Students’ engagement in schools: differenciation and promotion\textsuperscript{1}

Feliciano Veiga e Carolina Carvalho\textsuperscript{2}
Ana Almeida e Céu Taveira\textsuperscript{2}
Isabel Janeiro e Sara Baía\textsuperscript{4}
Isabel Festas\textsuperscript{5}
João Nogueira\textsuperscript{6}
Madalena Melo\textsuperscript{7}
Suzana Caldeira\textsuperscript{8}

Abstract: The objective of this work is to present elements of the project Student engagement in Schools (SES). The team consists of 10 researchers from six Universities. Student engagement in schools is a multidimensional construct that unites affective, behavioural, and cognitive dimensions of student adaptation in the school and has influence on students’ outcomes. The team of researchers conceptualized two major studies, a differential study to analyze the relations between SES and contextual factors, personal factors, student’s outcomes, and a quasi-experimental study to analyze the effects on SES of a specific intervention programmes. In study 1, the sample size is around 600 students (150 6th graders, 150 7th graders, 150 9th graders, and 150 10th graders). We shall focus on years of school transition, with rural and urban populations, on different regions of the country, and on students with different family background. We shall conduct questionnaires with national and international scales.

The study 2 will involve students in 7th and 9th grade, from four classes, two of the experimental group and two of the control group. Patterns of verbal communications between a teacher and students can influence the classroom environment and SES. This model of communication would result in more effective student management and more time on-task for learning.

Key words: students’ engagement, differenciation, school motivation.

Introduction

Student engagement in schools (SES) has attracted, in recent years, growing interest in the field of Educational Psychology and Education, as a solution to the problems of

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Este estudo foi apoiado financeiramente pela FCT para o período 2007-2010, e desenvolvido no Instituto de Educação da Universidade de Lisboa. Informações podem ser pedidas a Feliciano H. Veiga [fhveiga@ie.ul.pt]. A informação que aqui se apresenta segue de perto os elementos do Projecto SES, submetido em 2010 à FCT para obtenção de apoio financeiro. Redigido obrigatoriamente em língua Inglesa e com especificidades nas referências bibliográficas, assim se decidiu manter também aqui.

2. Universidade de Lisboa, Instituto de Educação [fhveiga@ie.ul.pt]
3. Universidade do Minho, Instituto de Educação
4. Universidade de Lisboa, Faculdade de Psicologia
5. Universidade de Coimbra, Faculdade de Psicologia
6. Universidade Nova de Lisboa, F. de Ciências Sociais e Humanas
7. Universidade de Évora, Departamento de Psicologia
8. Universidade dos Açores, Departamento de Ciências da Educação
low academic achievement and high dropout that affect many schools. The general objective of this project is to study the engagement of Portuguese students in schools and how engagement is related with personal and contextual variables (such as motivational beliefs, and instructional and social relatedness contexts). Student engagement in schools (SES) is a multidimensional construct that unites affective, behavioural, and cognitive dimensions of student adaptation in the school and has influence on students’ outcomes. In a recent study, Lam & Jimerson (2008) developed the – Student Engagement in School Questionnaire – (SESQ), to evaluate the 3 dimensions of school engagement; including items about personal and contextual variables (see literature review for more details). The team is composed by several university researchers, from North to South of the country, including Azores Islands. Our project aims the study of the Portuguese students’ engagement in schools, and analyzes relationships between personal and contextual factors, as well as the consequences of school engagement in the student (academic, behavioral and emotional consequences). The school, as a psycho-educational space, is understood as an ecologic and systemic context in which the students’ development takes place. For this, we conceptualize 2 major studies, one differential (Study 1) and another with a quasi-experimental design (Study 2), to analyse: 1) the relationships between student’s school engagement and factors of the instructional context; 2) the relations between student’s school engagement and factors of the socio-relatedness context; 3) the relations between student’s school engagement and personal factors; 4) the relations between student’s school engagement and student’s outcomes, such as academic performance and behaviour; 5) the relationships between student’s school engagement and the representations of their teachers about their academic performance and behaviour; and 6) the effects on student’s school engagement of one intervention programme, the – Eclectic Communication Model – MCE (Veiga, 2007; Veiga et al., 2009). In study 1, the sample size is around 600 students (150 6th graders, 150 7th graders, 150 9th graders, and 150 10th graders). We shall focus on years of school transition, with rural and urban populations, on different regions of the country, and on students with different family background. We shall conduct questionnaires with national and international scales. The study 2 will involve students in 7th and 9th grade, from four classes, two of the experimental group and two of the control group. The results of our studies will allow: a deeper knowledge of Portuguese students’ engagement; a better comprehension of the relationships between school engagement and personal and contextual variables; an analysis of the effect of the intervention programme to promote students’ engagement and positive outcomes. In summary, our project has national diversity, in a cohesive team of university researchers with experience in the study of these contents. In this project, we go beyond the usual relational research: the intervention designed to promote students is an interest translated into specific tasks. Our project is also concerned with the mission of schools in the promotion of the personal and social development of the students.

Literature review

The concept of Student Engagement in Schools (SES) has received much interest from researchers (Archambault et al., 2009; Fredericks, Blumenfeld & Paris, 2004; Lam & Jimerson, 2008). In our project, the SES construct is revisited, attending to specific groups of students and variables, as reflected in the review that follows.

**Concept of Student Engagement in Schools (SES).** Student engagement in schools (SES) is a multidimensional construct that unifies affective, behavioral, and cognitive dimensions of student adaptation in the school (Archambault et al., 2009; Jimerson, Campos, & Greif, 2003). Affective engagement refers to students’ feelings about learning (Fredericks, Blumenfeld & Paris, 2004) and the school they attend (Schussler, 2009; Smyth, 2006). Behavioral engagement refers to students’ persistence and effort in learning (Smyth, 2006; Verkuyten & Thijs, 2009) and their involvement in extra-curricular activities in the school (Fredericks, Blumenfeld
Cognitive engagement refers to the quality of cognitive processing that students bring to academic tasks (Walker, Greene, & Mansell, 2006). Student engagement provides researchers and school practitioners with an integrated perspective (Fredrick, Blumenfeld, & Paris 2004).

**Significance of Student Engagement in Schools.** In recent years the concept of SES has attracted growing interest in the field of education (Fredrick, Blumenfeld, & Paris, 2004; Walker, Greene, & Mansell, 2006). Many educators and researchers see it as a solution to the problems of low academic achievement and high dropout rates that plague many schools (Archambault et al., 2009; Veiga, 2007; see Fredrick, Blumenfeld, & Paris, 2004 for a review). The literature on intrinsic motivation indicates that enjoyment and interest in learning tasks are predictive of higher academic achievement (Archambault et al., 2009; Ryan & Deci, 2000). Similarly, there is a consistent positive association between teacher and student reports of behavioral engagement and achievement (Archambault et al., 2009; Ryan & Deci, 2000). In the literature on self-regulated learning, cognitive engagement relates positively to students’ in-depth understanding and synthesis (Schussler, 2009; Smyth, 2006) and to various indicators of academic achievement (Boekart, Pintrich, & Zeidner, 2000; Zimmerman & Schunk, 2007).

**Background of Student Engagement in Schools (SES).** Student engagement in schools (SES) is a relatively new theoretical construct. Few empirical studies have addressed all three dimensions (affective, behavioral, and cognitive) of the construct. In search of the antecedents of student engagement in schools, we can look at the literatures on motivation, school bonding, and self-regulated learning (Schussler, 2009; You & Sharkey, 2009; Schunk & Zimmerman, 2006). Two sets of factors – of contextual and personal nature – have emerged.

**Contextual Factors.** In the Study 1 of this Project, we have research questions that aim to analyze the relationship between SES and contextual factors. In the school, at least two sets of contextual variables are likely to influence SES. How teachers teach in classrooms has tremendous impact on student motivation (Caldeira & Veiga, in press; Neves & Carvalho, 2006; Fredrick, Blumenfeld, & Paris, 2004). Research has identified important components of motivating contexts and that the teachers’ communication has a very important impact on students. Social-relatedness contextual factors can also affect SES. Children who report a higher sense of relatedness to teachers and peers show greater engagement (Furrer & Skinner, 2003; Gest, Welsh, & Domitrovich, 2005). The impact of contextual factors in SES and career decisions has also been documented (Bahia, Janeiro & Duarte, 2007). Our research on school bullying also reveals that children with a larger circle of friends and lower levels of peer victimization tend to like school more (Almeida et al., 2008; Veiga, 2008). It has also been documented that parental involvement (Festas, 2007; Veiga, 2001, 2009 a) contributes to SES and academic performance (Veiga, 2001; 2008; Veiga et al., 2009).

**Personal Factors.** In Study 1, the research questions analyze the relationships between SES and personal factors. Several beliefs seem essential to students’ intrinsic interest and may be important proximal determinants of SES (see Schunk & Zimmerman, 2006 for a review). These beliefs include goal orientations, attribution and self-efficacy (Fredricks, Blumenfeld & Paris, 2004; You & Sharkey, 2009). Students with learning goals are more persistent after failure than students with performance goals (Lam & Jimerson, 2008; Veiga et al., 2009). Goal orientation affects not only students’ persistence and effort in learning but also their cognitive engagement (Fredricks, Blumenfeld & Paris, 2004; Schussler, 2009; Smyth, 2006; You & Sharkey, 2009). The association between students’ rights and SES has also been documented (Veiga, 2001; Veiga et al., 2009).

**Student Engagement in Schools and Outcomes.** In study 1, there are also research questions that aim at examining the relationships between SES and student outcomes. In the literature, SES is considered a mediator between contextual influences and academic, social, and emotional learning outcomes (Fredericks et al., 2004). Literature indicates that a sense of school belonging relates not only to academic achievement (Festas, 2007; Lam & Jimerson, 2008; You & Sharkey, 2009), but also to a wide range of adjustment outcomes, such as school
disruptive behavior, violence and delinquency (Maddox & Prinz, 2003; Melo & Pereira, 2007; Veiga, 2007, 2008). Research on the influence of race and social class in student engagement has shown that students who begin class with weaker reading and writing skills are less likely to be engaged, setting the stage for a cycle of reduced achievement growth (Kelly, 2008). We found that student engagement in schools is a buffer against poor academic achievement and a myriad of negative adjustment outcomes (Lam & Jimerson, 2008; Veiga, 2008; Veiga et al., 2009).

Teacher-student communication. The study 2 considers teacher-student communication. Patterns of verbal communications between a teacher and students can influence the classroom environment, student management in the classroom, and SES (Archambault et al., 2009; Fredericks, Blumenfeld & Paris, 2004; Hargie, Saunders, & Dickson, 1995; Veiga, 2007; Veiga et al., 2009). The ”Eclectic Communicational Model” (Veiga, 2007, 2009 b) will be used by teachers to promote SES. This model of communication would result in more effective student management and more time on-task for learning.

Plan and methods

The main objective of this project is the study of the students’ engagement in schools, how it is influenced by personal and contextual factors, and how these factors relate to student outcomes. The project aims at a further understanding of the multidimensional concept of engagement (affective, cognitive and behavioural). The general research problem of this study is: what factors are involved in students’ engagement in schools? To answer this problem we formulated the following research questions: Q1. What are the relations between students’ engagement in schools and factors of the instructional context? Q2. What are the relations between students engagement in schools and factors of the socio-relatedness context? Q3. What are the relations between students’ engagement in schools and personal factors? Q4. What are the relations between students’ engagement in schools and student’s outcomes? Q5. What are the relations between students’ school engagement and the representations of their teachers about their behaviour and school outcomes? Q6. What are the effect on students’ engagement in schools of specific intervention programme (Eclectic Communicational Model – ECM), designed to promote positive engagement? Each of these six major research questions can lead to other more specific ones, in order to deepen and improve the understanding of the different concepts and variables in analysis.

Methodology

For the research questions 1 to 5 (Q1 to Q5): The sample size is approximately 600 students (150 6th graders, 150 7th graders, 150 9th graders, and 150 10th graders). We shall focus on years of school transition, with rural and urban populations, on different regions of the country (north, centre, south, and Azores islands), and on students with different family background. We shall conduct questionnaires with national and international scales. For research question five (Q5), each student of the sample will be evaluated on engagement by one teacher of each of the classes of the sample.

For Q6 (Study 2): the sample will involve students in 7th and 9th grade, from four classes, two of the experimental group and two of the control group. In what regards both nationality and academic performance, the groups are to be considered equivalent, as well as in the results obtained in the SES scale, with no significant differences between these groups in the pre-test situation. Instruments – Student Engagement in School Inquiry (Lam & Jimerson, 2008). This inquiry has items about the Student Engagement in School, SES (affective, cognitive
and behavioural) and about the following concepts: Instructional Contexts; Personal variables (goal orientations, attributions, learning self-efficacy, and motivating instructional); Social-relatedness contexts (teacher support, peer support, peer aggression, peer victimization, and parental support); and Student outcomes. A Portuguese adaptation of the questionnaire will be used. – Student Engagement in School – Teacher Report Form (Lam & Jimerson, 2008). This questionnaire assesses behaviour and school outcomes of each student of the sample, in teacher opinion. – Others instruments: Traditional bullying and cyberbullying practices (Portuguese adaptation); Questionnaire of Self-efficacy.

Data analyses

The data collected will be processed using SPSS. We will use both descriptive statistics and multivariate data analysis. Specifically, we will analyse: a) the variations in students’ engagement in schools (SES); b) the relationships among the concepts of SES and instructional, contextual, personal, and outcome variables; c) the relationships among those constructs; the effects in SES of instructional, contextual, and personal variables, using multiple regression analyses and tests of mediation models.

Expected Results. The theoretical model allows us to expect strong relationships among the concepts of SES and instructional, contextual, and personal factors; we also expect that the concepts of SES have a role of mediation between the instructional, contextual, and personal factors and students outcomes. Positive effects of the Eclectic Communicational Model (ECM) in the SES are also expected. Impact The results of this project will allow: a deeper knowledge of Portuguese students’ engagement; a better comprehension of the relationships between school engagement and personal and contextual variables; analyses of intervention programmes to promote engagement and positive outcomes.

Task description and expected results

Year 1. During the first year of the project, the research team will develop the following tasks: – Review relevant literature – Review existing new instruments. Analyze the possibility of adaptation of some of these instruments after a pilot study. Final decision of the choice of the instruments to be used in the data collection. – Selection of the sample in different regions of country. The classes will be chosen randomly within each school. We will include transition years. We will also include in the sample students in special programs for students at risk of dropping out. – Data collection, in the Study 1.

Year 2. Data analysis, in the Study 1. Implementation of Study 2 (quasi-experimental). Based on the results of the tasks of the 1st year, we will select the classes for intervention. The teachers of those classes will attend training workshops for the development of teacher-student communication, according the Eclectic Communicational Model (ECM). The study will proceed in two phases: training of teachers in the Eclectic Communicational Model (initial seminar, with subsequent meetings for reflection and planning), and intervention in the experimental groups (with support from researchers, review meetings and case discussions, and exchange experiences to meet the specific needs of students, and possible revision of strategies). This provides a study of longitudinal nature, with a quasi-experimental research model, specifically the type O₁ X O₂ / O₃ – O₄, with records before (O₁) and after (O₂) treatment (X) in the experimental groups and control groups (O₃, before, and O₄, later). After the training of teachers in the Eclectic Communicational Model (SCM) and the identification of the groups of students involved in an investigation, the Students Engagement in will be administered before and after the intervention. The intervention eclectic communicational program will be applied
to the experimental group, whereas the control group will continue to have the same kind of teacher-student relationship. The intervention will last approximately 24 weeks of school, in four classes of students, from schools participating in study 1. It is expected, through the analysis, that the differences between the control group and experimental group shift from non-significant in a pre-test to statistically significant and in favor of experimental group in the post-test. Teachers involved in the implementation of the program will be provided with monitoring and support in the continuation of the training given prior to the experiment. At the end of this phase teacher will be interviewed

Year 3. Data analysis, in Study 2 (the effect of the communicational intervention in students’ engagement). – Evaluation of the total project. – Elaboration of a communicational program to be used by teachers, based on data supplied by students and on interviews with teachers. – Description of a final report to disseminate the results of the Project, deriving and specifying lines of research to be developed with teachers and post-graduate students.

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In summary, the project has national diversity, in a cohesive team of university researchers with experience in the study of these contents. In this project, we go beyond the usual relational research: the intervention designed to promote students is an interest translated into specific tasks. Our project is also concerned with the mission of schools in the promotion of the personal and social development of the students.

References


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