

The Influencing Factors of Fathers' and Mothers' School-Based Involvement in a Central and Eastern European Sample

ZSOLT CSÁK*¹, HAJNALKA FÉNYES² AND GABRIELLA PUSZTAI³

Parental involvement has been widely studied internationally and, more recently, in Hungary as well. School-based involvement by mothers or fathers can positively impact a child's achievement, yet relatively little attention has been paid to the differences between fathers' and mothers' involvement. In the present study, we conducted a secondary analysis of a dataset from a questionnaire survey of parents in a Central and Eastern European region, focusing on differences between fathers' and mothers' school-based involvement. A further novel aspect of our study is that we also investigated the impact of different school practices on school-based involvement. The dependent variable in our regression analysis is a principal component derived from school-based involvement items. Among the explanatory variables, we emphasised the role of the parent's relationship to the child (father or mother) and the school's initiative in fostering involvement. The latter was explored using an exploratory factor analysis, revealing five parent-perceived dimensions of school initiative: Information and Contact, Emphasis on Informal Programmes, Decision-Making Opportunities, Presence of Professional Support, and Online Communication Forums. Our results show that fathers report lower levels of school-based involvement, and that school initiative significantly promotes parental engagement. Parental involvement increases when schools provide regular, meaningful information, organise informal events and foster community-building interactions. Our findings suggest that greater emphasis should be placed on informal school events – such as carnivals or sports days – that encourage the participation of both parents, and on ensuring that parents are involved in

1 *Corresponding Author. MCA – Collegium Professorum Hungarorum, Piliscsaba, Hungary; zsolt.csak@makovecz-campus.hu.

2 University of Debrecen, Department of Sociology and Social Policy, CHERD-Hungary, and MTA-DE Future Awareness Development Research Group, Debrecen, Hungary.

3 University of Debrecen, Institute of Educational Studies and Cultural Management, and MTA-DE Future Awareness Development Research Group, Debrecen, Hungary.

school decision-making processes in order to strengthen parent-teacher relationships.

Keywords: school-based involvement, parental involvement, gender differences, school initiative, school-family partnership

Dejavniki, ki vplivajo na vključevanje očetov in mater v šolsko delo svojih otrok, ponazorjeni na vzorcu iz srednje in vzhodne Evrope

ZSOLT CSÁK, HAJNALKA FÉNYES IN GABRIELLA PUSZTAI

∞ Vključevanje staršev v šolsko delo je obsežno raziskovano na mednarodni ravni, v zadnjem času pa tudi na Madžarskem. Vključevanje mater ali očetov lahko pozitivno vpliva na uspešnost otroka, vendar je bilo razlikam med vključevanjem očetov in mater posvečene sorazmerno malo pozornosti. V tej študiji smo izvedli sekundarno analizo podatkov iz ankete med starši v srednji in vzhodni Evropi, pri čemer smo se osredinili na razlike med vključevanjem očetov in mater v šolsko delo. Dodatna novost naše študije je, da smo preučili tudi vpliv različnih šolskih praks na vključevanje v šolsko delo. Odvisna spremenljivka v naši regresijski analizi je glavna komponenta, izpeljana iz postavk vključevanja v šolsko delo. Med pojasnjevalnimi spremenljivkami smo poudarili vlogo odnosa staršev do otroka (očeta ali matere) in pobude šole za spodbujanje vključevanja. Zadnje smo raziskali z raziskovalno faktorsko analizo, ki je razkrila pet dimenzij šolske pobude, kot jih zaznavajo starši: informacije in stiki, poudarek na neformalnih programih, možnosti odločanja, prisotnost strokovne podpore in spletni forumi za izmenjavo mnenj. Naši izsledki kažejo, da očetje poročajo o nižji stopnji vključenosti v šolsko delo in da šolska pobuda znatno spodbuja angažiranost staršev. Starševska vključenost se poveča, ko šole redno zagotavljajo pomembne informacije, organizirajo neformalne dogodke in spodbujajo interakcije, ki krepijo skupnost. Naše ugotovitve kažejo, da bi bilo treba večji poudarek dati neformalnim šolskim dogodkom, kot so šolski sejmi ali športni dnevi, ki spodbujajo udeležbo obeh staršev, ter zagotavljanju, da so starši vključeni v procese odločanja v šoli, da se okrepi odnos med starši in učitelji.

Ključne besede: vključevanje v šolsko delo, vključevanje staršev, razlike med spoloma, šolska pobuda, partnerstvo med šolo in družino

Introduction

The role of parents in school activities is a well-researched topic. Evidence suggests that stronger parent-teacher-child relationships lead to higher academic achievement (Bubić et al., 2021; Đurišić & Bunijevac, 2017; Froiland & Davison, 2014; Guo et al., 2018; Kaplan Toren, 2013; Wang & Sheikh-Khalil, 2014), a finding that is further supported by meta-analyses (Fan & Chen, 2001; Hill & Tyson, 2009; Kim & Hill, 2015). The parent-teacher partnership constitutes a multidimensional resource that can facilitate children's academic progress and healthy development (Bubić et al., 2021; Drvodelić & Domović, 2022; Đurišić & Bunijevac, 2017; Klun et al., 2023), making its investigation particularly warranted in the fields of educational research and pedagogy.

Although several studies have addressed this topic in Hungary (Bacsikai et al., 2024; Csók & Pusztai, 2022; Hrabéczy et al., 2023; Kovács et al., 2024; Pusztai et al., 2023, 2024), as well as in Romania (Damean, 2010; Radu, 2013; Marin & Bocos, 2019), Ukraine (Pallay, 2024; Zelenskaya & Balatsynova, 2020) and Transcarpathia (Pallay, 2024; Pusztai et al., 2025), the gender aspect of parenting has received less attention. Most research on parental involvement either does not differentiate between mothers and fathers or, if it does, typically lacks an in-depth analysis of this topic. Furthermore, few studies examine the school's initiating role (i.e., how open the school is to parental involvement), and even fewer apply multivariate methods to explore factors influencing parental involvement.

The purpose of the present study is to examine in greater depth the differences in school-based involvement between fathers and mothers. Another objective is to identify the types of school initiatives and to measure their effects on parents' school-based involvement. We conducted a secondary analysis of data from a large-scale questionnaire survey ($N = 1,002$) administered to Hungarian-speaking parents living in the border regions of Hungary, Romania and Ukraine. The Eastern Hungarian region included in our research has cross-border relations with Hungarian minority communities in Romania and Ukraine. Our aim was to extend the research to a Central and Eastern European region; however, our sample only included Hungarian-speaking families from the three aforementioned countries, regardless of whether they were minority or majority Hungarians. This results in a certain degree of cultural homogeneity within the sample, despite the different education systems of the three countries. A multivariable linear regression model is applied in order to reveal the factors that can increase parental school-based involvement, including control variables in addition to parents' relationship to the child (father or mother) and the schools' initiative role factors.

Forms and Effects of Parental Involvement

Parental involvement includes the school and home contexts and focuses on the parent-school-child relationship. Following Epstein et al. (2002), parental involvement refers to parental activities and attitudes that directly or indirectly promote children's progress and success in school. The international literature typically divides parental involvement into two dimensions based on the place of implementation: home-based involvement and school-based involvement (Fan & Chen, 2001; Guo et al., 2018; Hill & Tyson, 2009; Kaplan Toren, 2013; Kim & Hill, 2015; Pribesh et al., 2020; Wang & Sheikh-Khalil, 2014). Home-based involvement refers to activities by parents that take place outside of school but may contribute to the child's school achievement (e.g., visiting a family museum, helping a child with homework). In contrast, school-based involvement refers to activities by parents that take place either in school or with school actors and may contribute to the child's school achievement (e.g., parent participation in parent-teacher meetings or school days, online school forum activity, contact with school support professionals, school volunteering).

Regarding the effects of school-based involvement, while some research shows a positive relationship between child achievement and parents' school-based involvement (Bacsikai et al., 2024; Begić et al., 2024; Bubić et al., 2021; Ceglédi et al., 2024; Drvodelić & Domović, 2022; Đurišić & Bunijevac, 2017; Hill & Tyson, 2009; Kovács et al., 2024; Pribesh et al., 2020), other research shows a negative relationship (Kaplan Toren, 2013; Wang & Sheikh-Khalil, 2014), with a causal problem underlying this relationship. Indeed, more frequent parent-school contact may be a consequence of the child's problems and deteriorating school performance. In such cases, teacher-parent contact aims to find solutions to child-related problems (Behtoui & Strömberg, 2020). Nevertheless, most research highlights the positive impact of school-based involvement (Bacsikai et al., 2024; Begić et al., 2024; Bubić et al., 2021; Ceglédi et al., 2024; Drvodelić & Domović, 2022; Đurišić & Bunijevac, 2017; Hill & Tyson, 2009; Kovács et al., 2024; Pribesh et al., 2020). Harmonious parent-teacher partnerships and communication have benefits beyond academic achievement, proving valuable in addressing children's behavioural problems (Klun et al., 2023; Velki, 2022), strengthening students' perceived academic control (Bubić et al., 2021), supporting the implementation of distance learning (Begić et al., 2024) and promoting school inclusion (Cáceres-Iglesias et al., 2025). Parents' school-based involvement is of particular importance in Transcarpathia (Ukraine), especially due to the difficulties caused by the war situation (Pallay, 2024). Since 2017, gradual reforms have been implemented in Ukraine based on

the concept of the New Ukrainian School (NUS), one of the goals of which is to strengthen partnerships between parents and teachers. Research conducted before the war shows that the most significant form of parental involvement is intensive communication between parents and teachers, including discussing students' progress and raising the awareness of disadvantaged parents about the importance of learning and supporting their children's academic development. Another important form of parental involvement is the voluntary work and expert participation of parents in schools (Zelenskaya & Balatsynova, 2020).

Factors That Influence School-Based Involvement

In the empirical part of the paper, school-based involvement of parents is the dependent variable, so the factors influencing school-based involvement are discussed based on the literature.

School-Related Factors

At the school level, results show much lower school-based involvement of parents in secondary schools than in primary schools (Cankar et al., 2012; Gubbins & Otero, 2018). This is due to adolescents' aspirations for independence, as well as the fewer parent-focused programmes offered by secondary schools. Moreover, secondary schools are often located in other cities, making it more difficult for parents to get to the school (Đurišić & Bunijevac, 2017; Hill & Tyson, 2009).

With regard to school administration, research has shown that church-run schools are slightly more successful in strengthening the school community and engaging parents in school (Pusztai et al., 2024; Pusztai et al., 2023). Qualitative research also shows that church-run schools place more emphasis on building a community of parents (Pusztai et al., 2024).

The school's positive climate and openness may also increase parents' school-based involvement (Caridade et al., 2020). A systematic literature review by Kocsis et al. (2024) shows that the school's initiating role is the dominant factor in parents' volunteering in schools, as parents seldom initiate programmes and volunteering activities on their own. The school's openness to parental involvement is also reflected in organising events for parents and inviting them to participate (Behtoui & Strömberg, 2020), employing school professionals who can facilitate the child's well-being (Csók & Pusztai, 2022) and providing regular information to parents (Drvodelić & Domović, 2022), which also increases the likelihood of parents' participation in formal school events (Gubbins & Otero, 2018). Some studies in Hungary suggest that school-based

involvement may be influenced by the initiative of the school (Bacsikai et al., 2024; Ceglédi et al., 2024), but this has not been empirically investigated. Data from Romania also support this finding (Damean, 2010). The size, location and funding of a school play a key role in shaping parental involvement. In Romania, parental involvement in schools tends to increase when the institution is located in a smaller settlement or has a lower number of students. Furthermore, school organisations established for parents (e.g., Parents' Committee, School Board, Parents' Council) foster more frequent parental participation in school events, such as open days and parent-teacher conferences. Ukrainian studies also highlight the fact that the prevailing climate within a school contributes substantially to the development of an effective parent-teacher partnership (Zelenskaya & Balatsynova, 2020).

Child-Related Factors

Researchers have found different results regarding the relationship between child gender and parental involvement. While some studies suggest that school-based involvement is higher for boys (Bhargava & Witherspoon, 2015; Gubbins & Otero, 2018; Guo et al., 2018), others suggest that it is higher for girls (Pusztai et al., 2025). However, a meta-analysis by Kim and Hill (2015) found no significant difference.

The results are consistent when looking at the age and grade of the child. The literature shows that as the child grows, parents' school-based involvement decreases (Bacsikai et al., 2024; Bhargava & Witherspoon, 2015; Lee, 2019; Pusztai et al., 2025). Most researchers attribute this phenomenon to the increased autonomy aspirations associated with child development, which discourage parents from participating in school activities.

A larger number of siblings reduces the chances of school-based involvement due to the finite nature of parental resources (Fleischmann & de Haas, 2016; Wei et al., 2016), although Pusztai et al. (2023) found no significant difference in this respect. Pári and Engler (2024) also point out that parental attention is divided when there are several children, so fewer resources can be allocated to each child. Gee (2011), on the other hand, points out that if parents have more children attending the same school, they are more likely to do volunteer work at school, for example, because it "pays off" for them.

Parental and Family Factors

In terms of the impact of social background, both international (Cankar et al., 2012; Đurišić & Bunijevec, 2017; Fleischmann & de Haas, 2016; Gibbs et al., 2021; Guo et al., 2018; Mohammed & Engler, 2022; Šteh & Kalin, 2011; Wang

& Sheikh-Khalil, 2014) and Hungarian studies (Bacsikai et al., 2024; Ceglédi et al., 2024; Pusztai et al., 2025) show that parents with higher educational attainment and higher income are more likely to participate in school events and have closer relationships with teachers. The same can be demonstrated in Romania (Radu, 2013) and presumably in Ukraine (Pusztai et al., 2025; Zelenskaya & Balatsynova, 2020). According to research conducted in Transcarpathia (Ukraine), parents living in urban areas and those in more advantaged financial situations are more active in school-based involvement (Pallay, 2024). One of the main reasons for this is the difference in communication styles, worldviews, values and attitudes between disadvantaged parents and schools, which results in teacher-parent distance (Behtoui & Strömberg, 2020; Đurišić & Bunijevac, 2017; Šteh & Kalin, 2011; Zelenskaya & Balatsynova, 2020; Warrington, 2013).

In terms of family structure and parental marital status, most research suggests that parents from two-parent families are more likely to be involved in school than parents from single-parent families (Pribesh et al., 2020). Some studies suggest that family structure does not affect school-based involvement (Pusztai et al., 2023; Weiser & Riggio, 2010). A possible explanation for this is that the long-term stability of the family structure is much more important for school-based involvement than the type of family structure (Pribesh et al., 2020).

The main topic of the present research is the effect of the parent's gender. Research in developed countries shows that mothers have higher school-based involvement than fathers (Brooks & Hodkinson, 2022; Cankar et al., 2012; Fleischmann & de Haas, 2016). In Hungary, quantitative research has consistently found that mothers are overrepresented in parental surveys (Hrabčecz et al., 2023). In Ukraine, mothers are more likely than fathers to complete school-related questionnaires as well (Pallay, 2024). In addition, fathers show slightly lower involvement than mothers on the indicators of school involvement among those who completed a questionnaire in Hungary (Pusztai et al., 2023). Similar findings were reported for parents living in Romania (Negru et al. 2010; Marin & Bocos, 2019). According to the results from Transcarpathia (Ukraine), mothers exhibit much higher levels of school-based involvement than fathers, a difference that can be partly explained by the war situation and the high rate of employment abroad (Pallay, 2024). However, as a result of the war, the absence of fathers has placed increased pressure on mothers, making school involvement more difficult for them as well. Overall, in Transcarpathia, fathers' participation in formal school events – such as parent-teacher conferences or open days – is lower than that of mothers. At the same time, fathers tend to participate to a greater extent in informal leisure activities organised by

schools and are more likely to provide financial or material donations (Pallay, 2024). School volunteering is one of the most important indicators of school-based involvement. In research by Fényes et al. (2025), the school volunteering of fathers who completed the study's questionnaire was similar in extent to that of mothers. However, when examining non-interviewed parents, a significant difference emerged, with mothers volunteering more than fathers. The results also showed that school volunteering was more prevalent among parents living in urban areas, religious parents, parents with higher educational attainment, parents of children attending primary school rather than secondary school, and parents of schools administered by a church or foundation (Fényes et al., 2025).

Hungarian qualitative studies in Hungary show that fathers tend to attend informal school events, which are not specifically based on teacher-parent contact. Informal events (e.g., carnival balls, sports days) provide a space for joint activities with the child and give fathers a better opportunity to participate in child-rearing, potentially fulfilling their desire to prepare their children for everyday life (Csák, 2023). Researchers explain the differences in fathers' and mothers' school-based involvement with reference to changing gender roles, among other factors. After the turn of the millennium, the gradual societal acceptance of women's employment was observed in Hungary (Spéder, 2023). Furthermore, a dual expectation toward fathers was noticeable among the population in 2009. Public opinion considered both the breadwinner role of fathers and their involvement in child-rearing and family life to be important (Spéder, 2011), and this had not changed significantly by 2016 (Makay & Spéder, 2020). The changing role of the father is also reflected in the interview research of Takács (2020), where the subjects defined themselves as "actively caring fathers". According to them, an "actively caring father" meant – in addition to providing financial support – a father who spent quality time and engaged in direct activities with the child. In their interview study, Neményi and Takács (2016) presented families in which women were the main breadwinners. In Hungary today, however, equal burden-sharing in the family is still uncommon. School activities are intertwined with child-rearing tasks, and school-related tasks are therefore more often fulfilled by mothers (Csák, 2023).

Research Questions and Hypotheses

The present study aims to examine the determinants of school-based involvement, with a particular focus on the differences between mothers and fathers and the role of the school as an initiator. The research is grounded in the theory of parental involvement proposed by Epstein et al. (2002). In this

framework, school-based involvement refers to parental activities that occur within the school or are directed toward maintaining communication with teachers. According to this approach, both parties must take the necessary steps to foster effective cooperation. The study therefore examines not only the characteristics of parents but also the various school practices related to parental involvement, particularly the school's initiating role in this process. Based on the theoretical framework and previous empirical results, our research questions and hypotheses are as follows:

- R1:** What are the differences between fathers' and mothers' school-based involvement?
- H1:** Fathers' school-based involvement will be lower than that of mothers (Cankar et al., 2012).
- R2:** What is the role of the school in inviting parents to participate in school-related tasks?
- H2:** Parents' perceived school initiative – such as the frequency of school events, invitations to participate, and the openness and informativeness of events – will be positively associated with school-based involvement (Behtoui & Strömberg, 2020).
- R3:** How does the involvement of the respondent parent affect the involvement of the other parent?
- H3:** Non-interviewed parents' higher school-based involvement will increase parents' school-based involvement (Fleischmann & de Haas, 2016).
- R4:** What other factors affect parents' school-based involvement?
- H4:** In line with findings on parental school volunteering (Fényes et al., 2025), higher school-based involvement is expected to be associated with urban residence, parental religiosity, higher parental education, primary school level and church-administered institutions (Pusztai et al., 2024).

Method

Participants

The study utilises data from a large-sample, quantitative cross-sectional survey conducted in winter 2022/2023 ($N = 1,002$), targeting parents of upper primary and secondary school students. The sample comprised respondents from

three disadvantaged counties in Eastern Hungary (62.2% of the sample), complemented by Hungarian-speaking parents from Transylvania, Romania (25%) and Transcarpathia, Ukraine (12.5%). The survey employed quota sampling to ensure representativeness across regions, school types (general vs. secondary) and regional school maintenance rates. As Creswell and Creswell (2018) note, quota sampling serves as a widely used non-probability technique that systematically reflects population characteristics. Our sampling strategy involved school stratification and classification in order to identify relevant parent groups, thereby ensuring representation across diverse school types and social contexts. This approach aligns with theoretical frameworks emphasising the importance of capturing varied educational experiences when examining parental perspectives (Lareau & Cox, 2011). Strategic quota sampling proves particularly valuable in educational research when probability sampling is impractical due to logistical constraints. By structuring our sample according to school stratification, we achieved adequate representation of different parent segments, thereby enhancing the validity of our findings regarding parental perceptions.

Instruments

The research team, of which the authors are members, first compiled measurement instruments used in prior research to examine parental involvement in children's academic progress as part of questionnaire development. From the initial pool of 10 instruments collected, three measures were selected following expert consultation: (1) the 18-item version of the Family Involvement Questionnaire (Fantuzzo et al., 2000), (2) the 30-item Parent and School Survey (Ringenberg et al., 2005), and (3) the combined 15-item (4+11) parent involvement and barriers questionnaire from PISA (OECD, 2022).

Additional questionnaire blocks addressing sociodemographic characteristics, school and student background variables, and academic achievement measures were also incorporated. The specific variables used in the regression analyses will be presented below.

Research Design

The study employed a quantitative research approach. The research team conducted surveys primarily using paper-based instruments supplemented by online questionnaires with audio recording capabilities. In order to enhance sample size during the pandemic, participants were permitted to complete the survey independently using their personal mobile devices.

Interviewers were specifically directed to target each child's primary caregiver, defined as the individual most knowledgeable about the child's developmental and educational circumstances. When biological parents were unavailable, foster parents or legal guardians were included as eligible respondents. In cases where parents had multiple children, they were instructed to complete the questionnaire with reference to only one child.

Data Analysis

Exploratory factor analysis (EFA) and principal component analysis (PCA) were conducted, and a multistage linear regression model was subsequently applied. All of the analyses were performed using SPSS Statistics software (version 27).

The school-based involvement of the respondent parent was the dependent variable in the multivariate regression analysis, which was constructed using principal component analysis based on 10 items from the questionnaire. These items were measured on a 5-point Likert scale. The questions focused on the frequency of participation in various school events, school volunteering, and parent-teacher or parent-school professional contact (see Table 1.).

In the questionnaire, respondents were also asked about the other (non-interviewed) parent, so the 10 items were also available for them. Principal component analysis was performed on these 10 items as well, thus constructing the variable "school-based involvement of non-interviewed parents" (this will serve as an explanatory variable in the regression).

For the principal component of the respondent parents' school-based involvement, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.89, and the extraction communality was greater than 0.25 for all items. All items had factor weights above 0.5, making them significant for the principal component (Costello & Osborne, 2005). The overall variance explained by the principal component was 44.5%. In the principal component analysis of school-based involvement among the non-interviewed parents, the KMO was 0.91, and extraction communality scores were greater than 0.25 for all items, with factor weights above 0.5 (Costello & Osborne, 2005). The overall variance explained by the principal component was slightly higher, at 52.6%. The factor loadings of the principal components are presented in Table 1, separately for the respondent parent and the non-interviewed parent.

Table 1

Factor loadings of the principal components of school-based involvement for the respondent and non-interviewed parents (10 items).

Items	Factor loadings	
	Respondent parents	Non-interviewed parents
I always attend open days and parent-teacher visits organised for my child's class. / My co-parent always attends open days and parent-teacher visits organised for our child's class.	0.51	0.636
I have made suggestions to my child's teachers about how they could better support his/her learning. / My co-parent has made suggestions to our child's teachers about how they could better support his/her learning.	0.536	0.644
In the past 12 months, I have participated several times in events organised specifically for parents at my child's school (e.g., family day, school celebration, charity fair, or school ball). / In the past 12 months, my co-parent has participated several times in such events.	0.768	0.758
In the past 12 months, I have taken part several times in sports events organised by my child's school. / In the past 12 months, my co-parent has taken part in such events.	0.766	0.706
In the past 12 months, I have participated several times in art or cultural events organised by my child's school. / In the past 12 months, my co-parent has participated in such events.	0.761	0.749
In the past 12 months, I have attended several school meetings. / In the past 12 months, my co-parent has attended several school meetings.	0.57	0.694
In the past 12 months, I have done volunteer work at my child's school. / In the past 12 months, my co-parent has done volunteer work at our child's school.	0.695	0.747
I always participate in programmes and information sessions for parents organised by the school social worker. / My co-parent always participates in these programmes and sessions.	0.739	0.82
I always attend the parent counselling and information sessions announced by the school psychologist. / My co-parent always attends these sessions.	0.68	0.792
I often benefit from the pedagogical assistant's support in my child's development. / My co-parent often mentions that he/she benefits from the pedagogical assistant's support in our child's development.	0.574	0.685

Next, we present the additional explanatory variables included in the regression. The relationship to the child of the respondent parents and the other parents was measured with a dichotomous nominal variable: mother or foster mother, and father or foster father. The responses from other individuals (e.g., grandparents or sisters) were treated as missing data and excluded from the analysis. This resulted in a valid case count of 981 instead of 1,002. Among

the respondent parents, 86.6% were mothers or foster mothers, and 13.4% were fathers or foster fathers. The number of valid responses was lower for the non-interviewed parents ($N = 639$), of which 16.1% were mothers or foster mothers, and 83.9% were fathers or foster fathers. For marital status, a dummy variable was included: "married or cohabiting", with the categories "divorced, single, unmarried, widowed, or other" used as the reference. Subjective financial well-being was measured on an ordinal scale, with the following options: "Often cannot afford everyday expenses" (1); "Sometimes cannot afford everyday expenses" (2); "Have everything but cannot afford major expenses" (3); "Have everything and can afford major expenses" (4). The type of settlement was categorised using two dummy variables: "capital city or county seat" (1 or 0), "town" (1 or 0), with the reference category being "village". For religiosity, two dummy variables were included: "follow the teachings of the church" (1 or 0), "religious in your own way" (1 or 0), with "don't know or not religious" as the reference category. The number of years of education completed by the respondent parent (educational attainment) was measured as a continuous variable, with the following scale: primary school [8], vocational school (without school-leaving certificate) [11], technical school (with school-leaving certificate) [12], secondary school [12], college or university [15], doctoral degree [20]. Descriptive statistics for the explanatory variables can be found in Table 2.

Table 2

Descriptive statistics of the explanatory variables in the regression.

Variables	<i>n</i>	%
Respondent's relationship to the child		
Mother or foster mother	850	86.6%
Father or foster father	131	13.4%
Marital Status		
Married or cohabited (1)	833	85%
Divorced, single, unmarried, widowed or other (0)	138	15%
Type of settlement		
Capital city or county seat	228	23.2%
Town	447	45.6%
Village (reference category)	292	29.8%
Religiosity		
Follow the teachings of the church	337	34.4%
Religious in own way	455	46.4%
Don't know / not religious (reference category)	179	18.2%
School's administrator		
Church, foundation or private (1)	231	23.5%
State or public administrator (0)	750	76.5%

Variables	<i>n</i>	%		
Type of school				
Upper elementary school	402	41.0%		
Secondary school	579	59.0%		
Child's gender				
Male (1)	436	44.4%		
Female (0)	541	55.1%		
Respondent's country/region				
Hungary (1)	602	61.4%		
Transylvania or Transcarpathia (0)	377	38.4%		
	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Average age of the respondent parent	44.22	6.85	28	74
Number of children	2.40	1.23	1	11
Subjective financial well-being	3.36	0.65	1	4
Educational attainment of the respondent parents ^a	12.90	2.65	6	20

Note. ^aNumber of years in education

Another explanatory variable in the regression model was the school's initiative role. In the questionnaire, this was measured using a 51-item block developed by the MTA-DE Parent-Teacher Cooperation Research Group, assessing respondents' perceptions of their child's school and their cooperation with it. Exploratory factor analysis (EFA) was conducted on these items using the Maximum Likelihood method with Varimax rotation. Initially, seven factors were extracted. Items with a factor loading of 0.50 or higher were considered significant contributors and were assigned to their respective factors (Costello & Osborne, 2005). Items that hindered the interpretability of the factors were excluded. Ultimately, 30 items were retained in the final analysis, yielding five distinct factors. The Kaiser-Meyer-Olkin (KMO) value was 0.95, indicating excellent sampling adequacy, and the final communalities of all items exceeded 0.25, confirming the suitability of the data for factor analysis. Together, the five factors explained 57.98% of the total variance.

The five factors identified were:

- **Information and Contact (IC):** Reflects the extent to which parents feel the school keeps them informed and provides useful communication.
- **Emphasis on Informal Programmes (EIP):** Captures parental perceptions of how much importance the school places on organising and inviting families to informal events (e.g., family days, school carnival).
- **Decision-Making Opportunities (DMO):** Reflects the extent to which parents perceive that the school provides them with opportunities to participate in school-related decision-making processes, such as choosing the date of school trips or being involved in decisions related to school regulations and policies.

- **Presence of Professional Support (PPS):** Refers to the extent to which parents are informed about the work of professionals such as school psychologists or social workers, either directly or through teachers.
- **Online Communication Forums (OCF):** Measures parents' perceptions of the availability and presence of school- and class-level digital platforms (e.g., school and class groups, mailing lists, newsletters) provided by the school.

Results

A multistage linear regression was employed to analyse the school involvement of the responding parent, which served as the dependent variable. Explanatory variables were introduced in five successive steps:

1. Demographic characteristics of the parent;
2. Social background variables;
3. Type of school and school's administrator;
4. School's initiating role (the five derived factors);
5. Non-interviewed parent's school-based involvement and child's gender.

In order to control for geographical variance, a binary country variable (1 = Hungary; 0 = Transylvania/Transcarpathia) was included in the final step. The results of the regression analyses are presented in Table 3.

Table 3

Multistage linear regression model of respondent parents' school-based involvement

Variables	Standardised coefficients				
	Model 1	Model 2	Model 3	Model 4	Model 5
Respondent's relationship to the child: Father	-0.053	-0.033	-0.041	-0.054*	-0.198***
Respondent parent's age	-0.031	-0.04	0.004	0.009	0.033
Marital status: Married or cohabited	-0.034	-0.043	-0.05	-0.017	-0.053#
Number of children		0.011	0.001	-0.044	-0.022
Subjective financial well-being		0.064#	0.058#	0.009	-0.011
Type of settlement: Capital city or county seat		-0.027	-0.043	0.013	-0.011
Type of settlement: Town		0.072#	0.057	0.039	0.008
Educational attainment of respondent parent ^a		0.003	0.01	0.076*	0.059#
Religiosity: Follow the teachings of the church		0.182***	0.147**	0.127***	0.092#
Religiosity: Religious in own way		0.094*	0.075	0.058	0.044

Variables	Standardised coefficients				
	Model 1	Model 2	Model 3	Model 4	Model 5
School's administrator: Church, foundation or private			0.099**	0.016	0.03
Type of school: Upper elementary			0.176***	0.134***	0.115***
Information and contact factor (IC)				0.246***	0.227***
Emphasis on informal programmes factor (EIP)				0.421***	0.299***
Decision-making opportunities factor (DMO)				0.168***	0.089**
Presence of professional support factor (PPS)				0.265***	0.161***
Online communication forums factor (OCF)				0.049#	0.025
Non-interviewed parent's school-based involvement (principal component)					0.412***
Child's gender: Male					0.009
Country: Hungary					0.03
Adjusted R ²	0.002	0.02	0.052	0.421	0.57

Note. *** $p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$, # $p \leq 0.1$.

^aNumber of years in education

The regression results show that fathers have significantly lower school-based involvement after controlling for the effects of other explanatory variables. The largest change in the value of the standardised coefficients occurs in the final step, when we include the variable for non-interviewed parent school-based involvement, which has significant explanatory power. The results show that school-based involvement increases if the school is managed by a church or foundation, although later factors representing the school's initiative role eliminate this effect unless the parent is religious and follows the teachings of the church, in which case their involvement increases. The significance of the place of residence (town) and better subjective financial well-being, although initially present, disappears in the fourth step after including the school-initiating factors. The educational attainment of the respondent parent is not significant initially but becomes and remains significant after including factors indicating the school's initiative role. School-initiative factors are fairly strong explanatory variables for school-based involvement, as shown by the increase in the R-squared value in the fourth step and the high, persistent coefficient values and significances.

In the fourth step, the factors Emphasis on Informal Programmes (EIP), Presence of Professional Support (PPS), and Information and Contact (IC) also have a significant impact. In the fifth step, however, the coefficients for the factor Decision-Making Opportunities (DMO) are almost halved (from 0.168 to 0.089), while the coefficients for Emphasis on Informal Programmes (EIP)

and Presence of Professional Support (PPS) are also significantly reduced, with an effect size of around 0.1. Among the variables included in the final step, it is the non-interviewed parent's school-based involvement that has the most significant effect on the parent's school-based involvement. This suggests that the non-interviewed parent's school-based involvement primarily accounts for the decrease in the coefficients of the school factors. The results suggest that Emphasis on Informal Programmes (EIP), Decision-Making Opportunities (DMO) and Presence of Professional Support (PPS) are significant drivers and forms of non-interviewed parent school-based involvement (among school factors), as they explain the reductions in the coefficients. The magnitude of the decrease in the coefficients on school factors between steps four and five indicates the extent to which the non-interviewed parent influences the completing parent's school-based involvement through each school factor. The factors Emphasis on Informal Programmes (EIP), Decision-Making Opportunities (DMO) and Presence of Professional Support (PPS) may also increase the school-based involvement of the respondent parent, as these factors also have a large impact on the school-based involvement of the non-interviewed parent. Finally, the country variable included in the last step of the model did not exhibit a significant relationship with school-based involvement.

Discussion

The present research aimed to investigate the determinants of school-based involvement, with particular attention to the differences between mothers and fathers and the role of the school in initiating such involvement. The novelty of the study lies in the fact that the differences in fathers' and mothers' involvement and the role of school initiatives in promoting parental involvement has not yet been empirically investigated in detail in the examined region, despite some studies highlighting its potential significance. Moreover, only a limited number of international studies have simultaneously examined the determinants of school-based parental involvement using multivariable regression methods, while also including variables such as the parent's relationship to the child (mother or father) and the school's initiating role. The study therefore represents a meaningful contribution to the international discourse on this topic.

In our analysis, we conducted principal components based on 10 items measuring school-based involvement. In the regression model, the dependent variable was the principal component representing the respondent's school-based involvement, while the independent (explanatory) variables included

the principal component of the non-interviewed parent's school-based involvement, along with other control variables.

Our first hypothesis was confirmed by the multivariate regression analysis, which revealed that fathers exhibit lower levels of school-based involvement than mothers. This finding aligns with results reported in the international literature (Brooks & Hodkinson, 2022; Cankar et al., 2012; Fleischmann & de Haas, 2016) as well as in research conducted within the examined region (Pusztai et al., 2023; Pallay, 2024; Marin & Bocoş, 2019). As noted in the research design section, the respondents were the children's primary caregivers, as they possessed the most comprehensive knowledge of the children's development and schooling. Consequently, the questionnaire was completed predominantly by mothers, resulting in a smaller proportion of fathers among the respondents. Nevertheless, information regarding the other parent's school-based involvement was also obtained based on the respondents' reports.

It should also be noted that the fathers who participated in the survey – those identifying themselves as primary caregivers – were likely to be more motivated than other (non-interviewed) fathers. Nonetheless, even within this subgroup, the regression analyses indicated that mothers remained more actively involved in their children's schooling than fathers. In the regression analysis, after controlling for the other parent's level of school-based involvement, gender differences became even more pronounced. Qualitative studies have demonstrated that fathers' school-based involvement is strongly influenced by mothers' involvement (Csák, 2023), and this dynamic may be reflected in the present findings.

Closely related to the above, we also confirmed our third hypothesis: that non-interviewed parental school-based involvement significantly increased the school-based involvement of the respondent parent. As the activities and attitudes of the two parents converge, the parent who is more involved in school may also encourage the other parent to increase their school-based involvement (Lee, 2019).

Our fourth hypothesis is only partially confirmed. Contrary to research on school volunteering (Fényes et al., 2025), in the fifth step of the regression, school-based parental involvement was not significantly affected by the type of settlement or the school administrator. In smaller settlements, the network of relationships is closer and the culture of church-run schools is often one of community building, both of which are conducive to parent-teacher relations (Pusztai et al., 2024). Our results indicate that the mere fact that the school is church-run or that the parent lives in a city does not lead to more active school involvement. Instead, the advantage of church-run and urban schools

is community building (Pusztai et al., 2024). Conversely, if the institution is a primary school and the parent has higher educational attainment, this significantly increases the parent's school-based involvement, regardless of the school's initiating role. In the case of secondary schools, adolescents' aspirations for independence and the geographical distance of the school from the parents' residence contribute to less frequent parental school attendance (Kim & Hill, 2015). Higher parental educational attainment is also associated with higher school attendance in both international (Cankar et al., 2012; Đurišić & Bunijevac, 2017; Froiland & Davison, 2014; Wang & Sheikh-Khalil, 2014) and Hungarian research (Bacskai et al., 2024). One reason for this is that more highly educated parents share similar norms and communication patterns with teachers (Behtoui & Strömberg, 2020; Đurišić & Bunijevac, 2017; Šteh & Kalin, 2011), making it easier for them to be involved.

Our second hypothesis was confirmed, with four of the five factors indicating that the school's role as an initiator had a strong and significant positive effect in the final regression model. The openness and climate of the school were thus a determinant of parents' school-based involvement, as suggested by international research (Behtoui & Strömberg, 2020; Caridade et al., 2020; Drvodelić & Domović, 2022).

Our research covered Hungarian-speaking parents in three countries (Hungary, Romania, Ukraine). Although we did not formulate hypotheses on differences between countries due to the lack of appropriate comparative data, our results indicated no significant difference in school-based involvement between parents living in border regions near Hungary and those living in Hungary, after including control variables and composite indicators measuring the initiating role of the school in our model. Presumably, by including factors measuring the initiating role of the school, we were able to filter out differences arising from the different school systems of the respective countries. Our results rather show common cultural effects. The value preferences of Hungarian-speaking parents that can influence school involvement are presumably similar in the three countries studied.

Conclusion

Research suggests that parent-teacher contact faces several barriers, one of which is the communication, values and attitudinal gap associated with unfavourable social status (Bacskai et al., 2024; Behtoui & Strömberg, 2020; Ceglédi et al., 2024). However, this is not the only reason for the relatively infrequent parent-teacher contact; for instance, in the case of school volunteering,

the school's role in initiating contact is the dominant factor, and parental initiatives are rare (Kocsis et al., 2024). This suggests that the extent to which school actors (teachers, principals, support professionals) are open to the presence of parents and to engaging with them may be a key factor in school-based involvement (Csók & Pusztai, 2022; Pusztai et al., 2024).

The present research supports this finding through multivariate analysis, which represents a novel contribution both in Hungary and internationally. Parents' school-based involvement is significantly increased when schools provide regular, useful and meaningful information to parents, and when they organise informal events in addition to formal ones, with an emphasis on community building and informal interaction. Furthermore, if the school is open to involving parents in decision-making and has a well-developed network of support professionals (e.g., school psychologists, social workers), it can foster greater school-based involvement among parents. Our results also show that the school's initiating role is crucial for non-interviewed parent involvement. Since most of the non-interviewed parents in our study were fathers, analysing these results can offer additional insights. Our regression analysis suggests that the school-based involvement of the non-interviewed parent increases the school-based involvement of the respondent parent, which aligns with previous qualitative findings involving fathers (Csák, 2023).

When the school-based involvement of the non-interviewed parent was included in the regression, changes in the coefficients of the school factors were observed. This suggests that formal events, where information is primarily transferred, contribute less to both parents' involvement in the school. Informal events and decision-making opportunities are more likely to increase both parents' school-based involvement, a finding mostly supported by qualitative research to date (Csák, 2023). The work of and relationship with support professionals can also enhance school-based involvement from both parents. This is not a surprising result, as their work can provide parents with information and advice that can also assist in parenting at home (Csók & Pusztai, 2022).

Limitations and Further Research Plans

One limitation of our study is that we only learned about the non-interviewed parent's school-based involvement from the respondent parent's narrative, and we only examined the school-based involvement of the respondent parent as the dependent variable in the regression. Moreover, we relied solely on parents' narratives about the role and openness of the school, and not on the perspectives of the school or teachers, which could also introduce potential

bias. Our future research plans include investigating the factors influencing school-based involvement among non-interviewed parents through a separate regression model. Additionally, we consider it important to examine the school's initiating role from multiple perspectives, incorporating not only parents' views but also those of teachers and students.

Policy Recommendation

This study aimed to examine the school's role in facilitating parental involvement and to identify differences between paternal and maternal engagement patterns. According to the regression results, maternal involvement plays a significant role in shaping fathers' school-based involvement; however, the influence of the school is also evident. When schools initiate informal events and provide parents with decision-making opportunities and professional support, this enhances the school-based involvement of the non-interviewed parent (mostly fathers) and, consequently, the joint involvement of both parents.

The findings indicate that while schools should continue providing explicit information during parent-teacher conferences, this formal engagement strategy demonstrates greater effectiveness for mothers than for fathers. A second critical function of schools involves organising informal events designed to be inclusive of fathers. Such events not only promote community building – a domain in which church-run schools exhibit particular success – but also offer a replicable model for other educational institutions. Furthermore, incorporating parents into school decision-making processes represents another vital strategy, with evidence suggesting that this approach holds specific appeal for paternal involvement. Lastly, deploying school professionals (e.g., psychologists, social workers) for home visits may serve as an additional effective mechanism to enhance fathers' participation in school-related activities.

Ethical Statement

The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board (or Ethics Committee) of the School Ethics Committee of the Doctoral Programme in Educational Sciences at the University of Debrecen (protocol code 1/2022, dated 9 March 2022).

Data Availability Statement

The dataset on which the analyses were conducted is subject to a one-year embargo following the completion of the research, in accordance with university regulations. After the embargo period has expired, the authors will make the data available in Hungarian upon reasonable request.

Disclosure Statement

The authors declare that there is no conflict of interest.

When preparing this article, the authors used ChatGPT, GPT-4o on 15 May 2025 with the following prompt: “Translate the following text into English, maintaining an academic style,” for the purpose of supporting the translation of the manuscript. The authors subsequently reviewed and edited the output as necessary and accept full responsibility for the content and integrity of the publication.

Acknowledgements

The research on which this paper is based was implemented by the MTA-DE-Development of Future Awareness Research Group with support provided by the Scientific Foundations of Education Research Programme of the Hungarian Academy of Sciences. Supported by the MCA – Collegium Professorum Hungarorum and the EKÖP-24-2 University Research Scholarship Programme of the Ministry for Culture and Innovation from the source of the National Research, Development and Innovation Fund.

References

- Bacsikai, K., Bencze, Á., Dorogi, A., Hegedűs, G., Major, E., Rétháti, C., & Pusztai, G. (2024). Implementing parental involvement to improve student achievement in Hungary schools: Patterns of hidden resources. *Eurasian Journal of Educational Research*, 109(109), 198–213.
- Behtoui, A., & Strömberg, I. (2020). Compensatory school effects and social capital. *Social Sciences*, 9(11), Article 193. <https://doi.org/10.3390/socsci9110193>
- Bhargava, S., & Witherspoon, D. P. (2015). Parental involvement across middle and high school: Exploring contributions of individual and neighborhood characteristics. *Journal of Youth and Adolescence*, 44(9), 1702–1719. <https://doi.org/10.1007/s10964-015-0334-9>
- Brooks, R., & Hodkinson, P. (2022). The distribution of ‘educational labour’ in families with equal or primary carer fathers. *British Journal of Sociology of Education*, 43(7), 995–1011. <https://doi.org/10.1080/01425692.2022.211426>

- Bubić, A., Tošić, A., & Mišetić, I. (2021). The role of parental self-efficacy in explaining children's academic outcomes. *Center for Educational Policy Studies Journal*, 11(4), 189–212. <https://doi.org/10.26529/cepsj.860>
- Cáceres-Iglesias, J., Gajardo-Espinoza, K., Meza-Cortés, A. F., & Palomero-Fernández, P. (2025). Inclusive education for students with type 1 diabetes in Spain: Reality or utopia? *Center for Educational Policy Studies Journal*, Article 1982. <https://doi.org/10.26529/cepsj.1982>
- Cankar, F., Deutsch, T., & Sentočnik, S. (2012). Approaches to building teacher-parent cooperation. *Center for Educational Policy Studies Journal*, 2(1), 35–55. <https://doi.org/10.26529/cepsj.394>
- Caridade, S. M. M., Sousa, H. F. P., & Pimenta Dinis, M. A. (2020). The mediating effect of parental involvement on school climate and behavior problems: School personnel perceptions. *Behavioral Sciences*, 10(8), Article 129. <https://doi.org/10.3390/bs10080129>
- Ceglédi, T., Alter, E., Godó, K., & Papp, H. (2024). Can high involvement of Roma parents combat the impact of poverty? Resilience and parental involvement in the success of Roma students at school from the students' perspective. *HORIZONTY WYCHOWANIA*, 23(66), 107–120. <https://doi.org/10.35765/hw.2024.2366.11>
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation*, 10(7), 1–9. <https://doi.org/10.7275/jyj1-4868>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Csák, Z. (2023). Types of fathers' home-based and school-based involvement in a Hungarian interview study. *Central European Journal of Educational Research*, 5(1), 95–103. <https://doi.org/10.37441/cejer/2023/5/1/12047>
- Csók, C., & Pusztai, G. (2022). Parents' and teachers' expectations of school social workers. *Social Sciences*, 11(10), Article 487. <https://doi.org/10.3390/socsci11100487>
- Damean, D. (2010). Determinants of parent involvement in Romanian schools. *Journal of Social Research & Policy*, 2, 117–129.
- Drvodelić, M., & Domović, V. (2022). Parents' opinions about their children's distance learning during the first wave of the Covid-19 pandemic. *Center for Educational Policy Studies Journal*, 12(3), 221–241. <https://doi.org/10.26529/cepsj.1131>
- Đurišić, M., & Bunijevac, M. (2017). Parental involvement as an important factor for successful education. *Center for Educational Policy Studies Journal*, 7(3), 137–153. <https://doi.org/10.26529/cepsj.291>
- Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). *School, family, and community partnerships: Your handbook for action*. Corwin Press.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22. <https://doi.org/10.1023/A:1009048817385>
- Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family involvement questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, 92(2), 367–376. <https://doi.org/10.1037/0022-0663.92.2.367>

- Fényes, H., Csák, Z., & Pusztai, G. (2025). Parental volunteering in schools: Perspectives from a Central and Eastern European region. *Cogent Education*, 12(1), Article 2535842.
<https://doi.org/10.1080/2331186X.2025.2535842>
- Fleischmann, F., & de Haas, A. (2016). Explaining parents' school involvement: The role of ethnicity and gender in the Netherlands. *The Journal of Educational Research*, 109(5), 554–565.
<https://doi.org/10.1080/00220671.2014.994196>
- Froiland, J. M., & Davison, M. L. (2014). Parental expectations and school relationships as contributors to adolescents' positive outcomes. *Social Psychology of Education*, 17(1), 1–17.
<https://doi.org/10.1007/s11218-013-9237-3>
- Gee, L. K. (2011). The nature of giving time to your child's school. *Nonprofit and Voluntary Sector Quarterly*, 40(3), 552–565. <https://doi.org/10.1177/0899764010362116>
- Gibbs, B. G., Marsala, M., Gibby, A., Clark, M., Alder, C., Hurst, B., Steinacker, D., & Hutchison, B. (2021). “Involved is an interesting word”: An empirical case for redefining school-based parental involvement as parental efficacy. *Social Sciences*, 10(5), Article 156.
<https://doi.org/10.3390/socsci10050156>
- Gubbins, V., & Otero, G. (2018). Determinants of parental involvement in primary school: Evidence from Chile. *Educational Review*, 72(2), 137–156. <https://doi.org/10.1080/00131911.2018.1487386>
- Guo, X., Lv, B., Zhou, H., Liu, C., Liu, J., Jiang, K., & Luo, L. (2018). Gender differences in how family income and parental education relate to reading achievement in China: The mediating role of parental expectation and parental involvement. *Frontiers in Psychology*, 783(9), 1–12.
<https://doi.org/10.3389/fpsyg.2018.00783>
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740–763.
<https://doi.org/10.1037/a0015362>
- Hrabéczy, A., Ceglédi, T., Bacskai, K., & Pusztai, G. (2023). How can social capital become a facilitator of inclusion? *Education Sciences*, 13(2), Article 109. <https://doi.org/10.3390/educsci13020109>
- Kaplan Toren, N. (2013). Multiple dimensions of parental involvement and its links to young adolescent self-evaluation and academic achievement. *Psychology in the Schools*, 50(6), 634–649.
<https://doi.org/10.1002/pits.21698>
- Kim, S. W., & Hill, N. E. (2015). Including fathers in the picture: A meta-analysis of parental involvement and students' academic achievement. *Journal of Educational Psychology*, 107(4), 919–934.
<https://doi.org/10.1037/edu0000023>
- Klun, M., Frangež, D., & Ručman, A. B. (2025). Addressing violence against parents and peers and violence in schools through the perspective of ecological theory. *Center for Educational Policy Studies Journal*, 15(2), 227–247. <https://doi.org/10.26529/cepsj.1681>
- Kocsis, Z., Markos, V., Fazekas, E., Fényes, Z. H., & Pusztai, G. (2024). “Won't be enough to invite parents to school events”: Results of a systematic literature review of parental volunteering. *Ricerche Di Pedagogia e Didattica. Journal of Theories and Research in Education*, 19(2), 133–153.
<https://doi.org/10.6092/issn.1970-2221/20185>

- Kovács, K., Oláh, Á. J., & Pusztai, G. (2024). The role of parental involvement in academic and sports achievement. *Heliyon*, 10(2), Article e24290. <https://doi.org/10.1016/j.heliyon.2024.e24290>
- Lareau, A., & Cox, A. (2011). Social class and the transition to adulthood: Differences in parents' interactions with institutions. In M. J. Carlson, & P. England (Eds.), *Social class and changing families in an unequal America* (pp. 134–164). Stanford University Press. <https://doi.org/10.1515/9780804779081-009>
- Lee, H. (2019). An exploratory analysis of the factors associated with fathers' school involvement in South Korea. *Journal of Child and Family Studies*, 28(3), 839–850. <https://doi.org/10.1007/s10826-018-01307-2>
- Makay, Z., & Spéder, Z. (2020). Fatherhood: Parenthood and family roles for man. In J. Monostori, P. Óri, & Z. Spéder (Eds.), *Demographic portrait of Hungary 2018* (pp. 67–84). Hungarian Demographic Research Institute.
- Marin, D., & Bocos, M. (2019). The effects of a high family involvement in pupils' education. In E. Soare, & C. Langa (Eds.), *Education facing contemporary world issues, European proceedings of social and behavioural sciences* (pp. 875–883). Future Academy. <https://doi.org/10.15405/epsbs.2019.08.03.105>
- Mohammed, P., & Engler, Á. (2022). The role of family and family context in the learning process of children. *Vietnam Journal of Education*, 6(1), 1–9. <https://doi.org/10.52296/vje.2022.144>
- Negru, O., Damian, L., & Baban, A. (2010). Parents and children in Romania: The influence of family culture dimensions on parental involvement in children's academic life. *Revista de Psihologia da Criança e do Adolescente*, (1), 31–48.
- Neményi, M., & Takács, J. (2016). Main breadwinner women in Hungary and their work-family balance related coping strategies. *Intersections. East European Journal of Society and Politics*, 2(3), 97–117. <https://doi.org/10.17356/ieejsp.v2i3.170>
- OECD. (2022). *PISA 2022 Database*. <https://www.oecd.org/en/data/datasets/pisa-2022-database.html>
- Pallay, K. (2024). Szülői bevonódás Kárpátalja magyar tannyelvű iskoláiban: egy empirikus vizsgálat eredményei ukrainai magyar szülők körében. [Parental involvement in schools with Hungarian teaching language in Transcarpathia: Results of an empirical study of Hungarian parents in Ukraine.] *Önkéntes Szemle*, 4(3), 110–128. <https://doi.org/10.53585/OnkSzem.2024.3.110-128>
- Pári, A., & Engler, Á. (2024). The role of sibling patterns in the educational attainment of Hungarian twins. *Twin Research and Human Genetics*, 27(4–5), 231–240. <https://doi.org/10.1017/thg.2024.37>
- Pribesh, S. L., Carson, J. S., Dufur, M. J., Yue, Y., & Morgan, K. (2020). Family structure stability and transitions, parental involvement, and educational outcomes. *Social Sciences*, 9(12), Article 229. <https://doi.org/10.3390/socsci9120229>
- Pusztai, G., Bacskai, K., Ceglédi, T., Kocsis, Z., & Hine, M. G. (2025). Mission possible? Institutional family-school-community partnership practices and parental involvement in Hungarian majority and minority schools in three Central and Eastern European countries. *Social Sciences*, 14(2), Article 107. <https://doi.org/10.3390/socsci14020107>
- Pusztai, G., Demeter-Karászi, Z., Major, E., & Puskás, M. (2024). Beyond the barriers of deficit orientedness? Comparing distinct teacher approaches of parental involvement. *British Journal of*

- Religious Education*, 46(4), 370–388. <https://doi.org/10.1080/01416200.2024.2388133>
- Pusztai, G., Róbert, P., & Fényes, H. (2023). Parental involvement and school choice in Hungarian primary schools. *Journal of School Choice*, 17(1), 118–135. <https://doi.org/10.1080/15582159.2023.2169812>
- Radu, R. (2013). School-based parental involvement: A comparative assessment of predictors of satisfaction in South-East Europe. *Educational Studies*, 39(2), 167–182. <https://doi.org/10.1080/03055698.2012.702891>
- Ringenberg, M. C., Funk, V., Mullen, K., Wilford, A., & Kramer, J. (2005). Test-retest reliability of the Parent and School Survey (PASS). *School Community Journal*, 15(2), 121–134.
- Spéder, Z. (2011). Ellentmondó elvárások között... Családi férfiszerepek, apaképek a mai Magyarországon [Between conflicting expectations... Family male roles, father images in contemporary Hungary]. In I. Nagy, & T. Pongrácz (Eds.), *Szerepváltozások: Jelentés a nők és férfiak helyzetéről [Role changes: Report on the situation of women and men]* (pp. 207–228). TÁRKI. <https://demografia.hu/hu/letoltes/kiadvanyok/Szerepvaltozasok/207-228Speder.pdf>
- Spéder, Z. (2023). A quarter century of change in family and gender-role attitudes in Hungary. *Comparative Population Studies*, 48, 741–770. <https://doi.org/10.12765/CPoS-2023-29>
- Šteh, B., & Kalin, J. (2011). Building partner cooperation between teachers and parents. *Center for Educational Policy Studies Journal*, 1(4), 81–101. <https://doi.org/10.26529/cepsj.407>
- Takács, J. (2020). How involved are involved fathers in Hungary? Exploring caring masculinities in a post-socialist context. *Families, Relationships and Societies*, 9(3), 487–502. <https://doi.org/10.1332/204674319X15592179267974>
- Velki, T. (2022). The mediating role of parents and school in peer aggression problems. *Center for Educational Policy Studies Journal*, 12(1), 169–188. <https://doi.org/10.26529/cepsj.921>
- Wang, M.-T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child Development*, 85(2), 610–625. <https://doi.org/10.1111/cdev.12153>
- Warrington, M. (2013). Challenging the status quo: The enabling role of gender sensitive fathers, inspirational mothers and surrogate parents in Uganda. *Educational Review*, 65(4), 402–415. <https://doi.org/10.1080/00131911.2012.689274>
- Wei, W., Wu, Y., Lv, B., Zhou, H., Han, X., Liu, Z., & Luo, L. (2016). The relationship between parental involvement and elementary students' academic achievement in China: One-only children vs. children with siblings. *Journal of Comparative Family Studies*, 47(4), 483–500. <https://doi.org/10.3138/jcfs.47.4.483>
- Weiser, D. A., & Riggio, H. R. (2010). Family background and academic achievement: Does self-efficacy mediate outcomes? *Social Psychology of Education*, 13(3), 367–383. <https://doi.org/10.1007/s11218-010-9115-1>
- Zelenskaya, L., & Balatsynova, A. (2020). Problem of parents–school cooperation in the learning process within the context of requirements of the New Ukrainian School. In V. M. Gryniova, S. M. Kurinna, & L. M. Romanishyna (Eds.), *Theory and practice of future teachers' training for work in the New Ukrainian School* (pp. 513–520). Oktan Print. <https://doi.org/10.46489/TAPOFT>

Biographical note

ZSOLT CSÁK, researcher at the MCA – Collegium Professorum Hungarorum. His research focuses on value orientations and intergenerational value transmission. He is also involved in the work of the MTA-DE Future Awareness Development Research Group. Previously, as a member of the MTA-DE Parent-Teacher Cooperation Research Group, his research concentrated on parental involvement, with a particular emphasis on differences between mothers' and fathers' involvement, its underlying mechanisms, and gender-specific differences in the effects of parental involvement on educational outcomes.

HAJNALKA FÉNYES, PhD, graduated as an economist in 1991, earned her PhD in sociology in 2001, and obtained her habilitation in educational sciences in 2010. She is currently an associate professor at the Department of Sociology and Social Policy at the University of Debrecen (Hungary). Also, she serves as a lecturer and supervisor at the Doctoral School of Humanities. She has been a member of the CHERD research group since 2002, where she is continuously involved in numerous projects as a senior researcher. In addition to applying sociological research methods – particularly multivariate statistical analyses – her research interests include the social mobility of higher education students, gender roles and gender differences in higher education, students' paid and voluntary work, and young people's career aspirations.

GABRIELLA PUSZTAI, PhD (2002) and DSc (2012), is the professor of sociology of education at the Institute of Educational and Cultural Studies at the University of Debrecen (Hungary), the director of the Center for Higher Education Research and Development, and the leader of the Doctoral School on Human Sciences in Debrecen. Her main research interests relate to the equal opportunity of diverse student groups in education and the influence of students' communities and networks on their academic careers. One of her books was published in the HERP series by Peter Lang (*Pathways to Success in Higher Education*, 2015). She is a member of the editorial board of *Religion and Society in Central and Eastern Europe*, *Hungarian Educational Research Journal*, and *Journal of Social Research & Policy*, and the chief editor of the *Central European Journal of Education Research*.