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Abstract

This study presents the development and validation of an evaluation instrument aimed at assessing parents' involvement in their children's education, utilizing a two-phase approach. During the development stage, items were meticulously generated through literature reviews and interviews, followed by a rigorous validation process by experts who carefully recognized each item, considering both content and expression. The validation stage involved piloting the instrument with 27 respondents, resulting in high reliability. Subsequently, using Exploratory Factor Analysis (EFA) on responses from 310 high school parents, the construct validity revealed 33 components out of 60, ultimately culminating in four distinct constructs: parental love and guidance (15 items), parent-teacher communication (8 items), participation in school activities (6 items), and parental satisfaction (4 items). The convergence of these constructs facilitates active parental involvement and enhances positive learning experiences. Further validation and confirmation of the developed parental involvement scale for flexible learning is recommended for future research.

Keywords: Parental Involvement Scale (PIS), Evaluation Tool, Exploratory Sequential Mixed-methods Approach

Introduction

Parents' involvement has been regarded as one of the most important factors in students' academic performance (Tus, 2021). Students perform better in school when their parents are involved, regardless of race or ethnicity or how well-off they or their parents are. Children exhibit greater aspirations and drive for education, as well as higher self-esteem and self-discipline. Although parental involvement is the key term in this study, similar concepts such as parental engagement, parental support, and family involvement are interconnected, and while they may differ in their specific emphases, they all aim to improve a child's educational experience. Parental engagement includes homework assistance, parent-teacher conferences, and discussions about academic progress (Epstein, 2001). Parental support, on the other hand, encourages children to attain their academic goals by providing resources and creating a supportive environment (Desimone, 1999). In addition to academics, family involvement includes parents and schools working together to improve children's performance.

The Education for All Handicapped Children Act (EAHC), enacted in 1975, was the first law to encourage family involvement in schools. It was critical for schools and parents of students with disabilities to collaborate and communicate. The No Child Left Behind Act of 2001 (NCLB) specifies how schools can and should implement policies and procedures to increase family involvement considerably. All of the aforementioned regulations demand regular communication with parents, particularly when academic programs are being carried out and progress is being assessed.

The COVID-19 crisis made things worse for teachers, learners, and families who were already having difficulty, in part because many educational institutions discontinued face-to-face learning and instruction. The lockdown underscored that education systems around the world, including those in the Philippines, needed significant upgrading, particularly when it came to providing virtual or flexible learning opportunities. As a result, the pandemic's demand for digital technology increased significantly; however, it was difficult to make an

immediate transition for teachers, parents, and students who were not used to online learning because, despite the availability of technical tools in the Philippines, qualifications and school practices for efficiently using digital devices needed to improve. Students and their families reported greater stress as a result of limited access to online technology and an abundance of modular work, while teachers had little opportunity to provide more in-depth face-to-face or personal instruction as needed.

Through crises like this, the crucial role of parents is brought into focus, but many are concerned about whether or not they are prepared to deal with it given the disparities in socioeconomic status across Filipino families. Despite the fact that the country has numerous public and private educational institutions that provide resources and services, many parents are only now learning about them, including Google Meet, Zoom, and other Learning Management Systems (LMS), and are still getting used to a flexible learning modality that the Department of Education has implemented (Cahapay, 2021). Moreover, parents not only struggle to use these applications, but they also struggle to juggle home responsibilities while inquiring with their child's adviser or subject teachers about homework or module completion deadlines.

Difficult times, such as the pandemic, highlight the necessity of parents and educators collaborating to create meaningful partnerships, as well as the importance of learning about critical events in their children's education that may be positive, negative, or should be transformed. On a far larger scale, when parents or families are involved, they understand how to contribute to society. Evidence from the Sustainable Development Goals (SDGs) points out that family-focused initiatives are frequently positively assessed, and cross-over impacts between SDGs have been found. For instance, effective family interventions have favorable effects on both education and health (UNICEF Office of Research – Innocenti, 2018). On the contrary, poor academic progress, misunderstandings, conflicts, and other negative impacts are likely in the absence of significant parental involvement, and effective online learning may be an illusion (Yosef et al., 2020). Developing a valid and reliable tool is a significant lobbying effort that would help assess how much parental involvement is required to build meaningful partnerships between schools and families, and such an instrument must operate within a tried-and-true framework.

Epstein's model of parental involvement, which has been around for almost 25 years, is still regarded as the most widely used framework for involving parents. Schools regularly use it to evaluate their parental involvement policies, and it has an impact on policy making (Goodall, 2022). Epstein first saw four types of parental involvement, that includes basic responsibilities, parent involvement in educational activities at home and at school, and communication between the two. She later described six levels of parental involvement, which she classified as follows: 1) helping parents with child-rearing techniques, 2) fostering communication between the school and parents, 3) involving parents in volunteer opportunities at the school, 4) involving parents in home-based learning, 5) involving parents in school decision-making, and 6) involving parents in school-community collaborations. Epstein again simplified these six types of involvement into parenting, communicating, volunteering, learning at home, making decisions, and collaborating with the community.

While Epstein's dimensions related to parental involvement have contributed to research discussions and appears to have influenced certain instruments development, stringent reviews and validation of these constructs within test development remains restricted. Although some studies have used existing surveys and questionnaires to assess parental involvement, there is a shortage of specialized instruments adapted specifically to the intricacies of this context. There remains a significant gap in the utilization of comprehensive tests and development of instruments that effectively measure the multifaceted nature of parental participation in the field of parental involvement studies.



As a result, researchers have a chance to fill these gaps by improving existing tools and developing new ones that correspond with Epstein's framework, as well as performing rigorous empirical studies to validate the conceptual constructs of parental involvement, allowing for a better understanding of this crucial aspect of education.

Statement of the Problem

What tool could be developed to evaluate the parent's involvement for flexible learning?

Theoretical Framework

Using Epstein's model, this study examined the complicated nature of parental involvement and its implications. Parent-child interactions, according to Epstein, influence children's motivation, self-esteem, and sense of responsibility over their academic performance (Grolnick & Slowiaczek, 1994). Parents' actions that show they are working together to make sure their children get a good education also show that they know what their responsibilities are as parents. To ensure optimal learning, the school or teacher must provide options that include activities from all six areas of engagement: parenting, communication, volunteering, at-home learning, decision-making, and community collaboration (Epstein et al., 2018). This could include assisting a child with their academics, discussing school programs and courses, volunteering at the school, and attending school events. Discussions with children about the importance of education and a good attitude toward school are examples of intellectual or cognitive engagement activities that parents can perform with their children to help them learn new skills and knowledge.

Methods

The study used an exploratory sequential mixed-methods approach. The goal was to study a phenomenon using qualitative data before moving on to a quantitative phase (Creswell et al., 2003). In this study, the researchers first conducted a qualitative analysis of the research question with a small group of participants. The researchers then used the qualitative data to create scales and questions for a quantitative survey instrument, which they subsequently tested to ensure it functioned properly. The instrument parts' creation allows for the merging of qualitative and quantitative methodologies.



Figure 1 Methodological Framework of the Study.

The design of this instrument made heavy use of deduction. It began with a literature review alongside interviews to develop ideas and perspectives on evaluating parent involvement in a flexible learning environment before determining what to test. Following DeVellis and Thorpe's (2021) suggestions, the procedure for making scales was done first, and then qualitative data were used.

During the quantitative phase, a survey was given to parents to find out how involved they were in the education of their children. Participants in the pilot study were given access to an online survey and asked to rate their level of involvement as parents on a five-point scale.

Research Locale

In Region VII, Central Visayas, all of the informal interviews, focus groups, pilot tests, and main tests were done. The PIS administration involved high schools in the area, both public and private. The Central Visayas administrative region of the Philippines is made up of the large islands of Cebu, Bohol, Siquijor, and the Eastern portions of Negros, as well as three extremely urbanized municipalities (Cebu City, Lapu–Lapu, and Mandaue), four provinces, and other smaller islands.

Research Participants and Sampling

The ten (10) parents who were first interviewed made up the study's qualitative component and were chosen through a purposive sampling technique. According to Etikan et al. (2016), purposive sampling is a non-probability sampling technique in which a researcher selects a sample of subjects/units from a population. For the quantitative part of the study, 310 parents from both public and private schools were chosen at random to take part. Conducting Exploratory Factor Analysis (EFA) requires at least 200 samples (Becker et al., 2006; Goldstein, 2006 as cited in Callaman, 2022).

Research Instrument

During the study's development phase, semi-structured interview questions were used to get information from the people who took part in the study. The developed 60-item parental involvement tool was the study's instrument during the validation phase.

Data Gathering

Development Phase

Step 1: Qualitatively Investigating the Scale Construct

The researchers were interested in a number of factors that govern how each item and the scale as a whole were established. For instance, acceptable scale instructions, a sufficient number of items, a suitable display format, and appropriate item redaction (all items should be straightforward, clear, and explicit, guarantee the variability of responses, and remain unbiased), among other parameters (DeVellis & Thorpe, 2021 as cited in Worthington & Whittaker, 2006).

Step 2: Converting Qualitative Findings to Scale Items

In the end, the researchers made the items by taking Eipstein's six types of parental involvement into account. At this stage, the researchers converted qualitative data into scale items. Epstein et al. (2018) suggested six types of parental involvement: parenting, communication, learning at home, volunteering, decision making, and collaboration. Taking down notes of significant statements not only from the relevant literature explorations of the researchers, but also from informal interviews and focus group discussions were significant aspects during item generation.

Step 3: Conducting Mixing Validation to Review Items' Content-based Validity

A linguist, a psychometrician, a professor, and a parent-teacher were chosen to do a content validity analysis. They looked at each item to see if it was simple, clear, relevant, and appropriate, and if any items were repeated. The researchers recorded the consensus that was gleaned from the reviews after listening and taking notes. To obtain approval to conduct the survey, the researchers sent letters to the heads of each school. Each grade–level coordinator received a consent letter following the approval. Teachers were made aware of the survey through coordinators. Teachers signed the consent form, and a link to the survey questionnaire was available to parents through Google Classroom.



Step 4: Conducting Quantitative Validation to Examine Items' Construct-based Validity

The main test was done after the pilot test because the researchers, school administrators, and teachers had already talked about what they expected from the two parts of the study. The developed tool had a pilot test with at least 27 parents (N = 27). Before the survey started, the parents were given instructions to make sure they knew how to answer the questions and how the Likert scale worked. Parents were likewise asked about items that required revision following the pilot testing.

Step 5: Administering the Scale on the Target Population

After establishing the reliability of the tool, it was then administered to at least 310 parents. Parents were given seven days by grade-level coordinators to complete the survey.

Data Analysis

During the development phase of the study, Braun and Clarke's (2012) thematic analysis was used to pull out themes from the answers of the research participants. The researchers used a number of steps in scale development in order to make statistical analysis of the quantitative data simpler. The Cronbach's alpha for reliability analysis was determined as part of the process. The constructs of the generated evaluation tool were also explored using Exploratory Factor Analysis (EFA).

In analyzing the EFA, the following test were also utilized: *Bartlett test of sphericity* to compare an observed correlation matrix and the identity matrix; *Kaiser–Meyer–Olkin (KMO) test* to measure the adequacy of sampling; *factor extraction* used to estimate the variability explained by the input items; and *factor rotation method* which is used to aide interpretation of factor matrix.

Ethical Considerations

This section talks about the need to set clear rules for how the development study should be done and what the researchers' responsibilities are. In this case, certain ethical standards were mostly followed with the knowledge that difficult things could happen. In order to begin the survey, the researchers obtained permission and met all conditions.

The Research Ethics Committee (REC) of the university helped ensure that the participants rights in this study were not violated, thus, research methodologies, ethical practices were followed, respectfully. The CNU-REC looked at the request for an exemption from the ethical review, talked about it, and then gave an exemption certificate.

Results and Discussion

Development of Parental Involvement Scale for Flexible Learning

The Epstein parental model was used as a foundation for the item statements during the development phase, and a casual interview with the parents was also conducted. Initially, there were 41 item-statements generated, of which parenting type involvement (11 items), communicating type involvement (9 items), volunteering type involvement (5 items), learning at home (7 items), decision-making (4 items), and collaborating with the community (5 items) were the most prevalent.

It cannot be overstated that parents are uniquely positioned to ensure that schools support their children's specific needs by collaborating with teachers through regular feedback and updates as children's learning increasingly moves toward a broader vision of 21^{st} century learning, according to a study by Bartolome et al. (2017).

I think they feel ang (that) teachers kung (if) parents are open to feedback, so when they do, they regularly send us updates not just about grades but any activity sa (in) school.

"Syempre ako, (of course me) especially because we are still in Covid time, I have to make sure that my kids are safe in school, especially that I am not with them. I constantly communicate with my child's teacher and even some close friends in school for updates."

The ideal parent involvement programs give parents enough time to have open-ended, parent-led conversations that improve communication and make the school a better place to work together (Antunez, 2000). People in the community feel more responsible for the well-being of children, families, and schools when they talk with businesses, cultural institutions, and community groups.

I am an active member of the PTA, in fact, I am an officer, so that goes to say I am also an active organizer when it comes to our group sending out letters for donations. For example, I help write letters to bookstore companies for donations when we have important school events.

Additionally, researchers acknowledge the importance of strong, positive relationships between families and schools for children's education and development (Đurišić & Bunijevac, 2017).

I am a believer that home is an extension of learning. I always make it a point to ask my child, "what did you do at school today?", so I will know where to come in.

I also ask my kid whether she is happy in school that day so we have something to talk about.

Four experts, including a professor, a parent-teacher, a psychometrician, and a language expert, were asked to look at the content and language of the tool to make sure it was valid. After considering their inputs, the tool was updated.

"Consider rephrasing or restating the statements to align what it intends to measure." - Expert 1

"Please revisit Epstein's framework in grouping your questions. For example, question 1 under parenting may fall under communicating. So with the other items." – Expert 3

"Be careful with the use of adverbs (of frequency) because it may go against your descriptions of your scaling. For example, the use of "constantly" may be superfluous when the answer is "always". Is there a phrase constantly always? Or constantly sometimes? Or constantly never?" – Expert 4

"Provide clear instructions. Does this instrument test their perception? Or their experience? Or their willingness?" - Expert 2

After incorporating the panel of experts' suggestions, the new developed PIS now consists of 60 items rather than 41. The items were grouped based on literature and are as follows: parenting involvement (11 items), communication (15 items), volunteerism (5 items), school-parent partnership (7 items), decision-making (4 items), collaborating with the community (5 items), love and encouragement (8 items), and support and assistance (5-items).

Validation of Parental Involvement Scale for Flexible Learning

A test of the PIS' internal consistency and reliability, conducted on 27 parents, yielded an alpha value of 0.960, which is interpreted to be "very good". As measured by Cronbach's alpha, the scale reliability varies from 0.960 within subscales to 0.960 for the entire scale. These reliability coefficients are all "very good", satisfying the basic standards (Nunnally, 1978). These results confirm that the Parental Involvement Scale (PIS) has an ideal stability and psychometric properties.



Exploratory Factor Analysis (EFA) was used to figure out how the instrument was put together. The result shows that the Kaiser-Meyer-Olkin sample adequacy score was 0.920. This shows that the factor analysis process is useful. Bartlett's test for sphericity also yielded significant results (x2 (311) = 15038.273; p = 0.000).

The scree plot or eigenvalues graph is shown in Figure 2. Based on the plot, only one inflection point, at eigenvalue 5, could be seen. The constructs to the right of the inflection point are all eliminated. Thus, only four constructs are determined.





Only 33 components out of the 60 were retained, with factor loadings ranging from 0.504 to 0.855 and only four (4) constructs being considered in the final EFA. The results of this study have given us a valid and reliable self-report scale for figuring out how involved parents think they are in their kids' education. So, one of the new things that this research adds is a numerical scale that can be used to measure parent involvement.

Table 1 Results of Exploratory Factor Analysis of Parental Involvement Scale (N	= 310)
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Construct 1: Parental Love and Guidance

Item Code	Item	Component 2
Q59	I always support the interests (talent or skills enhancement) of my child.	0.855
Q54	I appreciate whatever accomplishments my child achieved be it through academic or non-academic.	0.827
Q49	I am always there for my child willing to sacrifice.	0.823
Q52	I monitor my child's growth to be a responsible and confident but a humble kid.	0.823
Q53	I trusted and encouraged him to do his given tasks in school and at home letting him follow certain home chores, routine and taking time to relax or play after school.	0.788
Q50	I give my child's my full attention despite me being busy at work.	0.778
Q55	I respect and listen to his opinion or ideas and let him understand things the way it is.	0.776
Q51	I make sure I keep the bond (thru study/reading time) between me and my child.	0.766
Q48	I am a loving parent to my child and a disciplinarian as well.	0.723
Q56	I make sure I keep the bond (thru study/reading time) between me and my child.	0.714
Q60	I trained my child to become an independent individual starting from the early years and at this point of many educational adjustments, he can easily adopt to these changes with resilience.	0.677
Q58	I provided my child with technology and learning materials that help boost her creativity and develops her thinking skills.	0.662
Q57	I give my support to the teacher for my child's progress or improvement and confidence to do her task.	0.636
Q23	I always communicate with my child before going to school.	0.546
Q26	I usually ask what my child did in school when he arrive home.	0.514

Factor 1 accumulated the majority of 15 items as shown Table 1. In the developed scale, the items clustered within this factor were focused on aspects of *Parental Love and Guidance*. This classification aligns with Epstein's parenting type involvement category, highlighting parents' crucial role in child development. Today's challenges in raising school-aged children are evident (Petrash & Sidorova, 2019), shaped by diverse factors from family to society (Abujabbor et al., 2019). This factor aligns with Epstein's framework by emphasizing parents' impact on children's growth.

Moreover, children's perceptions of communication with both parents and their subjective well-being were significantly associated with each other, according to a study by Bireda & Pillay's (2018). There is a link between four children's well-being indicators and perceived parent-child communication (depression, self-esteem, substance use and school adjustment), thus, Salehizadeh and Abbasi (2021) demonstrated how parental love influences children's drive, moral virtue development, socialization, hope, and other positive mental health outcomes.

Table 2 illustrates the second construct, comprising eight-item statements, identified as *Parent-teacher Communication* through the findings. This classification aligns with Epstein's communicating type involvement category. Justifying this alignment, preliminary research by Dawson and Wymbs (2016) established a connection between students' academic performance and their relationships with both parents and teachers. Ceballo et al. (2014) as cited in Grace and Gerdes (2019) further support this by highlighting that Latino parents' active engagement in their children's education leads to improved outcomes for children, families, and communities. By identifying parent-teacher communication as a construct within this study, it aligns with Epstein's framework and contributes to the understanding of effective involvement approaches.

Also, Myende and Nhlumayo (2022) say that parents must understand how important parental engagement is, but schools should invest in their empowerment, take into account modern communication methods, and let parents know what the school's vision is and what it expects from them.

Item Code	Item	Component 2
Q13	I proactively communicate with my child's teacher/s to learn about his/her best and most challenging subjects in school.	0.825
Q15	I ask my child's teacher/s if he/she is 'but-an' or well-behaved in school.	0.823
Q12	I proactively communicate with my child's teacher/s regarding his/her performance in school.	0.797
Q17	I communicate with my child's teacher/s and ask the kind of book/s he or she is currently into.	0.796
Q16	I proactively communicate with my child's teacher/s to ask whether she has displayed his or her leadership skills in school and how to help improve those skills.	0.790
Q14	I proactively communicate with my child's teacher/s to help improve his/her academic performance.	0.779
Q25	I often communicate with the teacher of my child for updates.	0.697
Q20	I directly reach out to my child's teacher/s regularly and had received a timely response from them.	0.679

Construct 2: Parent-teacher Communication

 Table 2 Results of Exploratory Factor Analysis of Parental Involvement Scale (N = 310)

Another aspect of the developed tool pertains to *Participation in School Activities* as shown in Table 3. This component comprises six statements that gauge the extent of parental involvement in school-related activities, fitting well with Epstein's decision-making parental involvement category. This connection is substantiated by Kimaro and Machumu (2015) who found parental involvement in educational activities to correlate with children's academic success and access to essential learning resources. Reparaz and Sotés-Elizalde' (2019) also underlines

the school's efforts to involve parents. By placing participation in school activities within decision-making context, this study contributes to Epstein's framework and enhances the understanding of parental involvement's impact.

Item Code	Item	Component 3
Q39	I am an active member of the PTA.	0.851
Q40	I am a PTA officer.	0.745
Q2	I regulariy attend orientations/seminars organized by the school to support my child's education as well as improve parents-teacher collaboration.	0.667
Q19	I regularly attend school meetings, and recognition ceremonies of my child.	0.620
Q41	I actively participate in initiatives or activities, funds-drive to help the school improve its services and facilities.	0.582
Q42	I share my child's learning preferences to his or her teachers during feedbacking sessions in PTA meeting so they can design appropriate activities.	0.509

 Table 3
 Results of Exploratory Factor Analysis of Parental Involvement Scale (N = 310)

 Construct 3: Participation in School Activities

Collaboration among educators, parents, students, and the community significantly contributes to academic success. Masabo et al. (2017) strongly advocate parental involvement in education, regardless of financial status. Bi et al. (2018) emphasized the impact of family beliefs and attitudes within specific cultural contexts on teenagers' perspectives.

Table 4 illustrates the item component of the fourth construct, focusing on parental satisfaction, which aligns Epstein's collaborating with the community category within parental involvement. *Parental Satisfaction* holds a pivotal role in the effectiveness of flexible learning. Research highlights that parental satisfaction directly influences students' engagement and motivation in flexible learning environments (Gray & DiLoreto, 2016). This construct's relevance to community collaboration underscores its place within Epstein's framework and its significance in promoting successful educational initiatives.

 Table 4
 Results of Exploratory Factor Analysis of Parental Involvement Scale (N = 310)

Construct 4: Parental Satisfaction

Item Code	Item	Component 4
Q8	I find the amount of online learning imparted by the teachers to my child is enough.	0.750
Q9	I am satisfied of the school's learning contents as they are at an appropriate pace of my child's development.	0.712
Q10	I am satisfied with the teaching strategies currently used by the teacher for my child's learning.	0.644
Q32	The school communicates with me whenever my child has a home assignment.	0.504

Wei and Ni (2023) underscored parental involvement's significance as well as its potential impact on parents satisfaction through initiatives like the Parents Teachers Association (PTA), which resonates with Shao et al.'s (2022) findings that robust school-based parental involvement raises both satisfaction and active engagement. Wang and Sheikh-Khalil (2014) revealed enhanced academic and emotional outcomes linked to parental involvement. Such involvement serves as a direct and indirect predictor of young people's academic success and mental well-being, mediated by behavioral and emotional interactions. Hampden-Thompson and Galindo (2015) highlight how school-family ties and high satisfaction levels drive youth academic achievement, further emphasizing the need for school policies that foster family relationships and satisfaction. Moreover, parental satisfaction influences the persistence of flexible learning options, impacting their effectiveness and longevity as

noted by Shao et al. (2022). Therefore, ensuring that parental satisfaction with flexible learning offerings is pivotal for program success and durability.

The findings discussed here closely resemble Epstein's parental involvement approach. Wei and Ni (2023) emphasize the importance of family involvement, similar to Epstein's emphasis on parental involvement in school governance. The research of Shao et al. (2022) relates parent satisfaction to involvement, echoing Epstein's notion of strong parent-school collaborations. Wang and Sheikh-Khalil (2014) demonstrate the favorable influence of parental involvement on academics and emotions, correlating with Epstein's "parenting at home" model. Strong school-family ties improve success, according to Hampden-Thompson and Galindo (2015), echoing Epstein's "parent involvement in learning at home". Shao et al. (2022) link satisfaction with learning flexibility, echoing Epstein's "parent involvement in decision-making".

Measuring the involvement of parents has advanced beyond surveys and into Epstein's six categories. Qualitative interviews, technology driven tools, and virtual communities are all instances of advances. Diverse forms of involvement and adapting to changing education are two challenges. Comprehensive measurement informs successful collaboration for student success.

Conclusion

The parental involvement scale for flexible learning encompassed four (4) constructs, according to the results: parental love and guidance, parent-teacher communication, participation in school events, and parental satisfaction. All of these indications of meaningful parental involvement fit a variety of expert-set criteria, proving that they are authentic, based on observed behavior, credible, and extremely crucial to parents, teachers, and children. Teachers, parents, administrators, and all stakeholders must then emphasize the essential nature of strong, positive, and meaningful relationships between families and schools for optimal learning through a variety of engaging activities.

Recommendation

The research's conclusions led to the following recommendations:

1. The study could be replicated to improve the reliability and validity of the new parental involvement scale.

2. A confirmatory study should be carried out to establish and corroborate the constructs of the developed parental involvement scale.

References

Abujabbor, R., Khayam, M., & Nurali, I. (2019). The Role of Parent Love in Child Education. *BECTHUK ТАДЖИКСКОГО НАЦИОНАЛЬНОГО УНИВЕРСИТЕТА*, 6, 263–267. Retrieved from https://www.elibrary.ru/item.asp? id=43045475

Antunez, B. (2000). When Everyone is Involved: Parents and Communities in School Reform. In *Framing Effective Practice: Topics and Issues in the Education of English Language Learners* (pp. 53–59). Washington, DC: National Clearinghouse for Bilingual Education.



Bartolome, M. T., Mamat, N., & Masnan, A. H. (2017). Parental Involvement in the Philippines: A Review of Literatures. *International Journal of Early Childhood Education Care*, 6, 41–50. https://doi.org/10.37134/ saecj.vol6.5.2017

Becker, D. F., McGlashan, T. H., & Grilo, C. M. (2006). Exploratory Factor Analysis of Borderline Personality Disorder Criteria in Hospitalized Adolescents. *Comprehensive Psychiatry*, 47(2), 99–105. https://doi.org/10.1016/j.comppsych.2005.07.003

Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W., & Deater-Deckard, K. (2018). Parenting Styles and Parentadolescent Relationships: The Mediating Roles of Behavioral Autonomy and Parental Authority. *Frontiers in Psychology*, *9*, 2187. https://doi.org/10.3389/fpsyg.2018.02187

Bireda, A. D., & Pillay, J. (2018). Perceived Parent-child Communication and Well-being Among Ethiopian Adolescents. International Journal of Adolescence and Youth, 23(1), 109-117. https://doi.org/10.1080/02673843.2017.1299016

Braun, V., & Clarke, V. (2012). Thematic Analysis. In H. Cooper (Ed.), APA Handbook of Research Methods in Psychology, Vol. 2, Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological (pp. 57–71). Washington, DC: American Psychological Association. https://doi.org/10.1037/13620-004

Cahapay, M. B. (2021). Involvement of Parents in Remote Learning of Children Amid COVID-19 Crisis in the Philippines: A Transcendental Phenomenology. *International Journal of Sociology of Education*, 10(2), 171-192. https://doi.org/10.17583/rise.2021.7317

Callaman, R. A. (2022). Development and Validation of OBE-based Syllabus Evaluation Tool. Asia Pacific Journal of Social and Behavioral Sciences, 20, 15-30. https://doi.org/10.57200/apjsbs.v20i0.281

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced Mixed Methods Research Designs. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research* (pp. 209–240). Thousand Oaks, California: Sage Publications.

Dawson, A. E., & Wymbs, B. T. (2016). Validity and Utility of the Parent-teacher Relationship Scale-II. *Journal of Psychoeducational Assessment*, 34(8), 751–764. https://doi.org/10.1177/0734282915627027

Desimone, L. (1999). Linking Parent Involvement with Student Achievement: Do Race and Income Matter? *The Journal of Educational Research*, 93(1), 11–30. https://doi.org/10.1080/00220679909597625

DeVellis, R. F., & Thorpe, C. T. (2021). Scale Development: Theory and Applications (5th ed.). California: Sage Publications.

Đurišić, M., & Bunijevac, M. (2017). Parental Involvement as a 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. (2001). School, Family, and Community Partnerships: Preparing Educators and Improving Schools. Boulder, Colorado: Westview Press.

Epstein, J. L., Sanders, M. G., Sheldon, S. B., Simon, B. S., Salinas, K. C., Jansorn, N. R., ... Williams, K. J. (2018). *School, Family, and Community Partnerships: Your Handbook for Action* (4th ed.). Thousand Oaks, California: Corwin. Retrieved from https://tinyurl.com/3cmb6re9

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Goodall, J. (2022). A Framework for Family Engagement: Going Beyond the Epstein Framework. *Wales Journal of Education*, 24(2), 74–96. https://doi.org/10.16922/wje.24.2.5

Grace, M., & Gerdes, A. C. (2019). Parent-teacher Relationships and Parental Involvement in Education in Latino Families. *Contemporary School Psychology*, 23, 444-454. https://doi.org/10.1007/s40688-018-00218-9

Gray, J. A., & DiLoreto, M. (2016). The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments. *NCPEA International Journal of Educational Leadership Preparation*, 11(1), 1–20. Retrieved from https://eric.ed.gov/?id=EJ1103654

Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' Involvement in Children's Schooling: A Multidimensional Conceptualization and Motivational Model. *Child Development*, 65(1), 237–252. https://doi.org/10.2307/1131378

Hampden-Thompson, G., & Galindo, C. (2015). Family Structure Instability and the Educational Persistence of Young People in England. *British Educational Research Journal*, 41(5), 749–766. https://doi.org/10.1002/berj.3179

Kimaro, A. R., & Machumu, H. J. (2015). Impacts of Parental Involvement in School Activities on Academic Achievement of Primary School Children. *International Journal of Education and Research*, *3*(8), 483–494. Retrieved from http://www.ijern.com/journal/2015/August-2015/40.pdf

Masabo, S. L. P., Muchopa, S. E. D., & Kuoth, W. B. G. (2017). Parental Involvement in School Activities in Kibondo District, Tanzania: Challenges and Remedies. *International Journal of Education and Research*, 5(10), 89–96. Retrieved from https://www.ijern.com/journal/2017/October-2017/08.pdf

Myende, P. E., & Nhlumayo, B. S. (2022). Enhancing Parent-teacher Collaboration in Rural Schools: Parents' Voices and Implications for Schools. *International Journal of Leadership in Education*, 25(3), 490-514. https://doi.org/10.1080/13603124.2020.1731764

Nunnally, J. C. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill.



Petrash, E., & Sidorova, T. (2019, May 21). Experience in the Implementation of the Parental Enlightenment Program "Axioms of Parental Love". In *Society. Integration. Education, Proceedings of the International Scientific Conference, Volume II, 24–25 May 2019* (pp. 409–419). https://doi.org/10.17770/sie2019vol2.3802

Reparaz, C., & Sotés-Elizalde, M. A. (2019). Parental Involvement in Schools in Spain and Germany: Evidence from PISA 2015. *International Journal of Educational Research*, *93*, 33–52. https://doi.org/10.1016/j.ijer. 2018.10.001

Salehizadeh, M. I., & Abbasi, N. (2021). The Role of Parental Love in the Mental Health of Children from the Perspective of the Qur'an and Hadith. *International Journal of Multicultural and Multireligious Understanding*, 8(7), 752-762. https://doi.org/10.18415/ijmmu.v8i7.2949

Shao, M., He, W., Zhao, L., & Su, Y.-S. (2022). The Influence of Parental Involvement on Parent Satisfaction: The Moderating Effect of Parental Educational Level and the Number of Children. *Frontiers in Psychology*, *12*, 752802. https://doi.org/10.3389/fpsyg.2021.752802

Tus, J. (2021). Amidst the Online Learning in the Philippines: The Parental Involvement and its Relationship to the Student's Academic Performance. *International Engineering Journal for Research & Development*, 6(3), 1–15. https://doi.org/10.6084/m9.figshare.14776347.v1

UNICEF Office of Research – Innocenti. (2018, May 17). *Could Families be the Key to Achieving the SDGs?* Retrieved from https://www.unicef-irc.org/article/1815-could-families-be-the-key-to-achieving-the-sdgs.html

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

Wei, F., & Ni, Y. (2023). Parent Councils, Parent Involvement, and Parent Satisfaction: Evidence from Rural Schools in China. *Educational Management Administration & Leadership*, 51(1), 198–218. https://doi.org/10.1177/1741143220968166

Worthington, R. L., & Whittaker, T. A. (2006). Scale Development Research: A Content Analysis and Recommendations for Best Practices. *The Counseling Psychologist*, 34(6), 806–838. https://doi.org/10.1177/0011000006288127

Yosef, Hasmalena, & Sucipto, S. D. (2020). Parental Self-efficacy in Educating Elementary School Children. *International Conference on Elementary Education*, 2(1), 977-985. Retrieved from http://proceedings.upi.edu/index.php/icee/article/view/709