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The predictive power of social support's sources and types for school engagement

Capacidad predictiva de fuentes y tipos de apoyo social sobre implicación escolar

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ABSTRACT

Social support has been found to play a key role in certain adolescent school behaviours and it is widely accepted that it fosters school engagement. On the contrary, more recent theoretical contributions regarding the principal sources and types of social support during adolescence suggest that this relationship may vary. To respond to this gap in the research the aim of the present study is to determine the predictive power of social support for school engagement (behavioural, emotional and cognitive) in accordance with the source (family, friends, and teachers) and type (emotional, material and informational) of the support provided to determine the most influential ones and to test through a structural model the combined statistical effect of both perspectives. Participants were 323 compulsory secondary school students from the Basque Autonomous Community, aged between 13 and 18 years (M = 14.41, SD = 1.18), being 40% boys and 60% girls. Participants completed

two questionnaires, one measuring perceived social support and one measuring school engagement. The results of the present study show that perceived support from all sources and all types of support predict at least one of the three dimensions of school engagement. The results also indicate that support from teachers and emotional support were the source and type of support (respectively) that most strongly predicted school engagement, whose combined effect has been tested using SEM methodology. These findings may be particularly useful for designing future educational intervention programmes that seek to foster school engagement through social support. For example, intervention designs focusing on encouraging certain changes in teachers' practice to foster a learning experience based on closer relations characterised by trust and recognition are suggested.

Keywords: social support groups, learner engagement, teacher guidance, multiple regression analysis, structural equation models

RESUMEN

Se ha descubierto que el apoyo social juega un papel clave en ciertos comportamientos escolares de los adolescentes y está ampliamente aceptado que fomenta la implicación escolar. Por contra, los aportes teóricos más recientes sobre las principales fuentes y tipos de apoyo social en la adolescencia sugieren que la relación entre ambos puede variar. Para dar respuesta a este vacío de conocimiento, el objetivo del presente trabajo es precisar la capacidad predictiva del apoyo social, según las fuentes (familia, amistades y profesores) y los tipos (emocional, material e informacional) de apoyo sobre la implicación escolar (conductual, emocional y cognitiva) para determinar los más influyentes y probar mediante un modelo estructural el efecto estadístico combinado de ambas perspectivas. Participaron 323 estudiantes de Educación Secundaria Obligatoria de la Comunidad Autónoma Vasca con edades comprendidas entre los 13 y 18 años (M = 14.41, DT = 1.18), siendo el 40% chicos y el 60% chicas. Los participantes completaron dos cuestionarios, uno para evaluar el apoyo social percibido y otro para la implicación escolar. Los resultados del presente estudio muestran que el apoyo percibido de todas las fuentes y todos los tipos de apoyo predicen al menos una de las tres dimensiones de la implicación escolar. Los resultados también indican que son los profesores y el apoyo emocional la fuente y el tipo de apoyo respectivamente que en mayor grado predicen la implicación escolar cuyo efecto combinado se ha probado mediante metodología SEM. Esto podría resultar de gran utilidad para el diseño de futuros programas de intervención educativos que busquen una mejora de la implicación escolar mediante el apoyo social. Por ejemplo, se sugieren diseños de intervención enfocados a incentivar ciertos cambios en la práctica docente para propiciar una experiencia de aprendizaje basada en relaciones más cercanas caracterizadas por la confianza y el reconocimiento.

Palabras clave: fuentes de apoyo social, implicación escolar, orientación del profesorado, análisis de regresión múltiple, modelos de ecuaciones estructurales

INTRODUCCIÓN

Since the 1970s, when, thanks to the work of Cassel (1974a, 1974b), Cobb (1976) and Caplan (1974) social support first began to be regarded as an object of interest, many studies have sought to explore this construct (Diao, 2019).

However, the concept of social support is hard to define and there is a lack of consensus regarding what exactly the term means, mainly due to the existence of many different definitions and the multidimensional nature of the construct (da Silva et al., 2019). Lin (1986) took the most widely-accepted proposals and summarised them into what is generally considered to be one of the most comprehensive and accepted definitions to date (González & Mercado, 2019): the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners. This definition distinguishes between three elements: (1) whether the support is perceived or actual; (2) the source of said support (community, social networks and/or confiding partners); and (3) the type of support received (instrumental and/or expressive).

Although Lin (1986) proposed community, social networks and confiding partners as the three sources of support, it is generally accepted that during adolescence, the most important sources are family, friends and teachers (Hombrados-Mendieta & Castro, 2013), and it is these three sources that are taken into account in an increasing number of studies today (Mischel & Kitsantas, 2020).

In relation to the different types of support, although Lin (1986) distinguished between instrumental and expressive, he also recognised other classifications, such as that proposed by Schaefer et al. (1981), which is currently considered to be the most widely-used (Yang, 2021). Schaefer et al. distinguish between (1) emotional support, which includes actions and feelings of attachment and trust, etc.; (2) material support, which includes direct support such as money or other assistance services; and (3) informational support, which refers to information or advice, as well as to feedback on one's actions.

Social support has been found to play a key role in certain adolescent school behaviours, such as, for example, school engagement (Siu et al., 2021). School engagement is considered indicative of good academic functioning since it is vital to achieving optimal outcomes and reflects the student's commitment to their school, as well as their desire to learn (Benito et al., 2021).

No consensus has yet been reached regarding the definition of school engagement (Nouwen & Clycq, 2019), although there is broad acceptance of the fact that it is a multifaceted construct with the three-dimensional model proposed by Fredricks et al. (2004) being the most popular and widely-used at present (Buzzai et al., 2021). This model distinguishes between (a) behavioural engagement, referring to active participation and attention; (b) emotional engagement, which

encompasses positive and negative reactions to the school environment (feelings, trust, etc.), leading to a sense of connection and identification with the school; and (c) cognitive engagement, which reflects the student's level of investment in learning and their eagerness to learn.

Due to the variety of different definitions and theoretical conceptions of social support, few studies have explored this variable in light of the most recent theoretical-empirical findings, and while some authors have reported a general association between social support and school engagement (Tougas et al., 2016), the data presented vary in accordance with the approach adopted (sources or types of support).

Many studies have analysed the correlational relationship between social support considered in accordance with its source (family, friends and teachers) and school engagement, finding that all three sources correlate with at least one dimension of school engagement (Estell & Perdue, 2013; Furrer & Skinner, 2003; Perdue et al., 2009; Ramos-Díaz, 2015), although the extent and effect of these correlations vary, so the relation between the variables is not entirely clear. For example, although support from teachers seems to have a stronger impact on behavioural and cognitive engagement (Ramos-Díaz, 2015), and a far stronger impact on emotional engagement (Fernández-Lasarte et al., 2019), those predictive studies indicate that social support from teachers and family predict all the dimensions of engagement. Conversely, there is also evidence of the incapacity of support from family to predict emotional engagement (Cheng et al., 2020). Regarding the support from friends it has been found by some studies to predict only emotional engagement (Estell & Perdue, 2013), although in others it has been shown to have also predictive power for cognitive engagement (Ramos-Díaz, 2015). Despite it does not, however, appear to predict behavioural engagement (Estell & Perdue, 2013), recent studies guarantee the capacity of the support from friends to predict the three types of engagement (Cheng et al., 2020).

As regards the different types of support (emotional, material and informational), to the best of our knowledge, no studies have analysed their direct relationship with or direct predictive power for school engagement, since the few studies that do specify what type of support they are analysing, do so only in relation to its source. Some correlational studies (Cooper, 2014) argue that emotional support (from parents and teachers) is associated with school engagement, although others observe no relationship at all between the two, regardless of the source of support analysed (Tougas et al., 2016). However, if the results reported by studies conducting predictive analyses are considered, it can be seen that some argue that only material support (from teachers) predicts school engagement (Strati et al., 2017), while others (Furrer & Skinner, 2003) sustain that this variable is only predicted by emotional support (also from teachers). However, the most recent studies highlight the importance of teachers' emotional support in school engagement (Romano et al., 2021).

To respond to these gaps in the research, the present study aims to explore the predictive power of both sources and types of social support for school engagement in general and its different dimensions and to verify through a structural model the statistical impact of the most important source and type of social support acting jointly on the three types of school engagement. For this, the most recent theoretical findings in the field of perceived social support are taken into account.

METHOD

Participants

Among all the students planned to administer the scales, 11 (3.21% of the total available) did not provide signed informed consent and were therefore unable to complete the scales. Consequently, 331 students responded to the scales although two were eliminated for not answering more than 1% of the items and six were eliminated because of odd or inconsistent response patterns. Missing values (0.9% of the total) were replaced using the linear trend estimation at the point method, based on regression estimates. The final sample comprised 323 compulsory secondary education students from 13 different classes (four from 1st level, three from 2nd level, four from 3rd level and two from 4th level) from the Basque Autonomous Community, aged between 13 and 18 years (M = 14.41; SD = 1.18) with a medium/medium-high socioeconomic level. As regards sex, 39.6% were boys and 60.4% were girls, with both groups being evenly balanced ($\chi^2 = 4.87$, $p > .05$). The sample was selected using an incidental procedure.

Instruments

The APIK questionnaire (Izar-de-la-Fuente et al., 2019) was used to measure perceived social support. The items of this instrument refer to the source (family, friends and teachers) and type of support (emotional, material and informational). It can therefore be used to measure both variables, and in all cases comprises a total of 27 items measuring three dimensions composed of nine items each. Responses are given on a five-point Likert-type scale ranging from 'completely disagree' to 'completely agree'. In this study, the instrument has an internal consistency value of α = .90 and a McDonald's Omega coefficient of ω = .96 based on the sources of support, and of α = .90 and ω = .89 based on the types of support. Regarding the dimensions, they obtain values of family α = .89, friends α = .88, teachers α = .91, emotional α = .78, material α = .73 and informational α = .75.

The validated Spanish language version of the School Engagement Measure (SEM; Ramos-Díaz et al., 2016) was used to assess school engagement. This 19-item scale measures three dimensions of engagement: cognitive (eight items), emotional (six items) and behavioural (five items). Responses are given on a five-point Likert-type scale ranging from 'never' to 'all the time'. In this study, the scale was found to have an internal consistency of $\alpha = .83$ and a McDonald's Omega of $\omega = .90$. The dimensions obtained values of cognitive $\alpha = .76$, emotional $\alpha = .80$ and behavioural $\alpha = .63$.

Procedure

After planning the study taking into consideration the Declaration of Helsinki and obtaining approval from the Ethics Board for Research with Human Beings at the University of the Basque Country (CEISH-UPV/EHU - M10_2018_261) which certifies compliance with ethical and data protection standards, management teams of schools were contacted to present the research and request participation. After the acceptance to participate, informed consent forms were sent out to students' parents or legal guardians, informing them of the altruistic nature of their child's participation, the study aims, the procedure and the questionnaires they would be asked to complete. Special care was taken to emphasise the ethical use that would be made of the data, the voluntary nature of students' participation, confidentiality, anonymity, the exclusive use of the data for research purposes and the fact that they could withdraw at any time. Information was also provided regarding data protection and access to the results, respecting the ethical norms necessary to carry out an investigation.

The instruments were administered individually during class time in a single session only to students presenting the signed informed consent and took about 20 minutes to complete. The authors of the study were present during completion and reminded participants prior to beginning that their answers would be totally anonymous and that their participation was strictly voluntary. In order to reduce threats to the validity of the study, its objective was not disclosed to participants.

Statistical analysis

First, univariate and multivariate normality was assessed, with the results revealing normal values on some occasions but not in all cases, which may indicate a violation of the normality assumption and the need for non-parametric tests. However, asymmetry and kurtosis were not too far removed from a normal distribution. Since parametric tests have been shown to be robust enough for use in

the event of a violation of the normality assumption (Schmider et al., 2010), it was decided to use them rather than non-parametric ones.

As a necessary step prior to carrying out the predictive study, Pearson correlation analyses (statistically significant with a p of .05) were conducted between all variables to verify the existence of possible associations.

Next, to analyse the predictive statistical effect of perceived social support on school engagement, regression analyses were performed including as independent variables all those that had been found to have a statistically significant relationship or a $p < .20$ in previous correlations. This is a frequently accepted criterion (Mirghafourvand et al., 2014). The regression analyses followed the steps described below.

First, a visual inspection of the dispersion graph point curves was conducted, observing that scores were distributed around a straight line with an upwards trend. Therefore, a linear regression analysis using the entry method was carried out.

Second, the equation that best fit the data was identified calculating different statistics, including the determination coefficient (adjusted R^2) and the explanatory β coefficient, and checking that the relationship was statistically significant with a p of .05 (Pulido-Acosta & Herrera-Clavero, 2019).

Finally, after constructing the regression model, it was verified that it fit the data used for its estimation. This was done by checking the following residual assumptions:

(A) The *normal distribution of residuals*, verified by means of a histogram and a standardised residual P-P plot. This process checks whether the errors are normally distributed for each independent variable value, following the Gaussian function in the histogram and with the accumulated proportions of the variable coinciding with those of a normal distribution, represented by a line in the P-P plot (Lester et al., 2014).

(B) The *linearity of residuals* in the standardised residuals dispersion diagram, compared with the standardised estimated values. If the residuals are randomly distributed for each value of the expected scores, this assumption is deemed to be met. Any other non-random pattern is taken to indicate some degree of non-linearity and a possible violation of the model (Lester et al., 2014).

(C) The *homoscedasticity of the residuals* in the same diagram. For this assumption to be deemed to be met, scores must follow a random pattern within a horizontal band, thereby indicating that variance is constant. Any specific pattern or grouping of scores is considered a violation of this assumption and indicates the presence of heteroscedasticity (Lester et al., 2014).

(D) It was also verified *multicollinearity* between regressor variables, which is frequently analysed to check the goodness of fit of a multiple linear regression (Guerrero & Melo, 2017). Multicollinearity indicates the existence of redundant variables in the model and, in this case, was identified using the Tolerance index and its *VIF* (variance inflation factor). A tolerance of less than .10 is deemed to indicate a multicollinearity problem, as is a *VIF* of over 10.

The effect size for the regressions was also calculated using Cohen's f^2 (Cohen, 1988), estimated using the R^2 coefficient and categorised as small ($f^2 \geq .02$), medium ($f^2 \geq .15$) or large ($f^2 \geq .35$).

Finally, robust estimators were used for the analysis of the structural regression model since the normed estimate of Mardia's multivariate coefficient (19.90) deviated from a normal distribution. As goodness-of-fit indices, the normed version of the Satorra-Bentler Chi-Square (SBχ^2/df) was used, whose values of less than 3 are considered adequate; the *NFI*, *NNFI* and *CFI* whose values are recommended to exceed .90; the *RMSEA* together with its 90% confidence interval whose value of less than .08 is acceptable; and the *AIC* and *CAIC* (Kline, 2015).

The SPSS statistical package (version 25 for Windows) was used for all statistical analyses except the effect size calculations for the linear regression for which the G*Power statistical program was used and the structural regression model analysis which was conducted using the EQS program (version 6.2 for Windows).

RESULTS

Prior to the regression analyses, the correlations between the dimensions of school engagement (behavioural, emotional and cognitive) and perceived social support in accordance with the sources (family, friends and teachers) and types (emotional, material and informational) were analysed.

Regarding the sources of support, all correlated positively and significantly with the dimensions of engagement except for support from friends with behavioural and cognitive engagement ($p < .20$). The strongest correlations were obtained for support from teachers ($r = .359$ - $.576$), followed by family ($r = .266$ - $.386$) and finally by friends ($r = .096$ - $.265$).

With respect to the types of support, all of them correlated significantly and positively with the dimensions of school engagement, with emotional support being the one that obtained the strongest correlations ($r = .341$ - $.530$), followed by informational support ($r = .342$ - $.515$) and finally by the material ($r = .336$ - $.503$).

Regressions between sources of support and school engagement

To calculate the multiple linear regression models, all sources of social support were added as independent variables, since they were all found to correlate significantly or with a $p < .20$ with school engagement. However, not all independent variables were found to have significant values, which is why only those predictive models with the best fit are presented here, without the non-significant variables.

Table 1 shows the linear regressions between sources of perceived social support and school engagement and its dimensions.

Table 1

Regressions between sources of support and school engagement

V. D.	Model		ANOVA		f^2	Regression coefficients			
	R	R^2 adjusted	F (d. f.)	p		Beta	t	p	
Overall engagement	.608	.366	94.02 (2, 320)	.000	.58		10.16	.000	Con
						.210	4.439	.000	Fam
						.502	10.600	.000	Tea
Behavioural engagement	.434	.183	37.18 (2, 320)	.000	.23		14.864	.000	Con
						.260	4.839	.000	Fam
						.268	4.992	.000	Tea
Cognitive engagement	.445	.193	39.52 (2, 320)	.000	.24		4.509	.000	Con
						.132	2.474	.014	Fam
						.381	7.134	.000	Tea
Emotional engagement	.553	.299	46.86 (3, 319)	.000	.44		3.617	.000	Con
						.116	2.255	.025	Fam
						.126	2.550	.011	Fri
						.453	9.002	.000	Tea

Note. D. V. = Dependent variable; d. f. = Degrees of freedom; Con = Constant; Fam = Support from family; Fri = Support from friends; Tea = Support from teachers

Only support from family and teachers were found to significantly predict overall school engagement, but teachers had more than twice as much power as support from family ($\Delta\beta = .292$). The effect size of the model was large ($f^2 = .58$).

In relation to behavioural engagement, only support from family and teachers were found to have significant values, with the Beta values being very similar but slightly higher for teachers (Δβ = .008). In this case, the effect was medium (f^2 = .23).

Support from family and teachers were once again the only dimensions which significantly predicted cognitive school engagement, with the Beta value being notably higher for support from teachers than for support from family (Δβ = .249). For this model, the effect size was again medium (f^2 = .24).

In the case of emotional school engagement, support from family, friends and teachers were all significant. The standardised Beta regression coefficients indicated that support from teachers had the greatest weight in relation to the dependent variable, with a difference of Δβ = .327 regarding support from friends and of Δβ = .337 with respect to support from family. In this last model, the effect size obtained was large (f^2 = .44).

Based on these data, perceived support from teachers has the greatest impact on school engagement since, in addition to showing predictive power for its general factor and all its dimensions, it is the source of support that does so with the greatest intensity.

All the multiple linear regression models presented in Table 1 comply with the assumptions of linearity, homoscedasticity and normality of residuals, as well as with the assumption of multicollinearity, findings which guarantee their validity.

Regressions between types of support and school engagement

Table 2 shows the linear regressions between types of perceived social support and school engagement and its dimensions.

Only emotional and material support were found to be significant predictors of overall school engagement, with a difference in Beta value of .108 in favour of the emotional one. The effect size obtained was large (f^2 = .44).

As regards behavioural engagement, only emotional support was found to be a significant predictor, with a standardised Beta regression coefficient of β = .385. The effect size for this model was medium (f^2 = .17).

In relation to cognitive engagement, material and informational support were found to be significant predictors, with almost identical Beta indexes (β = .201 and β = .200, respectively). In this case, the effect size was also medium (f^2 = .17).

Table 2
Regressions between types of support and school engagement

V. D.	Model		ANOVA		f^2	Regression coefficients			
	R	R^2 ajusted	F (d. f.)	p		Beta	t	p	
Overall engagement	.554	.303	70.96 (2, 320)	.000	.44		7.206	.000	Con
						.350	5.024	.000	Emo
						.242	3.464	.001	Mat
Behavioural engagement	.385	.146	55.87 (1, 321)	.000	.17		15.357	.000	Con
						.385	7.475	.000	Emo
Cognitive engagement	.382	.141	27.34 (2, 320)	.000	.17		2.633	.009	Con
						.201	2.236	.026	Mat
						.200	2.227	.027	Inf
Emotional engagement	.532	.278	63.01 (2, 320)	.000	.39		2.469	.014	Con
						.376	4.836	.000	Emo
						.182	2.344	.020	Inf

Note. D. V. = Dependent variable; d. f. = Degrees of freedom; Con = Constant; Emo = Emotional support; Mat = Material support; Inf = Informational support

Finally, in terms of predicting emotional engagement, emotional and informational support were found to have significant values. Emotional support had more than twice as much power as informational support (Δβ = .194). The effect size for this model was large (f^2 = .39).

Taking into consideration the exposed data, emotional support is chosen as the type of support with the greatest capacity to predict school engagement and its dimensions, as it is the one that predicts the most dimensions and always with the greatest intensity.

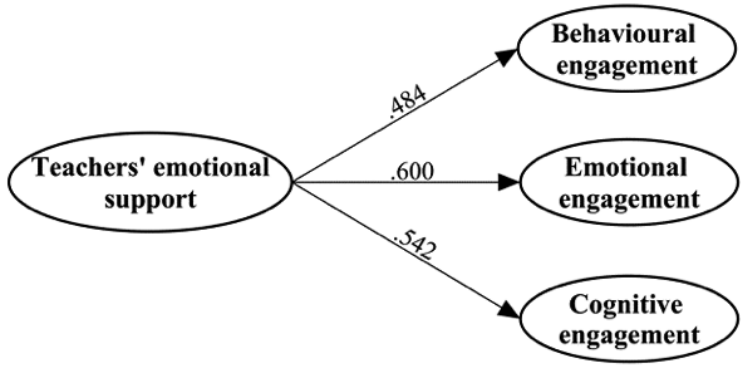
Only two of the multiple linear regression models shown in Table 2 complied with the assumptions of linearity, homoscedasticity and normality of residuals, as well as with the assumption of multicollinearity. The linear regression for emotional support on behavioural engagement and those of material and informational support on cognitive engagement failed to meet the assumption of linearity of residuals, since non-random patterns were found in the standardised residual dispersion diagrams in comparison with the standardised estimated values. This means that the correct application of these regression models cannot be guaranteed.

Structural model of teachers' emotional support for behavioural, emotional and cognitive school engagement

Based on the set of results obtained from the multiple linear regression models, a structural regression model is conducted to jointly analyse the effect of the most influential type of support perceived from the most relevant source of support on the dimensions of school engagement. Thus, in the model shown in Figure 1 perceived teachers' emotional support is established as an independent variable that directly influences the dependent variables behavioural, cognitive and emotional engagement.

The robust goodness-of-fit indices obtained ($SB\chi^2_{(202)} = 412.2821$, $p < .001$; $SB\chi^2/df = 2.04$; *NFI* = .80; *NNFI* = .89; *CFI* = .89; $RMSEA_{(90\%)} = .057_{(.049, .065)}$; *AIC* = 8.282; *CAIC* = -956.804) allow to consider the fit of the model to the data as acceptable. The model shows the direct, positive and significant influence of perceived teachers' emotional support on the three dimensions of school engagement. Specifically, the greatest effect is observed on emotional engagement (γ = .600, R^2 = .361), followed by cognitive (γ = .542, R^2 = .293) and finally by behavioural (γ = .484, R^2 = .234).

Figure 1
Standardised solution of the structural model



DISCUSSION AND CONCLUSIONS

Social support has been the object of a large body of research since the 1970s, and despite the wide variety of theoretical approaches that have been developed since that time, the theory and definition proposed by Lin (1986) remain one of the most widely-accepted among the scientific community (González & Mercado, 2019). In recent years, however, other authors have developed Lin's theoretical approach, viewing the principal sources of support during adolescence as being

family, friends and teachers, and the principal types of support as being emotional, material and informational (Hombrados-Mendieta & Castro, 2013; Schaefer et al., 1981).

Nevertheless, few studies have attempted to analyse the role played by each type of perceived social support and the support provided by each of the main sources in school engagement and its different dimensions. No consensus has yet been reached regarding whether all sources have the same statistical impact on engagement and its dimensions, or the extent of the impact had by each one, existing abundant contradictions regarding support from family and friends (Cheng et al., 2020; Estell & Perdue, 2013; Fernández-Lasarte et al., 2019). Nor is there any agreement regarding what type of support (regardless of source) best predicts school engagement, with some authors claiming it is material (Strati et al., 2017) and others emotional support (Furrer & Skinner, 2003) although the most recent contributions highlight the emotional support from teachers as being of great importance in school engagement (Romano et al., 2021).

The results of the present study suggest that perceived support from all sources, including friends, predicts at least one of the three dimensions of school engagement. Here, albeit fairly weakly, support from friends was found to predict emotional engagement, which is consistent with previous contributions (Estell & Perdue, 2013), but considerably different from those studies in which support from friends predicts the three types of engagement (Cheng et al., 2020).

Our findings confirm that adolescents' perceptions of the support provided by their family and teachers may predict their level of school engagement in all its dimensions (behavioural, cognitive and emotional), with support from teachers being clearly the most decisive. Both the predictive power of both sources of support and the superiority of teachers is consistent with that reported by previous studies (Fernández-Lasarte et al., 2019; Ramos-Díaz, 2015), but contradict at the same time recent contributions that deny the potential of support from family to predict emotional engagement (Cheng et al., 2020).

The strong influence of support from teachers on all dimensions of school engagement may be due to the fact that each source of support predominates in different situations, within a specific area. For example, teachers play a crucial role in students' future school engagement, family may be the principal source of support in everyday personal situations and peers may be vital in situations linked to leisure. Consequently, support from friends was found to (weakly) predict only one of the dimensions of school engagement: emotional engagement. This may be due to the fact that, in their efforts to become more independent and consolidate their social networks, adolescents reserve their friendships for environments that are outside the school and family spheres and in which they can share interests and pursue greater intimacy and fun. Regarding support provided by the family,

it should not be overlooked, since although its influence is not as strong as that provided by teachers, it is nevertheless a factor that predicts all kinds of school engagement. Although, during adolescence, less importance is attached to support from family and families are less involved in their children's academic lives (Dueñas et al., 2020), teenagers are still not entirely autonomous, which is why support from family can help prevent disruptive or negative school behaviours. Finally, teachers are undoubtedly the key figures in the academic environment in general and in school engagement in particular as may influence students' experiences in many different ways (conveying affection, setting an example, moderating participation, etc.), beyond merely imparting knowledge.

In relation to type of social support, the present study analyses, for the first time, the direct predictive association (independently of source) between the three principal types of support and school engagement and its dimensions, finding that emotional support has more predictive power and for more dimensions of engagement than its material and informational counterparts. This follows the same trend as most of the scant previous research (Cooper, 2014; Furrer & Skinner, 2003; Romano et al., 2021).

Material support was found only to influence overall and cognitive engagement with a weak predictive power. Despite that, students' academic commitment may be influenced by the fact that they perceive key figures of reference to be interested and engaged in the specific educational process (Fajardo et al., 2017). Informational support only predicted the cognitive and affective dimensions, suggesting that when students perceive that their diverse sources of support offer them information and advice designed to enhance their academic performance or provide feedback regarding their school behaviour, this may help them feel happier at school, identify more with their school community, view making an effort to learn as being more important and be more eager to learn, thereby fostering greater levels of participation. Finally, emotional support was found to explain both overall engagement and the emotional and behavioural dimensions of the construct, which makes it the most important type of support in the academic environment. On that point, some previous studies have argued that care, acknowledgment of feelings and different perspectives, trust, etc., are key elements for encouraging greater student engagement (Wigfield et al., 2006). Many of the school improvement measures implemented to date, such as, for example, the optimisation of interrelationships, the establishment of intimate contexts for learning and healthier social environments (Morin, 2020), fall within the framework of emotional support.

Regression analyses clearly indicate that not all sources of support have the same effect on school engagement, just as not all types of support impact student engagement to the same degree. Since, independently, teachers are

the most decisive source and emotional the most influential type, it seems logical to focus efforts primarily on teachers' emotional support in order to be more effective in fostering school engagement through social support. Based on these results, the final model conducted has made it possible to verify, using structural equations, the influence of teachers' and emotional support acting in combination on school engagement. Thus, teachers' emotional support has obtained a significant effect on the three types of engagement, exerting a greater influence on emotional engagement, followed by the cognitive and finally by the behavioural.

Those results may be particularly useful for designing future intervention programmes aimed at fostering school engagement through social support, focusing them, for example, on encouraging certain changes in teachers' practice in order to foster a learning experience based on closer relations, characterised by trust and recognition.

Despite the relevance of the findings, the study has some limitations, for example, the non-random selection procedure of the participating sample means that the data obtained must be taken with caution when generalising them. Furthermore, the nature of the research is cross-sectional, so reference is made to the probability of prediction or to the statistical incidence, but never to the real causality between variables. Likewise, the stability of the results has not been proven regardless of the characteristics of the participants.

Finally, future research may wish to explore new areas to gain greater insight into the relationship between social support and school engagement, and to complement the initial data obtained in the present study. Firstly, longitudinal studies are required to analyse the true causal relationships which exist between the two variables. It would also be interesting to determine whether each individual source plays a key role in those contexts closest to it. Lastly, it would be enriching to replicate the analyses with samples of different characteristics, which would provide evidence of validity to the results obtained in the present study.

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