A Study of Parental Involvement in Early Years:

The Role of Gender and Level of Education

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Approval Form

This research paper attached hereto, entitled “A Study of Parental Involvement in Early Years: The Role of Gender and Level of Education” prepared and submitted by Hoo Pui Yin in partial fulfilment of the requirements for the Bachelor of Early Childhood Education (Hons) is hereby accepted.

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ROLE OF GENDER, LEVEL OF EDUCATION AND PARENTAL INVOLVEMENT

Declaration

I declare that the material contained in this paper is the end result of my own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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ROLE OF GENDER, LEVEL OF EDUCATION AND PARENTAL INVOLVEMENT

Abstract

This research paper attempted to examine the relationship between parents' education levels and their involvement in Early Years in Seremban and to investigate whether a significant difference exists between the genders of parents and their involvement in Early Years within the same region. There was limited research investigating the effects and differences of parents' gender role and educational level on parental involvement in early years. This study applied Epstein's Model of Six Types of Parent Involvement. Quantitative research method, correlational and cross-sectional research design were applied in this study. Research instrument used in this study was Family Involvement Questionnaire-Short Form (FIQ-SF). Convenience sampling was used, and 62 parents in Seremban with children between the ages of 4 and 6 participated in this study. The finding's result showed that there was a significant positive relationship between parents' educational level and home-school conferencing (rho=0.879, p=0.001), school-based involvement (rho=0.883, p=0.001) and home-based involvement (rho=0.891, p=0.001). There was also a significant difference between genders of parents and their involvement in home-school conferencing (p=0.036), but no significant difference in school-based involvement (p=0.130) and home-based involvement (p=0.079). Descriptive analysis revealed that Seremban parents less inclined to participate in school-based activities, implying there was a need to begin intervention programmes to improve collaboration between families and schools. Inferential finding proven that parents' educational level was significantly positively related to all aspects of parental involvement. Therefore. it alerted the preschools that helping to improve parents' knowledge and skills to increase parental involvement in school. Additionally, inferential finding indicated that fathers and mother differed in their involvement in home-school conferences. Therefore, it alerted that preschools should pay special attention to encouraging fathers to participate more actively in

home-school conferencing. As recommendations, this study suggested implementing average collection strategies, increasing the sample size, and employing random sampling method.

Keywords: Parents' gender role, parents' educational level, parental involvement, home-school conferencing, school-based involvement, home-based involvement

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List of Abbreviations

DV	Dependent variable
ECE	Early Childhood Education
FIQ-SF	Family Involvement Questionnaire-Short Form
HBI	Home-based Involvement
HSC	Home-school Conferencing
IV	Independent variable
rho	Spearman rho correlation
SBI	School-based Involvement
SPSS	Statistical Package for Social Sciences

Chapter I

Introduction

Introduction

This study endeavored to examine the relationship between parents' education levels and their involvement in early years in Seremban. Furthermore, it also aimed to investigate whether a significant difference existed between the genders of parents and their involvement in early years within the same region. This chapter included background of the study, problem statement, research objectives, research questions, research hypothesis, significance of the study, and definitions of terms, including conceptual and operational definitions.

Background of Study

Parents held a paramount position in the formative years of young children, assuming the primary and influential position of educators. Hernawati and Herawati (2020) highlighted that parental engagement played a vital role in education, particularly within Early Childhood Education (ECE), with potential benefits for children's development. The phrase "parental involvement" was used interchangeably with the term "parental engagement" (Handayani et al., 2020). PI encompassed the investment of parents to their children's education, be it in or out of the school hours (Handayani et al., 2020). For instance, monitoring and checking homework, as well as participation in SBI, including communication with teachers and attendance at classroom meetings (Duan et al., 2018). According to the No Child Left Behind Act of 2001, PI entailed parents actively participating in regular, two-way communication and providing meaningful input regarding their children's academic endeavors and other school-related activities (Ikhlas et al., 2022). Goodall and Montgomery (2014) expounded that PI held the capacity to enhance children's self-esteem, increase their motivation and involvement in

learning, ultimately resulting in enhanced learning outcomes. Efforts to enhance PI had yielded noteworthy success in improving student achievement compared to alternative interventions in the school improvement initiative, such as teacher development, educational management, and the supply of learning resources (Yulianti et al., 2018). Not only did school administrators and teachers acknowledge the positive effects of parents being involved in their children's education, but policymakers had also incorporated various aspects of PI into new educational plans and changes (Wilder, 2013). In the Malaysian context, the Ministry of Education was of the view that PI in children's learning would greatly influence children's performance in school, as children spent most of their time at home (Kamal et al., 2022). Overall, PI was found to be critical to children's education and ought to be promoted as a means of enabling parents to actively participate in their child's academic progress.

Drawing from existing literature, it became evident that the characteristics of parents wielded a significant influence on their involvement in the early years. Among the various factors identified, parental gender emerged as one of the influencers of PI (Derrick et al., 2022). Past studies clarified the difference between the types of activities in which fathers and mothers were involved (Yap et al., 2014). According to numerous scholarly inquiries, mothers were often more involved in their children's care and education compared to fathers (Kim & Hill, 2015). These differences in PI may have stemmed from nuanced interpretations of parental roles, shaped by the gendered expectations associated with both fathers and mothers. Schmidt (2017) suggested that traditional parenting norms often portrayed fathers as primarily responsible for financial provision for their families, while mothers were typically assigned exclusive roles in childcare and homework responsibilities. A comparative analysis between fathers' and mothers' involvement revealed that, except for providing income, mothers generally exhibited higher levels of involvement across all domains (Yap et al., 2014).

Additionally, another factor consistently shown to influence PI was the educational level of parents. Shao et al. (2022) highlighted that parental education level not only affected children throughout their lives but also left an enduring imprint on their academic development. This was attributed to the fact that parents with higher education levels had higher expectations for their children's education and exhibited more stringent oversight of their daily activities (Wang et al., 2020). Generally, parents with higher educational levels exhibited a greater degree of active involvement in their children's education than parents who had lower educational levels (Handayani et al., 2020). Ali et al. (2021) further substantiated this by reporting that parents who had completed high school education were more involved in their children's academic activities than those who did not complete high school. Locally, Vellymalay (2011) aligned with these findings, asserting that the educational level attained by parents significantly influenced their involvement in their children's education, both within the home environment and at school. Nevertheless, local studies rarely made distinctions in parental involvement across various regions and school populations, including those in Early Childhood Education (ECE). Consequently, this study was dedicated to investigating the relationship between parental education levels and their involvement in early years in Seremban, while also examining differences in PI based on gender within the early years context in the same region.

Problem Statement

It was widely acknowledged among policymakers and researchers that PI constituted a crucial determinant of children's academic achievements. Active involvement of parents in their children's educational journey was believed to foster not only academic excellence but also social and emotional development (Boonk et al., 2018). Within the context of Malaysia, empirical studies conducted (Omar et al., 2018; Kamal et al., 2022) and even in Johor (Kuan & Chuen, 2017; Shahri et al., 2020) and Pahang (Sobri et al., 2022) consistently underscored

the significance of parental involvement in yielding favorable educational outcomes for students.

However, there were several demographic characteristics that affected PI. One of these demographic characteristics was gender. An imbalance persisted in the level of involvement between fathers and mothers (McMunn et al., 2015). Traditional gender role parents frequently perceived that women should take care of their families and men should be the main breadwinners (Wang & Cheung, 2023). Fathers who had more traditional views about gender roles exhibited reduced levels of father involvement, as seen by their less time investment and less participation in caring for their children (Kuo et al., 2018; Petts & Knoester, 2018). Conversely, mothers who had more traditional views about gender roles showed higher levels of maternal engagement. (Pinho & Gaunt, 2021). Research by Li and Guo (2023) also highlighted that fathers typically allocated less time to childcare and educational activities compared to mothers. As times changed, a growing number of parents adopting egalitarian gender role attitudes now regarded parenting as a shared responsibility (Wang & Cheung, 2023), signaling substantial shifts in the roles of fathers within contemporary family dynamics. Due to these changes of view, it was indeed important to investigate the differential contributions of mothers' and fathers' gender role attitudes on PI in early years in Seremban.

Moreover, parental educational level exerted a more pronounced influence on PI strategies than factors such as occupation and income (Al-Matalka, 2014). M. Idris et al. (2020) highlighted parental educational level as the foremost predictor of children's academic performance. Şengönül (2022) also noted that the extent of PI tended to vary based on their educational level. Parents with higher levels of education showed a greater willingness to participate in school events, volunteer at schools, and help with homework. Conversely, Naite (2021) mentioned that parents with lower educational level might exhibit diminished motivation to partake in school-related activities and home-school conferences due to

perceived communication barriers with school staff. Thartori (2019) affirmed that parental education level significantly influenced their involvement in fostering the academic learning, progress, and ultimate success of their children. While research on parental education levels and their involvement in preschool remained limited, the existing studies underscored the pivotal role of parents' educational level in fostering involvement with their children's education.

Over recent years, the majority of research concerning PI in children's education has centered on students at primary (Yulianti et al., 2018; Kamal et al., 2022; Kamal et al., 2023), secondary (Keetanjaly et al., 2020), college (Ismail et al., 2019) and universities (Bakar et al., 2021; Von et al., 2022), with relatively scant attention devoted to preschool-aged children. Notably, PI during early childhood education assumed a pivotal role in the holistic development and maturation of young learners (Nurhayati, 2021). However, only a limited number of studies have investigated PI at the preschool level (Sobri et al., 2022). Furthermore, regarding differences in parental gender and their involvement in early years, Tekin (2012) claimed that most researchers targeted almost fully on mothers when the focus was on the early years of educational life and underestimated the involvement of fathers in it. This was due to the fact that in most societies, mothers cared for young children for a greater amount of time than fathers (García et al., 2022). As a result, parents who adopted egalitarian gender role attitudes had not been studied much when it came to PI in early years.

There were limitations that persisted in examining the differences related to parental gender and their involvement in early years, alongside the relationship between parents' level of education and their involvement in early years within the Malaysian context. Local research on PI typically focused on specific factors that influenced PI, such as income (Ishak et al., 2020) and self-efficacy (Shanmugam et al., 2022) rather than gender and educational level. A lack of research existed pertaining to the potential influence of parental gender and educational level

on their involvement within the Early Childhood Education (ECE) framework in Malaysia. Given the inadequacy of investigations regarding the relationship between parents' educational levels and their involvement in early years in Malaysia, coupled with an examination of gender-based differentials in parental involvement within the early years context in the same geographical region, the researcher was prompted to undertake a comprehensive study in this topic.

Research Objectives

This study aimed to:

1. Determine the types of parental involvement in Early Years in Seremban.
2. Examine the relationship between parents' education levels and their involvement in Early Years in Seremban.
3. Examine the differences between the genders of parents and their involvement in Early Years in Seremban.

Research Questions

Based on the above research objectives, the following research questions were formulated for this study:

1. What is the level of three dimension of parental involvement shown by parents in Seremban?
2. Is there a significant relationship between parents' education levels and their involvement in home-school conferencing?
3. Is there a significant relationship between parents' education levels and their involvement in school-based involvement?
4. Is there a significant relationship between parents' education levels and their involvement in home-based involvement?
5. Is there a significant difference between the genders of parents and their involvement in home-school conferencing?
6. Is there a significant difference between the genders of parents and their involvement in school-based involvement?
7. Is there a significant difference between the genders of parents and their involvement in home-based involvement?

Research Hypothesis

The following research hypothesis were proposed in this study:

H_{a1}: There is a significant relationship between parents' educational level and their involvement in home-school conferencing.

H_{a2}: There is a significant relationship between parents' educational level and their involvement in school-based involvement.

H_{a3}: There is a significant relationship between parents' educational level and their involvement in home-based involvement.

H_{a4}: There is a significant difference between the genders of parents and their involvement in home-school conferencing.

H_{a5}: There is a significant difference between the genders of parents and their involvement in school-based involvement.

H_{a6}: There is a significant difference between the genders of parents and their involvement in home-based involvement.

Significance of Study

This current study aimed to provide an updated statistic overview, specifically focusing on the mean level of PI among parents in Seremban. The key areas under examination included HSC, SBI, and HBI. According to Ishak et al. (2020), PI was low in Malaysia. Building on this, insights from various research reviews, such as the research by Cronsby et al. (2015), consistently emphasized the positive impact of PI on students' overall learning outcomes. The current findings not only shed light on the existing scenario but also served as a valuable tool for parents to recognize the specific areas where their involvement might be lacking, particularly in the Early Years. This awareness became crucial for parents aiming to enhance their participation. For example, parents noted that they were less involved in school, so they

could build and maintain collaboration between preschools and them by participating in preschool programs. Additionally, parents could advocate for more equal opportunities and resources for all families if they were aware of how PI was impacted by gender and educational level. It empowered parents to look for programs and services that helped their children to have equitable access to learning and growth opportunities.

Furthermore, this study was also expected to offer valuable insights for preschool teachers in Seremban regarding PI. As preschool teachers recognized the pivotal role of PI in children's development, they were prompted to foster partnerships with parents to enrich the children's educational experiences. Yulianti et al. (2020) emphasized the significant role of teachers as the key facilitators within educational institutions in promoting PI. They found significant effects of teacher-initiated invitations on PI, particularly in activities centered around the school, such as recruiting parents as volunteers and involving them in decision-making processes (Yulianti et al., 2020). Additionally, Durack (2022) also underscored the significance of educators welcoming family members into the classroom and establishing a strong parent-teacher partnership. In addition, teachers could provide strategies to encourage balanced participation of fathers and mothers at home or at school, regardless of their level of education. For instance, teachers could assign homework or projects that required PI, encouraging both parents to work together with their child on academic tasks and fostering a collaborative learning environment at home. Additionally, teachers could design activities that were easy to perform and stimulated interaction between parent and child. They could also show parents how to do the activities because that was the best way to explain to parents with little prior knowledge (Van Der Pluijm et al., 2021).

Moreover, this study was expected to be a valuable resource for future researchers to explore this specific domain of inquiry. Within the context of Malaysia, scant attention had been directed towards the issue of PI in education (Vellymalay, 2012). As stated in the problem

statement, there was a dearth of research in Malaysia examining the differences and relationship between parental gender and education level with their involvement in the Early Years. Thus, the significance of this study lay in its contribution to local literature and its efforts to determine whether parental gender and educational level served as determinants of PI in three different areas: HSC, HBI, and SBI. This study could serve as a foundational study for future researchers interested in investigating PI in early childhood development, providing an initial point for more in-depth explorations into the numerous factors influencing PI and its impacts for children's outcomes.

Definition of Terms

Conceptual definition

Parents: The conceptual definition of parents referred to the primary caregivers of young children in the home (Children et al., 2016).

Parental Involvement: The conceptual definition of parental involvement referred to the parents' commitment and behaviors of parents who were actively involved in their children's lives at home and/or in school through interactions with teachers and others to influence their children's overall behavior and developmental outcomes (Kim et al., 2016).

Gender: The conceptual definition of role of gender was defined as the set of behaviors and attitudes deemed culturally appropriate for individuals identified as male or female (Golombok & Fivush, 1994).

Parental Education Level: The conceptual definition of parental education pertained to the highest educational attainment reached by either the father or the mother (Su et al., 2022).

Operational definition

Parents: In this study, operational definition of parents referred to parents who took care of preschoolers in Seremban.

Parental Involvement: In this study, operational definition of PI referred to the three different ways in which parents were involved in their children's educational experiences, including home-based involvement, school-based involvement, and home-school conferencing (Fantuzzo et al., 2013).

- Home-based Involvement: It referred to activities including parental participation that happened at home, such as homework monitoring and checking, and discussions about school life (Duan et al., 2018).
- School-based Involvement: It described PI in the school activities such as communicating with teachers and attending classroom meetings (Duan et al., 2018).
- Home-school Conferencing: It was defined by the sharing of information regarding child's development and experiences, including challenges at school, between families and teachers (Fantuzzo et al., 2013).

Gender: In this study, the operational definition of gender operationally defined the biological sex of individuals identified as either male or female within the context of parental involvement.

Parental Education: The operational definition of parental education in this study was determined by considering the highest level of formal education attended by both the father and mother, as outlined by Fakhrunnisak and Patria (2022). Within the scope of this study, the educational level of parents was categorized into five groups: 1) Primary and below; 2) Secondary (SPM); 3) Higher Secondary (STPM); 4) Diploma; and 5) Degree and above (M. Idris et al., 2020).

Conclusion

In conclusion, this study aimed to examine the relationship between parents' education levels and their involvement in Early Years in Seremban. Furthermore, it also aimed to investigate whether a significant difference exists between the genders of parents and their involvement in Early Years within the same region. The study held paramount significance as it served to raise awareness regarding parental involvement among the parents and shed light on strategies for preschools to enhance communication and implement programs at the centre-based level. This, in turn, facilitated increased parental involvement in home-school conferencing, home-based involvement, and school-based involvement. Importantly, given the lack of local research in the Early Childhood context, this study aspired to underscore local literature on parents' gender and educational backgrounds and their influence on Early Years participation.

Chapter II

Literature Review

Introduction

This chapter presented an overview of past research on parental involvement related to parental gender and educational levels, including home-school conferencing, school-based involvement, and home-based involvement. This chapter also described the theoretical framework used in this study. The conceptual framework explained the difference and relationship between the two variables.

Parental Involvement

According to Topor et al. (2010), the concept of PI encompassed various dimensions, which were delineated and assessed diversely. These dimensions included parental activities both within the home environment and school setting, as well as fostering positive attitudes towards a child's education, school, and teachers. According to Jafarov (2015), PI was defined as the parents' or caregivers' investment in their children's education. According to Fantuzzo et al. (2013), parental involvement could be categorized into three areas: home-school conferencing (HSC), school-based involvement (SBI), and home-based involvement (HBI). Firstly, HSC referred to ongoing communication between families and teachers about their child's progress and experience, including difficulties at school (Fantuzzo et al., 2013). Secondly, SBI referred to the active participation of parents in educational activities typically conducted at school, such as volunteering in the classroom or assisting on class field trips (Badri et al., 2014). Lastly, HBI referred to the support provided by parents for informal school-related learning and teaching practices that took place at home (Gan & Bilige, 2019). For

example, PI at home could include activities such as discussing about school, assisting with homework, and reading with children (Ngure & Amollo, 2017).

Notably, Topor et al. (2010) underscored that active PI in a child's educational journey consistently correlated positively with the child's academic achievements. Studies by Utami (2022) also stated that children did better academically and scored higher on standardized tests when their parents were involved in their education. This correlation was attributed to several reasons. First, PI conveyed to the child that the importance of their performance (Wang & Sheikh-Khalil, 2014). When parents took an active role in their children's education, it also showed to the child that they had someone to support and help them when they needed (Wong et al., 2018). This emotional support and encouragement created a conducive environment for learning and striving for excellence. As a result, the combined effect of support and encouragement tended to show higher academic achievement. Furthermore, parents who were involved in their children's education at home, such as assisting them with their homework, were better able to ensure that their children were fully grasped the concepts and were prepared to do well on any related examinations or homework. Additionally, parents who assisted their children with homework were able to identify their children's problem areas and help them improve in those areas. Therefore, PI was found to have a positive impact on children's academic performance (Ates, 2021).

Role of Gender and Parental Education Level on Parental Involvement

A study conducted by Ishak et al. (2020) in Malaysia found that parents with 2-year college degrees and above had significantly higher levels of PI, particularly in parent-child conversations at home and school involvement. Schmid and Garrels (2021) also highlighted that highly educated parents were more likely to be involved in their children's schoolwork, communicate with schools, and have higher expectations for their children. Conversely, parents

with lower educational level may have encountered bigger challenges in effectively supporting their children's academic development (Heng et al., 2021). Naite (2021) also mentioned that parents who had lower levels of education may have exhibited reduced motivation to involve in school-related activities due to a lack of confidence in communicating with school personnel. Hence, the parental education level would have also determined the degree and level of involvement (Oranga et al., 2022).

In addition, previous studies have also highlighted that the level of PI varied by parental gender. Different levels of involvement in parenting may have explained observed gender-related effects (Derrick et al., 2022). Wang and Cheung (2023) also indicated that PI may have helped to explain parental gender role attitudes. These attitudes constituted the acceptance of specific gender roles, as well as the acceptance of shared roles for men and women within the family and society (Wang & Cheung, 2023). Traditional gender roles referred to the interdependence of men and women in relationships with a clear division of power and responsibilities (Gowda & Rodriguez, 2019). Traditional gender role attitudes established a gendered division of labor between "the man who is the breadwinner and the women who is the homemakers" (Shi-Song, 2020). In contrast, nontraditional gender roles were often described as egalitarian, in which power distinctions were less pronounced and both parents were perceived as contributing equally to childcare, household chores, and family finances (Gowda & Rodriguez, 2019). When mothers and fathers endorsed more egalitarian gender roles, fathers might have become more involved with their children (Gowda & Rodriguez, 2019). As times changed, more parents who adopted egalitarian gender role attitudes viewed parenting as a shared responsibility (Wang & Cheung, 2023). This shift reflected the trend of fathers taking an increasingly active role in parenting (Derrick et al., 2022).

Association between Parents' Educational Level and their involvement in Home-school Conferencing

Abubakari (2020) conducted a study on parents and teachers in the Sagnerigu District of Ghana (N=250) and the results showed that there was a significant positive correlation between level of education and parent-teacher conferences ($r=0.534$, $p<0.001$). The results of the study indicated that the parents' educational level affected their propensity to participate parent-teacher conferences. Notably, parents with higher levels of education were more likely to attend home-school conferences, discuss their children's academic issues with teachers and work together to support their children's education. On the other hand, parents with lower levels of education might have encountered obstacles, such as unfamiliarity with educational terminology or discomfort with formal meetings, which may have restricted their involvement in these kinds of interactions.

Furthermore, Bormann et al. (2021) elucidated that parents with higher educational levels tended to be more actively involved in home-school conferences, as they perceived such conferences as platforms for receiving information, guidance, and even for resolving personal conflicts pertaining to their children. Park and Holloway (2016) also found that parents with college degrees were more likely to be involved in the parent–teacher association (PTA) or parent–teacher organization meetings or parent–teacher conferences than parents with less education. More educated parents were more involved in communicating with schools about their children's education than less educated parents because they had a sense of adequacy (Handayani et al., 2020). In contrast, Naite (2021) noted in their study that parents with lower levels of education may have demonstrated reduced motivation to participate in these conferences, largely due to perceived communication barriers with school staff. They had a sense of inadequacy due to lack of educational knowledge (Handayani et al., 2020).

Association between Parents' Educational Level and their involvement in School-based Involvement

Martinez (2022) conducted a study involving mothers in Rotterdam (N=3490), revealing a significant positive relationship between parental education level and children's academic performance (r=0.54, p=0.001). The research suggested that parents with higher education tended to engage more in their children's school activities and were better equipped to comprehend the significance of both in-school and extracurricular activities. Conversely, less educated parents may have encountered difficulties in interacting with teachers and other parents, thus constraining their participation in school-based activities.

Trigo et al. (2021) stated that higher education levels corresponded to higher levels of involvement at school. Research by Khan et al. (2015) indicated that highly educated parents typically exhibited keen interest and concern for their children's academic performance and achievements. Thus, they actively participated in school events (Khan et al., 2015). These parents held the belief that their involvement in their children's educational journeys could enhance academic outcomes (Hall & Quinn, 2014).

Association between Parents' Educational Level and their involvement in Home-based Involvement

According to findings from Handayani et al. (2020), a notable correlation existed between parental educational level and their involvement in home-based activities (t=-3.12, p=0.02). 230 parents of children ages 4 to 5 participated in the study in Buleleng Regency, Bali. The authors posited that parents with higher levels of education tended to be more actively involved in their children's learning at home, primarily driven by a sense of adequacy. These parents, often possessing greater knowledge and resources, created a conducive environment for their children's learning, recognizing their roles and responsibilities in their children's

educational experiences. On the other hand, parents with lower educational levels would have felt inadequate due to a lack of educational knowledge, thereby diminishing their motivation to assist their children's learning at home.

Study of Al-Matalka (2014) further substantiated that PI at home increased with higher levels of parental education. High educated parents exhibited greater knowledge and understanding of effective methods for guiding their children's education. Additionally, they were better equipped to assist their children with homework, readily addressing any problems that may have arisen. In contrast, parents with lower educational levels often failed to prioritize learning, leading them to defer their children's education to teachers due to their own attitudes and low self-esteem.

Difference between the Genders of Parents and their involvement in Home-school Conferencing

Some studies suggested that mothers tended to exhibit higher levels of communication and involvement in school-related activities, including attending conferences and communicating with teachers. This tendency was often attributed to traditional gender roles, wherein mothers were typically more deeply involved in the care and education of their children (Kim & Hill, 2015). Aytaç et al. (2019) further corroborated this assertion, demonstrating that mothers scored higher on measures of home-school conferencing involvement compared to fathers. The traditional gender division of labor reinforced the notion that men were primarily responsible for the financial duties of the household, while women assumed more extensive responsibilities for family care, including child education (Cui, 2023). Consequently, mothers were more likely to take the initiative in attending school conferences and interacting with teachers. While fathers hardly had the time to interact with teachers (Hernawati & Herawati, 2020). Work-related constraints often hindered fathers' ability to

participate in school conferences during standard hours. These constraints may have included inflexible work schedules and conflicts between meeting times and work hours (Baker et al., 2016). As a result, fathers may have found it challenging to allocate time for such involvements, thereby further reinforcing the tendency for mothers to take the lead in home-school conferencing.

However, there was a growing shift towards more equitable sharing of parenting responsibilities (Wang & Cheung, 2023), which could impact this dynamic. Parents with egalitarian gender role attitudes typically approached home-school conferencing with a more balanced and collaborative mindset, regardless of their gender. They were equally involved in staying informed about their child's academic performance and progress. Positive coparenting was when fathers and mothers concurrently embraced the best parenting practices, demonstrating the highest adaptive degree of coordination (Kara & Sümer, 2022). They may have attended meetings together or alternated attendance to ensure that both had opportunities to interact with teachers and participate in discussions. Parents with egalitarian gender role attitudes, regardless of gender, tended to engage in a balanced and collaborative manner during these conferences.

Difference between the Genders of Parents and their involvement in School-based Involvement

Mothers typically exhibited greater involvement in school-based activities compared to fathers, a distinction often attributable to entrenched traditional gender roles. These roles often saw mothers assuming primary caregiving responsibilities (Kim & Hill, 2015) and possessing greater flexibility in their schedules, enabling them to volunteer at school or attend events during the day. Moreover, mothers tended to engage in more frequent communication with teachers, discussing their child's progress and staying informed about school events and

activities. Okeke (2014) observed that mothers were typically the primary participants in their school activities. Hernawati and Herawati (2020) corroborated this finding, noting that mothers frequently involved in children's school activities, such as attending social events and attending conferences with teachers to plan children's school activities. Conversely, fathers' involvement in school activities tended to be more limited (Hernawati & Herawati, 2020), largely due to their role as primary breadwinners, which caused less direct involvement in childcare (Ladage, 2015). Grace and Gerdes (2018) also stated that Latino fathers demonstrated lower involvement in school-based activities. This indicated that mothers typically assumed a more active role in school-based activities conducted in their children's schools and communicated more frequently with their children's teachers.

On the other hand, parents who embraced egalitarian gender role attitudes typically approached school-based involvement with a more balanced and collaborative mindset. They perceived their role in their child's schooling as a shared responsibility and actively strove to participate in various school-related activities, such as parent-teacher conferences, school events, and volunteering opportunities. Mothers often participated in social and fundraising activities, as well as accompanying children on school trips (Hernawati & Herawati, 2020). Meanwhile, fathers were frequently involved in their children's sports activities (Strandbu et al., 2017).

Difference between the Genders of Parents and their involvement in Home-based Involvement

Traditional gender role parents usually viewed women as the primary caretakers and men as the major earners in the household (Pinho & Gaunt, 2021). Thus, fathers who were more committed to traditional gender roles were therefore less likely to be involved in parenting, both in terms of time spent and activities related to raising children (Wang & Cheung,

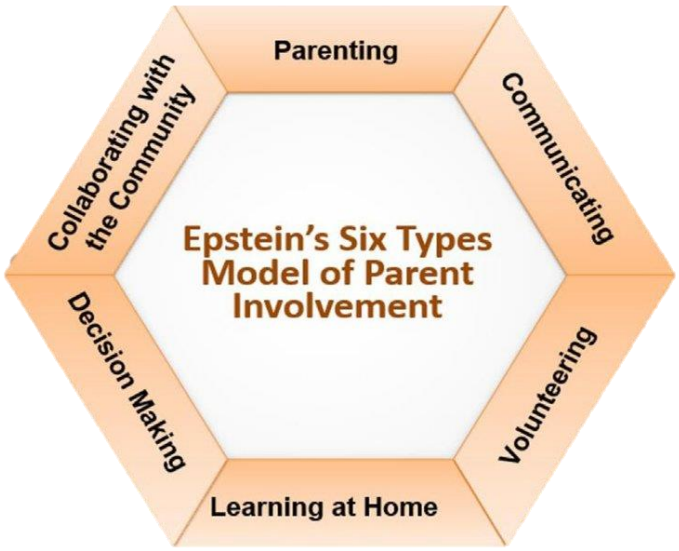
2023). Data showed that in traditional gender roles, mothers were seen as the primary caregivers of their children (Rakotomanana et al., 2021). Schmidt (2017) further asserted that traditional parenting norms often assigned mothers exclusive responsibilities for childcare and homework duties. As a result, they might have been more likely to take the lead in organizing and facilitating learning experiences within the home environment.

Conversely, when mothers and fathers endorsed more egalitarian gender roles, fathers tended to become more involved with their children (Gowda & Rodriguez, 2019). They viewed child rearing as a shared responsibility (Wang & Cheung, 2023). Consequently, they engaged with their children in different ways. As Thartori (2019) observed, mothers typically took on a more active role in their children's education and academic support. This was because mothers often felt that they had a greater responsibility than fathers to help their children with their studies. Hernawati and Herawati (2020) also stated that more than half of mothers dedicated time teaching their children fundamental skills such as counting, reading, writing and fostering creativity. Mothers tended to shoulder a greater share of potentially demanding managerial tasks (McDonnell et al., 2019). Fathers, on the other hand, spent a greater percentage of their time with their children engaging in pleasurable activities, such as sports, storytelling, and playing (McDonnell et al., 2019). They often engaged in play activities with their children, from playing soccer to dancing (Rakotomanana et al., 2021).

Theoretical Framework

Figure 1

Epstein's Model of Six Types of Parent Involvement



Note. Image from "Perspectives of family–school relationships in Qatar based on Epstein's model of six types of parent involvement," by Ihmeideh, F., AlFlasi, M., Al-Maadadi, F., Coughlin, C., & Al-Thani, T., 2018, *Early Years*, *40*(2), 188–204. Copyright 2018 by Early Years.

One of the most popular models of parental involvement was Epstein's Six Types Model of Parent Involvement. In this model, Joyce Epstein and colleagues conceptualized parental involvement as six types of partnerships between families and schools for the benefit of their children (Ihmeideh et al., 2018). Epstein et al. (2018) identified six different types of parental involvement, including: (1) parenting; (2) communicating; (3) volunteering; (4) learning at home; (5) making decisions; and (6) collaborating with the community.

Parenting referred to how parents developed their parenting skills and created a home environment conducive to learning to support children as students (Goodall, 2022; Ihmeideh et al., 2018; Kamal et al., 2022). It could also refer to how parents could nurture happy, healthy,

and successful children through interactive involvement (Handayani et al., 2020). Communicating referred to two-way conversations between school and home concerning school programs and children's academic progress (Goodall, 2022; Ihmeideh et al., 2018; Kamal et al., 2022). This involved any communication between parents and schools aimed at optimizing the educational experience for children, including parents providing teachers with relevant information about their children's health and academic background (Handayani et al., 2020). Volunteering referred to voluntary involvement of parents in school programs and childrens' activities (Handayani et al., 2020). Through volunteering, schools engaged parents in facilitating their children's education (Kamal et al., 2022). Learning at home referred to how parents assisted their children with academic activities at home, such as homework completion (Handayani et al., 2020). Parents could carry out educational activities with their children at home using guidance and resources provided by schools (Kamal et al., 2022). Decision making referred to parents' participation in school decision-making processes, particularly through involvement in parent committees (Handayani et al., 2020). For example, encouraging parents to be involved in Parent-Teacher Associations (PTAs) (Kamal et al., 2022). Last but not least, collaborating with the community involved identifying appropriate community services and resources to support schools, students, and families (Handayani et al., 2020). Consistent with Epstein's framework, Fantuzzo et al. (2013) identified three dimensions of parental involvement, namely home-school conferencing, school-based involvement, and home-based involvement. Researchers determined the relationship between parental involvement and children's academic success based on Joyce Epstein's Epstein Theory of Parental Involvement (Salac & Florida, 2022).

Application of The Epstein's Model of Six Types of Parent Involvement into current study

The Epstein Theory of Parental Involvement elucidated the concept of parenting, encapsulated the process through which parents nurtured and educated their children from birth to adulthood (Virasiri et al., 2011). Fathers and mothers played different roles in raising children. According to the traditional parenting roles, mothers were the primary caregiver and fathers were the breadwinner. However, societal shifts had engendered a transformation in paternal roles, with an increasing number of parents embracing egalitarian gender role attitudes and viewing parenting as a shared responsibility (Wang & Cheung, 2023). In this modern paradigm, mothers primarily provided emotional support and nurturing, whereas fathers played a pivotal role in offering guidance for future behavior (Kara & Sümer, 2022). Moreover, fathers were often inclined towards engaging in physically vigorous and spontaneous play interactions, thereby exposing their children to novel experiences that mothers may perceive as risky (Robinson et al., 2021). In addition, when it came to raising children, parents with higher levels of education often had higher expectations for their children's academic performance and exhibited more stringent oversight over their daily activities (Wang et al., 2020). Additionally, parents with high educational levels possessed the means to provide their children with social and material resources conducive to enhance scholastic achievement (Martinez, 2022). According to Thartori (2019), educated parents had the capacity to create home environments conducive to learning. Moreover, Keizer et al. (2019) highlighted that higher-educated parents were more likely to equally share childcare duties, particularly those categorized as routine care, such as physical care and accompanying a child.

Furthermore, Epstein's Theory of Parental Involvement posited that the second model of parental involvement revolved around communication. Interactive communication facilitated collaboration between families and educators, bridging the realms of home and school to convey a unified message and significantly influence children's learning and

development (Muscoe, 2022). Abdullah et al. (2023) also emphasized that parent-teacher communication described various forms of cooperation and communication aimed at improving children's academic performance. According to Grace and Gerdes (2018), Latino fathers tended to engage more in home-based involvement than school-based activities. This indicated that mothers typically assumed a more active role in school-based activities conducted in their children's schools and communicated more frequently with their children's teachers. In addition, parents with higher levels of education believed that educational outcomes of children could be significantly improved through programs that stimulated greater parent-teacher interaction (Islam, 2017). Thartori (2019) findings revealed that parents with postgraduate degrees reported engaging in more frequent communication with the school compared to other parental groups. Conversely, Naite (2021) highlighted that parents with lower levels of educational may exhibit diminished motivation to partake in home-school conferences due to perceived communication barriers with school staff.

Furthermore, Epstein's Theory of Parental Involvement outlined the third model of parental involvement, which revolved around volunteering. Parents participated in different volunteer activities, with mothers might be more likely to volunteer for classroom activities or school events, while fathers might prefer to volunteer for sports teams or technical projects. Okeke (2014) observed that mothers were typically the primary participants in their school activities. Conversely, Strandbu et al. (2017) found that some parents, especially middle-class fathers, exhibited deeper involvement in their child's sporting activity. Additionally, Ihmeideh et al. (2018) noted that well-educated parents expressed a desire to volunteer in their children's schools. They recognized the importance of active involvement in their children's education and perceived volunteering as a means to directly impact their child's school experience. Moreover, Yulianti et al. (2018) demonstrated that highly educated parents tended to be more involved in volunteering activities.

In addition, the fourth model of parental involvement in Epstein's Theory focused on learning at home. It referred to parents assisting their children with academic activities at home (Handayani et al., 2020). Home-based parental involvement in education was shown to positively influence children's academic achievement (Gan & Bilige, 2019). This involvement encompassed creating a supportive environment, stimulating children's intellectual stimulation, supervising homework completion and parent-children discussion. Gender roles may have influenced the division of responsibilities and approaches taken by mothers and fathers. Hernawati and Herawati (2020) found that more than half of mothers often spent time teaching their children to learn to count, to read, to write and to do creativity. Mothers also tended to check their children's schoolwork at home. Conversely, fathers tended to allocate more time to playing with their children at home, viewing play as crucial for children's development and academic success (Waters et al., 2022). Research by Gan and Bilige (2019) revealed that parents with lower levels of education may have lacked the sufficient knowledge to effectively assist with homework. Triutami and Muljani's (2021) found that a parent's limited English proficiency due to their education level could hinder their involvement in their child's learning. This suggested that parents with lower educational level faced challenges in supporting their children's learning at home. In contrast, parents with higher levels of education had the ability to create home environments conducive to learning (Thartori, 2019). Studies have shown that parents who read to their children, assist with homework, and provide additional tutoring tended to have children who perform better academically (Đurišić & Bunijevac, 2017).

Moreover, Epstein's Theory of Parental Involvement delineated the fifth model focusing on decision-making. Parents' contributions to their children's education played a vital role in the decision-making processes within schools, encompassing matters such as school conventions, resource allocation including learning materials and maintenance of facilities, curriculum management, and problem-solving initiatives (Tufail & Zehra, 2023). This form of

involvement enhanced parent-child interaction and instilled confidence in students, knowing that their parents were actively engaged in decision-making processes; thus safeguarding their rights (Tufail & Zehra, 2023). However, gender dynamics within the family and societal expectations may have influenced the roles assumed by mothers and fathers in decision-making. Mothers were typically expected to take a central role in decision-making related to caregiving, nurturing, and the overall well-being of their children. This included decisions pertaining to education, healthcare, emotional support, and daily routines, as they were often more involved in nurturing and providing emotional support to the child (Chavda & Nisarga, 2023). Societal norms often highlighted how crucial mother involvement was to supporting children's growth and academic achievement. Conversely, fathers were commonly involved in providing protection and enforcing discipline within the family (Chavda & Nisarga, 2023). Fathers may have been involved in setting rules, enforcing discipline, and addressing behavioral issues. Furthermore, parents with higher education levels may have possessed greater knowledge about educational options, curriculum requirements, and academic pathways, enabling them to make more informed decisions compared to parents with lower education levels. As highlighted by Li and Qiu (2018), parents competed for high-quality educational opportunities for their children and better educational opportunities led to better academic performance. In contrast, when less educated parents attended some school events, they were hesitant to participate in decision-making because they felt that they had nothing valuable to offer (Magwa & Mugari, 2017).

Epstein's Theory delineates various models of parental involvement, among which the final one underscored collaboration with the community. It emphasized the importance of community resources and partnerships in supporting student learning and holistic development. Gender roles may have influenced how parents engaged with community organizations and resources to support their child's education. Mothers were often inclined to participate in

community groups focusing on parenting, education, or social services, whereas fathers may have gravitated towards activities such as coaching sports teams or mentoring programs. According to Britto et al. (2022), mothers' participation in parenting programs was higher because mothers were more likely to participate in such programs. Kilger (2020) accentuated sports as a traditional arena for masculine socialization, positing it as a conducive platform for paternal involvement. Moreover, parents with higher education levels tended to exhibit greater proficiency in advocating for their children's needs and leveraging community support compared to parents with lower education levels. They believed that community activities as facilitators of children's learning and skill development (Ihmeideh et al., 2018). Epstein and Sheldon (2016) asserted that children's learning and growth occurred not only within the confines of school and home but also within the broader community. They posited that collaborative efforts among parents, teachers and others in the community stakeholders fostered an environment conducive to learning and development.

Conceptual Framework

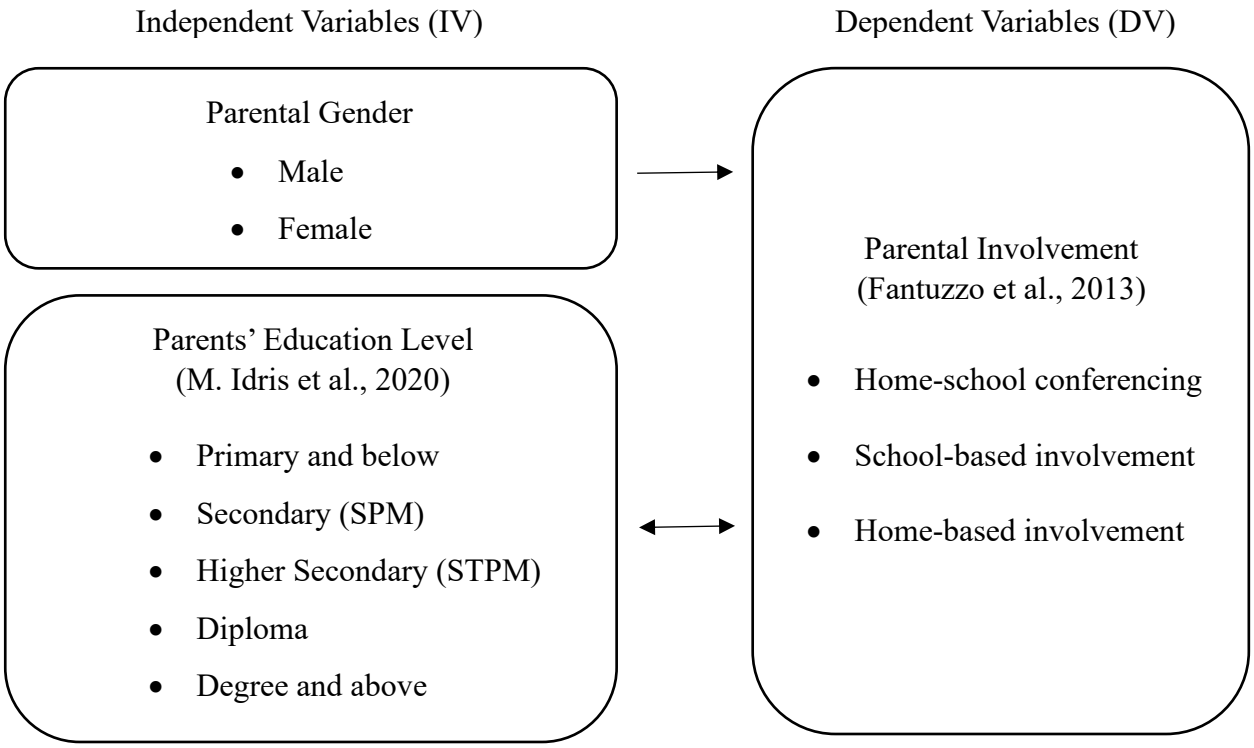


Figure 2. Conceptual Framework of the study

This study encompassed of independent variables (IV) and dependent variables (DV). Figure 2 above showed the IV, which included parental gender and parental education level. Parental gender was categorized into male and female, while parental education level was divided into five groups: 1) Primary and below; 2) Secondary (SPM); 3) Higher Secondary (STPM); 4) Diploma; and 5) Degree and above (M. Idris et al., 2020). Conversely, the DV comprised PI, which encompassed HSC, SBI and HBI (Fantuzzo et al., 2013). The researcher hypothesized that there was a significant difference between parental gender and their involvement, as well as a significant relationship between parental educational level and their involvement in early years.

Study by McMunn et al. (2015) emphasized that there was still an imbalance in the level of involvement between fathers and mothers. Parents with traditional gender role attitudes tended to perceive men as the primary breadwinners and women as the primarily caregivers for

family members (Wang & Cheung, 2023). However, with changing times, an increasing number of parents with egalitarian gender role attitudes viewed parenting as a shared responsibility (Wang & Cheung, 2023). As a result, parents adopting traditional gender role attitudes and egalitarian gender role attitudes differed in terms of PI.

Additionally, research conducted in Malaysia by Vellymalay (2012) identified parental educational level as a crucial determinant in fostering PI in their child's educational journey. Similarly, Thartori (2019) also highlighted the significant influence of parental education level on their active participation in facilitating the academic development, progress, and ultimate success of their children. Hence, this study endeavored to examine whether parental gender and parental educational level (IV) exerted influence on parental involvement (DV).

Chapter III

Research Methodology

Introduction

The methodology used to collect the data on the relationship between parents' education levels and their involvement in Early Years in Seremban and the difference existed between the genders of parents and their involvement in Early Years within the same region was discussed in this chapter. It consisted of the following sections: 1) research design, 2) sampling and respondents, 3) research instrument, 4) data analysis method, and 5) research procedure.

Research Design

This study used a quantitative research approach as its primary method of investigation. This present study employed a quantitative method to examine the relationship between parents' education levels and their involvement in Early Years in Seremban. And also, to examine the differences between the genders of parents and their involvement in Early Years in Seremban. As posited by Apuke (2017), quantitative studies are characterized by their focus on testing hypotheses, examining the relationships between variables, and making predictions. Utilizing numerical data collection and employing mathematical techniques for analysis, quantitative research methods offered a means to explain problems or phenomena, particularly through statistical analysis (Apuke, 2017). The use of quantitative research had several benefits. Firstly, quantitative research methods typically involved larger sample sizes and required relatively shorter durations for data collection (Rahman, 2016). Secondly, the researcher spent less time and effort in describing the findings as statistical data served as the basis for research descriptions and analyses. The utilization of statistical software such as the Statistical Package for Social Science (SPSS) enabled the efficient calculation and analysis of data, thereby

conserving time and resources (Eyisi, 2016). Lastly, this approach facilitated generalization as it employed scientific methods for both data collection and analysis (Eyisi, 2016).

Furthermore, this study employed a correlational research design to determine whether there was a relationship between the variables through a series of calculations. According to Cavallo et al. (2016), a correlation design fell within the realm of non-experimental research designs and was appropriate to use when the hypothesis predicted an association between variables. This study incorporated three variables: two independent variables (IV) and one dependent variable (DV) - specifically parental gender and parental educational level (IV), and parental involvement (DV). Therefore, the correlational design was appropriate for this study as it enabled researchers to examine the relationship between parents' educational level and parental involvement across three dimensions: HSC, SBI and HBI. While for the researchers to measure the differences in parental gender and their involvement across the three dimensions, a cross-sectional research design was used. Cross-sectional research designs measured both the outcome and exposures within study participants at the same time (Setia, 2016). In this study, data were collected at a singular point in time from different groups of individuals (in this case, parents of different genders) to compare their levels of parental involvement. Researchers assessed parental involvement across the three dimensions: HSC, SBI and HBI, and then analyzed whether there were differences between parents of different genders.

Moreover, the survey research method was employed in this study to gather data. Survey research method served as a fundamental instrument for collecting information about populations by asking them questions concerning the study, thereby understanding their characteristics, perspectives, attitudes, or previous experiences (Brewer et al., 2015). Survey research method encompassed various data collection approaches, with questionnaires and interviews standing out as the most prevalent (Ponto, 2015). In this study, the Family

Involvement Questionnaire-Short Form (FIQ-SF) was used to gather the parents' perspectives about their levels of involvement across HSC, SBI and HBI.

Sampling and Respondents

Researcher used a form of non-probability sampling in this study. Non-probability sampling strategies are any sampling methods that does not use some form of random selection (Jager et al., 2017). In this study, convenience sampling was utilized to select respondents. As defined by Etikan et al. (2016), convenience sampling entailed the inclusion of members from the target population who met certain practical criteria, such as easy accessibility, geographic proximity, availability at a given time, or willingness to participate. Convenience sampling provided several inherent benefits. Firstly, it reduced the effort required for participant selection compared to other non-random sampling methods; Secondly, it incurred minimal costs for the researcher; Thirdly, it saved time, as the sample drawn from the target population was readily accessible. Lastly, there was no need to compile a comprehensive list of all population elements (Golzar et al., 2022).

For the purpose of this study, the researcher aimed to have a sample of 60 respondents, with the survey conducted in Seremban. Accessibility and convenience were paramount considerations, particularly given the researcher's self-funding status, necessitating easy access to respondents via public transport. The target population in this study comprised parents aged 21 years and above with normal developmental milestones children in Seremban. Delice (2010) underscored the criticality of sample size determination in quantitative research, as it influenced the study's generalizability and replicability. Echoing this sentiment, Vasileiou et al. (2018) emphasized the threat to validity and generalizability posed by insufficient sample sizes. Therefore, the researcher aimed to gather data from a minimum of 60 respondents in Seremban, of which 30 were mothers and 30 were fathers. Parents of children with special needs were not

included in the current study. This was because, according to the findings of Lavan et al. (2018), parents of special needs children had to deal with a variety of professionals caring for their children and therefore needed to be more involved than parents of normally developing children, both at home and in school. Therefore, selecting respondents who had comparable demographic characteristics, such as by considering parents who had children with typically developing could enhance the consistency and accuracy of the study's findings. Furthermore, the researcher's choice of Seremban over other Negeri Sembilan cities was influenced by logistical convenience, as the researcher resided in Seremban. Additionally, Seremban's population demographics might be representative of the broader population of Negeri Sembilan, making it a suitable location for studying parental involvement across different demographic groups. According to data from the Seremban District: the population stood at 692,283 in 2020 (Malaysia: Negeri Sembilan State (Districts and Townships) - Population Statistics, Charts and Map, n.d.). It was inferred that the number of parents would also be relatively high. Hence, Seremban was chosen as the accessible population for this study.

Research Instrument

In this study, the questionnaire served as the primary instrument for data collection. It was a common approach in quantitative marketing research and social research (Roopa & Rani, 2012). Questionnaires were a helpful tool for gathering data on a variety of topics, including knowledge, attitudes, opinions, behaviors, facts, challenges, and more (Singh, 2017). A questionnaire consisted of a series of questions asked to individuals to obtain statistically relevant information on a given topic (Roopa & Rani, 2012). The utilization of online survey data collection was noted for its potential to amass substantial amounts of data efficiently, economically, and swiftly (Regmi et al., 2017).

There were two sections in the survey: Section A and Section B. Section A concentrated on the respondents' demographic information, providing insights into their backgrounds for the study. It encompassed four questions concerning gender, age, race and educational level. Section B incorporated questions derived from the Family Involvement Questionnaire-Short Form (FIQ-SF), developed by Fantuzzo et al. (2013). The FIQ-SF, a condensed version of the FIQ, originally comprised 42 items (Fantuzzo et al., 2013). The FIQ-SF was used to assess family's involvement in their child's education in early childhood education settings (Racine, 2016). More specifically, FIQ-SF was used to measure the type and extent of parental involvement in their children's education (Liu et al., 2022). It consisted of 21 items in total, each scored on a 4-point Likert scale: (1) rarely, (2) sometimes, (3) often, and (4) always. These items were equally distributed across three subscales: HSC, SBI and HBI, with seven items per subscale.

The cumulative score of items within each subscale yielded the parent involvement score. Then, the mean score was calculated by dividing by the number of items in the subscales. Higher scores indicated greater levels of parental involvement at home and school (Fantuzzo et al., 2000). Nawi et al. (2020) recommended a reliability result of 0.60 or above during the pilot study phase. They proposed four reliability categories: excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70), and low reliability (0.50 and below). The FIQ-SF had a high reliability score for each subscale. The Cronbach's alpha values (reliability level) of FIQ-SF were 0.91, 0.87, and 0.83 for HSC, SBI and HBI, respectively. Overall, the Cronbach's alpha value of 0.95 across all 21 items indicated high internal consistency at the test level (Fantuzzo et al., 2013).

Data Analysis Method

In this quantitative study, a comprehensive approach integrating both descriptive and inferential analyses was employed. The data of demographic information and Family Involvement Questionnaire-Short Form (FIQ-SF) were then analyzed using IBM SPSS Statistics 29.0.2.0. In the descriptive analysis, table, frequency, percentage scores, mean and standard deviation were used to analyze the collected demographic information and data from the FIQ-SF subscales. To illustrate, the table, frequency, and percentage score were used to summarize the demographic data of the respondents such as gender, age, race and educational level. Whereas the mean was used to calculate the mean score of the total FIQ-SF. By adding up each value and dividing the total by the total number of values in the set, the mean was determined (Petrie & Sabin, 2009). While the standard deviation (SD) exhibited how much variation or dispersion existed from the mean (Almazari, 2014).

In the inferential analysis, Spearman's rank order correlation was utilized to evaluate the relationship between the independent variable, parents' educational level, and the dependent variable, PI. As highlighted by Thirumalai et al. (2017), Spearman correlation is commonly used in analyzing relationships involving ordinal variables. In this study, parents' education level was categorized into ordinal levels: 1) Primary and below; 2) Secondary (SPM); 3) Higher Secondary (STPM); 4) Diploma; and 5) Degree and above (M. Idris et al., 2020). The Spearman coefficient, often denoted as ρ (rho) or "rs" (Schober et al., 2018), spans from –1 to +1, allowing interpretation ranging from no association ($\rho = 0$) to a perfect monotonic relationship ($\rho = -1$ or $+1$) (Schober et al., 2018). According to Pallant (2010), rho=0.10-0.29 indicated small correlation, rho=0.30-0.49 indicated medium correlation, and rho=0.50-1.0 indicated large correlation. By utilizing the Spearman's rank order correlation, the relationship between parents' educational level and PI could be effectively investigated. Furthermore, the

p-value served to validate the hypothesis assumption, as noted by Andrade (2019), with statistically significant results typically observed when obtaining $p<0.05$.

In addition, a t-test was utilized to evaluate the differences between IV and DV in this study. The IV in this study referred to genders of parents and the DV in this study referred to PI. The utilization of a t-test was aimed at discerning whether a distinction existed between two independent samples (Kim, 2015). The t-test (also called Student's t test) was used to compare the means across two distinct groups and there was no need of multiple comparisons as unique P value was observed (Mishra et al., 2019). T-tests could be categorized into two types: independent t-test and paired t-test. In this study, the researcher used an independent t-test. Independent t-test could be used when the compared groups were independent of each other (Kim, 2015). In this study, the researcher was interested in comparing the levels of parental involvement between male and female parents, treating them as separate, independent groups. In the analysis of three dimensions of parental involvement among parents of different genders, the mean scores ranged from 1 to 4, reflecting varying levels of agreement or satisfaction. Specifically, mean scores between 3.01 and 4.00 were regarded as high level, indicating strong agreement or satisfaction with the aspects addressed in the questionnaire. Conversely, mean scores ranging from 1.00 to 2.00 were interpreted as low level, indicating disagreement or dissatisfaction with the items assessed. Mean scores falling between 2.01 and 3.00 were considered moderate level, showing a degree of agreement or satisfaction that was neither exceptionally high nor low (Phoong, 2021).

In inferential statistics, the p-value was used to determine whether the hypothesis assumption was accurate (Andrade, 2019). There were two types of hypotheses in common, that is null hypothesis (H0) and alternative hypothesis (H1). The null hypothesis (H0) was a statement that there was no difference between groups in terms of a mean or proportion, whereas the alternative hypothesis (H1) presented a contradictory assertion (Kang, 2021). If

the p-value was greater than 0.05, it indicated insufficient evidence to reject the null hypothesis, thereby aligning with it (Konasani & Kadre, 2015). Conversely, a p-value below 0.05 warranted the rejection of the null hypothesis, thereby corroborating the alternative hypothesis. Therefore, if the p-value was greater than 0.05, it indicated that there was no significant difference between mothers and fathers in terms of parental involvement; if the p-value was less than 0.05, it indicated that there was a significant difference between mothers and fathers in terms of parental involvement.

Research Procedure

The process of data collection was estimated to span approximately two weeks. Prior to commencing data collection, the researcher utilized Google Forms to create both the consent letter and survey questionnaire. Then, the researcher started to search preschools within the Seremban area, followed by initiating contact with the respective preschool principals. The researcher explained the research objectives via WhatsApp communication with the principal, seeking authorization to conduct the study.

Upon securing consent and approval from the principal, the researcher furnished the preschool principals with a questionnaire link for distribution among parents of children aged 4 to 6 years old. Ensuring voluntariness, the consent letter was attached to the questionnaire link, affording respondents the liberty to withdraw participation at any time at their discretion. In the event of inquiries pertaining to the study, respondents were encouraged to make use of the contact details provided within the survey form.

The data collection from 60 respondents (30 mothers and 30 fathers) was expected to span a two-week timeframe. Upon attainment of the targeted sample size, the researcher embarked on data analysis utilizing IBM SPSS Statistics 29.0.2.0. This analytical process

entailed initial data preparation followed by descriptive and inferential analysis. Subsequently, the researcher succinctly presented the key findings gleaned from the study.

Conclusion

To summarize, correlational design, cross-sectional research designs and survey research methods were used to examine the relationship between parents' education levels and their involvement in early years. And also, to investigate whether a significant difference exists between the genders of parents and their involvement in early years. 60 respondents (30 mothers and 30 fathers) were selected from Seremban area through convenience sampling. The study employed the Family Involvement Questionnaire-Short Form (FIQ-SF) to measure parental involvement. IBM SPSS Statistics 29.0.2.0 was used to conduct descriptive and inferential analyses. Before starting the data collection for this study, which was anticipated to take two weeks, the parents' informed consent was sought. The main conclusions were outlined and reported.

Chapter IV

Findings and Analysis

Introduction

This chapter has presented an overview of the data collected and aimed to address the research questions in this study. A total of 62 respondents in Seremban participated in the questionnaire via Google Form. The data collection process lasted for 2 weeks to successfully collect responses from the targeted sample. Subsequently, the collected data was analyzed in this chapter, and the findings were presented through tables and paragraphs. IBM SPSS Statistics 29.0.2.0 was used to tabulate and analyze the collected data.

Descriptive Statistics and Analysis

The demographic information of 62 respondents, including their gender, age, race and educational level, was analyzed and presented in both table and paragraph formats.

Table 1

Gender of Respondents

Gender	Frequency (N)	Percentage (%)
Male	30	48.4
Female	32	51.6
Total	62	100.0

Table 1 displayed the gender distributions of parents in Seremban who participated in this study. There were 32 respondents (51.6%) who were female and 30 respondents (48.4%) who were male.

Table 2

Age of Respondents

Age Group	Frequency (N)	Percentage (%)
21 - 25 years old	7	11.3
26 - 30 years old	20	32.3
31 - 35 years old	16	25.8
36 - 40 years old	10	16.1
> 40 years old	9	14.5
Total	62	100.0

Table 2 displayed the distribution of age groups of parents in Seremban who participated in this study. 20 out of 62 respondents (32.3%) were in the age group of 26 to 30 years old. This was followed by 16 respondents (25.8%) who were aged between 31 to 35 years old. There were 10 respondents (16.1%) who were 36 to 40 years old, while 9 respondents (14.5%) were aged 40 years old and above. Only 7 respondents (11.3%) were in the age group of 21 to 25 years old who participated in this study.

Table 3

Race of Respondents

Race	Frequency (N)	Percentage (%)
Malay	11	17.7
Chinese	35	56.5
Indian	16	25.8
Total	62	100.0

Table 3 indicated the respondent's races in Malaysia, which included Malay, Chinese and Indian. Among the races, 35 respondents (56.5%) were Chinese, followed by 16 respondents (25.8%) who were Indian, and 11 respondents (17.7%) who were Malay.

Table 4

Educational Level of Respondents

Educational Level	Frequency (N)	Percentage (%)
Primary and below	7	11.3
Secondary (SPM)	17	27.4
Higher secondary (STPM)	13	21.0
Diploma	8	12.9
Degree and above	17	27.4
Total	62	100.0

Table 4 showed the educational level of the respondents, categorized into five groups: Primary and below, Secondary (SPM), Higher secondary (STPM), Diploma, and Degree and above. The majority of parents (27.4%) had a certificate in Secondary (SPM), and Degree and above. Then, they were followed by 13 respondents (21.0%) certified with Higher secondary (STPM), 8 respondents (12.9%) who were diploma holders, and only 7 respondents certified with Primary and below, which was about 11.3%.

Table 5

Mean and standard deviation for the subscale of FIQ-SF

Subscales of FIQ-SF	N	Mean (M)	Std. Deviation (SD)
HSC	62	2.5760	.92146
SBI	62	2.4839	.92378
HBI	62	2.8295	.91522

Table 5 showed the Mean (M) and Standard Deviation (SD) for HSC, SBI and HBI. The sample size (N) of the data was 62. Referring to the results, HBI recorded the highest mean, which was 2.829 (SD=0.915), followed by M=2.576, SD=0.921 for HSC, and M=2.483, SD=0.923 for SBI. Based on the mean data, it appeared that HBI exhibited the highest level of parental involvement, followed by HSC, while SBI demonstrated the lowest level of parental involvement. This indicated that parents in this study demonstrated a higher level of involvement in HBI with their children compared to both HSC and SBI.

Inferential Statistics and Analysis

Inferential analysis in the present study was carried out using Spearman's rank order correlation to evaluate the relationship between the independent variable, parents' educational level, and the dependent variable, PI based on 62 local parents in Seremban. Additionally, an independent t-test was used to compare the levels of PI between male and female parents based on 62 local parents in Seremban.

Table 6

Correlation between Parents' Educational Level and Home-school Conferencing

		Educational level	Home-school Conferencing
Spearman's rho	Correlation Coefficient	1.000	.879**
	Sig. (2-tailed)		<.001
	N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

H_{a1}: There is a significant relationship between parents' educational level and their involvement in home-school conferencing.

The results from Table 6 revealed a significant positive relationship between parents' educational level and their involvement in HSC, as evidenced by rho=0.879**, N=62, p=0.001. According to Pallant (2010), this correlation coefficient indicated a large correlation strength (0.50< r <1.0), showing that a higher level of education in parents was associated with increased involvement in home-school conferencing. Furthermore, the results achieved statistical significance with a p-value of less than 0.05, further confirming the significant relationship between the variables. Consequently, it can be inferred that the hypothesis H_{a1} of this study was accepted.

Table 7

Correlation between Parents' Educational Level and School-based Involvement

		Educational level	School-based Involvement
Spearman's rho	Correlation Coefficient	1.000	.883**
	Sig. (2-tailed)		<.001
	N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

H_{a2}: There is a significant relationship between parents' educational level and their involvement in school-based involvement.

The results from Table 7 revealed a significant positive relationship between parents' educational level and their SBI, as evidenced by rho=0.883**, N=62, p=0.001. According to Pallant (2010), this correlation coefficient indicated a large correlation strength (0.50< r <1.0), showing that a higher level of parental education was associated with increased involvement in school-based activities. Furthermore, the results achieved statistical significance with a p-value of less than 0.05. Kwak (2023) stated that a p-value below 0.05 is considered significant, further confirming the significant relationship between the variables. Hence, it can be inferred that the hypothesis H_{a2} of this study was accepted.

Table 8

Correlation between Parents' Educational Level and Home-based Involvement

		Educational level	Home-based Involvement
Spearman's rho	Correlation Coefficient	1.000	.891**
	Sig. (2-tailed)		<.001
	N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

H_{a3}: There is a significant relationship between parents' educational level and their involvement in home-based involvement.

The results from Table 8 revealed a significant positive relationship between parents' educational level and their HBI, as evidenced by rho=0.891**, N=62, p=0.001. According to Pallant (2010), this correlation coefficient indicated a large correlation strength (0.50< r <1.0), showing that higher parental education positively influenced their involvement in home-based activities. Furthermore, the results achieved statistical significance with a p-value of less than 0.05 (p=0.001, p<0.05). Hence, it can be inferred that the hypothesis H_{a3} of this study was accepted.

Table 9

Group Statistics on Home-school Conferencing among Parents of Different Genders

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Home-school Conferencing	Male	30	2.3238	.78599	.14350
	Female	32	2.8125	.98670	.17443

According to Table 9, the mean item response for HSC among male parents was 2.323 (SD=0.785), and among female parents was 2.812 (SD=0.986). Item ratings ranged from 1 to 4, indicating that the mean scores for HSC were at the moderate level for both male and female parents.

Table 10

Independent T-Test of Home-school Conferencing score among Parents of Different Genders

Gender	n	M	SD	t	p	df
Male	30	2.3238	.78599	-2.148	.036	60
Female	32	2.8125	.98670			

H_{a4}: There is a significant difference between the genders of parents and their involvement in home-school conferencing.

Table 10 showed the results of an independent samples t-test conducted on home-school conferencing among parents of different genders. As per Table 9 and Table 10, the results indicated that female parents (M=2.812, SD=0.986) exhibited higher involvement in home-school conferencing compared to male parents (M=2.323, SD=0.785), t=-2.148, df=60, p=.036. According to Kwak (2023), a p-value below 0.05 signifies significant, while the p-value above 0.05 indicates not significant. Therefore, a significant difference was observed between the genders of parents and their involvement in HSC. Hence, it can be inferred that the hypothesis H_{a4} of this study was accepted.

Table 11

Group Statistics on School-based Involvement among Parents of Different Genders

	Gender	N	Mean	Std. Deviation	Std. Error Mean
School-based Involvement	Male	30	2.3000	.77009	.14060
	Female	32	2.6563	1.03007	.18209

According to Table 11, the mean item response for SBI among male parents was 2.300 (SD=0.770), and among female parents was 2.656 (SD=1.030). Item ratings ranged from 1 to 4, indicating that the mean scores for SBI were at the moderate level for both male and female parents.

Table 12

Independent T-Test of School-based Involvement score among Parents of Different Genders

Gender	n	M	SD	t	p	df
Male	30	2.3000	.77009	-1.534	.130	60
Female	32	2.6563	1.03007			

H_{a5}: There is a significant difference between the genders of parents and their involvement in school-based involvement.

Table 12 showed the results of an independent samples t-test analyzing school-based involvement among parents of different genders. As indicated by Table 11 and Table 12, the results showed that female parents (M=2.656, SD=1.030) demonstrated higher involvement in school-based involvement compared to male parents (M=2.300, SD=0.770), *t*=-1.534, *df*=60, *p*=.130. According to Kwak (2023), a p-value below 0.05 signifies significant, while the p-value above 0.05 indicates not significant. Therefore, there was no significant difference observed between the genders of parents and their involvement in SBI. Consequently, it can be inferred that the hypothesis H_{a5} of this study was rejected.

Table 13

Group Statistics on Home-based Involvement among Parents of Different Genders

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Home-based Involvement	Male	30	2.6190	.87930	.16054
	Female	32	3.0268	.91756	.16220

According to Table 13, the mean item response for HBI among male parents was 2.619 (SD=0.879), and among female parents was 3.026 (SD=0.917). Item ratings ranged from 1 to 4, indicating that the mean scores for HBI were at the moderate level for both male and female parents.

Table 14

Independent T-Test of Home-based Involvement score among Parents of Different Genders

Gender	n	M	SD	t	p	df
Male	30	2.6190	.87930	-1.784	.079	60
Female	32	3.0268	.91756			

H_{a6}: There is a significant difference between the genders of parents and their involvement in home-based involvement.

Table 14 showed the results of an independent samples t-test examining home-based involvement among parents of different genders. As indicated by Table 13 and Table 14, the results showed that female parents (M=3.026, SD=0.917) demonstrated higher involvement in HBI compared to male parents (M=2.619, SD=0.879), t=-1.784, df=60, p=.079. According to Kwak (2023), a p-value below 0.05 signifies significant, while the p-value above 0.05 indicates not significant. Therefore, no significant difference was observed between the genders of parents and their involvement in HBI. Consequently, it can be inferred that the hypothesis H_{a6} of this study was rejected.

Table 15

Summary of findings

Hypothesis Assumption	Result	Decision
H_{a1}: There is a significant relationship between parents' educational level and their involvement in home-school conferencing.	rho=0.879, N=62, p=0.001	Accepted
H_{a2}: There is a significant relationship between parents' educational level and their involvement in school-based involvement.	rho=0.883, N=62, p=0.001	Accepted
H_{a3}: There is a significant relationship between parents' educational level and their involvement in home-based involvement.	rho=0.891, N=62, p=0.001	Accepted
H_{a4}: There is a significant difference between the genders of parents and their involvement in home-school conferencing.	p=0.036	Accepted
H_{a5}: There is a significant difference between the genders of parents and their involvement in school-based involvement.	p=0.130	Rejected
H_{a6}: There is a significant difference between the genders of parents and their involvement in home-based involvement.	p=0.079	Rejected

Table 15 presented the summary of the research hypotheses investigated in the study. The findings showed that there was a positive significant relationship between parents' educational level and their involvement in home-school conferencing, school-based

involvement and home-based involvement. In brief, the three hypothesis $H_{a1,}$ H_{a2} and H_{a3} were accepted. Additionally, the findings revealed a significant difference between the genders of parents and their involvement in home-school conferencing. However, no significant differences were observed between the genders of parents and their involvement in school-based involvement and home-based involvement. To summarize, the hypothesis H_{a4} was accepted, while H_{a5} and H_{a6} were rejected.

Chapter V

Discussion and Conclusion

Introduction

In this chapter, the researcher discussed the findings of the descriptive and inferential analyses in Chapter 4. Additionally, this chapter also presented some limitations encountered during the study and provided recommendations for future research. Finally, it concluded by summarizing the entire study.

Descriptive Analysis and Discussion

Summary of demographical analysis

In this study, 62 local parents in Seremban participated in the questionnaire. Based on the data collected, majority of the parents were mothers, Chinese and young parents between 26 to 30 years old. And the current data reported that 55 respondents have obtained at least SPM certificate, and 61.3% of them had tertiary qualifications. Only 7 respondents (11.3%) had only primary and below.

Seremban parents' involvement in the aspect of HSC, SBI and HBI

Based on the descriptive analysis, it was noted that HBI exhibited the highest mean level (M= 2.829, SD=0.915), followed by HSC (M=2.576, SD=0.921), and lastly the SBI (M=2.483, SD=0.923). This finding is consistent with past literature, indicating a parental preference for HBI compared to other types of involvement (Yulianti et al., 2018; Handayani et al., 2020). This was because parents could participate in educational activities with their children at any time that suited their schedule (Fantuzzo et al., 2013), such as assisting homework, reading storybook together or discussing school-related topics. Additionally, home-based involvement reduced barriers such as transportation or scheduling conflicts that might

have limited participation in home-school conferences or school-based activities. This accessibility ensured that both fathers and mothers were able to engage in educational activities with their children without being constrained by external factors. Moreover, majority of parents in the current study were educated, holding at least SPM qualifications, with the exception of 7 respondents (11.3%) having primary education and below. Yulianti et al. (2018) further stated that educated parents were better equipped to create conducive learning environments at home and actively engage in their children's educational journey, potentially explaining the predominance of home-based involvement in this study.

For the current study, the second highest type of involvement was HSC, which involved teacher-parent communication about children's school routine, academic progress, and problem areas. This finding was potentially influenced by the gender distribution of the parents in the study, as mothers were more likely to take the initiative in attending school conferences and interacting with teachers, while fathers frequently found it difficult to make time for these kinds of interactions (Hernawati & Herawati, 2020). Work-related constraints, such as inflexible work schedules and conflicts between meeting times and work hours (Baker et al., 2016), often hindered fathers' ability to participate in school conferences during standard hours. Additionally, this finding was also potentially connected to the parents' educational level in this study, where parents with higher education levels demonstrated a greater knowledge and comprehension of school and education in general, and therefore they were more willing to participate in discussions with teachers about the curriculum or other school-related issues (Handayani et al., 2020). On the other hand, parents with lower levels of education might not have been motivated to participate in home-school conferences because they did not think they could effectively interact with school staff (Naite, 2021).

Lastly, the findings revealed that SBI recorded the lowest involvement among the three types of PI. This disparity could be attributed to the unique nature of SBI, which often required

parents' physical presence at school events, such as workshops or collaborative planning sessions with teachers. Upon closer examination, it became evident that a significant portion of the study's respondents fell within the category of younger parents, aged between 26 to 30 years old, who exhibited distinct patterns of engagement shaped by their reliance on digital communication methods and social media platforms. Unlike older parents who might have been more accustomed to traditional modes of involvement, such as attending in-person meetings or events, younger parents often preferred virtual interactions for staying informed about school activities and communicating with teachers. This is because traditional modes of involvement required families to be physically present at the child's school, thereby needing to plan, schedule, and make arrangements of their schedule (Chen & Rivera-Vernazza, 2022). Furthermore, younger parents thought digital communication methods were more convenient for them to interact with their children's teacher. For instance, they just needed to send messages to the teacher instead of engaging in face-to-face interactions (Bordalba & Bochaca, 2019). As a result, the preference for digital communication among younger parents presented a barrier to their participation in traditional forms of school-based involvement. Despite their willingness to engage with their children's education, the logistical challenges associated with physically attending school events might have limited their overall involvement levels.

Inferential Analysis and Discussion

Parents's Educational Level and Home-based Involvement

Based on the findings of this study, a significant positive relationship was identified between parents' educational level and their HBI, with rho=0.891 and p=0.001. These current findings find support in the works of Al-Matalka (2014), Gan & Bilige (2019) and Handayani et al. (2020), all of which suggest that parental involvement at home increased as parental education levels rise. Al-Matalka (2014) stated that parents with higher education are better

equipped to assist their children in homework because they possessed greater knowledge and understanding of effective methods for guiding their children's education. They also tended to adopt a flexible parenting style, characterized by regular communicate with their children, high expectations of their children, and active guidance in their children's learning, attitudes, and behaviours (Gan & Bilige, 2019). Moreover, highly educated parents often have more resources and know how to spend their time well, allowing for increased engagement in activities at home (Martinez et al., 2022). These parents are motivated to provide educational resources such as games, storybooks, art materials to foster learning at home because they recognize the important of education in their children's lives (Handayani et al., 2020). Conversely, parents with lower levels of education may feel inadequate due to a lack of knowledge about educational matters, hindering their involvement in home-based activities (Handayani et al., 2020). Additionally, these parents often prioritize other aspects of life over learning, leading them to delegate their children's education primarily to teachers, influenced by their own attitudes and self-esteem issues (Al-Matalka, 2014).

Parents' Educational Level and Home-school Conferencing

This study discovered a significant positive relationship between parents' educational level and their participation in HSC, with rho=0.879 and p=0.001. These findings echoed previous research indicating that parents with higher levels of education were more inclined to engage in discussions and conferences concerning their children's education (Abubakari, 2020; Handayani et al., 2020; Bormann et al., 2021). This tendency might stem from the heightened awareness among more educated parents regarding the crucial role of PI in their children's academic progress, viewing such conferences as valuable opportunities for obtaining information and guidance (Bormann et al., 2021). Parents who were more educated might have been more likely to recognize the benefits of attending such conferences in terms of gaining

insights into their child's progress, understanding school policies, and collaborating with teachers to support their child's learning (Muller & Kerbow, 2018). Additionally, parents with greater levels of education often had higher expectations for their children's academic performance and were more eager to participate in home-school discussions to ensure these expectations are met (Ates, 2021). Conversely, parents with lower educational level might have encountered challenges such as language barriers (Naite, 2021) and feelings of inadequacy due to limited educational knowledge when interacting with school staff, potentially reducing their motivation to participate in home-school conferences (Handayani et al., 2020).

Parents' Educational Level and School-based Involvement

Based on the results of this study, a significant positive relationship was found between parents' educational level and their SBI, with rho=0.883 and p=0.001. This finding aligns with previous research (Khan et al., 2015; Yulianti et al., 2018; Trigo et al., 2021; Martinez et al., 2022), which consistently demonstrated that higher levels of education correspond to increased school-based involvement. According to Martinez et al. (2022), parents with higher levels of education tended to participate more actively in their children's school-related activities and possessed a better understanding of the significance of both in-school and extracurricular activities. Khan et al. (2015) also agreed, noting that highly educated parents typically demonstrated a strong interest and concern for their children's academic performance and achievements, leading them to actively participated in school events. Additionally, parents with high educational level were more inclined to communicate with teachers, attend school events, and participate in discussions (Thartori, 2019). This was because they felt more comfortable engaging with teachers and school administrators. Conversely, parents with lower levels of education may be less likely to engage in school activities due to a lack of self-assurance and a greater reliance on teachers for their children's educational needs (Yulianti et al., 2018).

Genders of Parents and their involvement in Home-based Involvement

Based on the results of this study, no significant difference was found between the genders of parents and their involvement in HBI, with a p-value of 0.079. This finding aligned with previous research (Ogg & Anthony, 2019; Cooper, 2023), which consistently showed that no gender differences in home-based involvement were found. One possible explanation would be that both mothers and fathers were increasingly realizing the importance of being actively involved in their children's education regardless of gender. Studies by Puccioni (2018) and Kim and Yu (2022) highlighted the positive impact of PI on children's academic outcomes, which might have motivated both mothers and fathers to participate in home-based activities to support their children's learning. Additionally, nowadays, parents were more likely to be educated, leading to a trend of egalitarian parenting roles. Fathers had become increasingly involved with their children (Gowda & Rodriguez, 2019). They viewed child rearing as a shared responsibility (Wang & Cheung, 2023), leading to similar levels of involvement in home-based activities. As a result, they engaged with their children in various ways. Thartori (2019) observed that mothers typically took on a more active role in their children's education and academic support. This was because mothers often felt that they had a greater responsibility than fathers to assist their children with their studies. Hernawati and Herawati (2020) noted that over half of mothers dedicated time to teaching their children fundamental skills such as counting, reading, writing and fostering creativity. On the other hand, fathers allocated a larger portion of their childcare time to enjoyable supervision and recreational activities, including playing, reading stories, and sports (McDonnell et al., 2019). They often participated in play activities with their children (Rakotomanana et al., 2021).

Genders of Parents and their involvement in Home-school Conferencing

Based on the result of this study, a significant difference was found between the genders of parents and their involvement in HSC, with a p-value of 0.036. This finding corroborated previous research (Kim & Hill, 2015; Aytaç et al., 2019), which consistently indicated that mothers exhibited higher levels of involvement in home-school conferencing compared to fathers. This pattern could be attributed to the traditional gender division of labor, where men typically assumed primary responsibility for the financial aspects of the household, while women took on more extensive roles in family care, including child education (Cui, 2023). Therefore, mothers were more inclined to take the initiative in attending school conferences and interacting with teachers, while fathers often struggled to have the time for such home-school conferences (Hernawati & Herawati, 2020). Work-related constraints, such as inflexible schedules and conflicts between meeting times and work hours (Baker et al., 2016), frequently hindered fathers' ability to participate in school conferences during standard hours. These constraints made it challenging for fathers to allocate time for such involvements, thereby reinforcing the tendency for mothers to assume a leading role in HSC.

Genders of Parents and their involvement in School-based Involvement

Based on the result of this study, no significant difference was found between the genders of parents and their SBI, with a p-value of 0.130. This finding was contrary to earlier studies (Okeke, 2014; Tao & Lau, 2021), which consistently indicated that fathers tended to be less involved in school activities compared to mothers. The result of this study was different with past studies because in modern society, traditional gender roles changed, with both mothers and fathers increasingly sharing responsibilities within the family (Wang & Cheung, 2023), including involvement in their children's education. As a result, the historical distinctions in parental roles might have diminished, leading to equivalent levels of

involvement between genders in school-based activities. For instance, mothers often participated in social and fundraising activities, as well as accompanying children on school trips (Hernawati & Herawati, 2020). And fathers were frequently involved in their children's sports activities conducted at school (Strandbu et al., 2017).

Implication

This study reported that parents lacked school-based involvement (M=2.483), which implied to Seremban parents and preschool teachers the need to foster collaboration between families and schools. From the study, parents understood that their involvement in school-based activities was considered a factor that could enhance children's learning outcomes (Ramasamy et al., 2023). Therefore, parents would begin to engage in activities organized at school, such as parent meetings, volunteering, various forms of parental activism, as well as workshops and seminars (Đurišić & Bunijevac, 2017). Moreover, when preschool teachers noticed that parental involvement was low in school-based activities, they took proactive steps to address the situation. Yulianti et al. (2020) emphasized the significant role of teachers as the key facilitators within educational institutions in promoting parental involvement. Đurišić and Bunijevac (2017) further supported the statement as parents' degree of involvement was likely to be affected by the school itself. Preschool teachers should provide invitations for parents' involvement in school-related activities to convey that their participation was highly valued and could positively impact the learning process. The finding of the past study supported this statement and indicated that invitations for involvement had a significant positive effect on school-based involvement (Strickland, 2015). The school's requirements for parental involvement could significantly influence parents' decisions about engaging in their child's education (Hernawati & Herawati, 2020). By recognizing the importance of parental

involvement and actively working to promote it, preschool teachers could increase parents' school-based involvement.

In addition, the finding showed that HBI was the type of involvement with the highest level of PI (M=2.829). Therefore, parents needed to take proactive steps to maintain this level of involvement. They continued to prioritize activities that supported their child's learning and development within the home environment, such as reading together, engaging in educational games, and exploring new learning opportunities. For instance, parents enriched their children's daily literacy practices by storytelling during breakfast, talking during car rides, and reading books during bedtime (Lin et al., 2023). Additionally, they sought out ways to further enrich their child's learning experiences by incorporating new activities and resources into their daily routines. This included visiting libraries, museums, and other educational venues, as well as seeking out online resources and educational materials. Furthermore, parents communicated regularly with their child's teachers to stay informed about their progress and to seek guidance on how to support their learning at home. By remaining actively involved and committed to their child's education, parents ensured that their high level of home-based involvement continued to benefit their child's growth and development.

Furthermore, according to the findings of the study, there was a significant difference between the involvement of fathers and mothers in HSC. Therefore, the implication of these findings suggested that preschools should pay special attention to encouraging fathers to participate more actively in home-school conferencing. This could have involved implementing targeted strategies to increase fathers' engagement, such as offering flexible scheduling options. For instance, they could offer evening or weekend sessions to accommodate fathers who work during typical school hours. Moreover, this study would let the parents know that both of their involvement were important for their children. Therefore, when fathers perceived the importance of their involvement, they were more likely to engage

in activities such as home-school conferencing (Okeke, 2014). Additionally, the findings of the study showed that there were no significant differences between the genders of parents and their involvement in SBI and HBI. A more balanced parental involvement might have resulted from societal changes and egalitarian gender roles (Lomazzi et al., 2018). Therefore, educational interventions and programs that aimed at fostering parental involvement should be inclusive and not targeted exclusively towards one gender (Benner et al., 2016). Instead, efforts should focus on encouraging and facilitating the active involvement of all parents, regardless of gender, in order to maximize the advantages of parental involvement on children's academic success and overall development.

In addition, the findings of the study reported that parents' educational level influenced their involvement in HSC, SBI and HBI, implying that preschools should develop programmes aimed at enhancing parents' knowledge and skills related to parental involvement. Yulianti et al. (2020) emphasized the significant role of teachers as the key facilitators within educational institutions in promoting parental involvement. Preschool teachers could conduct workshops or training sessions to teach low-educated parents how to help their children learn at home. For instance, preschool teacher implemented a literacy workshop that empowered parents to enhance their children's literacy skills by equipping them with strategies for teaching early literacy skills at home (Villalobos, 2018). Additionally, to effectively connect with parents who lacked confidence in interacting with school staff and encourage their participation in HSC and school-based activities, it was essential for teachers to communicate using language that was easily understandable for all parents, including those with lower levels of education. This entailed avoiding the use of jargon or complex terms that might cause confusion. This was because various studies consistently emphasized the significant impact of language barriers on PI in HSC and school-based activities (Vera et al., 2017; Zhou & Lan, 2018; Henderson et al., 2020).

Limitation

Throughout the study, the researcher encountered several limitations. Firstly, an equal number of parents held certificates in Secondary (SPM) and Degree and above, totaling 17 parents (27.4%) in each category. This equal distribution raised concerns regarding the representation of educational levels within the sample, potentially impacting the generalizability of the findings. Previous research indicated that well-educated parents tended to exhibit higher levels of involvement in their children's education (Handayani et al., 2020). This involvement was often motivated by their understanding of the positive correlation between PI and improved academic performance in children (Utami, 2022). Thus, parents with higher educational level were more likely to participate in HSC, school-based and home-based activities. Among the respondents, 61.3% were counted as highly educated parents with tertiary qualifications, holding certificates in Higher secondary (STPM) (21%), Diploma (12.9%) and Degree and above (27.4%). According to Hassan et al. (2019), Malaysia recognized STPM and Diploma as entry qualifications for tertiary education, affirming their status as tertiary qualifications. Additionally, degrees beyond the undergraduate level were also considered tertiary qualifications (Liu et al., 2018). However, the findings also revealed that parents with only Secondary (SPM) certificates were also actively involved in their children's education. They actively participated in HSC, school-based and home-based activities as they were aware that active involvement had been linked to improved academic performance in children.

Secondly, the study suffered from a limitation in its sample size. Gumpili and Das (2022) pointed out that when a sample size is too small, it fails to accurately represent the entire population. In other words, a small sample size might not adequately capture the diversity present within the population being studied. In this case, the study only involved 62 parents of young children in Seremban, which was a relatively small number considering the population diversity of the area. As a result, the findings derived from such a limited sample could not be

confidently applied to the broader population. This lack of representativeness undermined the generalizability of the study's results. As highlighted by Memon et al. (2020), a larger sample size was essential to ensure that the results could be generalized to a wider population and to draw more reliable conclusions.

Thirdly, the sampling method employed in this study, which was convenience sampling, might have been another limitation. Convenience sampling, classified as a non-probability sampling method, as defined by Etikan et al. (2016), entailed the inclusion of members from the target population who met certain practical criteria, such as easy accessibility, geographic proximity, availability at a given time, or willingness to participate. Convenience sampling counted as non-random sampling. Consequently, this sampling method might not have been representative of the population, as it could only have been generalized to the portion of the population that was conveniently accessible, from which the sample was drawn (Andrade, 2020). Moreover, convenience sampling appeared to have constrained the inclusion of respondents with various characteristics in the current study. Based on the current findings, the majority of the respondents were female, Chinese, and young adults. Therefore, it raises questions about whether these findings could be applied to a broader range of respondents with different ethnicities, ages, and genders.

Recommendation

To overcome the limitation of an equal number of parents with certificates in Secondary (SPM) and Degree and above, and to increase the overall representativeness of the sample, it was recommended to implement average collection strategies. The average collection strategies aimed to recruit participants with varying educational backgrounds. This could be achieved through targeted outreach efforts that encompassed diverse communities, educational institutions, and socioeconomic groups. Additionally, the utilization of various recruiting

channels, such as online platforms, community groups, and educational networks enhanced the reach and inclusivity of the recruitment process. According to Newman et al. (2021), the use of platforms with varied participant pools could enhance external validity and the generalizability of study findings.

Furthermore, the findings of the study indicated that there was a need to increase the sample size, meaning more respondents were required for better accuracy. This aligns with the idea presented by Andrade (2020) that having a larger sample size than necessary can lead to more accurate results because it provides a better representation of the entire population being studied. To determine the ideal sample size, the researcher can use Krejcie and Morgan (1970) table of sample size determination. According to data from the Seremban District: the population stood at 692,283 in 2020 (Malaysia: Negeri Sembilan State (Districts and Townships) - Population Statistics, Charts and Map, n.d.), the sample determinant provided an appropriate number of samples which was around 380 samples. The reason for this increase is that with a larger sample size, the findings can be more reliably applied to the broader population. Therefore, future researcher could try to contact more preschool principals to get as many respondents as possible. By having a larger respondents, the researcher could calculate the values better and avoid any errors while screening for the data collected.

Moreover, to address the issue of the sampling method potentially not being representative of the population, the researcher could consider employing random sampling methods in future study. Random sampling, as recommended by Palinkas et al. (2015), is used to enhance the generalizability of findings by minimizing bias in selection. This method ensures that every individual within the population has an equal chance of being selected for the sample. For instance, by using random sampling, the researcher could include participants from different areas of Negeri Sembilan (not limited to Seremban), such as Nilai, Mantin, Labu and others. This would ensure a diverse mix of people with different ages, races, genders and

educational levels. Consequently, this approach would help to reduce sampling error and enhance the accuracy of the data and findings (Taherdoost, 2016). In essence, by employing random sampling methods, the researcher can increase the likelihood of obtaining a sample that accurately reflects the broader population. This would lead to more reliable and generalizable research findings, ultimately enhancing the quality and validity of the study.

Conclusion

In conclusion, this study examined the relationship between parents' education levels and their involvement in Early Years in Seremban. Furthermore, it also aimed to investigate whether a significant difference exists between the genders of parents and their involvement in Early Years within the same region. A quantitative method was used in this research, and the research instrument used was the Family Involvement Questionnaire-Short Form (FIQ-SF). This study involved 62 parents in Seremban who had children between the ages of 4 and 6 years old. The results indicated that there was a significant relationship between parents' educational level and their involvement in home-school conferencing, as well as their involvement in school-related and home-based activities. Additionally, the results revealed a significant difference between the genders of parents and their involvement in home-school conferencing. However, no significant differences were observed between the genders of parents and their involvement in school-based involvement and home-based involvement.

Moreover, the current finding had implications for alerting parents and preschool teachers in Seremban about the importance of enhancing cooperation between families and schools. Seremban preschools should design parental programmes or interventions, such as virtual parent workshops or training, that allowed parents who had limited time to participate in school-based activities. Additionally, according to the study analysis, parents' educational level served as one of the significant determinants that was significantly and positively related

to parental involvement-based variables. Thus, this study had significant implications for promoting the importance of parent education programmes to enhance parents' knowledge and abilities. There were some limitations to the research, including representativeness of educational levels within the sample, small sample size, and restricted generalizability of the findings. Some recommendations that could made to enhance future research included implementing average collection strategies, increasing the sample size for better accuracy, and employing random sampling method to increase the generalizability of the findings.

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Appendices

Appendix A: Questionnaire

A Study of Parental Involvement in Early Years: The Role of Gender and Level of Education

Dear parents,

You are invited to participate in this research study to examine the relationship between parents' education levels and their involvement in Early Years in Seremban. And also to investigate whether a significant difference exists between the genders of parents and their involvement in Early Years within the same region. This study is conducted by Hoo Pui Yin, who is pursuing Bachelor of Early Childhood Education (Honours) at Universiti Tunku Abdul Rahman (UTAR), Sungai Long campus.

PURPOSE OF STUDY

This study aims to examine the relationship between parents' education levels and their involvement in Early Years in Seremban. And also to investigate whether a significant difference exists between the genders of parents and their involvement in Early Years within the same region.

BENEFITS AND RISKS

The information obtained in this study may help researcher to deepen their understanding of how gender and educational level affect parental involvement. The study will also help to raise parents' awareness of parental involvement. There is no particular harm or risk involved in this study.

RESEARCH PROCEDURES

This survey is only distributed to parents aged 21 years old and above with normally developing children. This survey may take approximately 5 to 10 minutes to complete, and it consists of two sections, which are:

Section A: Demographic information
Section B: Family Involvement Questionnaire-Short Form (FIQ-SF), a 21-items that measures parental involvement

CONFIDENTIALITY

Your responses to this survey will be anonymous. All the data you have given will be kept confidential. The results of this study will be presented in a written up report. In this event of participation, no personal identification will be disclosed.

CONTACT INFORMATION

If you have questions at any time about this survey, you may contact the researcher, Hoo Pui Yin (joeyhoo@1utar.my/019-2688199)

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. You are required to complete all the sections in this survey without skipping any questions. If you decide to take part in this study, you have the right to withdraw at any time and without giving a reason.

Sincerely appreciate your participation in this survey,
Hoo Pui Yin

* Indicates required question

1. **Consent** *

I have read and understood all the information provided above. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and giving a cost. I, hereby consent to participate in this research voluntarily.

Mark only one oval.

- ◯ Yes, I agree
- ◯ No, I disagree

Section A: Demographic information

Please complete this section by choosing only **ONE** answer.

2. Gender *

Mark only one oval.

- ◯ Male
- ◯ Female

3. Age *

Mark only one oval.

- ◯ 21-25 years old
- ◯ 26-30 years old
- ◯ 31-35 years old
- ◯ 36-40 years old
- ◯ >40 years old

4. Race *

Mark only one oval.

- ◯ Malay
- ◯ Chinese
- ◯ Indian
- ◯ Other: _____

5. Educational level *

Mark only one oval.

- ◯ Primary and below
- ◯ Secondary (SPM)
- ◯ Higher secondary (STPM)
- ◯ Diploma
- ◯ Degree and above

Section B: Family Involvement Questionnaire-Short From (FIQ-SF)

The following statements represent situation that result in parental involvement among parents.
You are required to read each statement carefully and choose only **ONE** number for **EACH** question that accurately represents your response. There are no right or wrong answers, and you are requested to be honest.

Please answer all the following questions using this guide:
1= Rarely
2= Sometimes
3= Often
4= Always

Home-School Conferencing

6. I attend conferences with the teacher to talk about my child's learning or behavior. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

7. I talk to my child's teacher about his/her daily school routine. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

8. I talk to my child's teacher about the classroom rules. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

9. I talk to the teacher about how my child gets along with his/her classmates in school. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

10. I talk to my child's teacher about my child's accomplishments. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

11. I talk to my child's teacher about his/her difficulties at school. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

12. I talk with my child's teacher about school work he/she is expected to practice at home. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

School-based Involvement

13. I participate in planning classroom activities with the teacher. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

14. I attend parent workshops or training offered by my child's school. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

15. I participate in planning school trips for my child. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

16. I volunteer in my child's classroom. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

17. I go on class trips with my child. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

18. I participate in parent and family social activities at my child's school *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

19. I talk with other parents about school meetings and events. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

Home-based Involvement

20. I take my child places in the community to learn special things (e.g., zoo, museum, etc.). *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

21. I talk about my child's learning efforts in front of relatives and friends. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

22. I talk with my child about how much I love learning new things. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

23. I bring home learning materials for my child (tapes, videos, books). *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

24. I spend time with my child working on reading/writing skills. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

25. I spend time with my child working on creative activities (like singing, dancing, drawing, and story telling). *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

26. I spend time with my child working on number skills. *

Mark only one oval.

	1	2	3	4	
Rare	◯	◯	◯	◯	Always

Thank you for taking out your precious time! Have a great day :)

Appendix B: Original Data

Table A1

SPSS output of descriptive statistics - Respondents' Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	30	48.4	48.4	48.4
	Female	32	51.6	51.6	100.0
	Total	62	100.0	100.0	

Table A2

SPSS output of descriptive statistics - Respondents' Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-25 years old	7	11.3	11.3	11.3
	26-30 years old	20	32.3	32.3	43.5
	31-35 years old	16	25.8	25.8	69.4
	36-40 years old	10	16.1	16.1	85.5
	>40 years old	9	14.5	14.5	100.0
	Total	62	100.0	100.0	

Table A3

SPSS output of descriptive statistics - Respondents' Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	11	17.7	17.7	17.7
	Chinese	35	56.5	56.5	74.2
	Indian	16	25.8	25.8	100.0
	Total	62	100.0	100.0	

Table A4

SPSS output of descriptive statistics - Respondents' Educational Level

Educational level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary and below	7	11.3	11.3	11.3
	Secondary (SPM)	17	27.4	27.4	38.7
	Higher secondary (STPM)	13	21.0	21.0	59.7
	Diploma	8	12.9	12.9	72.6
	Degree and above	17	27.4	27.4	100.0
	Total	62	100.0	100.0	

Table A5

SPSS output of descriptive statistics – Mean and standard deviation for the subscale of FIQ-Sf

Descriptive Statistics

	N	Mean	Std. Deviation
HomeSchoolConferencing	62	2.5760	.92146
SchoolBasedInvolvement	62	2.4839	.92378
HomeBasedInvolvement	62	2.8295	.91522
Valid N (listwise)	62		

Table A6

Spearman Correlation for parent's educational level and their involvement in Home-school Conferencing

Correlations

			Educational level	HomeSchool Conferencing
Spearman's rho	Educational level	Correlation Coefficient	1.000	.879**
		Sig. (2-tailed)	.	.000
		N	62	62
	HomeSchoolConferencing	Correlation Coefficient	.879**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

Table A7

Spearman Correlation for parent's educational level and their involvement in School-based Involvement

Correlations

			Educational level	SchoolBased Involvement
Spearman's rho	Educational level	Correlation Coefficient	1.000	.883**
		Sig. (2-tailed)	.	.000
		N	62	62
	SchoolBasedInvolvement	Correlation Coefficient	.883**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

Table A8

Spearman Correlation for parent's educational level and their involvement in Home-based Involvement

Correlations

			Educational level	HomeBased Involvement
Spearman's rho	Educational level	Correlation Coefficient	1.000	.891**
		Sig. (2-tailed)	.	.000
		N	62	62
	HomeBasedInvolvement	Correlation Coefficient	.891**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

Table A9

Group Statistics on Home-school Conferencing among Parents of Different Genders

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
HomeSchoolConferencing	Male	30	2.3238	.78599	.14350
	Female	32	2.8125	.98670	.17443

Table A10

Independent T-Test of Home-school Conferencing score among Parents of Different Genders

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig (Two-Sided p)	Mean Difference	Std. Error Difference	Lower	Upper
HomeSchoolConferencing	Equal variances assumed	2.072	.155	-2.148	60	.036	-.48869	.22753	-.94382	-.03356
	Equal variances not assumed			-2.164	58.512	.035	-.48869	.22587	-.94073	-.03665

Table A11

Group Statistics on School-based Involvement among Parents of Different Genders

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SchoolBasedInvolvement	Male	30	2.3000	.77009	.14060
	Female	32	2.6563	1.03007	.18209

Table A12

Independent T-Test of School-based Involvement score among Parents of Different Genders

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig (Two-Sided p)	Mean Difference	Std. Error Difference	Lower	Upper
SchoolBasedInvolvement	Equal variances assumed	4.463	.039	-1.534	60	.130	-.35625	.23220	-.82072	.10822
	Equal variances not assumed			-1.549	57.235	.127	-.35625	.23005	-.81689	.10439

Table A13

Group Statistics on Home-based Involvement among Parents of Different Genders

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
HomeBasedInvolvement	Male	30	2.6190	.87930	.16054
	Female	32	3.0268	.91756	.16220

Table A14

Independent T-Test of Home-based Involvement score among Parents of Different Genders

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig (Two-Sided p)	Mean Difference	Std. Error Difference	Lower	Upper
HomeBasedInvolvement	Equal variances assumed	.013	.910	-1.784	60	.079	-.40774	.22853	-.86487	.04940
	Equal variances not assumed			-1.787	59.968	.079	-.40774	.22822	-.86424	.04876