Strategies for Parental Involvement during Emergency Remote Teaching Scale: Its Psychometric Properties

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Abstract: Recently, Emergency Remote Teaching (ERT) has caused a considerable interest in the school community due to the wide-scale lockdown brought about by the COVID-19 pandemic. The curriculum's alteration necessitated a call to explore mechanisms for effective remote instruction delivery—including parental involvement. This research determined the psychometric properties of the "Strategies for Parental Involvement during Emergency Remote Teaching - Scale (SPIERT-S). The tool assesses the strategies used by teachers to facilitate parental involvement during ERT. Through a thorough literature review, 22 items about home and school collaboration and ERT were initially developed. Evidence related to content validity was established through two-round expert consultation, while data related to construct validity were gathered through factor analyses. The content validity analysis resulted in the deletion of four (4) items; hence, 18 items were retained. A three-factor structure was yielded from Exploratory Factor Analysis (parents as facilitators of learning, parents as sources of information, and parents as collaborators), and a total of 15 items were retained. The confirmatory factor analysis indicated an acceptable level of the goodness-of-fit indices measured. The internal consistency of the factors and the whole scale showed excellent reliability. The results suggest that the SPIERT-S has good, valid, and reliable psychometric qualities and can be used to examine the strategies for parental involvement that teachers utilize during emergency remote teaching. Recommendations and limitations of the study are discussed.

Keywords: *Emergency remote teaching, home and school collaboration, parental involvement, Epstein's typology.*

Introduction

The COVID-19 pandemic has prompted an unprecedented impact on the global economy and an unforeseen alteration in achieving school goals. The widespread threat to public health prompted the implementation of Emergency Remote Teaching (ERT) to address a wide-scale academic shutdown (Hodges et al., 2020). ERT was instituted to ward off the spread of the virus and address the learner's educational demands during social distancing and "lockdown." The move to ERT has challenged educational stakeholders that included the administrators, teachers, students, parents, and the community at varying levels.

The suspension of face-to-face instruction has left a gargantuan challenge. Teachers became vulnerable during the shift to distant instruction as creating an effective learning environment was quite a feat for them (Whittle et al, 2020). Some students were unable to attend classes (Zhang, 2020). The learners' mental health issues emerged as the children are in social segregation (Duan et al., 2020). On the other hand, parents were skeptical and had argued that only students with self-discipline and autonomy in achieving tasks would directly benefit from remote learning (Zhang, 2020).

The global health menace has stopped face-to-face schooling but not teaching and learning, hence, necessitated parents to become co-creators of opportunities for virtual learning. ERT has reframed home environments into the most fundamental place for formal education and has demanded parents, guardians, or caregivers of the school children become a significant learning facilitator (Richmond et al., 2020). The parents' obligations have immediately increased and became more complicated as schooling shifted to remote instruction. If ERT has to be implemented meaningfully, parents and families should be involved more actively and purposely to achieve the educational response during a crisis. A meaningful home and school partnership is an integral part of a good school (Epstein, 2018) regardless of circumstances.

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Works about home and school relationships are extensively explored, but how teachers strategize parental involvement during an educational crisis and remote teaching is far inadequate worldwide. Several studies, qualitatively and quantitatively, conceptually expanded home and school collaboration, but ERT procedures are still emerging. There is a need to build and validate mechanisms by which a response can be made during a critical circumstance and remote instruction. Due to the unprecedented impact of COVID-19, a mandate to fully understand the teaching and learning landscape during a crisis to ensure quality in educational services is of paramount interest. An improved practice toward emergency remote instruction in the future should be offered. This paper narrows this gap by providing a tool to investigate the strategies for parental involvement that teachers utilize during remote teaching.

Emergency Remote Teaching

The World Health Organization (WHO) announced on March 11, 2020 that COVID-19 is a profound universal health issue (Waseem et al., 2020). As a response to the virus's high-transmissibility, social distancing and "lockdown" were reinforced (Whitelaw et al., 2020). What initially appeared as a grave menace to public health likewise resulted in widespread alteration of educational processes and systems' smooth operation and progress.

As early as March 18, 2020, over 107 countries had strictly and rapidly carried out a national-level school closure (Viner et al., 2020). As to the learners, the need to stay home was a temporary and an indefinite response. Also, complexities for the teachers and administrators in terms of systems and frameworks, connectivity, assessment of learning outcomes, and school partnership became evident (Fauzi & Sastra Khusuma, 2020).

Issues regarding curriculum implementation were made complex. The problem entailed the implementation of ERT (Whittle et al., 2020). ERT as an academic response is situated on the other end of a continuum in online instruction. The influential study of Hodges et al. (2020) described ERT in contrast to online instruction that is being held in pre-pandemic. Typical online teaching is one that is methodically mapped and enforced. On the other hand, ERT is an emergency response to a dilemma or a disaster and will return to the traditional instructional delivery mode once the emergency has abated. The former being enforced with pre-planning, substantial resources, and infrastructure, while the latter being decided and implemented abruptly even with scant resources and time (Hodges et al., 2020).

ERT is the same measure enforced in an emergency like in Afghanistan, where pupils stay home and receive curriculum instruction through video and radio systems. The country opted to carry out ERT to safeguard the children in the middle of crossfire (Hodges et al., 2020). In times of the coronavirus pandemic, ERT was carried out to ensure the learners' security from the fatal infection. ERT is a reasonable choice during a crisis; however, it creates curricular circumstances.

The demand to implement ERT is a herculean challenge to its collaborators. The shift entailed reframing learning outcomes, pedagogies, policy, professional development, infrastructure, and systems – and this does not exempt home and school collaboration. Therefore, to meet the fundamental goals of remote instruction, there is a need to explore how to shape home and school partnerships to attain significant learning outcomes.

Home and School Partnership during ERT

 Studies about home and school partnerships are among the most researched arguments involving teaching and learning (Punter et al., 2020). The interaction of both family and school systems is an intersection of rich experiences that shapes children's lives (Bronfenbrenner, 1979). Hence, mechanisms that shall advocate a home and school collaboration be carried out alongside instructional and assessment pedagogies (Epstein, 2018). At the core of the home-and-school relationship is parents' and schools' engagement in the curriculum implementation toward promoting the learners' optimal learning progress (Kim & Sheridan, 2015). Furthermore, educator practices that promote alliance building and open dialogue among school community members have been associated with positive school climate and conflict reduction (Acevedo-Gil, 2016).

It has been found from decades of research that a functional family and school partnership are a facilitator of learner's optimal success, multi-domain development (Hartas, 2015; Hornby & Blackwell, 2018; Ihmeideh, AlFlasi, Al-Maadadi, Coughlin, & Al-Thani, 2018; Kim & Sheridan, 2015; Mulder, 2014), academic achievement across ages (Epstein, 2013; Epstein & Dauber, 1991; Hornby & Blackwell, 2018; Ihmeideh et al., 2018). Specific benefits of home and school collaboration to the learners spelled out in the literature are reading, language, and math achievement, high academic aspirations, socio-emotional adjustment, academic engagement, satisfaction with their education, and positive attitude toward learning (Castro et al., 2015; Deng et al., 2018; Epstein, 2013; Epstein & Dauber, 1991; Hampden-Thompson & Galindo, 2017; Hornby & Blackwell, 2018; Ihmeideh et al., 2018; Kim & Sheridan, 2015; Mo & Singh, 2008; Punter et al., 2016; Wilder, 2014). With the advantages of the home and school relationship, there is a general understanding that parents' engagement in the home and school partnership is multi-layered and multi-faceted and requires complex collaborative practices and thorough investigation (Lau et alg, 2012; Punter et al., 2016).

The literature reports several frameworks that elucidate home and school collaboration in achieving curricular goals. For instance, Eccles & Harold (1996) in their investigation set forth a better family-initiated design through five aspects

like (a) monitoring; (b) volunteering; (c) involvement; (d) contacting the school about the child's progress, and (e) contacting school how to provide child extra support. On the other hand, Hoover-Dempsey and Sandler (1997) popularized a model that encapsulates factors that dictate parents' involvement in their child's schooling. These components are (1) decision to be involved, (2) choice of the type of involvement, (3) how involvement influences school results, (4) tempering or mediating variables, and (5) student outcomes. Christenson and Sheridan (2001) likewise provided a five A's structure that facilitates the relationship between home and school – approach, attitude, atmosphere, action, and involvement. Through effective partnerships, the framework depicted families that negotiate multiple roles, including supporters, encouragers, monitors, advocates, decision-makers, and collaborators. There is no definitive framework about parental involvement at the moment; hence, it is specific to a particular study (Hirsto, 2010; Ihmeideh et al., 2018).

Theoretical Framework

This study is mainly anchored on the influential work of Jocelyn Epstein, "Epstein's Framework of Six Types of Involvement," which was launched almost five decades ago (Epstein, 2010). The framework gave rise to a renewed interest in examining home and school collaboration (Punter et al., 2016). Further, the groundwork is more frequently outlined in educational inquiry, theory, and practice (Nathans & Revelle, 2013). As to breadth, the categorization is comprehensive in its approach as it comprises three spheres in advancing a learning environment for the children - parents or families, schools, and the community (Nathans & Revelle, 2013; Punter et al., 2016). Epstein's parental involvement model is school-oriented (Punter et al. , 2016), making it appropriate for this study.

Epstein (2010) proposed the typology that defined different dimensions of parental responsibility in the context of a school partnership. The first type of involvement is "parenting." This type accords with how the teacher involves the parents and families to determine an environment to support their children. Some processes that facilitate this type of engagement are workshops, videotapes, and online meetings to assist parents with health, nutrition, and other services and support. The first type encourages the students to realize the importance of respect and good family values. It helps the parents develop efficacy in parenting. For the teachers, it helps them imbibe an understanding of the learners' family background and how diverse it is (Hornby & Blackwell, 2018). The second type in the typology is "communicating." It explores effective home-to-school and school-to-home communication mechanisms. This type of involvement reinforces the parents to internalize the curriculum and its implementation, allowing them to be guided with their performance and ownership in their academic journey and strengthen practical communication skills. The third type of relationship is "volunteering," which requires parents' help and support in the school and the community' affairs. The third typology allows the students to witness how the school community members are collective in carrying out school programs, the parents to internalize the complexities of curriculum implementation, and the teachers acquire a readiness to engage the parents in attaining the educational targets. The fourth type is "learning at home," which necessitates how parents and families can attain curricular goals in the home setting. This involvement causes the students to extend their love for learning even at home, for parents and guardians to support their children with their take homework, and lets the teacher recognize the diversity of their pupils' home setting. The fifth type of involvement is "decision-making," which compels the families as participants in school decisions. The typology provides understanding and engagement about school decisions; for the parents, it creates ownership of the decisions they make for their children's schooling, and for the teachers, their leadership capacity is expanded. Finally, the sixth type in the classification is "collaborating with the community," which describes integrating community resources and services to enhance school delivery modes. Community collaboration expands the experiences of school children, extends interaction of parents, and increases teachers' knowledge and awareness of resources toward enriching curriculum and instruction (Epstein, 2010).

The implementation of ERT and the goal toward educational accessibility, equality, and quality during a crisis has created the role of school, home, and community more involved – albeit the teachers as its primary responders (Whittle et al., 2020). There is a need to develop a scale to explain the teachers' strategies for parental involvement, even in a crisis, to address educational quality.

This study

This study's primary objective is to test the psychometric properties of a tool that shall investigate teachers' strategies for home and school collaboration during a catastrophe. This study's output will provide insight into the dynamic delivery of learning experiences during a disaster through parental involvement. While it is a desire that the current circumstance abates, there is a call to develop mechanisms that shall support the transition to remote teaching when an unusual catastrophe will occur again. This research was organized following two stages: (1) literature review about parental involvement and emergency remote teaching and item generation; (2) analysis of content validity, construct validity, and internal consistency.

Methods

Sample

A convenience sampling method was utilized to determine the respondents for pilot testing. A total of 20-40 respondents is deemed sufficient in pre-testing a survey instrument (Rea & Parker, 2014). For this study, over 570 teacher-respondents were invited to constitute the sample group; 285 samples for the Exploratory Factor Analysis and 285 samples for the Confirmatory Factor Analysis. The research participants are Filipino elementary school teachers using remote instruction during the COVID-19 pandemic. All the participants signed consent before pilot testing.

Process

The data collection and analysis proceeded through the following stages.

Stage 1: Preparation and scoping phase: The researchers reviewed literature that covered home and school relationships and emergency remote teaching. Following the inclusion criteria, over 32 articles were reviewed.

Stage 2: Item generation: After careful analysis of existing literature, the item generation was completed. Initially, the number of items generated was 22 and is evaluated through a 5-point Likert scale. The items were initially grouped into six sections following the theoretical framework.

Stage 3: Content validity: The third stage contributed to the refinement of the initial tool by way of establishing content validity. Content validity ensures a high-quality and rigorously developed tool (Polit, Beck, & Owen, 2007) and one that includes constructs it seeks to cover—a balanced representation of the construct under investigation (Cohen, Manion, & Morrison, 2002). To establish the content validity of the instrument, Item – Content Validity Index (I-CVI), Scale-level-Content Validity Index Average (S-CVI/Ave), and Scale - Content Validity Index Universal Agreement (S-CVI/AU) were analyzed. A total of eight (8) experts were invited to validate the instrument. The experts were asked to assess clarity, relevance, accuracy, redundancy of construct, and "fit" of the construct through a four-point anchor (1=not relevant, 2=somewhat relevant, 3=quite relevant, and 4=highly relevant). The item level CVI (I-CV) was computed by dividing the total number of experts who gave a 3 or 4 by the total number of experts. If there are more than six raters, an item that obtained an I-CV of ≥.78 should be retained; an item is revised when it is nearly 0.78 and is deleted when it is ≤ 0.78 (Kovacic, 2017; Lynn, 1986; Polit et al., 2007). To establish scale level content validity, the researchers computed S-CVI/Ave and S-CVI/AU. To compute the S-CVI/Ave, the scores of all the items were added and divided by the number of total items (Kovacic, 2017). To compute the S-CVI/AU, I-CVI items equal to 1 is divided by the total number of items (Zamanzadeh et al., 2015). The acceptable range for S-CVI/Ave is ≥0.90, while for S-CVI/AU, it should be ≥ .08 (Polit & Beck, 2006).

Stage 4: Testing for Factorability and Factor Analysis: Before conducting the factor analysis, the researcher examined the factorability of the data collected. This determined whether the data gathered was sufficient to develop a set of factors. The Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were performed to test for factorability. The recommended KMO index is 0 to 1. An index above 0.50 suggests factorial analysis. Further, Bartlett's test of sphericity ensures that there is no overlapping of the variables factored (Hair, Black, Babin, Anderson &Tatham, 2006) and should yield a significant level of $p < 0.5$ to allow factorial analysis (Williams et al., 2010).

The researchers conducted Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to refine the scale. EFA is a multivariate statistical method that allows the researcher to establish a precise map of the factors and constructs about the phenomena under study (Edwards & Bagozzi, 2000; Watkins, 2018). Principal Component Analysis (PCA) was utilized as the factorization technique, and the varimax with Kaiser normalization was used as the factor rotation method. Items with eigenvalues that are>1.00 were retained. Further, items were excluded if (a) they loaded on more than one factor, (b) the loaded factor is not consistent with the meaning of other items, and (c) they obtain <0.50 factor loading (Deng et al., 2016).

During tool development and validation, CFA is conducted to refine the items as it examines the nature of and relations of constructs. As the structural model is created through CFA, a precise hypothesis about the phenomena under study can be established (Jackson et al., 2009). There is a need to analyze indices like the chi-square goodness-of-fit test, goodness-of-fit index (GFI), adjusted goodness-of-fit (AGFI), comparative fit index (CFI), normed fit index (NFI), and root-mean-square error of approximation (RMSEA) to evaluate the model fit.

Stage 5: Test of Internal consistency: Analysis of Cronbach's alpha coefficient and composite reliability (CR) were utilized to establish the internal consistency of the newly developed tool. For an excellent reliability level, alpha values should not be lower than 0.70 (Kline, 2011; Lavrakas, 2008) and not exceed 0.94 (Taber, 2018). Further, a composite reliability value that is greater than 0.60 is deemed adequate (Diamantopoulos & Siguaw, 2000). The researchers made use of SPSS v27 for the data analysis.

Findings

Content Validity

To determine the questionnaire's content validity, an analysis of the Context Validity Index (CV-I) was conducted. Initially, a total of eight (8) experts validated the instrument through a 4-point Likert scale (1=not relevant, 2=somewhat relevant, 3=quite relevant, and 4=highly relevant). During the first round of the CV-I analysis, 3 (three) items yielded an I-CVI of 0.63. These items were deleted. Hence, among the 22 statements generated initially, 18 were retained, and four were deleted. A second version of the instrument was re-evaluated by three (3) experts from the previous pool for the second round of establishing content validity. The experts were invited to rate the relevance of the remaining items using the same anchor. During the second round, all the 18 statements obtained excellent validity with an index of 1.0.

The scale level content validity index was established by analyzing S-CVI/Ave and S-CVI/AU. The S-CVI/Ave and S-CVI/UA obtained in all 18 items is 1.0. The CV-I, S-CVI/Ave analysis, and S-CVI/AU show excellent validity of the scale developed. Table 1 presents the result of the analysis of content validity.

Table 1. Results of analysis of Content Validity

Items	ROUND 1		ROUND 2	
	I-CVI	Decision	I-CVI	Decision
Item 1	1.0	Retained	1.0	Retained
Item 2	1.0	Retained	1.0	Retained
Item 3	1.0	Retained	1.0	Retained
Item 4	1.0	Retained	1.0	Retained
Item 5	1.0	Retained	1.0	Retained
Item 6	1.0	Retained	1.0	Retained
Item 7	1.0	Retained	1.0	Retained
Item 8	**.75**	**Excluded**		
Item 9	1.0	Retained	1.0	Retained
Item 10	**.75**	**Excluded**		
Item 11	**.62**	**Excluded**		
Item 12	.87	Retained	1.0	Retained
Item 13	1.0	Retained	1.0	Retained
Item14	1.0	Retained	1.0	Retained
Item 15	.87	Retained	1.0	Retained
Item16	1.0	Retained	1.0	Retained
Item 17	1.0	Retained	1.0	Retained
Item 18	1.0	Retained	1.0	Retained
Item 19	1.0	Retained	1.0	Retained
Item 20	**.62**	**Excluded**		
Item 21	1.0	Retained	1.0	Retained
Item 22	.87	Retained	1.0	Retained
S-CVI/Ave			1.0	Excellent
S-CVI/AU			1.0	Excellent

Exploratory Factor Analysis

To conduct the factorial analysis, the assumptions of EFA were first established. The KMO Measure of Sampling Adequacy analysis yielded a value of .922 above the prescribed index. Similarly, Bartlett's test of sphericity yielded an acceptable result (x^2= 1861.143, df= 153, p<.000). The results of the KMO measure and Bartlett's test revealed that the items are acceptable and there is a reasonable level of inter-correlations that qualifies the item for factor analysis (Hair et al., 2006; Williams et al., 2010)

Three factors were deemed appropriate as indicated by the eigenvalues (greater than 1.0) and examination of the scree plot. Results showed that three items were excluded as they loaded to more than one factor. The three factors explained 57.06% of the total variance. The first factor explained 42.31% of the variance, the second factor explained 8.87% of the variance, and the third factor explained 5.87%. The factor loading of each item is displayed in Table 2.

Table 2. Factor loading of the SPIERT-S

Item Number	Factor Loadings		
	Parents as facilitators of learning	Parents as sources of information	Parents as collaborators
Item 9	.813		
Item 7	.731		
Item 13	.706		
Item 8	.692		
Item 12	.604		
Item 15	.529		
Item 11	**.467**		**.440**
Item 2		.750	
Item 3		.713	
Item 1		.704	
Item 6		.546	
Item 4		.508	
Item 5	**.426**	**.466**	
Item 17			.803
Item 18			.792
Item 16			.683
Item 10			.594
Item 14	**.482**		**.520**

Confirmatory Factor Analysis

The researchers conducted CFA to verify the structure of the tool constructed through EFA. The CFA provides a perspective by which a good fit is established when the EFA result is obtained in the confirmatory data. To perform CFA, the researchers utilize the maximum likelihood method to analyze statistical fit. The results of the CFA were evaluated through the chi-square value, the root-mean-square error of approximation (RMSEA) while the model fit was analyzed through the comparative fit index (CFI), goodness-of-fit index (GFI), adjusted goodness-of-fit (AGFI), and normed fit index (NFI) (Browne & Cudeck, 1992; Schermelleh-Engel, Moosbrugger, & Müller, 2003). The fit parameter is displayed in Table 3.

Table 3. Fit Parameters of CFA

Fit Parameters	Good Fit	Acceptable Fit	Values of the model
X^2	$.05 < p \leq 1.00$	$01 < p. \leq .05$	.008
X^2/df	$0 \leq X^2/df \leq 2$	$2 < X^2/df \leq 3$	1.41
RMSEA	$0 \leq RMSEA \leq .05$	$.05 \leq RMSEA \leq .08$	.068
CFI	$.97 \leq CFI \leq 1.00$	$.95 \leq CFI \leq .97$	.931
NFI	$.95 \leq NFI \leq 1.00$	$.90 \leq NFI \leq .95$	.875
AGFI	$90 \leq AGFI \leq 1.00$	$.85 \leq AGFI \leq .90$	.876
GFI	$.95 \leq GFI \leq 1.00$	$.90 \leq GFI \leq .95$	.910

It is noticeable that the result of CFI and NFI parameters are below the acceptable values of goodness-of-fit (*CFI=.931, NFI=.875).* The weakness is justified by Bentler (1990), who argued that the CFI and NFI might not reach the acceptable range in a small sample (less than 200) even if the rest of the fit parameters does. Therefore, the fit parameters of the CFA reflected in the table are interpreted to fit the model. The observed model of the confirmatory data set is depicted in Figure 1.
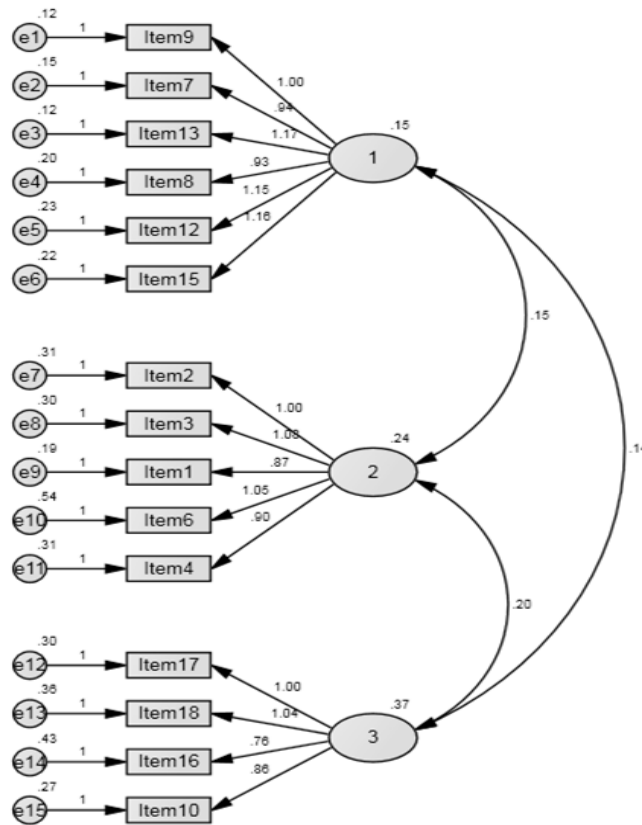
Figure 1. Equation modeling results from Confirmatory Factor Analysis

Reliability

The internal consistency of the tool developed was established through the analysis of Cronbach's alpha coefficient and CR. The consistency coefficient of each factor and the overall scale is evaluated very well. The alpha coefficient of the three subscales is .807, .838, and .792, respectively. Further, the obtained alpha coefficient of the scale is .913. The CR obtained for the three subscales are .799, .801, and .759. The CR of the overall scale is .885. The alpha coefficient and CR values yielded suggest that the tool is a reliable measure to investigate teachers' parental involvement strategies during ERT (See Table 4).

Table 4. Cronbach's alpha coefficient and CR of the three factors and the overall scale

Factors	No. of Items	Cronbach's Alpha	Composite Reliability
Parents as facilitators of learning	6	.807	.799
Parents as sources of information	5	.838	.801
Parents as collaborators	4	.792	.759
SPIERT-S	15	.913	.885

Discussion

Home and school relationships are a fundamental area of inquiry in the educational sphere--it is a fundamental component of any school program (Epstein, 2018). Intensive parental involvement is a vital facilitator of a learner's academic achievement (Ihmeideh et al., 2018). In remote instruction, where demands and struggles in all teaching and learning fields are exacerbated, investing in parental involvement as co-facilitators is a feasible option.

The present study presented evidence that the scale to examine teachers' parental involvement strategies during ERT has strong psychometric qualities. The finalized scale comprises an 18-item statement investigated through a five-point Likert scale (1= never, 2 = almost never, 3=occasionally / sometimes, 4=almost every time, 5=every time). The three-factor scale highlighted parental involvement strategies such as parents as facilitators of learning, parents as sources of information, and parents as collaborators. This paper's framework is drawn from Epstein's earlier works on parental involvement and concepts about ERT. The result of exploratory and confirmatory analyses yielded three factors; thus, Epstein's six-type model is embedded in the factors extracted (Figure 2).
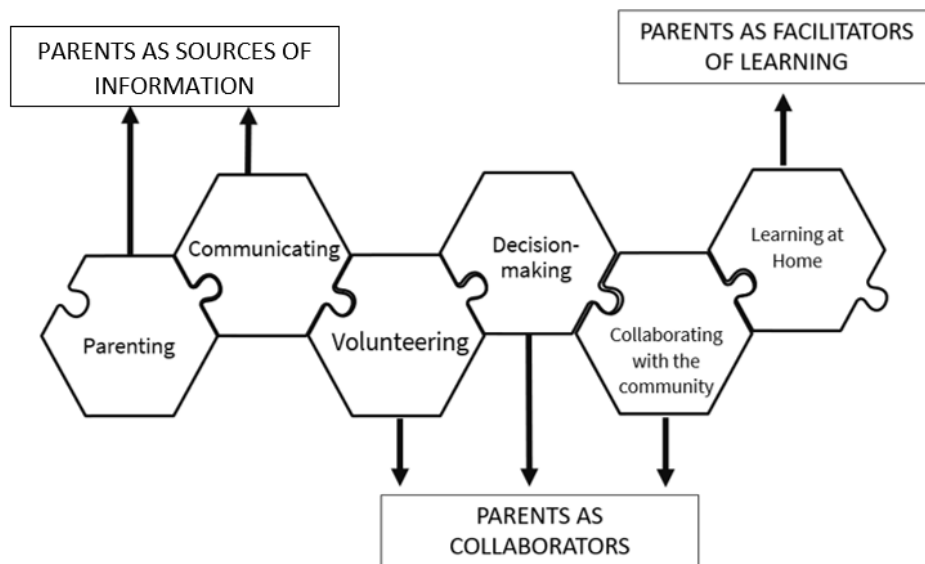
Figure 2. Traversing Epstein's parental involvement model (2010) and SPIERT-S

The statements that directly relate to Epstein's (2010) parental relationship in "learning at home" have most parts of this study's "parents as facilitators of learning." Noticeably, this study's findings relate to only one model in Epstein's work than the second and third factors. The findings of this study emphasize the complexities and relevance of parental involvement during remote instruction. According to the study participants, the findings agree with Ihmeideh et al. (2018) that "learning at home" involvement is a significantly critical form of involvement. It is essential to engage parents as facilitators of the children's learning during remote instruction. The model of Epstein and findings of this study are compared in the light of the following statements: informing parents about their children's progress and difficulties, encouraging parents to support their children accomplish learning packs, reminding parents to monitor their children during synchronous and asynchronous discussions, providing support to parents who have limited education on how to engage their children in learning, educating parents of the importance of motivating their children. This first factor requires a parent to become a teacher of their children (Hirsto, 2010) in their role as (1) monitor, and (2) assist in the learning activities (Nathans & Revelle, 2013). While this paper is framed from Epstein's work, it agrees with Greenwood & Hickman's (1991) earlier explanation, where teachers prepare all the materials and implement it with the parents' support. In ERT, the teacher also reaches out to parents for empowerment regarding strategies and ideas on promoting their children's learning during remote instruction.

Two models from Epstein's typology were subsumed in this study's second factor. A similar view of what Epstein termed as "parenting" and "communicating" is "parents as sources of information" in this study. The term was best judged to represent this factor and Epstein's work. The statements are strategies that engage parents to appropriately acquire and responsively utilize information about the emergency (in this context is the COVID-19 pandemic), emergency remote learning, and the challenges and opportunities that go with them. "Adult education" is a means of presenting information to parents on how to fulfill their roles better (Epstein, 2018; Epstein & Dauber, 1991; Hirsto, 2010). However, as parents are involved in communication, there is a need to consider cultural and language variations to avoid miscommunications (Ihmeideh et al., 2018). The way parental involvement is achieved during remote instruction should not end with sheer communicating about home works and deadlines, but providing them with an immense array of mechanisms by which their parenting capacities are enhanced and enriched. Parents need the appropriate information to perceive how to engage themselves in their children's academic progress (Morrow, 2012).

The third factor derived in this research, which is described as "parents as collaborators," features what Epstein termed as "volunteering," "decision-making," and collaborating with the community." The third factor, parents as collaborators, describes procedures that require parents to share their expertise with the community of learners, taking part in the decision-making processes, networking with other organizations, and utilizing available resources from the community. Ihmeideh et al. (2018), in their view, asserted that volunteering serves no purpose as their research participants did not regard it as significant. However, this study's findings narrate how volunteering among parents facilitates a stable experience during remote teaching. There is a paucity of resources in the Philippine context; allowing parents to share to the school community their competence that shall support remote learning targets is used to a maximum advantage. In terms of involving parents in decision-making, this study's findings reiterate the value of trusting parents, especially during a perilous condition. To forward what Epstein (2013) observed-- parental involvement becomes uncertain as schools do not fully trust the parents and their contribution. There is a demand to strongly involve the parents in the decision-making as they contribute significantly to realizing their children's curricular goals during remote learning. Being apt in decision-making prompts accountability and ownership. Thus, as

Hirsto (2010) urged, involving parents in the decision-making process allows them to redirect their focus and attention to their children's learning. Lastly, community linkages as a compelling ERT aspect (Hartshorne, Baumgartner, Kaplan-rakowski, Mouza, & Ferdig, 2020) are also fundamental in establishing parental involvement (Epstein & Dauber, 1991). Nathans and Revelle (2013) affirmed that collaborating with the community should be done with "persistence and appreciation" (Hirsto, 2010, p. 14).

School children's outstanding academic outcome is established when there is a collaborative relationship between parents and school (Epstein, 2013). Thus, it situates the partnership as an integral part of any school program. As students come from diverse backgrounds, so are their parents and families. Schools need to strategize to involve parents regardless of their dispositions, socioeconomic status, educational attainment, agency, capital, and other perceived differences (Hill, Witherspoon, & Bartz, 2018). As primary implementers of school curriculum (Raguindin, 2020), teachers need to delve into these strategies, especially during an urgent necessity where remote instruction is imperative. In fact, teachers are the key players in facilitating an engaging home and school partnership (Yulianti, Denessen, Droop, & Veerman, 2019).

Conclusion

The purpose of establishing a functional home and school relationship is to bolster the learners' academic success (Epstein, 2018). The impact of social isolation and remote learning on children directly influences their learning engagement. During a critical circumstance, more active parent involvement is entailed. The impact of social isolation and remote learning on children directly affects their learning engagement. Given the strong association between learners' academic achievement and parental involvement, it is essential to understand home and school collaboration dynamics during remote learning. The UNESCO Education 2030 agenda appeals for a more resilient and responsive delivery of educational experiences (UNESCO, 2015) - even at times of emergency and critical circumstances, quality education should not fail.

Recommendations

The study's findings and how they corroborate with the literature is a starting point in investigating home and school collaboration in the context of remote instruction. Thus, the following recommendations are forwarded: (1) there is a need to test the tool with a more significant sample to address the low range of NFI and CFI in the confirmatory analysis (2) there is a need to gather insights from the parents and their families on practical strategies that work for them during remote teaching, (3) succeeding researchers may want to use the tool to gather information on the interaction of the strategies and demographic variables, competency for parental involvement, attitude, dispositions, and intentions to use the strategies during ERT, and (4) to understand the nuances of home and school involvement during ERT, gathering qualitative data is recommended.

Limitations

The most obvious limitation of this study is its use of participants from the urban area context, which could have contributed to bias, thus limiting the tool's generalizability. Further, the tool's statements may not be appropriate in other remote teaching contexts like a crossfire and other critical conditions. Another obvious limitation of the study is that the NFI and CFI are below the acceptable range, resulting from a small sample size. Despite this limitation, this study's findings are essential as ERT is an emerging educational research landscape.

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Appendix

STRATEGIES FOR PARENTAL INVOLVEMENT DURING EMERGENCY REMOTE TEACHING SCALE (SPIERT-S)

Name: (optional)_____

* Please put a check in the space provided to express your answer.

*Age: ___ 21-25 years old   ___ 26 – 30 years old
     ___ 31-35 years old   ___ 36 - 40 years old
     ___ 41- 45 years old   ___ 46-50 years old
     ___ 51 years old and above

*Gender:
     ___ Female   ___ Male   ___ Prefer not to say

*Highest Educational Attainment
     ___ Bachelor's Degree   ___ Master's Degree   ___ Doctorate Degree

*Agency:
     ___ Public School   ___ Private School

*Years in the Teaching Profession
     ___ 0 -3 years   ___ 4 – 6 years   ___ 7 – 9 years
 ___ 10 years and above

The following statements describe strategies for a meaningful home and school collaboration during Emergency Remote Teaching (ERT). Please rate your agreement on the indicators below to describe how frequently you use the following strategies. Use the anchors below
 1 – never
 2- almost never
 3 – occasionally/sometimes
 4 – almost every time
 5 – every time

Please check the appropriate box.
Thank you!

Statements	1	2	3	4	5
A. PARENTS as FACILITATORS of LEARNING					
1. I encourage the parents in my class to share their expertise that can help optimize their children's learning experiences.					
2. I regularly provide the parents an update about class activities (text messages, Facebook, etc.)					
3. I inform parents of the importance of motivating their children.					
4. I encourage parents to contact the teacher during scheduled consultation (except for emergency concerns) on matters about their children's progress and difficulties.					
5. I encourage parents to monitor their children during synchronous and asynchronous learning sessions.					
6. I provide additional support to parents who have no or limited education on how to engage their children to achieve the learning outcomes.					
B. PARENTS as SOURCES OF INFORMATION					
7. I provide resource materials (text, graphics, videos, etc.) about COVID-19 and its effects on school children.					
8. I provide information on how parents can protect their children from online risks					
9. I provide information on how parents can best support their children during emergency remote learning.					
10. I conduct a regular online parent-teacher conference.					
11. I encourage parents to share the difficulties they face in parenting and emergency remote learning and help them figure out solution to these challenges.					
C. PARENTS AS COLLABORATORS					
12. I encourage parents to collaborate with different organizations and individuals to support their children's remote learning.					
13. I encourage parents to avail of social protection mechanisms (financial support, mobile devices, etc.) to facilitate effective remote learning.					
14. I involve the parents in the decision-making process about school matters (submission of the module, online activities, delivery modes, etc.)					
15. I encourage the parents in my class to share their expertise that can help optimize their children's learning experiences					