Perceived Social Support, School Engagement and Satisfaction with School

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Abstract

There is evidence that social support from families, peers and teachers has an influence on student engagement, academic success, and satisfaction with school. The aim of this work is to use structural equations to analyze the effects of the perceived academic support and the school engagement on the satisfaction with school. A battery of measurement tools was administered to 2028 Angolan students aged between 14 and 22 years (mean = 17.4; SD = 2.3). The results show the influence of the perceived academic support of teachers, family, and peers on the satisfaction with school using the school engagement as mediating variable. The perception of peer support does not show a predictive capacity for school engagement. Receiving support from family and teachers is relevant for pupil engagement and satisfied with school.

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Introduction

Subjective well-being is a term used to describe the level of well-being that people experience based on a subjective assessments of their lives. These assessments, which can be both positive and negative, include judgments and feelings about life satisfaction, interest, commitment, and affective reactions such as joy and sadness in the face of life’s events. They also include feelings of satisfaction with work, social relationships, health, recreation, purpose in life, and other important domains (Diener & Ryan, 2009). One of these domains is the school context; hence satisfaction with school is one of the most important aspects of quality of life during childhood and adolescence (Verkuyten & Thijs, 2002). Satisfaction with school is defined as “the subjective and cognitive appreciation of the perceived quality of life in school” (Baker, Dilly, Außerperle, & Patil, 2003, p. 210). It is determinant in student’s development and it is associated with other variables such as well-
The scientific literature confirms the important role of social support from family, peers and teachers on the students' school engagement (Estell & Perdue, 2013; Garcia-Reid, Peterson, & Reid, 2015; Ramos-Díaz, Rodríguez-Fernández, Fernández-Zabala, Revuelta, & Zuazagotia, 2016; Simons-Morton & Chen, 2009, Wang & Eccles, 2012). In addition, social support is also related to other variables such as academic achievement and satisfaction with school (Elmore & Huebner, 2010; Li, Lynch, Kalvin, Liu, & Lerner, 2011; Sivandini, Koohbanani, & Vahidi, 2013).

In this vein, Estell and Perdue (2013) analyze the association of social support from family, teachers and peers with two forms of affective and behavioral engagement, finding that although the family support is associated with higher levels of behavioral engagement, peer support is associated with higher levels of affective engagement. Ramos-Díaz et al. (2016) highlight the direct effects of the relationships between perceived social support from teachers and family, however, the direct effect of peer support on school engagement is not significant, only indirectly through self-concept. Wang and Eccles (2012) find that different sources of support are not equally important in their impact on school engagement. Social support of the family predicts more strongly the engagement and identification with the school of the adolescents, while social support from teachers shows less intensity. Sivandini et al. (2013) conclude that social support is not a significant predictor of academic achievement, but it is one of the predictors of school satisfaction.

Social support facilitates school participation, particularly if the agents who provide it also promote student engagement. According to Wang and Holcombe (2010), teachers' social support predicts a series of indicators of school engagement, represented by school participation, school identification and the use of self-regulation strategies. Students who feel supported by their teachers tend to meet their expectations to a greater extent, which, in turn, reduces distraction and deviant behavior. Positive friendships are linked to increased participation and involvement with the school, while negative friendships are associated with disconnection from school (Garcia-Reid et al., 2015). According to Simons-Morton and Chen (2009), adolescents who perceive the support of their parents are more likely to be involved in prosocial activities, show interest and participate actively in school, while avoid getting into trouble.

However, Persson et al. (2016) indicate that although there is some research that has studied the satisfaction with school of adolescents and its connection with variables such as social relations, this should be further investigated because of their importance in the adolescents' development. In addition, most of the studies have focused on the consequences of school satisfaction, and there have been few to analyze its predictors. This is even more necessary in countries such as Angola, where four decades of successive wars have deteriorated the normal climate of coexistence and the vital trajectory of people, while paralyzing research in any of their fields.

Based on the aforementioned theoretical framework, the objective of this paper is to analyze the relationships between students' perception of the importance of social support from their family, peers and teachers on their school engagement and their satisfaction with school, as shown by the model of Figure 1. This model presents the effects of relevant predictors on school satisfaction, and it does so through a complete mediation hypothesis through school engagement. That is, the model simultaneously tests prediction and mediational hypotheses. It is based on three hypotheses: (a) that the perception of the social support of family, peers and teachers has a direct effect on students' school engagement; (b) that school involvement shows predictive capacity on satisfaction with school; and (c) that, as a consequence of previous direct effects,
there is an indirect effect of perceived social support dimensions on satisfaction with school.

Method

Participants

By means of incidental or convenience sampling, 2028 students aged between 14 and 22 years (M = 17.4, SD = 2.3) were selected. Of these, 51% are women and 49% are men, and 52.8% live in urban areas. Participants are studying studies equivalent to the levels of Secondary Education and Baccalaureate in the Spanish educational system, distributed by age and sex as shown in Table 1.

Participants were recruited at 18 educational centers in the Benguela region (Angola), 13 of which correspond to the level of Secondary Education and five of Baccalaureate. All educational centers are public and are located in medium-low socio-economic environments. Cultural level of their parents: 1.03% are not aware of it, 7.59% did not study, 24.11% had basic studies, 40.28% had secondary studies, 13.8% had bachelors, and 13.01% had higher studies. With respect to the level of studies of mothers, 1.08% are unknown, 11.34% did not study, 33.38% basic studies, 40% secondary studies, 9.17% bachelors and 5.03% higher studies.

Instruments

Family support. To measure students' perception of social support from family, the Significant Other Academic Support Scale by Sands and Plunkett (2005) was used. Of the total scale, only the factor of support of fathers and mothers was used. For the present study, this scale, which is made up of six items, refers to the globally support of parents (e.g., “My parents help me do well in school”). From the application of a Confirmatory Factor Analysis (CFA), the following fit indexes were obtained: $\chi^2 = 34.56, p < .001$, $CFI = .995$, $RMSEA = .037$, confirming the unidimensionality of the scale. The authors report a reliability of .83. The present sample yields an alpha of .73, a composite reliability coefficient (CRC) of .79, an average variance extracted (AVE) of .37 and omega of .76.

Social support of teachers and peers. It is based on two subscales from Lam et al. (2012) that measure teacher support using three items adapted from the Caring Adult Relationships in School Scale, and peer support with three items adapted from the Caring Peer Relationship in School Scale, both from the California Healthy Kids Survey (WestEd, 2000). For this study, a scale consisting of these two subscales was used, with six items, three of them for teacher support (e.g., “In my school/college, there is a teacher who cares about me”), and others three for peer support (e.g., “In my school/college, I have a friend who helps me when I have difficulties/problems”). From the application of a CFA to this scale, the fit indexes were: $\chi^2 = 32.74, p < .001$, $CFI = .992$, $RMSEA = .039$, confirming the two factors reported by their authors. Lam et al. (2012) report reliability of .79 and .82. For this sample, the reliability coefficients are .71 and .70, a CRC of .71 and .72, an AVE of .37 and .33, and omega of .64 and .61, respectively.

School engagement. The Engagement Scale, by Nie and Lau (2009) was used. This measure is based on a report from students about their attention, effort, and participation in class activities. It is composed of five items (e.g. “I strive to answer the teacher’s questions”), grouped into a single dimension. The CFA of this scale provides the following fit indexes: $\chi^2 = 98.11, p < .001$, $CFI = .970$, $RMSEA = .056$, which confirms its unidimensionality. Nie and Lau report a reliability of .86. With data from this sample, the alpha value is .74, the CRC = .83, an AVE of .36 and omega = .74.

Satisfaction with school. It is measured through the Satisfaction with School Scale, by Nie and Lau (2009), elaborated from items of the scales created by Huebner (1994). It consists of four items (e.g., “I am happy to be in this school”) indicators of a single dimension. The adjustment indexes provided by the CFA are: $\chi^2 = 25.61, p < .001$, $CFI = .994$, $RMSEA = .066$. This confirms that the scale is unidimensional. The authors report reliability of .86. With this sample the alpha value is .77, CRC = .75, AVE = .47 and omega = .77.

All the instruments used are formulated so that students can answer on a five-point Likert-type scale, from (1) Totally disagree, to (5) Totally agree.

Procedure

First, permission from the authorities of the Angolan Ministry of Education was requested to develop the research. Then, authorities of the schools who have expressed their willingness to cooperate were contacted to explain what the research is and get their permission to carry it out. Finally, the students were informed of the research aim and were given a letter addressed to the family of minors, requesting permission for their participation in the...
study. All participating students do so voluntarily, after returning the informed consent. None refuses to participate. The percentage of response was greater than 87%, and of the 2117 questionnaires collected there was a loss of 4.2%. This study complies with the ethical values required by the American Psychological Association (APA) ethical code, and it had the explicit permission of the Angolan Ministry of Education and each of the participating educational institutions.

Prior to the application of the instruments, they were translated into Portuguese, using reverse translation. Beyond simple reverse translation or back-translation (Muñiz, Elosua, & Hambleton, 2013), it was reviewed by a joint committee with knowledge of languages and cultures and specialists in the field of evaluation, and pilot tests were carried out to verify the understanding of the instruments.

The self-administered instruments were applied by a member of the research team, in the students’ classrooms and during normal classroom hours, without the presence of their teachers to maximize the anonymity of the answers and guarantee the confidentiality of the process. The interviewers were trained to solve any questions or problems that students may pose. The time spent completing the survey was approximately 15 minutes.

Data analysis

The data were analyzed at four levels: (a) Confirmatory Factor Analysis (CFA) to verify the adequacy of the instruments to the sample under study; (b) analysis of the reliability of the instruments, using the Cronbach alpha coefficient, the Composite Reliability Coefficient (CRC), the Average Variance Extracted (AVE), and omega; (c) bivariate correlations between the variables studied; and (d) Structural Equation Modeling (SEM) with latent factors was used to predict satisfaction with school based on the perception of social support, acting as a mediator school engagement. Confirmatory models were estimated using maximum likelihood with robust Satorra-Bentler corrections in standard errors and statistical fit indexes (Finney & DiStefano, 2006). In order to evaluate the models fit, the indexes that are usually recommended in the specialized literature were used. The CFI (Comparative Fit Index) was calculated, for which the .90 or higher value is usually considered appropriate to accept the model; The RMSEA (Root Mean Square Error of Approximation), parsimony index and error measure, with values lower than .08 considered acceptable to affirm that a model is plausible, the SRMR (Standardized Root Mean Square Residual) as an absolute index that shares criteria with the previous one, and the chi-square test. The cut-off values for an appropriate fit are proposed in Kaplan (2000) and Kline (2016). To compare nested models, a contrast was made between chi-square statistics. For the estimation of all structural models the statistical package EQS 6.7 was used (Bentler, 2006). In addition, SPSS 22 analyzes of bivariate correlations and related mean differences between the variables studied were performed.

Results

Descriptive statistics and correlations between the study variables

After having verified through CFA that all the instruments used for data collection are suitable for application to the present study sample, the descriptive and correlations shown in Table 2 were calculated. As can be seen, the means obtained by the students exceed the mean (central) value of the measurement scales. The scores assigned to the perception of family support ($M = 4.11$, $SD = 0.68$) and school engagement ($M = 4.00$, $SD = 0.64$) are slightly better. They are, in turn, the two factors that less dispersion present. An ANOVA with repeated measures on these five variables shows that there are significant differences between their means [$F(4,8108) = 144.2$, $p < .001$, $\eta^2 = .066$]. Bonferroni correction tests show that all pairs of means are significantly different ($p < .05$), with the exception of teacher support and satisfaction with school.

In the relationships among the variables studied, all correlations are positive and statistically significant, but of low magnitude, except between perceived peer support and teacher support ($r = .44$, $p < .01$).

Prediction of the satisfaction with school

The initial hypothetical model (Figure 1) suggests that the support of family, peers and teachers directly and positively predict students’ engagement, and this, in turn, predicts their satisfaction with school. This general a priori model is tested by a structural equation model with latent factors to predict school satisfaction, from the perception of family, peer and teacher support, with school engagement as the mediator. The model fit indexes are satisfactory: $\chi^2(182) = 662.41$, $p < .001$, CFI = .935, RMSEA = .036, 90% RMSEA confidence interval = .033–.039, SRMR = .046. However, the Lagrange Multipliers test (LM-test) provides information on the direct effect of teacher support on school satisfaction, so this structural path was added to the initial model, improving its fit (Figure 2). The goodness of fit indexes of this second model are: $\chi^2(181) = 593.70$, $p < .001$, CFI = .944, RMSEA = .034, 90% RMSEA confidence interval = .031–.037, and SRMR = .038, which indicates that the model fits the data correctly. Additionally, the two chi-square tests were checked to see if the modified model is statistically better than the initial model, the chi-square difference test corroborates that the new model better fits the data ($\Delta \chi^2(1) = 83.26$, $p < .001$).

According to Figure 2, the saturations of the indicators of family, peer, and teacher support, student engagement and satisfaction with school are high. With the exception of the first item of family support (.304), the remaining saturations show values between .475 and .819.

The results of this model (Figure 2) show that family and teacher support predict 18% of school engagement’s variance, with structural coefficients of $\beta = .272$, $p < .01$ and $\beta = .269$, $p < .01$, respectively. The relationship between peer support and school engagement is not statistically significant ($\beta = -.017$, $p > .05$). School engagement predicts satisfaction with school ($\beta = .296$, $p < .10$). In addition, a direct relationship is obtained between teacher support and school satisfaction ($\beta = .229$, $p < .01$). As for the indirect effects of the three dimensions of social support, the indirect effects of family support ($\beta = .080$, $p < .001$) and teacher support ($\beta = .079$, $p < .001$) are statistically significant, but not the peer support indirect effect ($\beta = -.005$, $p > .05$). Satisfaction with school variance is predicted by 23% due to student engagement and teacher support.

Discussion

There is evidence that student satisfaction with school is an under-studied variable (Elmore & Huebner, 2010), and there is a significant relationship between this and other variables of adolescent development (subjective well-being, academic success, school integration), as well as the prevention of undesirable behaviors (Estell & Perdue, 2013; Korobova & Starobin, 2015; Wang & Fredricks, 2014). Based on this, it is hypothesized, on the one hand, that the perception of social support from family, peers and teachers predicts school engagement; on the other hand, that school engagement shows a predictive capacity for satisfaction with school; and, finally, that the dimensions of perceived social support indirectly affect satisfaction with school.

The first hypothesis is partially confirmed, since the perception of family and teacher support shows a positive, significant and direct
Table 2
Means, standard deviations, and bivariate correlations between the study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Family support</th>
<th>Peer support</th>
<th>Teacher support</th>
<th>School engagement</th>
<th>Satisfaction with school</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Family support</td>
<td>1</td>
<td>.25**</td>
<td>.27**</td>
<td>.29**</td>
<td>.16**</td>
</tr>
<tr>
<td>2. Peers support</td>
<td></td>
<td>1</td>
<td>.44**</td>
<td>.20**</td>
<td>.19**</td>
</tr>
<tr>
<td>3. Teacher support</td>
<td></td>
<td></td>
<td>.24**</td>
<td></td>
<td>.23**</td>
</tr>
<tr>
<td>4. School engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5. Satisfaction with school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4.11</td>
<td>3.81</td>
<td>3.65</td>
<td>4.00</td>
<td>3.70</td>
</tr>
<tr>
<td>SD</td>
<td>0.68</td>
<td>0.94</td>
<td>0.93</td>
<td>0.64</td>
<td>0.97</td>
</tr>
</tbody>
</table>

*M* = Mean; *SD* = Standard Deviation.

** p < .01.

Figure 2. Standardized solution of the hypothesized structural model.

Notes. Fsup: Family support, Psup: Peer support, Sen: School engagement, Ssc: Satisfaction with school, Tsup: Teacher support. All relationships shown are significant with *p* < .01, except that denoted as n.s (non-significant).

effect on student engagement. However, the perception of peer support does not show predictive capacity on school engagement. These results corroborate those of Lam et al. (2016), and are in great agreement with those of Ramos-Díaz et al. (2016), although in its case the structural model poses the prediction of school engagement with the mediation of self-concept. These authors also draw direct effects from the relationships between perceived social support of teachers and family, while the direct effect of peer support on school engagement is only indirectly significant through self-concept. On the other hand, these results differ slightly from those provided by Estell and Perdue (2013). In their case, they find that just as the family support is associated with a higher level of behavioral engagement, the peers support affects to a greater degree on the students’ affective engagement, not being significant the teachers support, despite that the relationships of teacher support with affective engagement and students’ behavioral engagement are significant in the correlation matrix.

The second hypothesis, which suggests that school engagement is capable of predicting school satisfaction, is fulfilled. These results are in the same line as those obtained by Elmore and Huebner (2010), although the study of these authors considers satisfaction with school as a predictor of school engagement, while in the present work the reverse direction is posed, that is, that school engagement predicts satisfaction with school.

The third hypothesis refers to the existence of an indirect effect of social support dimensions on satisfaction with school, through school engagement as a mediating variable. This hypothesis is fulfilled to a great extent, since family and teacher support predict school engagement, and this satisfaction with school. The perception of peer support does not add significance to the prediction of school engagement, as in the study by Lam et al. (2016), and therefore not to satisfaction with school.

An effect that is not hypothesized in the initial theoretical model is the direct effect of teacher support on satisfaction with school. This does not mean that teachers do not bring their indirect influence through school engagement, but it does so also directly on students’ satisfaction with school. Similar behavior of this variable is found in the work of Ramos-Díaz et al. (2016), although in this case it is to predict school engagement, with its direct effect being more potent than the indirect effect mediated by self-concept.

As conclusion, it should be noted that perceiving social support from family, peers and teachers is relevant to feeling engaged, and this is positively associated with being satisfied with school. If
satisfaction with school is defined as the subjective assessment of the quality of school life (Baker et al., 2003, p. 210), it seems natural that the committed students, especially in an affective way, find satisfaction with school. As Noddings (2003) notes, children learn best when they are happy.

From an applied perspective, these results highlight the importance of the relationships between teachers and students, as well as the family support, to achieve a good school adaptation, a high school engagement, and a high satisfaction with the educational context. It should be remembered, as Taylor et al. (2014) stated, that schools are considered appropriate places to help young people to develop their full potential and feel good about themselves. In the teachers hands falls part of the responsibility to fulfill this objective, because as Beckman, Hagquist, and Hellström (2012) and Persson et al. (2016) pointed out, a threat to adolescents’ enjoyment of school is negative social relations, such as bullying, which has a damaging impact on students’ mental health and their ability to learn as well as in the general school climate.

Like any study, this has some limitations. Although the sample size is large, data are obtained through convenience sampling, and through students’ self-reports, which may incorporate the effect of social desirability, and there is a risk of self-selection. Therefore, it is necessary to establish a degree of caution about the evidences obtained. In addition, all the variables of the proposed model are self-reported and no external data more objective is available, so the inclusion of objective variables in future research is suggested. Another limitation is that the data are cross-sectional, so cause-effect conclusions cannot be established. A longitudinal design could provide greater assurance to conclusions, specifying the directionality of the relationships between social support, school engagement and satisfaction with school. It is also a limitation the lack of research background in Angola on the subject of school adjustment, except for the study of Gutiérrez and Romero (2014), although it is a work on the prediction of satisfaction with life and attitudes toward drug use, based on the perception of social support, acting as a mediator in the adolescents’ resilience. This hinders the contrast with the results of other studies in the same sociocultural context.

Additionally, the structural equation model tested here is only one of the possible models, and there may be other models capable of contributing with new explanations to the interpretation of the relationships between the variables studied. For example, Elmore and Huebner (2010) and Scharenberg (2016) report that most studies examine satisfaction with school as an outcome variable. However, studies such as Ladd, Buhs, and Seid (2000) conclude that student satisfaction with school determines their behavioral school engagement. In addition, in the study by Danielsen et al. (2011), satisfaction with school plays the role of mediator among other school variables, but Elmore and Huebner (2010) find that adolescents’ satisfaction with school is an independent predictor of their school engagement, regardless of quality of their attachment relationships with family and peers. Suldo and Huebner (2004) suggest that satisfaction judgments can play a buffer role, operating to protect individuals from adverse experiences. These studies suggest that high levels of satisfaction with school or with important domains of life can both be relevant results in themselves and also significantly influence the adaptation of children and young people. Therefore, the nature of this influence, as a direct and/or moderating effect, remains open to research. Finally, based on the results obtained here, it may be relevant to evaluate not only the weight of peers’ social support but also the weight of the lack of peer support, analyzing the positive and negative affects both quantitatively and qualitatively, as do Suldo et al. (2009) to analyze the relationships between the teachers social support and the students’ subjective well-being.

References


