


School and family ecosystem: Incentives and barriers to school–family communication

Fábio Botelho Guedes^{1,2}  | Ana Cerqueira^{1,2} | Alexandra Marques-Pinto³ | Amélia Branco⁴ | Cecília Galvão^{1,5} | Joana Sousa^{1,6} | Luis F. Goulao⁷ | Rosário Bronze⁸ | Wanda Viegas⁷ | Tania Gaspar^{1,9} | Carmen Moreno¹⁰ | Margarida Gaspar de Matos^{1,11,12}

¹Institute of Environmental Health (ISAMB), Aventura Social, Faculty of Medicine, University of Lisbon (FMUL), Lisbon, Portugal

²Faculty of Human Kinetics, University of Lisbon/FMH-UL, Lisbon, Portugal

³Centro de Investigação em Ciência Psicológica, Faculdade de Psicologia da Universidade de Lisboa, Lisboa, Portugal

⁴GHEs Research Center – Office of Economic and Social History, ISEG – Lisbon School of Economics & Management of the University of Lisbon, Lisbon, Portugal

⁵Institute of Education, University of Lisbon (IEUL), Lisbon, Portugal

⁶Nutrition Laboratory, Faculty of Medicine, University of Lisbon, Lisbon, Portugal

⁷Linking Landscape, Environment, Agriculture and Food (LEAF) Research Unit, School of Agriculture, University of Lisbon (ISA/ULisbon), Lisbon, Portugal

⁸Faculty of Pharmacy, University of Lisbon, Lisbon, Portugal

⁹HEI-LAB, Lusófona University of Humanities and Technologies, Lisbon, Portugal

¹⁰Department of Psychology, Evolutionary and Education of the University of Seville, Seville, Spain

¹¹Applied Psychology Research, Center Capabilities & Inclusion (APPsyCI), ISPA – Univeristy Institute, Lisbon, Portugal

¹²Faculty of Human Sciences, Catholic University, Lisbon, Portugal

Correspondence

Fábio Botelho Guedes, Institute of Environmental Health, Faculty of Medicine of the University of Lisbon, Av. Prof. Egas Moniz, Ed. Egas Moniz, Floor 0, Wing C, 1649-028 Lisbon, Portugal.
Email: fabiobotelhoguedes@gmail.com

Funding information

Fundação para a Ciência e a Tecnologia

Abstract

The aim of the study was to explore the factors and barriers related to the incentive and opportunity of school–family communication. This work is part of the HOUSE-Colégio F3 Project, ULisbon, which included 1,143 first-year university students from the University of Lisbon, with average age of 19.61 ± 3.96 years. The young people who had better communication with their parents, greater family support and better family relationship were the ones who reported greater incentives for school–family communication. School–family communication and relationship were associated with the incentives for school–family communication and greater parental monitoring. These results align

with the literature stating that parents' communication and presence in all areas of young people's lives, including the school context, foster better social and family relationships and academic results. This result should not be read as a call for non-autonomy. Instead, it highlights that monitoring and supporting family presence promotes that autonomy.

KEYWORDS

school ecosystem, school–family communication, school–family relationship, youth

1 | INTRODUCTION

From an ecological perspective, individuals are constantly interacting with the various environments in which they live. Therefore, individuals can be influenced by the relationships established between the immediate and broader social contexts. The interrelationships between the different contexts are likely to influence and be influenced by individuals. Therefore, it is crucial to consider the interactions between the individual, the different contexts and the other people present in these contexts (Bronfenbrenner, 1977, 1979, 1994; Gaspar et al., 2020; Matos, 2020, 2022).

The family is one of the contexts that plays an essential role in the development of children and young people, including those in higher education. Thus, the quality of family relationships and communication constitutes an impact factor regarding the well-being of young people (Guedes et al., 2022; Yubero et al., 2018). Family functioning has also emerged in the literature as a factor related to young people's school involvement and motivation (Harris et al., 2020; Stubbs & Maynard, 2017). A more positive family environment constitutes a facilitator element for the involvement of parents in their children's activities, promoting a more significant support structure for their learning and academic performance (Xia et al., 2016).

Parental involvement and communication between parents and children (Davidson & Cardemil, 2009) have been highlighted in the literature among other important family factors that can influence the well-being of children and young people (Davidson & Cardemil, 2009; Guedes et al., 2022; Levin et al., 2012). On the one hand, greater parental involvement is associated with better communication and relationships with children and more positive attitudes towards their teachers (Baker et al., 2016). On the other hand, good communication between the school and the family is essential to parental involvement in this context (Lyubitskaya & Shakarova, 2018). Also, parental involvement tends to be beneficial regarding academic results and success, to help parents and teachers adjust responses to students' needs (i.e., through the exchange of information) and to promote the relationship between parents and teachers (LaRocque et al., 2011).

Young people go through different stages in their development, which influences their interpersonal relationships, academic performance and involvement. Social environments that are more sensitive and adjusted to these changes tend to foster better development and adaptation results in children and adolescents, and school emerges as one of the most fundamental contexts in this regard (Eccles et al., 1993).

The feeling of belonging experienced at the school level is related to students' psychosocial well-being. A school environment that is too focused on academic indicators and results and less on the importance of the relationship between teachers and students tends to negatively affect the well-being and performance of both young people and teachers (Ibrahim & El Zaatari, 2020; Matos & Wainwright, 2021). Also, communication and interactions between parents and teachers play an essential role in the development of young people, their psychosocial

well-being and academic performance (Baker et al., 2016; Chen, 2019; Garreta, 2014; Matos & Wainwright, 2021; Willemse et al., 2018).

Family and school are two fundamental contexts in the lives of young people, and the existence of collaborative work between both environments may enhance students' psychosocial development (Baker et al., 2016; Guedes et al., 2022, 2023; Hampden-Thompson & Galindo, 2017; Smith et al., 2019). A good understanding of the features and dynamics of family context may promote greater proximity between the school and the family (Tanase, 2022).

The family and school environment (as well as the peer group) may act as risk or protective factors for the psychosocial development of young people (Levin et al., 2012; Mihić et al., 2022). For instance, support from parents and teachers (and peers) promotes children and adolescents' academic involvement and success (Wang & Eccles, 2012). Therefore, establishing a good relationship between the family and the school is vital to meet children's and young people's needs (Graham-Clay, 2005). The existence of partnerships and joint work between the family and the school is fundamental for the education and development of young people. This connection may contribute to a more positive environment, support parents, promote skills among parents and families and bring families and the community closer together. In addition, the school-family relationship also promotes the success of young people, not only academically but also in their adult life (Epstein, 1995).

To respond to the needs of young people, parents, teachers and the school community must join forces and communicate effectively (LaRocque et al., 2011). Therefore, one of the fundamental aspects concerning the involvement of parents in the school is the communication between the school and the family (Epstein, 1995; Graham-Clay, 2005). This type of communication is a subject that has received considerable attention in the literature and has emerged as related to the level of support and parental involvement existing in families since this is reflected in the performance and results obtained by students (Chen, 2019; Daniel, 2015; Sağkal, 2019; Thompson, 2008; Thompson & Mazer, 2012).

In this sense, this study intends to explore the factors that may influence communication between the school and the family and the barriers that may hinder this communication. Therefore, family-related variables (e.g., communication with parents, family support, parental monitoring and the quality of family relationships) and school-related variables (e.g., relationships with teachers and colleagues) were analysed. In addition, this study also intended to investigate the association between young people's communication with their parents and the incentives for school-family communication and relationship compared with the other variables under study.

2 | METHOD

This work is part of the Project HOUSE-Colégio F3, ULisbon, promoted by Colégio F3, University of Lisbon. This College comprises a group of Professors and Researchers from all 18 Faculties and Institutes of the University of Lisbon. It promotes the adoption of interdisciplinary attitudes and aims to reinforce national and international visibility by developing research and differentiated education.

The emergence of the COVID-19 pandemic raised concerns about the health status of first-year students at the University of Lisbon. Therefore, the opportunity arose to develop this study to understand and explore the health profile and lifestyles of first-year students at the University mentioned above. 17 of the 18 Faculties and Institutes of the University of Lisbon participated in this study. The House-Colégio F3 study allowed me to develop and include questions related to my area of expertise (i.e., questions related to the school and family ecosystem and incentives and barriers to school-family communication) using the autobiographical memories method (Bauer, 2015; Hung & Bryant, 2016; Nóvoa, 1988).

The Project HOUSE was approved by the Ethics Committee of the Academic Medical Center of Lisbon, of the Lisbon North Hospital Center, EPE. The participants received informed consent and were invited to answer the questionnaires online, voluntarily, anonymously and confidentially.

Further details on the HOUSE-Colégio F3, ULisbon study's data collection procedures may be found in the final report (HOUSE-Colégio F3, ULisbon, 2022).

2.1 | Participants

1143 university students participated in this study, 67.5% ($N=771$) female, aged between 17 and 65 years, with an average age of 19.61 years ($SD=3.96$). The sample included first-year students from 17 Faculties and Institutes of the University of Lisbon. All participants had taken compulsory education, and the questions were answered from an autobiographical perspective, analysing the pre-university school ecosystem retrospectively. We chose to use the autobiographical method, as this allows us to obtain personal information experienced in the past by the participants (i.e., personal experiences and historical narratives of the lives of individuals and the society in which each person is inserted). These memories are essential for the construction of individual identity and for a better understanding of the events that happened (Bauer, 2015; Hung & Bryant, 2016; Nóvoa, 1988). Of the young people surveyed, 88.9% ($N=1016$) were attending higher education for the first time.

2.2 | Measures and variables

Considering the objectives of the present study, data were collected through a set of self-report questions regarding the following variables (Table 1).

2.3 | Data analysis

Data were analysed using SPSS version 25 for IOS. Descriptive statistics were used to characterize the sample. The Chi-Square test was used for independent variables to analyse the relationship between communication with parents, the incentive for school-family communication and the barriers to the school-family relationship. Independent sample *t*-tests were used to analyse the relationship between communication with parents and incentive for school-family communication with the variables of family support, parental monitoring, relationship with family, teachers and colleagues/peers and with the school-family communication and relationship.

A linear regression model (adjusted for age and gender) was carried out to analyse the predictive value of the variables with statistical significance in the previous analysis in the explanation of school-family communication and relationship. A significance level of $p < .05$ was determined.

3 | RESULTS

The characterization of the participants is shown in Table 2, as well as the analysis of their differences regarding communication with their parents (i.e., difficult/easy). Significant differences were found between the communication with parents and almost all the variables related to the school and family environment, except for two barriers to the school-family relationship (i.e., lack of initiative from teachers and lack of parent attendance at school meetings).

Young people with easier communication with their parents reported a greater incentive for communication between school and family and better school-family communication and relationship. These students also considered having greater family support and relationship, a greater perception of parental monitoring, and a better relationship with teachers and colleagues/peers. On the other hand, those who reported greater difficulty

TABLE 1 Measures and variables under study.

| Variables | Measure |
|---|--|
| Gender | 0–Female; 1–Male |
| Communication with parents | 0–Difficult; 1–Easy |
| Incentive for school–family communication | 0–No; 1–Yes |
| Lack of parental initiative as a barrier to the school–family relationship | 0–No; 1–Yes |
| Lack of initiative from teachers as a barrier to the school–family relationship | 0–No; 1–Yes |
| Lack of parent attendance at school meetings as a barrier to the school–family relationship | 0–No; 1–Yes |
| Family support | Scale with 4 items, on a 7-point Likert scale, with 1 being 'I very strongly disagree' and 7 being 'I very strongly agree'. Higher values reveal greater family support. $\alpha = .95$ |
| Parental monitoring | Scale with 5 items that assesses the parents' knowledge regarding their children's daily lives, on a 4-point Likert scale (1 know a lot and 4 don't know anything). Higher values reveal a greater perception of parental accompaniment and monitoring. $\alpha = .83$ |
| Relationship with the family | Scale adapted from Cantril (1965), consisting of 11 steps, where the lowest step (0) corresponds to the worst quality of the family relationship and the highest step (10) to the best quality of the family relationship |
| Relationship with teachers | Scale adapted from Cantril (1965), consisting of 11 steps, where the lowest step (0) corresponds to the worst quality of the relationship with teachers and the highest step (10) to the best quality of the relationship with teachers |
| Relationship with colleagues/peers | Scale adapted from Cantril (1965), consisting of 11 steps, where the lowest step (0) corresponds to the worst quality of the relationship with colleagues and the highest step (10) to the best quality of the relationship with colleagues |
| School–family communication and relationship | Scale with four items, on a five-point Likert scale, with 1 being 'Did not exist' and 5 being 'Good'. Higher values reveal a better perception of communication and relationship between school and family throughout the academic/school path. $\alpha = .85$ |

communicating with parents identified the lack of parental initiative as the main barrier to the school–family relationship.

Table 3 presents the bivariate analysis of the differences regarding the incentive for school–family communication. Statistically significant differences were found between most of the variables under study, except for the barriers to school–family relationships.

The incentive for school–family communication was statistically and significantly related to easy communication with parents, better family support and relationship and greater parental monitoring. Additionally, the incentive for school–family communication was associated with better relationships with teachers and colleagues/peers and better school–family communication and relationships.

The linear regression model shown in Table 4 intends to analyse the predictive value of variables related to school (i.e., relationship with teachers and peers) and family (i.e., family support/relationship and parental monitoring) in explaining school–family communication and relationship. The model, which was adjusted for age and gender and included as predictive variables those found to be significant in the bivariate analysis (Table 3), proved

TABLE 2 Population characteristics and bivariate analysis for the variable 'communication with parents' (Chi-square test and Student *t*-test).

| | <i>M</i> ± <i>SD</i> or % (<i>n</i>) | | | <i>p</i> |
|--|--|--------------------------------------|---------------------------------|----------|
| | Total | Difficult 40.4% (<i>n</i> = 431) | Easy 59.6% (<i>n</i> = 636) | |
| Incentive for school–family communication ^b | | | | ≤.001 |
| No | 40.6 (305) | 51.2 (155) | 32.0 (136) | |
| Yes | 59.4 (447) | 48.8 (148) | 68.0 (289) | |
| Lack of parental initiative as a barrier to the school–family relationship ^b | | | | ≤.01 |
| No | 80.9 (599) | 76.4 (240) | 84.7 (343) | |
| Yes | 19.1 (141) | 23.6 (74) | 15.3 (62) | |
| Lack of initiative from teachers as a barrier to the school–family relationship ^b | | | | ≤.057 |
| No | 52.7 (390) | 57.0 (179) | 49.9 (202) | |
| Yes | 47.3 (350) | 43.0 (135) | 50.1 (203) | |
| Lack of parent attendance at school meetings as a barrier to the school–family ^b | | | | ≤.679 |
| No | 78.9 (584) | 79.3 (249) | 78.0 (316) | |
| Yes | 21.1 (156) | 20.7 (65) | 22.0 (89) | |
| Family support ^a | 21.91 ± 6.47 | 17.79 ± 6.75 | 24.90 ± 4.20 | ≤.001 |
| Parental monitoring ^a | 17.42 ± 2.54 | 16.55 ± 2.47 | 18.17 ± 2.01 | ≤.001 |
| Relationship with the family ^a | 8.15 ± 1.88 | 7.13 ± 1.99 | 8.90 ± 1.30 | ≤.001 |
| Relationship with teachers ^a | 6.58 ± 1.89 | 6.28 ± 1.89 | 6.80 ± 1.82 | ≤.001 |
| Relationship with colleagues/peers ^a | 7.30 ± 1.88 | 6.85 ± 2.02 | 7.64 ± 1.66 | ≤.001 |
| School–family communication and relationship ^a | 17.56 ± 3.00 | 16.89 ± 3.41 | 18.10 ± 2.44 | ≤.001 |

Note: Bold represents adjusted residuals >1.96.

Abbreviations: *M*, Mean; *SD*, standard deviation.

^aIndependent Sample *t*-test.

^bChi-square.

to be adequate and significant $F(10.473) = 110.30$; $p \leq .001$, and explains 22.3% of the variance of school–family communication and relationship.

According to the model, the school–family communication and relationship is better explained and has a positive relationship with the incentives for school–family communication, parental monitoring (better relationship and parental monitoring leads to better school–family communication and relationship) and relationship with colleagues/peers. Therefore, better school–family communication and relationship are associated with greater parental monitoring, a greater incentive for school–family communication and a better relationship with colleagues/peers.

4 | DISCUSSION

The main objective of this study was to analyse factors that may influence communication between the school and the family and the barriers that may hinder this communication. Young people's communication with their parents

TABLE 3 Bivariate analysis for the variable 'incentive to school–family communication'

| | <i>M</i> ± <i>SD</i> or % (n) | | <i>p</i> |
|--|-------------------------------|---------------------|----------|
| | No 40.6% (n = 305) | Yes 59.4% (n = 447) | |
| Communication with parents ^b | | | ≤.001 |
| Difficult | 53.3 (155) | 33.9 (148) | |
| Easy | 46.7 (136) | 66.1 (289)* | |
| Lack of parental initiative as a barrier to the school–family relationship ^b | | | ≤.804 |
| No | 80.2 (195) | 81.1 (219) | |
| Yes | 19.8 (48) | 18.9 (51) | |
| Lack of initiative from teachers as a barrier to the school–family relationship ^b | | | ≤.061 |
| No | 46.9 (114) | 55.2 (149) | |
| Yes | 53.1 (129) | 44.8 (121) | |
| Lack of parent attendance at school meetings as a barrier to the school–family ^b | | | ≤.115 |
| No | 82.3 (200) | 76.7 (207) | |
| Yes | 17.7 (43) | 23.3 (63) | |
| Family support ^a | 19.60 ± 7.20 | 23.38 ± 5.63 | ≤.001 |
| Parental monitoring ^a | 16.75 ± 2.70 | 17.90 ± 2.21 | ≤.001 |
| Relationship with the family ^a | 7.60 ± 2.14 | 8.50 ± 1.59 | ≤.001 |
| Relationship with teachers ^a | 6.22 ± 1.89 | 6.76 ± 1.93 | ≤.001 |
| Relationship with colleagues/peers ^a | 6.82 ± 2.12 | 7.54 ± 1.80 | ≤.001 |
| School–family communication and relationship ^a | 16.19 ± 3.41 | 18.63 ± 2.19 | ≤.001 |

Note: The results were adjusted to age and gender.

*Adjusted residuals > 1.96.

Abbreviations: *M*, Mean; *SD*, standard deviation.

^aIndependent Sample *t*-test.

^bChi-square.

and the existing incentives for school–family communication and relationship were analysed. It was intended to explore the factors that encourage communication between the school and the family, the existing barriers, communication with parents, family support, parental monitoring and the relationship with teachers and colleagues, with an impact on communication and relationship between the school and family.

The results show that young people who have easier communication with their parents are the ones who report better family relationships, greater family support and a greater perception of parental monitoring. These results align with the literature, showing that better communication between parents and children is associated with more positive and healthy family relationships (Davidson & Cardemil, 2009). Young people who communicate more efficiently with their parents also report that school–family communication is encouraged, school–family communication and relationships are improved, and relationships with teachers and classmates are improved. There is evidence that parental involvement in the educational process and family cohesion are essential aspects of young people's well-being, performance and academic engagement (Castro et al., 2015; Davidson & Cardemil, 2009; Jaynes, 2015, 2017; Stubbs & Maynard, 2017), which is consistent with the results obtained in this study.

Conversely, young people who report greater difficulty in communicating with their parents identify the parents' lack of initiative as the main barrier to the school–family relationship. Similarly, a study by Xia et al. (2016)

TABLE 4 Linear regression of school–family communication and relationship on school and family context variables.

| | Non-standardized coefficient | | Standardized coefficient | t |
|--|------------------------------|----------------|--------------------------|-------|
| | B | Standard error | β | |
| Communication with parents | -0.16 | 0.31 | -0.03 | -0.51 |
| Incentive to school–family communication | 1.72 | 0.27 | 0.28*** | 6.46 |
| Lack of parental initiative as a barrier to the school–family relationship | -0.19 | 0.34 | -0.02 | -0.57 |
| Family support | 0.02 | 0.03 | 0.05 | 0.74 |
| Parental monitoring | 0.14 | 0.06 | 0.11* | 2.19 |
| Relationship with the family | 0.14 | 0.11 | 0.08 | 1.28 |
| Relationship with teachers | -0.01 | 0.08 | -0.01 | -0.02 |
| Relationship with colleagues/peers | 0.29 | 0.08 | 0.18*** | 3.62 |

Note: The results were adjusted for age and gender. The variables were entered using the 'enter' mode.

* $p \leq .05$; *** $p \leq .001$.

demonstrated a reciprocal influence between family environment and school engagement in that more positive family relationships promote greater school engagement and vice versa.

The young people who report the existence of more incentive for school–family communication during their schooling are those who also report better family relationships (i.e., better communication with their parents, more support and better family relationships, as well as more parental monitoring), better school relationships (i.e., better relationships with teachers and peers) and better school–family communication. These results align with the literature showing that the school–family relationship plays a crucial role in students' social development and learning (Chen, 2019; Daniel, 2015; Sağkal, 2019; Thompson, 2008; Thompson & Mazer, 2012). Moreover, our findings also suggest that the interactions between the family and school context play a prominent role in the results obtained by the students at all levels of their development (school, personal and social) (Hampden-Thompson & Galindo, 2017).

A study by Saltmarsh and McPherson (2019) found that parents with the best experiences in school engagement also point to clear communication policies contributing to their satisfaction with the school. There is evidence that parental communication and presence in all areas of young people's lives provide healthier family relationships and higher academic performance (Davidson & Cardemil, 2009; Guedes et al., 2022; Hampden-Thompson & Galindo, 2017; Stubbs & Maynard, 2017).

The involvement of families in school encompasses, for example, the development of activities (playful and non-playful) with all the educational agents. Evidence shows that greater involvement of the entire school and family community provides better academic results and greater satisfaction with school (Chen, 2019; Kyzar & Jimerson, 2018; Sağkal, 2019; Saltmarsh & McPherson, 2019).

The present work has some limitations that should be considered: (1) It relies on self-reported data regarding the students' memories of the previous school year (thus, some bias may occur); (2) It followed a cross-sectional design, not allowing to make inferences of causality; (3) The female gender is over-represented in the sample, which may bring some bias; (4) It was carried out during the pandemic of COVID-19; (5) Participants were students from the public school system of a specific University. Therefore, there must be caution in the generalization of the results to all Portuguese students (e.g., students from the private school system or students who dropped out of school were not included). Despite these limitations, this work has several strengths: (1) It is a large-scale

study; (2) it followed a rigorous methodology to collect data on students from all the Faculties/Institutes of the University of Lisbon; (3) it furthers the knowledge about this topic in a specific population (i.e., first-year university students), thus allowing a deeper understanding of their perspectives and experiences.

5 | CONCLUSIONS

It is necessary to raise families' and schools' awareness of the importance of family involvement in school, not only regarding young people's achievement and academic learning but also in establishing and developing positive relationships and other socioemotional skills. Therefore, it is important to develop and implement intervention programs in school and family contexts, which promote students' and their educational agents' personal and socioemotional skills, individually and in groups. These interventions may impact the functioning, communication and school–family relationship and motivate the relationship between these two contexts.

It is also necessary to develop and implement school policies that promote transparency in communication and relationships with parents, focusing on creating more effective communication channels that encourage greater involvement of parents at school. In the following studies, it will be necessary to deepen the knowledge of barriers to the school–family relationship in addition to those already mentioned (i.e., lack of initiative from parents or teachers and lack of parental attendance at meetings) and to find strategies and suggestions to optimize this relationship. Existing barriers and incentives for school–family communication must be deepened considering the perspective of educational agents (i.e., teachers and parents). The relevance of medium and long-term impact assessment studies is highlighted, as the literature highlights the relevance of continuing measures promoting a change in the culture of the school institution in order to make it more accessible to families. These measures should not be read as a call for over-protection and non-autonomy but rather as a call for monitoring and supporting family presence that promotes that autonomy.

By developing these suggestions and delving into the needs of the target population, we will be able to contribute in a more solid and action-oriented way, providing insights and practical guidelines for better communication between school and family, which will have a direct impact on the well-being of students and the entire school community. These measures are particularly relevant in the post-pandemic period we are facing, in which an exercise of sharing ideas-solutions among the various school ecosystems can be developed. Therefore, we suggest creating a school–family proximity model that may support a broad debate on how to promote young people's well-being and learning development. This message is vital for health and education professionals and public policymakers so that they consider this transitional age to continue the support provided in the educational pathway preceding higher education.

FUNDING INFORMATION

Fábio Botelho Guedes—Foundation for Science and Technology (FCT) Grant (SFRH/BD/148299/2019). Ana Cerqueira—Foundation for Science and Technology (FCT) Grant (SFRH/BD/148403/2019).

CONFLICT OF INTEREST STATEMENT

The authors declared no potential conflicts of interest concerning this article's research, authorship and/or publication.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Fábio Botelho Guedes  <https://orcid.org/0000-0001-8291-1921>

REFERENCES

- Baker, T. L., Wise, J., Kelley, G., & Skiba, R. J. (2016). Identifying barriers: Creating solutions to improve family engagement. *School Community Journal*, 26(2), 161–184.
- Bauer, P. J. (2015). Development of episodic and autobiographical memory: The importance of remembering forgetting. *Developmental Review*, 38, 146–166. <https://doi.org/10.1016/j.dr.2015.07.011>
- Bronfenbrenner, U. (1977). Towards an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Bronfenbrenner, U. (1979). *The ecology of human development—Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1994). Ecological models of human development. In M. Gauvian & M. Cole (Eds.), *Readings on the development of children* (2nd ed., pp. 37–43). Freeman.
- Cantril, H. (1965). *The pattern of human concerns*. Rutgers University Press.
- Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review*, 14, 33–46. <https://doi.org/10.1016/j.edurev.2015.01.002>
- Chen, C. Y. C. (2019). Understanding school–family contact and academic and behavioral performance among adolescent students in Taiwan. *International Journal of School & Educational Psychology*, 7(1), 42–55. <https://doi.org/10.1080/21683603.2017.1385551>
- Daniel, G. (2015). Patterns of parent involvement: A longitudinal analysis of family–school partnerships in the early years of school in Australia. *Australasian Journal of Early Childhood*, 40(1), 119–128. <https://doi.org/10.1177/183693911504000115>
- Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *The Journal of Early Adolescence*, 29(1), 99–121. doi:10.1177/0272431608324480
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, 48, 90–101. <https://doi.org/10.1037/0003-066X.48.2.90>
- Epstein, J. L. (1995). School/family/community partnerships. *Phi Delta Kappan*, 76(9), 701. <https://doi.org/10.1177/00317171009200326>
- Garreta, J. (2014). La participación de las familias en la escuela: una cuestión pendiente. Documentación Social. *Revista de Estudios Sociales y sociología Aplicada*, 71, 101–124.
- Gaspar, T., Tomé, G., Ramiro, L., Almeida, A., & Matos, M. G. (2020). Ecosistemas de aprendizagem e bem-estar: fatores que influenciam o sucesso escolar. *Psicologia, Saúde & Doença*, 21(2), 462–481. <https://doi.org/10.15309/20psd210221>
- Graham-Clay, S. (2005). Communicating with parents: Strategies for teachers. *School Community Journal*, 15(1), 117–129.
- Guedes, F. G., Cerqueira, A., Gaspar, S., Gaspar, T., Moreno, C., & Matos, M. G. (2022). Family environment and Portuguese adolescents: Impact on quality of life and well-being. *Children*, 9(2), 200–210. <https://doi.org/10.3390/children9020200>
- Guedes, F. G., Cerqueira, A., Gaspar, S., Gaspar, T., Moreno, C., & Matos, M. G. (2023). Quality of life and well-being of adolescents in Portuguese schools. *Child Indicators Research*, 16, 1381–1394. <https://doi.org/10.1007/s12187-023-10021-5>
- Hampden-Thompson, G., & Galindo, C. (2017). School–family relationships, school satisfaction and the academic achievement of young people. *Educational Review*, 69(2), 248–265. <https://doi.org/10.1080/00131911.2016.1207613>
- Harris, C., Vazsonyi, A. T., Özdemir, Y., & Sağkal, A. S. (2020). Family environment and school engagement: An investigation of cross-lagged effects. *Journal of Adolescence*, 84, 171–179. <https://doi.org/10.1016/j.adolescence.2020.08.006>
- HOUSE-Colégio F3, ULisboa. (2022). *Saúde e estilos de vida dos estudantes universitários à entrada da universidade: Relatório do Estudo HOUSE-Colégio F3, ULisboa* [Health and Lifestyles of University Students at University Entrance: Report of the HOUSE-Colégio F3 Study, ULisbon]. University of Lisbon.
- Hung, L., & Bryant, R. A. (2016). Autobiographical memory in the angry self. *PLoS ONE*, 11(3), e0151349. <https://doi.org/10.1371/journal.pone.0151349>
- Ibrahim, A., & El Zaatari, W. (2020). The teacher–student relationship and adolescents' sense of school belonging. *International Journal of Adolescence and Youth*, 25(1), 382–395. <https://doi.org/10.1080/02673843.2019.1660998>
- Jeynes, W. H. (2015). A meta-analysis on the factors that best reduce the achievement gap. *Education and Urban Society*, 47(5), 523–554. <https://doi.org/10.1177/0013124514529155>
- Jeynes, W. H. (2017). A meta-analysis: The relationship between parental involvement and Latino student outcomes. *Education and Urban Society*, 49(1), 4–28.
- Kyzer, K., & Jimerson, J. B. (2018). Bridging the school-home divide in the middle grades: A process for strengthening school–family partnerships. *Middle School Journal*, 49(1), 13–23. <https://doi.org/10.1080/00940771.2018.1399331>

- LaRocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure*, 55(3), 115–122. <https://doi.org/10.1080/10459880903472876>
- Levin, K. A., Dallago, L., & Currie, C. (2012). The association between adolescent life satisfaction, family structure, family affluence and gender differences in parent-child communication. *Social Indicators Research*, 106(2), 287–305. <https://doi.org/10.1007/s11205-011-9804-y>
- Lyubitskaya, K., & Shakarova, M. (2018). Family-school communication: The key features at the current stage. *Educational Studies Moscow*, 3, 196–215. <https://doi.org/10.17323/1814-9545-2018-3-196-215>
- Matos, M. G. (2020). *Adolescentes, as suas vidas, o seu futuro*. Fundação Francisco Manuel dos Santos.
- Matos, M. G. (2022). *Adolescentes*. Oficina do Livro.
- Matos, M. G., & Wainwright, T. (2021). COVID-19 and mental health in school-aged children and young people: Thinking ahead while preparing the return to school and to life "as usual". *The Psychologist: Practice & Research Journal*, 4(1), 1–12. <https://doi.org/10.33525/pprj.v4i1.105>
- Mihčić, J., Skinner, M., Novak, M., Ferić, M., & Kranželić, V. (2022). The importance of family and school protective factors in preventing the risk behaviors of youth. *International Journal of Environmental Research and Public Health*, 19(3), 1630. <https://doi.org/10.3390/ijerph19031630>
- Nóvoa, A. M. S. S. (1988). A formação tem de passar por aqui: as histórias de vida no projeto Prosalus. In A. M. S. S. Nóvoa & M. Finger (Eds.). *O método (auto)biográfico e a formação* (pp. 107–129). Ministério da Saúde.
- Sağkal, A. S. (2019). Direct and indirect effects of strength-based parenting on adolescents' school outcomes: Exploring the role of mental toughness. *Journal of Adolescence*, 76, 20–29. <https://doi.org/10.1016/j.adolescence.2019.08.001>
- Saltmarsh, S., & McPherson, A. (2019). Un/satisfactory encounters: Communication, conflict and parent-school engagement. *Critical Studies in Education*, 63(2), 1–16. <https://doi.org/10.1080/17508487.2019.1630459>
- Smith, T. E., Reinke, W. M., Herman, K. C., & Huang, F. (2019). Understanding family-school engagement across and within elementary-and middle-school contexts. *School Psychology*, 34(4), 363. <https://doi.org/10.1037/spq0000290>
- Stubbs, N. S., & Maynard, D. M. B. (2017). Academic self-efficacy, school engagement and family functioning, among postsecondary students in the Caribbean. *Journal of Child and Family Studies*, 26(3), 792–799. <https://doi.org/10.1007/s10826-016-0595-2>
- Tanase, M. (2022). The benefits and challenges of home-school communication in urban settings. *Contemporary School Psychology*, 27(3), 1–16. <https://doi.org/10.1007/s40688-021-00404-2>
- Thompson, B. (2008). Characteristics of parent-teacher e-mail communication. *Communication Education*, 57(2), 201–223. <https://doi.org/10.1080/03634520701852050>
- Thompson, B., & Mazer, J. P. (2012). Development of the parental academic support scale: Frequency, importance, and modes of communication. *Communication Education*, 61(2), 131–160. <https://doi.org/10.1080/03634523.2012.657207>
- Wang, M. T., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, 83(3), 877–895.
- Willemsse, T. M., Thompson, I., Vanderlinde, R., & Mutton, T. (2018). Family-school partnerships: A challenge for teacher education. *Journal of Education for Teaching*, 44(3), 252–257. <https://doi.org/10.1080/02607476.2018.1465545>
- Xia, M., Fosco, G. M., & Feinberg, M. E. (2016). Examining reciprocal influences among family climate, school attachment, and academic self-regulation: Implications for school success. *Journal of Family Psychology*, 30(4), 442. <https://doi.org/10.1037/fam0000141>
- Yubero, S., Navarro, R., Larrañaga, E., Esteban, M., Gutiérrez, J., & Elche, M. (2018). Health contributing factors in higher education students: The importance of family and friends. *Healthcare*, 6(4), 1–8. <https://doi.org/10.3390/healthcare6040147>

How to cite this article: Guedes, F. B., Cerqueira, A., Marques-Pinto, A., Branco, A., Galvão, C., Sousa, J., Goulao, L. F., Bronze, R., Viegas, W., Gaspar, T., Moreno, C., & de Matos, M. G. (2024). School and family ecosystem: Incentives and barriers to school-family communication. *European Journal of Education*, 59, e12620. <https://doi.org/10.1111/ejed.12620>