



## PARENTAL MOTIVATIONAL BELIEFS, SCHOOL INVOLVEMENT, AND PERCEPTIONS OF ADOLESCENT ACADEMIC SELF-EFFICACY

MELITA PUKLEK LEVPUŠČEK<sup>1</sup> & LEA ŠTRAVS<sup>2</sup>

**Potrjeno/Accepted**  
15. 10. 2025

<sup>1</sup>Faculty of Arts, University of Ljubljana, Ljubljana, Slovenia

<sup>2</sup>Zdravstveni dom Črnomelj, Črnomelj, Slovenia

**Objavljeno/Published**  
18. 3. 2026

CORRESPONDING AUTHOR/KORESPONDENČNI AVTOR  
melita.puklek@ff.uni-lj.si

### Abstract/Izvleček

Grounded in the revised Hoover-Dempsey and Sandler model of parental involvement, this study examined motivational beliefs of parents regarding their school involvement, specific forms of involvement, and how these relate to parents' perceptions of their child's academic self-efficacy. Using a quantitative survey design, data were collected from a sample of 331 Slovenian parents of adolescents aged 12 to 15 years. Parents reported high levels of general invitation to participate in school, high levels of beliefs about their active role in their child's education, and generally positive attitudes toward school. These motivating beliefs were consistently and positively associated only with their direct involvement at the school level. Both forms of involvement (school and home activities) were negatively related to adolescents' academic self-efficacy.

### Keywords:

parental involvement,  
academic self-efficacy,  
motivational beliefs,  
parents, adolescents.

### Ključne besede:

starševsko vključevanje,  
učna samoučinkovitost,  
motivacijska prepričanja,  
starši, mladostniki.

UDK/UDC  
37.015.3-055.52

### Starševska motivacijska prepričanja o vključevanju v izobraževanje, oblike vključevanja in učna samoučinkovitost mladostnikov

Na podlagi revidiranega Hoover-Dempsey in Sandlerjevega modela starševske vključenosti smo v raziskavi preučevali motivacijska prepričanja staršev glede njihove vključenosti v šolo, specifične oblike vključenosti ter njihovo povezanost z zaznavo učne samoučinkovitosti otrok s strani staršev. Podatke smo zbrali z anketnim vprašalnikom na vzorcu 331 slovenskih staršev mladostnikov, starih od 12 do 15 let. Starši so poročali o visoki stopnji zaznanih povabil s strani šole, močnih prepričanjih o svoji vlogi pri izobraževanju, pozitivni vrednosti šole ter zaupanju v lastno znanje in sposobnosti za vključevanje. Ta motivacijska prepričanja so bila enotno in pozitivno povezana le s starševskim vključevanjem v šoli. Obe obliki vključevanja (v šoli in doma) sta bili negativno povezani s starševsko zaznavo učne samoučinkovitosti mladostnikov.

DOI <https://doi.org/10.18690/rei.5131>

Besedilo / Text © 2026 Avtor(ji) / The Author(s)

To delo je objavljeno pod licenco Creative Commons CC BY Priznanje avtorstva 4.0 Mednarodna.

Uporabnikom je dovoljeno tako nekomercialno kot tudi komercialno reproduciranje, distribuiranje, dajanje v najem, javna priobčitev in predelava avtorskega dela, pod pogojem, da navedejo avtorja izvirnega dela. (<https://creativecommons.org/licenses/by/4.0/>).



## Introduction

The education of children is often perceived as the sole responsibility of schools and teaching staff. Communication between parents and schools is often limited to solving problems that children have (Jurčević Lozančić et al., 2019). However, parents can play an important role in the education of their children. It is very important that they be involved in education from an early age and persist in it, especially for adolescents (DePlanty et al., 2007).

Through their involvement, parents influence their children's academic performance in both primary and secondary school and in the longer term. By instilling positive values in children, they can create a positive attitude towards school and learning, influencing children's sense of self-efficacy and the development of knowledge and skills (Fan and Chen, 2001; Rong, 2024). In a meta-analysis of studies examining the associations between parental forms of involvement and academic success between 2003 and 2017, the authors Boonk et al. (2018) found that parental motivational beliefs, such as parental high expectations regarding the child's education, communication between parents and children regarding school and obligations, and parental support and encouragement regarding learning were consistently and positively associated with academic achievement. In contrast, many behavioural forms of parental involvement, such as help with and control of homework or some forms of school-based involvement (e.g., attendance at teacher meetings, volunteering) showed no effect or even negative effects (Boonk et al., 2018).

The forms of parental involvement and their effectiveness also change with the child's age. During the transition to adolescence, children desire more freedom and independence, and parents adjust their level of control and involvement accordingly. While direct parental control over schoolwork typically decreases as adolescents strive for greater autonomy, home-based support (e.g., encouragement, academic expectations, supervision) and school-based involvement (e.g., communication with teachers) remain important factors in academic success (Benner et al., 2016). It is important to note that strategies for parental involvement in education need to be age-appropriate to be effective and to foster academic achievement (Green et al., 2007). Evidence from a sample of Chinese adolescents further suggests that the effectiveness of parental involvement depends on the specific approach employed, with autonomy-supportive practices proving more beneficial than high levels of involvement or control (Li et al., 2020).

While the effects of parental involvement on children's education have been extensively researched, less attention has been paid to the underlying motivations for parental engagement (Walker et al., 2005). In this study, we therefore investigated the motivational beliefs of parents that drive parental involvement. In this way, we could identify ways in which collaboration between parents and schools can be strengthened to optimise educational outcomes for children.

## Theoretical Background

### *The Hoover-Dempsey and Sandler Model of Parental Involvement in Education*

Hoover-Dempsey and Sandler's model (Hoover-Dempsey and Sandler, 1995, 1997) provides a theoretical model for understanding the psychological basis of parental involvement in childrearing. It focuses on the causes, forms and effects of such involvement on academic achievement. The model consists of five levels, which are organised in a linear fashion. It begins with the psychological factors that influence parents' decision to become involved and progresses through the subsequent levels. *The first level* describes four key psychological factors that influence parents' decision to become involved in their child's education: parental role construction (i.e., parents' beliefs about their role in their child's education), parents' sense of self-efficacy in assisting their child, the perceived school invitations for involvement, and the child's perceived invitations for involvement. *The second level* occurs when parents decide to become involved and choose strategies for involvement according to their skills and knowledge, their available time and energy, and specific invitations from the child and the school. For example, work commitments or caring responsibilities may determine the extent of their involvement. *The third level* describes the influence mechanism of parental involvement. Parents can act as role models, reinforcers of desired behaviour or transmitters of instructions. *The fourth level* of the model examines the appropriateness of parental involvement strategies in relation to the child's developmental needs and the school's expectation of involvement. For example, younger children tend to benefit from more intensive involvement, while older children value autonomy but still benefit from tailored support. *The fifth level* of the model encompasses the cumulative effects of parental involvement that are reflected in student outcomes, including knowledge, skills, and academic self-efficacy. Hoover-Dempsey and Sandler (1997) emphasise that several factors can influence parental involvement simultaneously, and to varying degrees.

*Expansion of the Hoover-Dempsey and Sandler Model (Walker et al., 2005)*

Hoover-Dempsey and Sandler's (1995, 1997) original model was primarily intended to explain the process of parental involvement, but not so much in terms of recommending how educational institutions and parents should act (Walker et al., 2005). Later, Walker et al. (2005) revised and adapted the model to improve its applicability in real-life contexts.

Walker et al. (2005) merged Levels 1 and 2 of the original model into a single level (Level 1 in the revised model), which incorporates three key constructs: parental motivational beliefs, perceived invitations for involvement, and perceived life context (see Figure 1).

*Parental motivational beliefs* encompass parents' perceptions of their role in their child's education and their self-efficacy for involvement. Role beliefs shape parents' sense of obligation and expectations for engagement, influenced by cultural norms and community values. These beliefs evolve as children develop, reflecting their achievements and changing developmental stages (Eccles and Harold, 1993; Hoover-Dempsey and Sandler, 1997). Self-efficacy, as defined by Bandura (1997), refers to parents' confidence in their ability to positively influence their child's education. Parents with a strong sense of self-efficacy are more likely to persist in involvement, influencing children's academic control and achievement goals (Bubić and Tošić, 2016; Bubić et al., 2021).

*Perceived invitations for involvement* refer to parents' understanding of their welcome by schools, teachers, and their child. These perceptions significantly influence parents' decisions to engage in their child's education (Walker et al., 2005). Schools can foster these perceptions through inclusive policies, open communication, and invitations to participate in activities (Balli et al., 1998; Griffith, 1998). Teachers play a critical role by encouraging collaboration, maintaining open lines of communication, and exhibiting positive attitudes toward parental involvement (Chliara et al., 2024; Westergård, 2013). Children also motivate engagement through direct or indirect requests for support, such as seeking help with homework (Pomerantz and Eaton, 2001).

*Perceived life context* refers to parents' self-assessment of their available time, energy, knowledge, and skills. These factors influence both their willingness and ability to participate (Walker et al., 2005). For example, parents with demanding jobs or caregiving responsibilities may find it difficult to engage in school-related activities. Additionally, parents' confidence in their abilities affects the strategies they employ to support their child's education. Cultural context is also crucial, as schools must

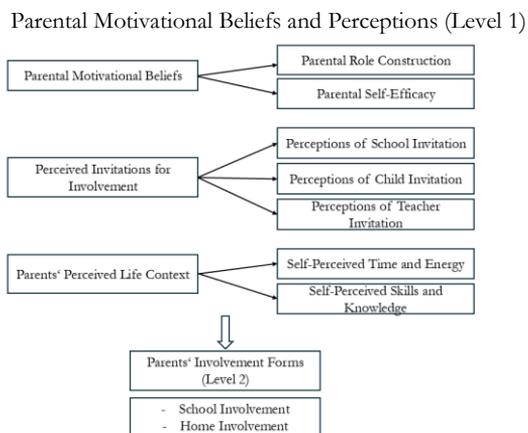
respect and adapt to diverse family backgrounds, including language barriers and differing cultural values (Deslandes, 2019; Garcia Coll et al., 2002).

The above-mentioned constructs represent the psychological and contextual factors that influence parental involvement and contribute to two forms of parental involvement in children's education: school involvement and home involvement (Level 2 in the revised model; Walker et al., 2005; see Figure 1).

*Parental school involvement* typically involves formal activities outlined in school policies, such as parent-teacher meetings and consultation hours. Other forms of involvement include participation in extracurricular activities, excursions, and written or phone communication between parents and schools.

Milosavljević Đukić et al. (2022) examined parental involvement among 198 parents in Serbia. They found that 93% recognized parent-teacher meetings as a form of collaboration, but only 34% viewed lectures for parents similarly. Even fewer parents identified one-on-one meetings at their initiative, discussions with school counsellors, or scheduled individual interviews as forms of collaboration. Additionally, only about 20% of parents expressed willingness to engage with school psychologists, and only 12% showed interest in participating in the Parents' Council.

*Parental home involvement* includes interactions between parents and children related to school activities that occur outside the school environment (Walker et al., 2005). They include parents' interest in their child's school responsibilities, attitudes toward education, assistance with homework and learning, and monitoring academic progress (Green et al, 2007; Sivabalan et al., 2024). Parental involvement at home has a significant positive impact on children's academic performance. Key activities include talking about school responsibilities (Epstein and Sheldon, 2002) and helping children to organise their tasks (Van Voorhis, 2003). These conversations can reduce problematic behaviours in the child (Epstein and Sheldon, 2002). DePlanty et al. (2007) found that one of the most important contributions parents can make is to ensure that their children complete their homework. Similarly, Perriel (2015) emphasises that most parents see support, encouragement and help with homework as the core of their involvement. On the other hand, Fan and Chen (2001) found a weak correlation between parental control and academic achievement, suggesting that struggling students may need more parental control than their higher-achieving peers.

**Figure 1***Walker et al.'s Revised Hoover-Dempsey and Sandler's Model*

*Note.* Levels 1 and 2 of the original model are subsumed under Level 1 in the revised model, representing the psychological factors, underlying parental involvement behaviours (Walker et al., 2005, p. 88).

## Study Aims

This study examines motivational beliefs of parents regarding their educational role, perceived knowledge and skills and perceived invitations to involvement (Level 1), and two forms of parental involvement (Level 2) as described in the revised Hoover-Dempsey and Sandler model of parental involvement (Walker et al., 2005). The study focuses on Slovenian parents with adolescent school-aged children. We formulated the following research questions:

RQ1: How are the characteristics of parental involvement related to children's academic self-efficacy as perceived by parents?

RQ2: What is the relationship between parental involvement, parents' level of education, and the age of their children?

## Method

### *Participants*

The sample consisted of 331 parents of adolescent children who attended the 6th, 7th, 8th or 9th grade of a Slovenian compulsory school. In Slovenia, compulsory

basic education lasts nine years and typically includes children aged 6 to 15. The 6th to 9th grades are usually attended by adolescents aged 11 to 15. The 6th grade is part of the second cycle, while the 7th to 9th grades represent the third cycle of basic education. These grades form the subject-based stage (*predmetna stopnja*), where individual subjects are taught by different subject-specific teachers. Of the participants, 298 (90%) were mothers and 33 (10%) were fathers. The average age of the participants was 43.9 years ( $SD = 4.7$ ,  $min. = 31$ ,  $max. = 62$ ). A total of 87 parents (26.3%) had completed primary or secondary education, 208 parents (62.8%) had completed post-secondary or university education, and 36 parents (10.9%) held a master's or doctoral degree. The sample of children for whom parents completed the questionnaire comprised 331 children, including 149 (45%) girls and 182 (55%) boys. Among these, 88 children (26.6%) were in the 6th grade, 78 children (23.6%) were in the 7th grade, 77 children (23.2%) were in the 8th grade, and 88 children (26.6%) were in the 9th grade.

### *Instruments*

#### Demographic Data

Participants answered a question regarding their relationship to the child for whom they were completing the questionnaire (mother or father), recorded their age, and indicated their level of education, the child's gender, and the grade the child was attending in the school. Additionally, parents rated, on a scale from 1 to 6, the extent to which they believed their child was capable of learning the study material independently (from 1 = not capable at all to 6 = fully capable).

#### Parental Involvement in Children's Education (Walker et al., 2005)

The following domains of beliefs that contribute to parents' decision to be involved in their child's education were included in the study: 1) Role Activity Beliefs (10 items; beliefs about responsibility for the child's education), Valence Toward School (6 items; parents' personal experiences and feelings about school), Parents' Perceptions of General Invitations for Involvement from the School (6 items; extent to which invitations or activities from the school make parents feel welcome and useful to support student learning) and Parents' Perceived Life Context – Knowledge and Skills (9 items; parents' beliefs about the skills and knowledge for involvement). In addition, Parents' Involvement in Home-Based Activities (5 items; involvement in the child's school-related activities at home) was included. All items

were translated with the help of two English teachers using the back-translation method. Parents responded to the statements in the domains of Role Activity Beliefs, Parents' Perceptions of General Invitations for Involvement from the School, and Parents' Perceived Life Context – Knowledge and Skills on a 6-point Likert scale (from 1 = disagree very strongly to 6 = agree very strongly). The Valence Toward School domain was assessed using a 6-point rating scale between two polar descriptors (e.g. 'disliked-liked'). The statements in the Parents' Involvement in Home-Based Activities domain were rated on a 6-point scale (from 1 = never to 6 = always).

Forms of Parental Involvement at the School Level (Milosavljević Đukić et al., 2022).

The domains of parental involvement in school-based activities as defined in the Serbian study were considered more contextually appropriate for the Slovenian school context than the domains proposed by Walker et al. (2005). The latter included activities related to parental involvement at school level, which are less common in Slovenia (e.g., voluntary parental participation in school trips). In contrast, the Serbian authors included activities more in line with Slovenian cultural and pedagogical practises (e.g., parental attendance at parent-teacher meetings, consultation hours and communication with the school counsellor). Nine forms of involvement in school-based activities (e.g. 'lectures for parents') were converted into statements (e.g. 'I attend lectures for parents at school'). Parents rated the extent of their participation in each form of involvement using a 6-point scale (1 = never to 6 = always).

### *Procedure*

Data collection took place between January and April 2024. The request to complete the questionnaire was sent to compulsory schools across Slovenia, from which we obtained approximately half the study sample. In the request, school secretariats were asked to forward the link to the online questionnaire to homeroom teachers of 6th to 9th grade classes, who were then asked to share the link with the parents of children in their class. The remaining half of the sample was obtained using the snowball sampling method. Specifically, the request to complete the questionnaire was posted in various groups on the social networking platform Facebook. Users were invited to complete the survey if they belonged to the target population and to share it with acquaintances who met the inclusion criteria (parents of children in grades 6 to 9 of compulsory school).

## Results

Descriptive statistics of the factors influencing parental involvement and the forms of parental involvement are presented in Table 1. As can be seen, the data of all measured variables follow a normal distribution, as indicated by the skewness and kurtosis coefficients which fall within the range of -1 to 1. Table 1 also shows that all measured variables exhibit satisfactory to good internal consistency, with Cronbach's alpha values ranging from 0.71 to 0.91 (Tavakol and Dennick, 2011).

On average, parents most strongly perceived positive invitations for involvement from school. They also expressed a strong belief in the importance of their role in their children's education, confidence in their knowledge and skills, and generally positive attitudes toward the school. Parents generally perceived their frequency of involvement in home-based activities and school-based activities as occasional to frequent. Additionally, on a scale from 1 to 6, parents rated their children's academic self-efficacy highly on average.

**Table 1**  
*Descriptive Statistics of the Measured Variables*

	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	$\alpha$
Role Activity Beliefs	4.15	.65	-.19	.27	.71
Valence Toward School	4.46	1.12	-.78	.06	.91
Invitations for Involvement from the School*	4.66	.85	-.75	.44	.83
Knowledge and Skills**	4.29	.77	-.38	.38	.73
Parents' Involvement in Home-Based Activities	3.60	1.00	.38	-.61	.79
Parents' Involvement in School-Based Activities	3.39	.85	.16	-.12	.71
Child's Academic Self-Efficacy***	4.85	1.20	-.83	-.19	/

*Note.* Scores for the parental involvement beliefs and activities were calculated as an average score per item (possible range was 1-6), child's academic self-efficacy (one item) was rated on a scale 1 to 6; \* Parents' Perceptions of General Invitations for Involvement from the School; \*\* Parents' Perceived Life Context – Knowledge and Skills; \*\*\* as perceived by parents.

Next, we examined the relationships between motivational factors influencing parental involvement, the two forms of parental involvement, and children's academic self-efficacy as perceived by their parents (see Table 2). The associations between motivational factors and forms of parental involvement were low to moderate. The strongest positive correlations were found between parents' perception of invitations from the school and their perceived knowledge and skills,

as well as between parental beliefs about their responsibility for their child's education and their perceived knowledge and skills. This suggests that parents who feel more welcomed by the school and who perceive a greater responsibility for their child's education also have greater confidence in their knowledge and skills to participate. Positive role activity beliefs were related to more frequent home-based involvement, while positive role activity beliefs, positive valence toward school, perceived invitations for involvement from school, and perceived knowledge and skills were related to more frequent school-based involvement. The correlations were low to moderate.

Furthermore, parents who more strongly believe that they are invited to be involved by the school and that they possess the necessary skills and knowledge for involvement rated their child's academic self-efficacy more highly. However, parental involvement in both home-based and school-based activities was negatively associated with the perceived academic self-efficacy of the child.

**Table 2**

*Correlations Among Parental Involvement Beliefs and Activities and Child's Academic Self-Efficacy as Perceived by the Parent*

	1	2	3	4	5	6
1 Role Activity Beliefs	1.00					
2 Valence Toward School	.09	1.00				
3 Invitations for Involvement from the School*	.32**	.17**	1.00			
4 Knowledge and Skills**	.40**	.21**	.41**	1.00		
5 Parents' Involvement in Home-Based Activities	.34**	.09	-.13*	.10	1.00	
6 Parents' Involvement in School-Based Activities	.37**	.16**	.14**	.22**	.31**	1.00
7 Child's Academic Self-Efficacy***	-.00	.06	.16**	.19**	-.43**	-.18**

*Note.* \* Parents' Perceptions of General Invitations for Involvement from the School; \*\* Parents' Perceived Life Context – Knowledge and Skills; \*\*\* as perceived by parents.

Next, we examined whether parents with lower or higher levels of education are more frequently involved in their children's education. Parents were divided into two groups based on their educational attainment: those who had completed general secondary education or lower were classified as less educated, while those with at least a post-secondary education were classified as more educated. The results indicate a statistically significant difference between the two groups (less and more educated parents) in the frequency of home-based involvement ( $t(329) = 2.01, p <$

.05, 95% CI [-.00; .50],  $d = .25$ ). More educated parents ( $M = 3.53$ ,  $SD = 1.00$ ) were less involved in home-based activities compared to less educated parents ( $M = 3.79$ ,  $SD = .99$ ). In contrast, more educated parents ( $M = 3.45$ ,  $SD = .85$ ) participated in school-based activities more frequently than less educated parents ( $M = 3.24$ ,  $SD = .84$ ), ( $t(329) = 1.97$ ,  $p = .05$ , 95% CI [-.42; .00],  $d = .25$ ).

Finally, we examined differences between parents of younger adolescent children (sixth and seventh grades) and parents of older adolescent children (eighth and ninth grades) in terms of the two forms of parental involvement. The results indicate a statistically significant difference between the two groups in the frequency of home-based involvement ( $t(323,368) = 4.26$ ,  $p < 0.001$ , 95% CI [.25; .67],  $d = 0.47$ ). Home-based involvement was more common among parents of younger adolescent children ( $M = 3.83$ ,  $SD = 1.04$ ) compared to parents of older adolescent children ( $M = 3.37$ ,  $SD = .91$ ). The two age groups did not differ in parental school-based involvement ( $t(329) = .26$ ).

## Discussion

Parental involvement in their children's education has long been recognised as an important factor in academic achievement and positive developmental outcomes (DePlanty et al., 2007; Izzo et al., 1999). While school is the formal institution for learning, the role of the family - particularly parental involvement - continues to be important in shaping children's educational pathways. This is particularly true in early adolescence, a developmental period characterised by increasing autonomy, greater academic demands and the need for less directive forms of parental involvement (Eccles and Harold, 1993; Li et al., 2020; Spera, 2006). In this context, it is particularly important to understand the motivational and contextual factors that influence parental involvement and how these relate to adolescents' academic self-efficacy.

The present study aimed to investigate how Slovenian parents perceive the key motivational factors for involvement in their children's education as conceptualised by Walker et al. (2005) in their revision of the Hoover-Dempsey and Sandler model. We also examined how these factors relate to two different forms of parental involvement - at home and at school - and to children's academic self-efficacy. In addition, we analysed differences in parental involvement as a function of parents' educational level and the age of their children.

One of the key findings of the study is that parents generally reported strong motivational beliefs regarding their involvement in their adolescent child's education. They perceived positive invitations from schools to participate, believed that their role in their child's education was important, and expressed confidence in their own knowledge and skills to engage effectively. These findings suggest that parents not only feel welcomed by schools but also perceive themselves as competent and responsible partners in the educational process. Such perceptions are crucial, as parental motivational beliefs - particularly role construction and self-efficacy - have been identified as important predictors of actual parental involvement (Bubić and Tošić, 2016; Hoover-Dempsey and Sandler, 1997; Walker et al., 2005). In the present study, all four domains of motivational beliefs - beliefs about role activity, positive valence towards school, perceived knowledge and skills, and perceived invitations from school - were significantly positively associated with parental involvement in school. This suggests that parents who feel more responsible for their adolescent child's education, perceive stronger invitations from the school and have more confidence in their ability to contribute are more likely to be directly involved with the school during their child's adolescent years (e.g., by attending parent-teacher meetings or consultation hours). Interestingly, while a significant difference was found between the groups of parents of younger and older adolescent children in terms of parental involvement at home, no such difference was found for parental involvement at school. Specifically, parents of younger (6th and 7th grade) and older adolescents (8th and 9th grade) reported similar levels of engagement at school, such as attending parent-teacher meetings or communicating with school staff. This result suggests that parental involvement at school remains stable in early adolescence, in contrast to parental involvement at home, which is less pronounced in older groups of adolescents than in younger ones. One possible explanation for this is that direct contact with school is more structured and scheduled and is often encouraged by the school, which could promote relatively constant parental involvement regardless of the child's age.

Of all the motivational factors analysed, only parents' beliefs about their responsibility for their child's education (role activity beliefs) were significantly and positively related to home involvement in the child's learning. This is consistent with the findings that children increasingly seek autonomy in adolescence (aged 12–15 years), which often leads to a decrease in direct parental involvement in academic tasks (Cheung and Pomerantz, 2015; Eccles and Harold, 1993). Consistent with this, our study also found that parents of younger adolescents were more involved in

school-related activities at home compared to parents of older adolescents. As adolescents strive for greater independence in managing their school-related tasks, parental involvement needs to adapt - moving away from direct supervision to a more supportive and autonomy-enhancing role (Li et al., 2020).

Parents who were more confident in their knowledge and skills and felt more welcomed by schools also rated their children's academic self-efficacy more positively. This finding is consistent with the perspective that parents' attitudes and involvement are internalised by children and contribute to the development of their academic self-efficacy (Bandura, 1997; Bubić et al., 2021; Fan and Chen, 2001). When parents perceive themselves as competent partners in education and feel that their involvement is valued by the school, they are more likely to convey positive messages about learning, consistently offer encouragement, and provide appropriate academic support. Such behaviours can support a constructive learning environment and a sense of self-efficacy in their children.

However, the directionality of this relationship justifies a cautious interpretation. It is possible that parents perceive their children as more academically self-efficacious because they observe them overcoming academic challenges on their own, which in turn boosts parents' confidence in their own ability to support learning. In this sense, the relationship could be bidirectional, with children's achievements and autonomy reinforcing parents' perceptions of their own effectiveness and role adequacy.

Interestingly, the study also found a negative correlation between parental involvement at home and at school and children's academic self-efficacy as perceived by parents. While this may seem counterintuitive, it is consistent with previous findings suggesting that higher parental involvement is sometimes reactive rather than proactive: i.e. parents become more engaged and contact schools when their children are struggling academically (Balli et al., 1998; Fan and Williams, 2010; Grolnick et al., 2002). In such cases, increased involvement may reflect underlying parental concerns rather than an intentional strategy to promote self-efficacy.

Another notable finding is that parents with higher levels of education reported greater involvement in school but less involvement in home activities related to the child's education. This could be because parents conceptualise their role differently depending on their level of education. Parents with a high level of education may be more likely to participate in institutional forms of involvement - such as attending parent-teacher meetings or being involved in school governance - and rely on their children to complete school tasks independently at home. In contrast, parents with lower levels of education may place more emphasis on home involvement, such as

helping with homework or monitoring study habits. These differences are consistent with research findings that show that socioeconomic and educational background influence the forms and frequency of parental involvement (Green et al., 2007; Hoover-Dempsey and Sandler, 1997; Williams-Johnson and Gonzalez DeHass, 2022).

### **Limitations and Implications**

This study has several limitations that should be considered when interpreting the results. First, all data were collected using parental self-reporting, which may lead to social desirability bias or inaccuracies in the assessment of children's actual self-efficacy. Including the views of the adolescent children themselves would lead to a more comprehensive understanding in future studies. Second, the sample composition represents a limitation, as most participants were mothers (90%), which may restrict the generalizability of the findings. The perspectives of fathers or other caregivers may differ and are underrepresented in this study. Finally, the cross-sectional design limits causal interpretations of the relationships between variables. Longitudinal studies would allow for a better understanding of how parental involvement develops over time and influences students' academic performance.

Despite some limitations, the results have several practical implications. Schools should continue to actively promote parental involvement by emphasising the importance of their participation for better student learning and academic well-being. All four motivational domains were positively associated with parental involvement in school activities, highlighting the importance of direct collaboration with the school as a channel through which motivated parents can remain active even as their children strive for greater independence at home. Parental participation in parent-teacher meetings and other forms of co-operation with the school can therefore be an appropriate way for parents to stay informed about and connected to their adolescent children's education. Schools play a crucial role in maintaining parental engagement by continuing to offer engaging activities and creating a welcoming environment for all parents. In addition, parent training sessions organised by the school could help parents to adapt their involvement to the developmental needs of adolescents by encouraging them to engage in a way that support their autonomy rather than control them.

## Funding

This work was financially supported by Javna agencija za znanstvenoraziskovalno in inovacijsko dejavnost Republike Slovenije (Slovenian Research and Innovation Agency) within the research program Applied Developmental Psychology (research core funding No. P5-0062).

## Data Availability Statement

The article is based on data fully presented and discussed within the article itself; therefore, no additional data archiving is required.

## References

- Balli, S. J., Demo, D. H., and Wedman, J. F. (1998). Family involvement with children's homework: an intervention in the middle grades. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 47(2), 149–157.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Benner, A. D., Boyle, A. E. and Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of Youth and Adolescence*, 45, 1053–1064.
- Boonk, L., Gijssels, H. J. M., Ritzen, H., and Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10–30.
- Bubić, A., and Tošić, A. (2016). The relevance of parents' beliefs for their involvement in children's school life. *Educational Studies*, 42(5), 519–533.
- Bubić, A., Tošić, A., and 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.
- Cheung, C. S.-S., and Pomerantz, E. M. (2015). Value development underlies the benefits of parents' involvement in children's learning: A longitudinal investigation in the United States and China. *Journal of Educational Psychology*, 107(1), 309–320.
- Chliara, P., Sampedro Requena, B. E., and Alonso-García, S. (2024). Examining the connections between teacher self-efficacy and parental involvement practices. *Specijalna Edukacija i Rehabilitacija*, 23(4), 315–326.
- DePlanty, J., Coulter-Kern, R., and Duchane, K. A. (2007). Perceptions of parent involvement in academic achievement. *The Journal of Educational Research*, 100(6), 361–368.
- Deslandes, R. (2019). A framework for school-family collaboration integrating some relevant factors and processes. *Aula Abierta*, 48(1), 11–18.
- Eccles, J. S., and Harold, R. D. (1993). Parent-school involvement during the early adolescent years. *Teachers College Record*, 94(3), 568–587.
- Eccles, J. S., and Harold, R. D. (1996). Family involvement in children's and adolescent's schooling. In A. Booth and J. F. Dunn (eds.), *Family school links. How do they affect educational outcomes?* (pp. 3–34). Routledge.
- Epstein, J. L., and Sheldon, S. B. (2002). Present and accounted for: improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308–318.

- Fan, X., and Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22.
- Fan, W., and Williams, C. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology*, 30, 53–74.
- Garcia Coll, C., Akiba, D., Palacios, N., Bailey, B., Silver, R., DiMartino, L., and Chin, C. (2002). Parental involvement in children's education: lessons from three immigrant groups. *Parenting: Science and Practice*, 2(3), 303–324.
- Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., and Sandler, H. M. (2007). Parents' motivations for involvement in children's education: an empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, 99(3), 532–544.
- Griffith, J. (1998). The relation of school structure and social environment to parent involvement in elementary schools. *The Elementary School Journal*, 99(1), 53–80.
- Grolnick, W. S., Gurland, S. T., DeCoursey, W., and Jacob, K. (2002). Antecedents and consequences of mothers' autonomy support: an experimental investigation. *Developmental Psychology*, 38(1), 143–155.
- Hoover-Dempsey, K. V., and Sandler, H. M. (1995). Parental involvement in children's education: why does it make a difference? *Teachers College Record*, 97(2), 310–331.
- Hoover-Dempsey, K. V., and Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3–42.
- Izzo, C. V., Weissberg, R. P., Kasprow, W. J., and Fendrich, M. (1999). A longitudinal assessment of teacher perceptions of parent involvement in children's education and school performance. *American Journal of Community Psychology*, 27(6), 817–839.
- Jurčević Lozančić, A., Basta, S., and Šerbetar, I. (2019). Teachers' attitudes towards collaboration with parents: development and evaluation of the questionnaire. *Sodobna pedagogika*, 70(4), 136–150.
- Li, R., Yao, M., Liu, H., and Chen, Y. (2020). Chinese parental involvement and adolescent learning motivation and subjective well-being: More is not always better. *Journal of Happiness Studies*, 21(7), 2527–2555.
- Milosavljević Đukić, T. B., Bogavac, D. S., Stojadinović, A. M., and Rajčević, P. Đ. (2022). Parental involvement in education and collaboration with school. *International Journal of Cognitive Research in Science, Engineering and Education*, 10(1), 1–14.
- Perriell, Y. (2015). Parental involvement and academic achievements: a case study. *Social and Economic Studies*, 64(1), 75–88.
- Pomerantz, E. M., and Eaton, M. M. (2001). Maternal intrusive support in the academic context: transactional socialization processes. *Developmental Psychology*, 37(2), 174–186.
- Rong, X. (2024). The impact of parental involvement on student growth and educational effectiveness. *Journal of Education, Humanities and Social Sciences*, 45, 81–85.
- Sivabalan, Y., Pek, L. S., Nadarajan, N.-T. M., Khusni, H., Mee Mee, R. W., and Ismail, M. R. (2024). Parental involvement on children's educational achievement: A scoping review. *International Journal on Studies in Education*, 6(4), 555–574.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, 17(2), 125–146.
- Tavakol, M., and Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55.
- Van Voorhis, F. L. (2003). Interactive homework in middle school: effects on family involvement and science achievement. *The Journal of Educational Research*, 96, 323–339.
- Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., and Hoover-Dempsey, K. V. (2005). Parental involvement: model revision through scale development. *The Elementary School Journal*, 106(2), 85–104.
- Westergård, E. (2013). Teacher competencies and parental cooperation. *International Journal about Parents in Education*, 7(2), 91–99.

Williams-Johnson, M. R., and Gonzalez-DeHass, A. R. (2022). Parental role construction leading to parental involvement in culturally distinct communities. *Educational Psychologist*, 57(4), 231–237.

**Authors:**

**Melita Puklek Levpušček, PhD**

Full Professor, University of Ljubljana, Faculty of Arts, Aškerčeva 2, 1000 Ljubljana, Slovenia, e-mail: melita.puklek@ff.uni-lj.si

Redna profesorica, Univerza v Ljubljani, Filozofska fakulteta, Aškerčeva 2, 1000 Ljubljana, Slovenija, e-pošta: melita.puklek@ff.uni-lj.si

**Lea Štravs, mag. psih.**

Community Health Centre Črnomelj, Delavska pot 4, 8340 Črnomelj, Slovenia, e-mail: lea.stravs2@gmail.com

Zdravstveni dom Črnomelj, Delavska pot 4, 8340 Črnomelj, Slovenija, e-pošta: lea.stravs2@gmail.com