. Data collection

The questionnaires have been applied to 945 teachers from 30 primary schools of the Argeş County in Romania, on paper, in a face-to-face approach. They have been applied in October and November 2019, by the research team of the University of Piteşti involved in SWPBS project with the support of Argeş County School Inspectorate. Prior to that, participants have received information about the purpose of the study and their consent to participate was obtained. Also, they have been instructed on how to proceed, what types of questions the questionnaires contain, being assured that their answers are confidential and will be used only for research purposes, by the researchers. As initially the questionnaire was designed in English, to ensure the correct meaning of the questions, reverse translation of the questionnaire was performed before administering it to teachers.

5.5. Rigour of study

The research methodology and design were analysed and agreed by the experts from all the countries that are partners in the SWPBS project, namely: Romania, Cyprus, Greece and Finland. The involved researchers are experienced in scientific research and have reliable professional and academic backgrounds. The questionnaire and the research activities have been documented and evidences upon the research procedures and results have been kept. The research was implemented according to the research ethics contained within the Code of Conduct agreed by all the partners from the SWPBS project, at the beginning of the project’s implementation.

6. Findings

As shown above, we applied the SWPBS Teacher Questionnaire to identify teachers' perception on students' disruptive behaviours in 30 schools participating in our study.

The teachers (N = 945) expressed their perceptions on disruptive behaviours that affect school climate and learning environment. The descriptive statistical analysis of their answers revealed which of these disruptive behaviours are more frequent and thus proved the necessity of SWPBS intervention regarding the improvement of school climate and the decrease of specific problematic behaviours, often experienced in primary school settings.

Table 1 presents item statistics on students' problems behaviours (Beh) observed by teachers in the last week with various frequencies: not once during the last week (1); once during the last week (2); several times during the last week (3); daily during the last week (4); several times each day during the last week (5).

Table 1. Item statistics on students' problems behaviours

Type of disruptive behaviour (N = 945)	M	SD
Beh1: Showing lack of concern towards others	2.07	1.060
Beh2: When entering school areas (classrooms, assembly, cafeteria), students are noisy	2.89	1.156
Beh3: Running in hallways	2.83	1.162
Beh4: Rough play	1.71	0.969
Beh5: Persistently breaking school rules	1.89	0.983
Beh6: Verbal abuse towards other students (e.g., offensive or insulting remarks)	2.14	1.044
Beh7: Standing in 'prohibited' school areas	1.38	0.752
Beh8: Rude, disrespectful comments or responses	1.75	0.927
Beh9: Physical aggression towards other students (e.g., by pushing, punching, striking)	1.90	0.966
Beh10: Leaving school premises without permission	1.33	0.732
Beh11: Physical destructiveness (e.g., breaking objects, damaging furniture and fabric)	1.41	0.720
Beh12: Verbal abuse towards school staff (e.g., offensive, insulting, insolent or threatening remarks)	1.21	0.567
Beh13: Physical aggression towards school staff	1.08	0.627

Out of thirteen, four behaviours are perceived as being more frequent by the respondents (Beh1, 2,3,6). Thus, the most disruptive behaviour seems to be students being noisy when entering school areas (classrooms, assembly, cafeteria) (MBeh2 = 2.89), followed by running in hallways (MBeh3 = 2.83), verbal abuse towards other students (e.g., offensive or insulting remarks) (MBeh6 = 2.14) and showing lack of concern towards others (MBeh1 = 2.07). For these four behaviours, however, respondents' perceptions vary significantly, as shown by the high values of standard deviation (SDBeh2 = 1.156; SDBeh3 = 1.162; SDBeh1 = 1.060; SDBeh6 = 1.044).

For the rest of the behaviours (running in hallways; rough play; persistently breaking school rules; standing in 'prohibited' school areas; rude, disrespectful comments or responses; physical aggression towards other students (e.g., by pushing, punching, striking); leaving school premises without permission; physical destructiveness (e.g., breaking objects, damaging furniture and fabric); verbal abuse towards

school staff (e.g., offensive, insulting, insolent or threatening remarks); physical aggression towards school staff) the general perception is that they are infrequent or do not occur at all.

Table 2 shows statistical indicators for the twelve items that have addressed teachers' efficacy in relation to two subscales: Instructional Strategies (items 1,2,5,6,9,11) and Student Discipline (items 3,4,7,8,10,12). The options provided for answering these items in the question "To what extent do teachers in your school do the following?" went from: not at all (1); very little (2); little (3); to some extent (4); quite a lot (5) to a great extent (6).

Table 2. Items statistics on teachers' efficacy

(N = 945)	M	SD
Tcef1: Contribute towards meaningful learning of the students	5.45	0.681
Tcef 2: Influence that students believe they can succeed well in school work	5.43	0.797
Tcef 3: Set clear expectations on student behaviour	5.31	0.787
Tcef 4: Create rules and practices which help learning	5.38	0.803
Tcef 5: Help students to master complicated learning contents	5.46	0.725
Tcef 6: Promote deep understanding of knowledge constructs	5.30	0.764
Tcef 7: React to students with challenging behaviour	2.01	1.599
Tcef 8: Manage disturbing behaviours	5.11	1.196
Tcef 9: Help students' critical thinking	5.17	0.921
Tcef 10: Make students follow school rules	5.35	0.792
Tcef 11: Promote students' creativity	5.45	0.745
Tcef 12: Help students to feel safe in school	5.64	0.641

The processing of the answers revealed that, the respondents (teachers) appreciated there is high teachers' efficacy in their school, as the values of the mean scores are mainly above 5 (out of 6), with one exception in the case of how teachers react to students with challenging behaviour (MTcef7 = 2.01). The standard deviation of this item is the highest (SDTcef7 = 1.599), showing the large distribution of opinions among respondents, which means either the lack of a school culture on managing challenging behaviour, or poor (lack of) teachers' skills for dealing with challenging behaviours, or both. A relatively high dispersion of answers we could observe for 'teachers manage disturbing behaviours' (SDTcef8 = 1.196), despite the fact that the mean score of this item is a high one (MTcef8 = 5.11). This could be an indication of the fact that, in singular cases, in particular situations the perception on how the disturbing behaviours is dealt with, was totally different.

These findings, obtained before implementing the SWPBS approach for disruptive behaviours, proved once again, the need to introduce in the preventive SWPBS framework in the 30 schools participating in the study.

The activities and attitudes that the respondents have selected to describe teachers' high efficacy in their school environment have been, in descending order:

(a) Regarding the Instructional Strategies (Inststrategy), teachers: help students to master complicated learning contents (MTcef5 = 5.46); contribute towards meaningful learning of the students (MTcef1 = 5.45); promote students' creativity (MTcef11 = 5.45); influence that students believe they can succeed well in school work (MTcef2 = 5.43); promote deep understanding of knowledge constructs (MTcef6 = 5.30); help students' critical thinking (MTcef9 = 5.17).

(b) regarding the Students Discipline (Studdiscipline), teachers: help students to feel safe in school (MTcef12 = 5.64); create rules and practices which help learning (MTcef4 = 5.38); make students follow school rules (MTcef12 = 5.35); set clear expectations on student behaviour (MTcef4 = 5.31); manage disturbing behaviours (MTcef8 = 5.11); react to students with challenging behaviour (MTcef7 = 2.01).

In table 3 we present the identified correlations between problem behaviours in school and teacher collective efficacy.

Table 3. ‘Problem behaviours in school - Teacher collective efficacy’ correlations

	Pearson Correlation	1			
ScoreBeh	Sig. (2-tailed)				
	N	945			
	Pearson Correlation	-,317**	1		
Inststrategy	Sig. (2-tailed)	,000			
	N	945	945		
	Pearson Correlation	-,241**	,761**	1	
Studdiscipline	Sig. (2-tailed)	,000	,000		
	N	945	945	945	
	Pearson Correlation	-,299**	,942**	,934**	1
Tcefscore	Sig. (2-tailed)	,000	,000	,000	
	N	945	945	945	945

** . Correlation is significant at the 0.01 level (2-tailed).

Bivariate Pearson correlation coefficient results indicated that instructional strategies (Inststrategy) student disciplines (Studdiscipline), as well as teacher collective efficacy (Tcefscore) and behavioural scores (ScoreBeh) were negatively and statistically significantly associated with each other at $p < 0.01$ level. Higher scores on instructional strategies will predict lower scores on behavioural problems in schools ($r = -0.317^{**}$). The magnitude of the association is strong between teacher collective efficacy and student discipline and are positively correlated ($r = 0.934^{**}$) which means that the variables increase concurrently. The relationship between perceived teacher collective efficacy and challenging behaviours was examined in other studies and strong correlation were identified as well (Sørlic & Torsheim, 2011).

6.1. Limitations of the study

Although the initial size of our sample was bigger, we removed the incomplete answers and that has reduced - though not drastically - the representativeness of the schools to which the incomplete answers belonged. Another limitation consisted in the school size – we included in the study small-size schools and large schools, and in the latter ones reaching a common perception on students challenging/disruptive behaviours and teachers’ efficacy is more difficult than in schools with reduced number of teachers. Lastly, it is to be mentioned here that we present here partial data only (more in-depth results following to be published) and thus the implications of our study are not complete, influence of certain factors (such as teachers' gender, age, teaching experience) on the scores to problem behaviours in school (Beh) and teacher collective efficacy (Tcef) not being yet taken into consideration.

7. Conclusions

The hypothesis that we tried to verify was that the teachers with higher efficacy (considered as such by themselves) tend to perceive disruptive behaviours less problematic than other teachers and manage them with higher confidence due to their professional skills.

Our findings support this premise.

Teachers identified a series of behaviours they perceive as disruptive (students are noisy when entering school areas; they run in hallways; they commit verbal abuse towards other students and show lack of concern towards others) but their vision on the instructional strategies is positive and highly confident (teachers are able to help students to master complicated learning contents, to contribute towards meaningful learning of the students, to promote students' creativity, to influence that students believe they can succeed well in school work; promote deep understanding of knowledge constructs and to help students' critical thinking) that shows teachers tend to believe their professional skills and the experience are the keys to master challenging and disruptive behaviours of their students.

There is therefore a strong correlation between the efficacy of teachers and their perception of negative behaviours of students. The results indicate that perceived teacher collective efficacy and student problematic behaviours negatively correlates ($r = -0.299$, at $p < 0.01$ level). Therefore, a high collective teacher efficacy will have a great impact in reducing problematic behaviours. With the growing number of disruptive behaviours in schools, it is imperative to develop teacher collective efficacy to manage and reduce those behaviours and facilitate the development of positive school climate.

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References

- Algozzine, B., Wang, C., & Violette, A. S. (2011). Reexamining the Relationship Between Academic Achievement and Social Behavior. *Journal of Positive Behavior Interventions*, 13(1), 3-16. <https://doi.org/10.1177/1098300709359084>
- Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the Effects of Schoolwide Positive Behavioral Interventions and Supports on Student Outcomes: Results From a Randomized Controlled Effectiveness Trial in Elementary Schools. *Journal of Positive Behavior Interventions*, 12(3), 133-148. <https://doi.org/10.1177/1098300709334798>
- Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide positive behavioral interventions and supports (PBIS) in elementary schools:

- Observations from a randomized trial. *Education and Treatment of Children*, 1-26. <https://doi.org/10.1353/etc.0.0025>
- Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly*, 23(4), 462-473. <https://doi.org/10.1037/a0012883>
- Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering School Climate through School-Wide Positive Behavioral Interventions and Supports: Findings from a Group-Randomized Effectiveness Trial. *Prevention Science*, 10(2), 100-115. <https://doi.org/10.1007/s11121-008-0114-9>
- Chitiyo, M., May, M. E., & Chitiyo, G. (2012). An Assessment of the Evidence-Base for School-Wide Positive Behavior Support. *Education and Treatment of Children*, 35(1), 1-24. <https://doi.org/10.1353/etc.2012.0000>
- Grey, J., & Sime, N. (1989). Discipline in schools. *Report of the committee of enquiry chaired by Lord Elton* (The Elton Report, 1989). <http://www.educationengland.org.uk/documents/elton/elton1989.html>
- Horner, R. H., & Sugai, G. (2015). School-wide PBIS: An Example of Applied Behavior Analysis Implemented at a Scale of Social Importance. *Behavior analysis in practice*, 8(1), 80-85. <https://doi.org/10.1007/s40617-015-0045-4>
- Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the Evidence Base for School-Wide Positive Behavior Support. *Focus on Exceptional Children*, 42(8). <https://doi.org/10.17161/foec.v42i8.6906>
- Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A Randomized, Wait-List Controlled Effectiveness Trial Assessing School-Wide Positive Behavior Support in Elementary Schools. *Journal of Positive Behavior Interventions*, 11(3), 133-144. <https://doi.org/10.1177/1098300709332067>
- Lewis, T. J., Colvin, G., & Sugai, G. (2000). The effects of pre-correction and active supervision on the recess behavior of elementary students. *Education and Treatment of Children*, 23(2), 109-121.
- Lewis, T. J., Powers, L. J., Kely, M. J., & Newcomer, L. L. (2002). Reducing problem behaviors on the playground: An investigation of the application of schoolwide positive behavior supports. *Psychology in the Schools*, 39(2), 181-190. <https://doi.org/10.1002/pits.10029>
- Malinen, O.-P., & Savolainen, H. (2016). The Effect of Perceived School Climate and Teacher Efficacy in Behavior Management on Job Satisfaction and Burnout: A Longitudinal Study. *Teaching and Teacher Education*, 60, 144-152. <https://doi.org/10.1016/j.tate.2016.08.012>
- McIntosh, K., Mercer, S. H., Hue, A. E., Franck, J. L., Turri, M., & Mathews, S. (2011). Factors Related to Sustained Implementation of School-wide Positive Behavior Support. *Exceptional Children*, 79(3).
- Mitchell, B. S., Hatton, H., & Lewis, T. J. (2018). An Examination of the Evidence-Base of School-Wide Positive Behavior Interventions and Supports through Two Quality Appraisal Processes. *Journal of Positive Behavior Interventions*, 20(4), 239-250. <https://doi.org/10.1177/1098300718768217>
- Närhi, V., Kiiski, T., Peitso, S., & Savolainen, H. (2015). Reducing disruptive behaviours and improving learning climates with class-wide positive behaviour support in middle schools. *European Journal of Special Needs Education*, 30(2), 274-285. <https://doi.org/10.1080/08856257.2014.986913>
- Ogden, T., Sørli, M.-A., Arnesen, A., & Meek-Hansen, W. (2012). The PALS School-Wide Positive Behaviour Support Model in Norwegian Primary Schools - Implementation and Evaluation. *International Perspectives on Inclusive Education*, 39-55. [https://doi.org/10.1108/s1479-3636\(2012\)0000002006](https://doi.org/10.1108/s1479-3636(2012)0000002006)
- Simonsen, B., Freeman, J., Myers, D., Dooley, K., Maddock, E., Kern, L., & Byun, S. (2012). The Effects of Targeted Professional Development on Teachers' Use of Empirically Supported Classroom Management Practices. *Journal of Positive Behavior Interventions*, 20(20), 22(1), 3-14. <https://doi.org/10.1177/1098300719859615>

- Sørli, M.-A., & Ogden, T. (2007). Immediate impacts of PALS: A school-wide multi-level programme targeting behaviour problems in elementary school. *Scandinavian Journal of Educational Research*, 51(5), 471–492. <https://doi.org/10.1080/00313830701576581>
- Sørli, M.-A., & Ogden, T. (2015). School-Wide Positive Behavior Support-Norway: Impacts on Problem Behavior and Classroom Climate. *International Journal of School & Educational Psychology*, 3(3), 202–217. <https://doi.org/10.1080/21683603.2015.1060912>
- Sørli, M.-A., & Torsheim, T. (2011). Multilevel analysis of the relationship between teacher collective efficacy and problem behaviour in school. *School Effectiveness and School Improvement*, 22(2), 175–191. <https://doi.org/10.1080/09243453.2011.563074>
- Sørli, M.-A., Idsoe, T., Ogden, T., Olseth, A. R., & Torsheim, T. (2018). Behavioral Trajectories During Middle Childhood: Differential Effects of the School-Wide Positive Behavior Support Model. *Prevention Science*, 19(8), 1055–1065. <https://doi.org/10.1007/s11121-018-0938-x>
- Sprague, J. R., Biglan, A., Rusby, J., Gau, J., & Vincent, C. (2017). Implementing School wide PBIS in Middle Schools: Results of a Randomized Trial. *Journal of Health Science and Education*, 1(2), 1–10. <https://escires.com/articles/Health-1-109.pdf>
- U.S. Office of Special Education Programs. [OSEP]. (2018). *Technical Assistance Center on Positive Behavioral Interventions and Supports*, 2018.
- Valdebenito, S., Eisner, M., Farrington, D. P., Ttofi, M. M., & Sutherland, A. (2018). School-based interventions for reducing disciplinary school exclusion: a systematic review. *Campbell Systematic Reviews*, 14(1). <https://doi.org/10.4073/csr.2018.1>
- Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: a randomized controlled effectiveness trial. *Archives of pediatrics & adolescent medicine*, 166(2), 149–156. <https://doi.org/10.1001/archpediatrics.2011.755>