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Relationship between teachers' invitations and the parental use of technology for involvement in children's education

Relaciones entre invitaciones docentes y el uso parental de las TIC para participar en educación

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ABSTRACT

The present study examined the direct and indirect relationships between teacher invitations, technological self-efficacy, the value attributed to ICT, and parents' use of these resources to participate in their children's education. Six hundred thirty-nine mothers and 447 fathers of public primary school students participated in the study. Subsequently, a structural model with two mediators was calculated. It was found that teacher invitations positively related to parental use of ICT to communicate with the school and support their children's learning at home. Additionally, it was found that technological self-efficacy and the value attributed to

ICT mediated the relationships studied. It was concluded that teacher invitations promoted the use of ICT by parents to become involved in their children's education.

Keywords: teachers, public education, elementary school, parent involvement, technology use in education

RESUMEN

El presente estudio examinó las relaciones directas e indirectas entre las invitaciones docentes, la autoeficacia tecnológica, el valor atribuido a las TIC y el uso parental de estos recursos para participar en la educación de los hijos. Participaron 639 madres y 447 padres de estudiantes de primarias públicas. Se calculó un modelo estructural con dos mediadores. Se encontró que las invitaciones docentes se relacionan positivamente con la utilización parental de las TIC para comunicarse con la escuela y apoyar el aprendizaje en casa de los hijos. Adicionalmente, se halló que la autoeficacia tecnológica y el valor atribuido a las TIC median las relaciones estudiadas. Se concluyó que las invitaciones de los docentes promueven el uso de las TIC por parte de los padres para involucrarse en la educación de los hijos.

Palabras clave: docentes, educación pública, escuelas primarias, participación parental, uso de la tecnología en educación

INTRODUCTION

Decision-makers in education policy are under pressure to create the conditions to provide quality public education for all. In Mexico, this is purpose has not been fully achieved, as it is estimated that approximately 10 percent of students of secondary school age have not completed elementary education. Moreover, this percentage is even higher for students with disabilities and those living in conditions of poverty (The National Commission for the Continuous Improvement of Education [MEJOREDU], 2022). Moreover, a substantial proportion of students in elementary education, particularly those from economically disadvantaged backgrounds, do not attain the desired educational goals (Graña & Murillo, 2023; Organization for Economic Cooperation and Development [OCDE], 2018). Such a condition remains critical given that a deficient acquisition of school curriculum learning usually leads to considerable negative consequences on students' academic trajectories, and it can also hinder the economic and social development of the country (Adelman & Szekely, 2016).

PARENTAL INVOLVEMENT IN EDUCATION

Although various factors influence educational quality, the literature acknowledges the importance of the student's family context. Empirical evidence shows that parental involvement in education, which includes the efforts and resources dedicated by fathers and mothers to support education (Epstein & Sheldon, 2022; Wilder, 2014), is related to the academic success of their children (Boonk et al., 2018; Castro et al., 2015; Tan et al., 2020). While there are multiple expressions of parental involvement in education, they are grouped into those centered at home and those centered at school (Boonk et al., 2018; Fantuzzo et al., 2000). An important indicator of school-centered parental involvement is communication between parents and teachers and with other parents about issues related to their child's performance at school and school-related activities. On the other hand, home-based learning support provided by parents is a central element of home-centered parental involvement (Epstein & Sheldon, 2022; Wong et al., 2018).

Home-centered parental involvement encompasses elements such as parents (father and mother) communicating with their children about school-related matters, providing assistance with homework, setting rules, and creating an appropriate environment for studying and organizing extracurricular activities that support the curriculum. On the other hand, school-centered parental involvement involves communication with teachers as well as participation in school-based activities (e.g., attending parent-teacher conferences, participating in extracurricular activities, getting involved in the parent's association) (Benner et al., 2016; Boonk et al., 2018; Epstein & Sheldon, 2022; Gubbins & Otero, 2020).

The empirical evidence confirms that both types of parental involvement in education are positively associated with a sense of school belonging, academic self-efficacy, engagement with learning, and academic performance of students (Gubbins & Otero, 2020; Lara & Saracostti, 2019; Murillo & Hernández-Castilla, 2020; Solís Castillo & Aguiar Sierra, 2017; Xiong et al., 2021). Furthermore, parental involvement creates opportunities for the exchange of information and increases trust and a sense of shared responsibility between parents and teachers for the performance of students (Acevedo et al., 2017; Li et al., 2019; Thompson et al., 2017; Urías et al., 2017).

In Mexico, the educational policy recognizes the importance of family involvement in achieving equitable access to education for all students (Secretariat of Public Education [SEP], 2013; Undersecretariat of Higher Education, 2019). Therefore, educational reforms consider implementing strategies to strengthen family involvement in their children's education. Regardless of its relevance, several studies (Márquez et al., 2015; Martín & Guzmán Flores, 2016; Meza-Rodríguez &

Trimiño-Quiala, 2020) indicate that parental involvement in education is limited, both at home and at school.

In recent times, the growth in the use of information and communication technologies (ICT), particularly the Internet, among the population (National Institute of Statistics and Geography [INEGI], 2022; We Are Social, 2022) offers an opportunity to increase parental involvement in education, as these technologies can facilitate distance communication between parents and teachers, as well as among parents themselves. Furthermore, ICT enables parents to access open educational resources and information to support their children's learning (Blau & Hameiri, 2017; Bonanati & Buhl, 2022; Head, 2020; Macià, 2016; Ramos et al., 2015).

Teachers and parental involvement in education

However, parental involvement is not solely reliant on access to technological mediums that facilitate communication and access to information. Instead, it is a social phenomenon influenced by multiple factors (Gubbins & Otero, 2020; Oswald et al., 2018). Several scholars suggest that teaching practices can encourage or inhibit parental communication with the school and their support for home learning (Gubbins & Otero, 2020; Valdés-Cuervo et al., 2022). In this regard, some scholars (Smith & Sheridan, 2019; Yulianti et al., 2022) consider teacher invitations to parental involvement essential for understanding prevailing disparities.

Invitations to parents include requests, opportunities, and support offered by teachers to encourage and share responsibilities with parents in promoting the social, emotional, and academic development of students (Bazán-Ramírez et al., 2020; Castro et al., 2015; Yulianti et al., 2023). There is a plethora of empirical evidence showing that teacher invitations positively affect parental involvement in school and at home to support children's learning (Reynolds et al., 2015; Sandoval et al., 2017; Valdés-Cuervo et al., 2022; Yulianti et al., 2022). While the literature highlights that teachers' actions explain differences in parental involvement in education, research on how teachers' practices relate to parents' use of TICs to participate in their children's education is limited, particularly in Mexico. To address this gap, the present study examines how teacher invitations, directly and indirectly, related to parental use of TICs to communicate with the school and support learning at home.

The mediating role of technological self-efficacy and the value attributed to ICTs

In the framework of cognitive social theory, it is generally acknowledged that individuals' beliefs significantly impact their behavior. Specifically, self-efficacy and

the value assigned to the task are regarded as crucial factors in explaining individuals' decisions, perseverance, and performance in certain activities (Bandura, 1982; Eccles & Wigfield (2002). These constructs mediate social influences, impacting how people perceive, interpret, establish goals, and respond to various situations in their contexts (Eccles & Wigfield, 2020; Plante et al., 2013).

Self-efficacy encompasses an individual's perception of their ability to effectively organize and perform in specific activities and social contexts (Bandura, 1982, 1995). Research confirmed that parents' perception of their self-efficacy in their involvement in their child's education is linked to improved communication with teachers, increased participation in school activities, and more effective support for learning at home (Gruchel et al., 2022; Gubbins & Otero, 2020; Liu & Leighton, 2021; Sandoval et al., 2017; Tazouti & Jargélan, 2019). Moreover, empirical evidence indicates that parental perception of technological self-efficacy is associated with increased use of ICT to support their child's learning (Han et al., 2022; Osorio-Saez et al., 2021).

The value of a task is associated with an individual's perception of its importance to their identity, the enjoyment it provides, its usefulness in achieving short and long-term objectives, and the cognitive effort and emotional exhaustion required to complete it (Eccles & Wigfield, 2020; Wigfield & Eccles, 2020). In line with this, some studies have found that parents hold positive beliefs about the value of ICT in the educational process (Angulo-Armenta et al., 2019; Ramírez-Rueda et al., 2021; Segura et al., 2022). While the empirical evidence is limited, research suggests that parents' beliefs about the value of ICT are associated with the frequency with which they use it in their children's education (Bradley, 2020; Hammer et al., 2021).

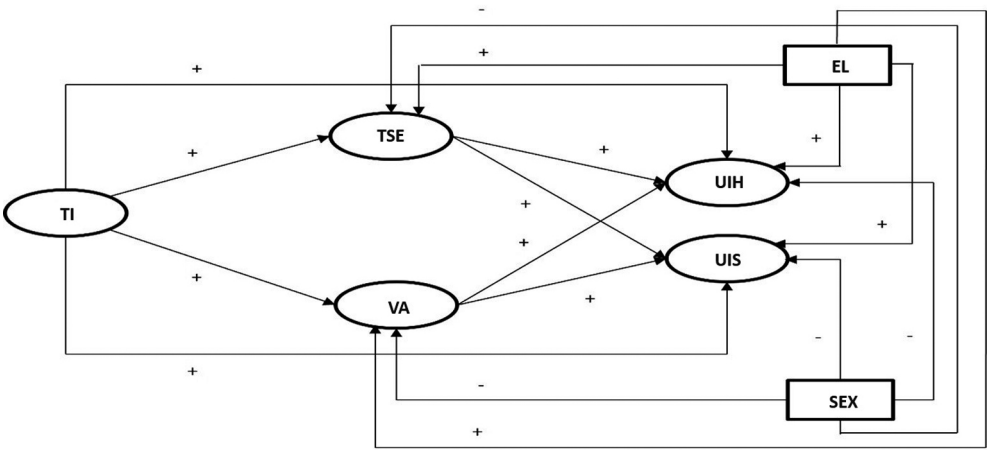
The present study

In this context, the present research examines, in a sample of primary school student's parents, the relationship between teaching invitations, parental technological self-efficacy, and the value that parents attach to ICT with the extent to which they employ these tools to communicate with the school and support their children's learning at home. The analyses will be conducted, controlling for sex and parents' education level (see Figure 1).

The following hypotheses are proposed to guide the study: (a) There is a positive association between teacher invitations and perceived technological self-efficacy, and the value that parents attribute to ICT; (b) There is a positive relationship between teacher invitations and the use of ICT by parents to communicate with the school and support children's learning at home; (c) Perceived technological self-efficacy and the value that parents attribute to ICT in their children's education are positively associated with the use of ICT to communicate with the school and

support children's learning at home; and (d) Parents' perceived technological self-efficacy and the value they attribute to ICT partially mediate the relationship between teacher invitations and parental involvement in the home and school.

Figure 1
Theoretical model of the relationships between the variables involved in the study



Note. TI = Teacher invitations to use ICT; TSE = Technological self-efficacy; VA = Value attributed to ICT; UIS = Use of ICT to communicate with the school; UIH = Use of ICT to support learning at home; EL = Educational level.

METHOD

Participants

A total of 639 mothers (*M* age = 37.1 years, *SD* = 6.1) and 447 fathers (*M* age = 39.7 years, *SD* = 6.6) of 679 fourth (29.9%), fifth (37.7%), and sixth (32.3%) grade students from 25 public primary schools located in different school zones of a city in southern Sonora participated in the study. All these schools had some form of internet access. As the study aimed to investigate parental participation, questionnaires completed by caregivers other than parents were excluded from the sample. Of the participants, 0.6% did not complete primary education, 4.1% had primary education, 28.7% had secondary education, 36.1% had upper secondary education, and 30.5% had post-secondary education. 75% of the participants reported having internet access at home, while 25% accessed the internet via mobile data.

Instruments

Invitations from teachers to use ICT

The Teacher Practices to Involvement Family scale was adapted (Valdés-Cuervo et al., 2016) to measure parents' perceptions of the frequency with which teachers invite them to use ICT to become involved in their children's education. The items were grouped into two dimensions: (a) Communication with the school (4 items, e.g., The teacher (a) of my child (a) invites me to participate in social groups on the Internet (e.g., WhatsApp) to inform me about school activities), and (b) Support for learning at home (3 items, e.g., The teacher (a) of my child (a) suggests web pages to reinforce my child's (a) learning of the school curriculum). A Likert-type response format was used with options ranging from 0 (Never) to 4 (Always).

Perceived value of ICT

The present study adapted items of previous scales proposed items to measure the parental perception of the value of ICT for becoming involved in their children's education (Eccles & Wigfield, 1995; Muenks et al., 2023). The response format was a Likert scale with options ranging from 0 (Completely disagree) to 4 (Completely agree). The items assessed parents' perception of the intrinsic value (2 items, e.g., I like using ICT to communicate with my child's teacher), the importance (2 items, e.g., I think it is good to use ICT to help my child with schoolwork), and the usefulness of ICT in education (3 items, e.g., I believe that ICT facilitates my communication with the teacher about concerns expressed by my child).

Technological self-efficacy

Building on the research of previous scholars (Grijalva-Quiñonez, 2023; Gruchel et al., 2022; Huang et al., 2018), we developed a scale to measure technological self-efficacy for the present study. Parents were questioned about how effective they perceived using ICT in activities related to their children's education (e.g., using technology to keep informed about school activities). The response format was a Likert-type scale with five options: 0 (Not at all skilled), 1 (Slightly skilled), 2 (Moderately skilled), 3 (Highly skilled), and 4 (Extremely skilled).

Parental involvement in ICT-supported education

The scale was developed for the study, drawing on previous research (Dueñas et al., 2022; Valdés Cuervo et al., 2009). The scale is comprised of 13 items that measure the use of ICT by parents for supporting learning at home (8 items, e.g., I help my child (a) search for information on the internet to complete assignments) and (b) communicating with the school (5 items, e.g., I use my cell phone, email, or social media to communicate with my child's teacher about how they complete assignments and participate in class). The response format was a Likert-type scale with options ranging from 1 (Never) to 5 (Always).

Control variables

Empirical studies indicate that mothers are typically more involved in their children's education than fathers (Ortiz-Zavaleta & Moreno-Almazán, 2016). Furthermore, parental involvement in education is positively associated with the parent's educational level (Chaparro Caso et al., 2016; Harris et al., 2017; Jang et al., 2017). Therefore, the study aimed to control for the sex (0 = female, 1 = male) and educational level of the parents (1 = not complete primary education, 2 = primary education, 3 = secondary, 4 = upper secondary education, and 5 = post-secondary education) to determine whether these factors better explain the use of TICs for educational purposes than the variables under study.

Procedure

Approval from the University's Ethics Committee was obtained. Subsequently, school authorities sought authorization to access students and their parents. As the instruments were specifically adapted or developed for the study, in all cases, the items were evaluated by expert judges (3 researchers, 3 teachers, and 3 parents) who rated the items as 1 = irrelevant, 2 = needs major revisions to be relevant, 3 = relevant, and 4 = highly relevant. The items with a content validity index equal to or greater than .78 were included in the scales (Almanasreh et al., 2019). Information was obtained by sending students an invitation to their parents, informing them of the purpose of the study, and soliciting their voluntary participation. Parents who agreed to participate signed an informed consent letter. The questionnaires were returned directly by the parents or through their children to the researchers.

Statistical analysis

In the present study, the missing data was less than 5% for all the variables examined, and this was addressed utilizing the multiple imputation techniques accessible in the SPSS 27 software. The validity of the internal structure of the scales used in the study was examined through confirmatory factor analysis (CFA). The CFAs were conducted using the method of weighted least squares robust estimation (DWLS) (Chen et al., 2023; Finney & DiStefano, 2013). The reliability of the scores was analyzed using McDonald's Omega coefficient (ω); values equal to or greater than .70 are considered indicators of adequate reliability of the scores (Green & Yang, 2015).

The median, standard deviation, and Spearman's correlation coefficient between the variables were calculated. Although there is no complete consensus regarding the interpretation of effect sizes, several authors (Bakker et al., 2019; Funder & Ozer, 2019; Lovakov & Agadullina, 2021) maintain that non-significant or small effect sizes, as per Cohen's (1988) proposed criteria, have significant practical and theoretical implications in the social sciences. In this context, in the present study, effect sizes of less than or equal to .10 were considered as indicators of a small effect size, those of less than or equal to .20 as indicators of a medium effect size, and those equal to or greater than .30 as indicators of a large effect size (Funder & Ozer, 2019; Gignac & Szodorai, 2016).

A structural model with latent variables and two parallel mediators was estimated. Since the variables were measured at an ordinal level, the robust weighted least squares method with diagonalized covariance matrix (DWLS) was employed with support from JASP 18 (Chen et al., 2023; Finney & DiStefano, 2013). Acceptable model fit indices for the structural model were considered, including Satorra-Bentler Chi-square (SBX^2) with associated *p*-values > .05, Comparative Fit Index (CFI ≥ .95), Tucker-Lewis Index (TLI ≥ .95), Root Mean Square Error of Approximation (RMSEA ≤ .08), and Root Mean Square Residual (SRMR ≤ .08) (Byrne, 2016; Kline, 2023).

RESULTS

Psychometric properties

Invitations from teachers to use ICT. The results of the confirmatory factor analysis (CFA) indicate a good fit of the measurement model to the data (SBX^2 = 30.7, *df* = 13, *p* = .004; SRMR = .01; CFI = .99; TLI = .99; RMSEA = .03, 90% CI [.02, .05]). A global score for teacher invitations was obtained since the correlations

between the factors were high (r = .76). The reliability values for both dimensions were acceptable: Communication with School (ω = .73) and Learning Support at Home (ω = .70).

Perceived value of ICT. The AFC results indicate a good fit of the one-dimensional measurement model to the data (SBX^2 = 46.74, df = 12, p < .001; SRMR= .03; TLI = .99; CFI = .99; RMSEA= .05, 90% CI [.03, .06]). The reliability of the scores was acceptable (ω = .92).

Technological self-efficacy. The findings from the AFC indicate a good fit of the measurement model to the data (SBX^2 = 25.2, df = 13, p = .02; SRMR = .04; CFI = .99; TLI = .97; RMSEA = .04, 90% CI [.01, .06]). The reliability of the scores was acceptable (ω = .90).

Parental involvement in ICT-supported education. The AFC demonstrates a good fit of the measurement model to the data (SBX^2 = 231.63, df = 62, p < .001; SRMR = .03; TLI = .99; CFI = .99; RMSEA = .05, 90% CI [.04, .06]). The value of McDonald's omega coefficient indicates that the reliability of the scores for the dimensions that measure the use of ICT by parents to support learning at home (ω = .92) and communicating with the school (ω = .89) is acceptable.

Preliminary analysis

Table 1 indicates that when parents were asked about invitations from teachers to utilize ICT for communication with the school or to support their children's learning at home, their responses predominantly fell within the 'almost never' category. Additionally, the medians of the responses suggest that parents and guardians value TICs as important for becoming involved in their children's education and find them effective for using these tools for this purpose. Finally, parents report that they rarely use TICs to communicate with the school and only occasionally use them to support children's learning at home.

Statically significant positive correlations were found among all the variables studied. The magnitudes of the effect sizes suggest practical and theoretical implications of these correlations. In regard to control variables, the results showed statistically significant positive correlations between the level of education and the variables included in the study. On the other hand, the sex of the parents did not correlate with the invitations to teach and the value attributed to TIC. However, it correlated negatively (0 = female, 1 = male) with technology self-efficacy and two types of parental involvement. The effect sizes suggest theoretical and practical implications of the correlations.

Table 1
Mean, standard deviation and correlation between the studied variables

Variable	*M*	*DE*	1	2	3	4	5	6	7
1. TI	2.01	1.12	-	.29***	.33***	.47***	.32***	.01	-.03
2. TSE	3.51	1.14		-	.54***	.33***	.52***	.28***	-.11***
3. VA	2.80	0.74			-	.30***	.43***	.13***	-.01
4. UIS	1.83	0.95				-	.46***	.14***	-.14***
5. UIH	2.35	1.05					-	.26***	-.12***
6. EL								-	-.01
7. Sex									-

Note. TI = Teacher invitations to use ICT; TSE = Technological self-efficacy; VA = Value attributed to ICT; UIS = Use of ICT to communicate with the school; UIH = Use of ICTs to support learning at home; EL = Educational level.

***$p < .001$.

Structural model

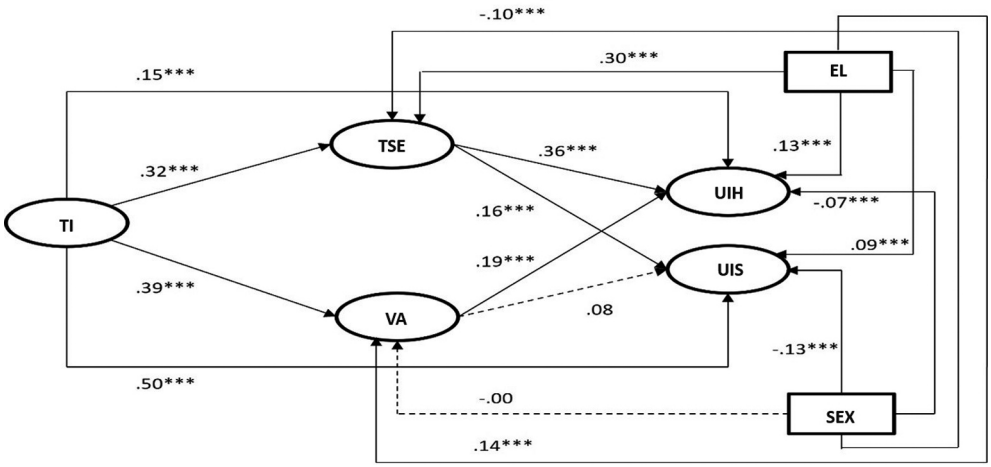
Results indicated a good fit of the structural equation model to the data (SBX^2 = 2471.97, *df* = 529, $p < .001$; SRMR = .03; CFI = .99; TLI = .99, RMSEA= .03, 90 CI [.02, .04]). The model explained 40% of the variance in parental use of ICT communicating with the school and 42% of the use of these resources to support home learning (see Figure 2). The direct relationships indicated that instructional invitations were positively related to parental evaluation of technology (β = .39, $p < .001$, 95% CI [.06, .15]), parental perception of technological self-efficacy (β = .32, $p< .001$, 95% CI [.25, .35]), use of technology for supporting home learning (β = .15, $p < .001$, 95% CI [.07, .15]), and communicating with school (β = .50, $p < .001$, CI 95% [.29, .43]). On the other hand, technological self-efficacy was positively related to parental participation in using technology to support learning (β = .36, $p < .001$, 95% CI [.20, .35]) and communicating with school (β = .16, $p< .001$, 95% CI [.06, .18]). Finally, parental evaluation of technology was positively related to support for home learning (β = .19, $p < .001$, 95% CI [.13, .35]), while its relationship with communicating with the school was non-significant (β = .08, $p = .062$, 95% CI [-.01, .20]).

About indirect relationships, the results indicated that the value attributed by parents to technology partially mediated the relationship between teaching invitations and the use of technology to support home learning (β = .07, $p < .001$, 95% CI [.02, .07]). However, it did not mediate the relationship between teaching

invitations and using technology to communicate with the school (β = .03, *p* = .058, 95% CI [-.01, .05]). On the other hand, parental technology self-efficacy partially mediated the relationship between teaching invitations and the use of technology to support home learning (β = .12, *p* < .001, 95% CI [.06, .11]) and to communicate with the school (β = .05, *p* < .001, 95% CI [.02, .11]).

Figure 2

Results of the structural model between the variables involved in the study



Note. TI = Teacher invitations to use ICT; TSE = Technological self-efficacy; VA = Value attributed to ICT; UIS = Use of ICT to communicate with the school; UIH = Use of ICTs to support learning at home; EL = Educational level.

***$p \leq .001$.

DISCUSSION

The literature recognizes that parental engagement in education is critical for fostering equitable and inclusive educational experiences. Whereas multiple scholars (Hornby & Blackwell, 2018; Meza-Rodríguez & Trimiño-Quiala, 2020) have underlined that several variables can obstruct parental participation in children's education, remains crucial for the educational research agenda to investigate ways, such as technology, that can facilitate and enhance parental participation in education. In this sense, the present study elucidates how teaching practices relate to parental use of technology to participate in their children's education. In general, our results suggest that invitations from teachers are directly associated with the use of technology by parents to communicate with the school and support their

children's learning at home and that these relationships are mediated by cognitive and social variables of parents, such as technological self-efficacy and the value they attribute to technology in education.

Direct relations of the invitations from teachers

The study demonstrates that teaching invitations are positively related to the use of technology by parents to support their children's learning at home and to communicate with the school. These findings align with previous research that reports a positive influence of teaching invitations on parental involvement in their children's education (Sandoval et al., 2017; Valdés-Cuervo et al., 2022; Yulianti et al., 2022).

An important finding is that teacher invitations are more strongly associated with parental use of ICT for school communication than with their use to support children's home learning. Although further studies are needed to clarify this finding, it is possible to consider that teachers' lack of familiarity with the use of technology as a support resource in teaching (Gallegos-Fernandez et al., 2021; Gómez et al., 2019) may cause them to lack the skills to effectively guide the use of these resources by parents as support for their children's learning at home. Additionally, limited parental skills in using technology as a support resource for acquiring the competencies demanded by the curriculum may also be associated with this (Castellanos et al., 2022; Misirli & Ergulec, 2021).

Consistent with previous literature, this study demonstrates that teacher invitations are positively associated with parents' technological self-efficacy and the value they attribute to ICT in their children's education (Liu & Leighton, 2021; Smith & Sheridan, 2019). These results suggest that when teachers invite parents to use ICT, they model technologically competent behaviors, provide guidance and support, create collaborative spaces, and achieve positive outcomes that enhance both parents' perceptions of their own ICT competence and the value they place on ICT in education.

Direct relationships between technological self-efficacy and the value attributed by parents to ICT

Furthermore, as anticipated, a direct and positive association was observed between technological self-efficacy and the frequency parents use ICT to communicate with schools and support their children's learning at home. This finding aligns with theory and empirical evidence, suggesting that self-efficacy is a crucial regulator of behavior (Han et al., 2022; Osorio-Saez et al., 2021).

The findings partially validate the hypotheses proposed in the study regarding the value of ICT. According to the considerations, the value parents attribute to ICT is positively associated with their use to support home learning (Bradley, 2020; Hammer et al., 2021). However, contrary to what was hypothesized, no significant relationship was observed between the value attributed to ICT and its use by parents to communicate with the school. Although new studies are needed to clarify this result, it is possible to hypothesize that the value attributed to ICT is more associated with its use in the home because this requires a significant formative effort and autonomous motivation on the part of parents, while the use of ICT to participate in school occurs in many cases as a response to direct invitations from the teacher. In general, it occurs through social networks (e.g., WhatsApp) that many parents handle beforehand.

Mediation of technological self-efficacy and the value parents attach to ICT to the relationship between teacher invitations and parental ICT use

The analysis of indirect relationships reveals that the perceived technological self-efficacy partially explains the relationship between teacher invitations and both types of parental involvement (communication with the school and support for learning at home). However, the value attributed by parents to ICT only partially mediates the relationship between teacher invitations and the use of technology to support learning at home. This finding confirms that teacher invitations have an influence that extends beyond the present situation, as they foster the development of psychological resources that can impact well-being, resilience, and autonomous motivation for parents to use ICT in their children's education (Hammer et al., 2021; Han et al., 2022).

LIMITATIONS

The study contributes to understanding the influence of teachers' practices on parental involvement in children's education. Nevertheless, it is essential to acknowledge certain limitations that should be considered when using its findings. Firstly, the study followed a cross-sectional design, which does not allow for the specification of cause-and-effect relationships between the variables studied. Therefore, future studies employ experimental or longitudinal designs to investigate the variables' relationships. Secondly, the information relied on self-reported measures administered to parents. It is essential to involve other informants (e.g., teachers, administrators, and students) and measurement methods (e.g., interviews and observations). Third, the study examines only two types of parental involvement in education. However, it is necessary also to examine teachers'

influence in different forms of parental involvement, such as decision-making and volunteering. Finally, while the sample was adequate for the study, it is proposed to involve more diverse samples of parents from the country, such as those from rural and indigenous schools, and to conduct transcultural studies.

CONCLUSIONS

The study suggests that the role of the teacher in implementing reforms and strategies to promote parental involvement should be reevaluated. Importantly, the study results indicate that teachers can empower parents to actively participate in their children's education through the use of ICT. Additionally, teachers play a significant role in fostering parents' psychological resources that favor the autonomous use of TICs in their children's education.

In practical terms, the study suggests that teachers must be informed about the importance of inviting parents to use ICT, both for communicating with the school and for supporting children's learning at home. Furthermore, it is confirmed that Mexican teachers must be equipped with the necessary skills to guide parents' use of ICT effectively. This effort requires the cooperation and accountability of educational authorities, teachers, and families.

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