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A Review of the Relationship between Parental Involvement and Children's Academic Achievement and the Role of Family Socioeconomic Status in this Relationship

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Abstract

Based on Bronfenbrenner's (1986) *ecological* system theory, Bourdieu's (1997) concept of cultural capital and Coleman's concept of social capital, the present study has examined the relationship between parents' involvement in their children's education and their academic achievement as well as the role the socioeconomic status plays in this relationship. Results obtained from a re-examination of 42 studies published between 2003 and 2021 revealed that there was a positive correlation between parental involvement and academic achievement of children. Parental involvement at home and at school, such as parents' reading to their children at home, providing encouragement and support for learning, maintaining high aspirations and expectations for their children's education and academic success, establishing communication, discussing school issues with their children, all have positively impacted the academic achievement of children. Socio-economic status (SES) affected the relationship between parental involvement and school success of children and played a mediating role in this relationship. Children of families with higher socioeconomic status made better use of their parents' involvement thanks to their parent's greater cultural capital. Nevertheless, the educational involvement that parents with lower socioeconomic status can demonstrate is important in that it reduces or eliminatates the disadvantages that children from poor and lower educated families may encounter and the risk of academic failure. The impact of increased parental involvement on poor and lower SES children was greater, and these children made better use of parental involvement and were able to boost their academic achievement to a certain extent.

Keywords: Cultural capital, Parental involvement in education, Social capital, Socio-economic status and academic achievement.

Introduction

Education researchers assert that parental involvement is an important factor in the education, learning and academic achievement of children and adolescents (Boonk, Gijselaers, Ritzen, & Brand-Gruwel, 2018; Wilder 2014; Epstein, 1991; Fan & Chen, 2001). Studies dealing with the positive effects of parental involvement on students' academic success have led to a growing body of literature concerning parental involvement (Hill & Tyson, 2009; Patall, Cooper, & Robinson, 2008). The literature on parental involvement underlines the importance of the role that families play in the development of their children. The theory of ecological systems emphasizes that children's relationships and interactions with people or objects in their immediate environment, as well as the activities of parents with their children such as learning, reading, collective research, play a significant role in socioemotional, cognitive and academic development of children (Bronfenbrenner, 1999). The development in children and adolescents depends on the *person-context interaction* and various contexts such as the family socioeconomic resources, neighborhood environments, educational institutions, life experiences shape students' identity and socio-emotional, cognitive and academic development during childhood and adolescence (Ren, Zhang, Jiang & Huang, 2021). In the family, which is the most immediate environmental setting, parents devote, allocate and spend their economic and psychological resources for children's school endeavours. Parents who undertake specific efforts and behaviors and maintain personal support to develop and enhance their children's education show their educational involvement to children by undertaking activities such as helping with homework and participating in school activities and providing materials that cognitively stimulate and improve them (Grolnick & Slowiaczek, 1994). Parental involvement emerges with aspects and dimensions such as basic obligations such as parenting and ensuring the safety of children, encouraging children to learn, engaging them in direct learning activities, helping them learn on the one hand, and communicating with their children's school, volunteering in school organizations,

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attending formal and informal conferences with teachers and school administrators, and cooperating with associations on the other hand (Epstein, 2011). Parental expectations for children's education and academic achievement, monitoring and setting rules for them are also considered as aspects of parental involvement (Halgunseth, Ispa, & Rudy, 2006). Parents exhibit their involvement at home or at school in a range of activities that are linked to children's learning such as reviewing work, monitoring progress, providing opportunities for children to talk about and discuss a school day or engage children in enriching learning activities, and various forms of communication from home with their children's school. Parents who engage in activities such as reading, playing games with their children at home, and visiting museums with them play a crucial role in promoting and improving cognitive development and academic success in their children (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Research asserts that when parents are involved and engaged in their child's learning at home, and when they volunteer at school and attend parent-teacher conferences, children can derive benefit from many mechanisms such as modeling, reinforcing and development of positive feelings towards learning and school and teachers. It is pointed out that as parents meet and interact with other parents, family involvement at school ensures parents with social capital and improve relationships, interactions and cooperation with teachers who aim to help children succeed in school (Lareau, 1996; McNeal, 1999). It is asserted that parental involvement in education and interaction with children and their schools is an important component of children's academic achievement (Graves & Brown Wright, 2011) and is essential in enhancing academic achievement and socio-emotional regulation (Grolnick, Friendly & Bellas, 2009; Hill, Castellino, Lansfort, Nowlin, Dodge & Bates, 2004) Parents who actively participate in education of their children can improve academic, social and emotional development of their children (Green, Walker, Hoover-Dempsey & Sandler, 2007).

Parents' socio-economic status has a significant role in the association between parental involvement in education and school success of their children. Socioeconomic advantages and disadvantages can be transferred from parents to their children (Bradley & Corwyn, 2002). Socioeconomic status refers to economic, cultural and social resources and economic and social standing, privileges and social prestige that derive from these resources. It is regarded as a multifaceted structure and concept evaluated according to the years or levels of education of parents as well as parental occupational status and family income (Volodina, Heppt & Weinert, 2021). The relationship between socioeconomic status and *children's academic achievement* can be explained by the family investment model. Accordingly, the economic, social and cultural capital of families is related to the academic *achievement* of their children. Families allocate and spend resources such as income, cash, knowledge and time that they own and control as economic, social and cultural capital to improve and enhance their children's education, cognitive skills and language proficiency. In compliance with the family investment model, families from higher socioeconomic status are able to provide their children with better educational materials and resources at home, especially books and magazines thanks to their wealth (Volodina, Heppt & Weinert, 2021). The number of books in the family home is often considered as one of the various predictors of socioeconomic status (Rutkowski & Rutkowski, 2013) and is associated with not only professional status and prestige but also cultural capital (Sieben & Lechner, 2019). The family cultural capital is particularly important for educational and academic achievement and can help promote, nurture and enhance children's knowledge and skills (Evans et al., 2010). Socioeconomic status directly affects students' academic achievement, both through home resources such as books, magazines, educational materials, and social connections that reflect shared norms, values and perceptions as social capital. On the other hand, it has an indirect impact on both the education of the parents and the *parental aspirations and expectations* for their children's *educational* attainment. Family socialization models emphasize that socioeconomic status-based variables affect children's academic achievement via parental expectations and subjective task value (STV) based on the Expectancy-Value Theory (EVT) (Brown & Putwain, 2021). Parental characteristics as well as education and socialization processes in the family may affect the educational expectations for children and adolescents. Parents in wealthier families tend to have higher educational expectations for their children's education and academic achievement, and therefore devote, spend, and invest more resources in promoting, nurturing, and enhancing their children's cognitive, intellectual, and academic development. On the other hand, parents in lower-socioeconomic status may decrease their educational expectations for their children owing to the negative impact of lower education, poverty, limited economic resources, less income, or economic hardships (Ren, Zhang, Jiang and Huang, 2021). Parental involvement as various resources that parents allocate and behaviors they engage in so as to improve children's educational outcomes can significantly mediate the association between socioeconomic status and academic achievement of children. The family stress theory describes mediating mechanisms in the relationship between family economic hardship and children's cognitive, intellectual, academic, emotional and social development. According to this theory, greater stress experienced by disadvantaged or lower-SES families may be closely associated with dysfunction in parental emotions and behaviors, which eventually harms or impairs the emotional, behavioral and cognitive development of children. Greater stress experienced by lower-SES parents

stemming from economic hardship may cause them to be less involved in their children during socialization and child-rearing processes. Higher parental stress and tension caused by poverty and economic hardship can harm, weaken and impede parental involvement, which plays a positive role in children's school and academic achievement (Zhang, Jiang, Huang, Ming, Ren & Wang, 2021). Economic hardship can lead to stress, tension, demoralization and conflict in parents, and can reduce positive parental behaviors and practices aimed at educating, socializing, and rearing their children to enhance their well-being. Such family stress-processes can negatively affect parental involvement in their children in education and activities such as talking about and discussing school-related issues with children and paticipating in school activities and organizations that require sparing time and paying attention (Conger, Ge, Elder, Lorenz, & Simons, 1994). On the other hand, socioeconomic status can increase parents' capacity to spend their financial, human and social capital resources for the improvement and enhancement of their children's educational performance and achievement. Parental investment theory posits that parents make decisions to devote and spend their existing and potential assets for a variety of purposes and although they depend on individual and cultural preferences, these decisions and choices are limited by the amount and level of existing family assets available to children (Mayer, 1997). Parental education and occupation, which can affect family income and family preferences as an indicator of existing and potential economic resources and which also serves as an indicator of human and social capital, can affect and specify parental investment and involvement for the education of children. Parents with higher levels of educational attainment attach more importance and value to education compared to parents with lower formal education, and can provide activities that stimulate and promote cognitive and intellectual development of children. Household income determines whether or not parents can provide their children with activities and opportunities such as tutoring, extra education or special education tutoring to prepare for exams, which require spending money as a manifestation of the involvement and investment in the education of their children. Family income facilitates or limits parents' ability to purchase services, activities, materials, and experiences that contribute and provide benefits to education and academic performance of their children (Altschul, 2012). Parental involvement in education of their children is lower in families with disadvantaged socio-economic status (Camacho-Thompson, Gillen-O'Neel, Gonzales & Fuligni, 2016; Kohl, Lengua & McMahon, 2000). Stress and tension resulting from economic constraints and inadequacies in poor and low-income families can cause parents to exhibit low levels of involvement in their children's education. Parental involvement can act as a protective key factor in the wake of many stressful conditions, and encourage, nurture and enhance cognitive and emotional resilience in children. Parental involvement is especially important, valuable and beneficial for children from poor and low-income families in that it can foster socio-emotional regulation and educational achievement (Shumow, Vandell & Posner, 1999).

Parental Involvement and Cultural and Social Capital

The theoretical framework of the present study is based on Bronfenbrenner's (1994) *ecological* system theory, Bourdieu's (1997) concept of cultural capital and Coleman's concept of social capital. *Ecological* systems theory states that child development is influenced by various *ecological* factors and defines them as four traversing layers, namely the *micro-system*, *meso-system*, *exo-system* and macro-system. Each subsystem starts with the microsystem and is stratified into the larger ecological system. The four systems, namely the *micro-system*, *meso-system*, *exo-system* and macro-system, display an individual's relationships, interactions and traversing networks that reflect his environment. The environment varies in the course of time as individuals grow and certain systems such as families, peers, schools become more or less important for the individual's development. Each system, which encompasses norms, rules and roles, plays a role in the development of the individual. Human growth and development are effectively shaped by relations and interactions between individuals and their environmental contexts. At the lowest level, such as family and school, the micro-system fulfills in some manner various functions such as care, education and socialization of individuals in the immediate environment and culture. Human development can be determined not only by small-level interactions and relationships between subcultures but also by interactions between the person and the larger environment that pertains to three other systems (Bronfenbrenner, 1994). In some respect, Bronfenbren's theory refers to parental involvement, success in school and personal characteristics that can be combined with and have an impact on an individual's development. Origin-based socio-psychological characteristics such as self-concept as a micro-system, family-level variables such as parental involvement as a mesosystem and school-level factors such as teachers' perceptions as an exo system interact and affect individual-level outcomes such as academic performance.

The micro-system is linked to parents' participation in education of their children at home and expands to include parental involvement at home, family structure and size, and other environmental agents. Various or different systems and sub-systems relate, interact and operate in this framework. Research reveals that parental involvement has an essential and fundamental impact on learning of children (Desforges & Abouchaar, 2003). The micro system is also directly linked to children and for this reason plays a more

substantial and important role in child development. Parents are regarded as the most crucial and important agents in the micro system. Academic success is a vital indicator of the development of children. Bronfenbrenner's ecological system theory asserts that parents *significantly* influence children's academic achievement. They are the most important factor behind children's school success and appear to be more effective than other environmental factors (Melhuish, 2008). Bronfenbrenner's ecological systems theory underlines the fact that the association between parental involvement and school achievement of children can differ and vary according to not only certain aspects and dimensions of parental involvement but also socio-economic status such as family income, educational level of parents as well as family structure and ethnicity.

As an indicator of socioeconomic status, cultural and social capital, which reflects the parental education level, is linked to parents' involvement in their children in the field of education. Cultural capital, which plays a role in the relationship between parental involvement and children's school success, is described as the general cultural origin or background, knowledge, dispositions and skills handed down from one generation to the next (MacLeod, 1995). Cultural capital is associated with education and parents acquire cultural capital in three forms as individual tendencies, attitudes and knowledge obtained through experience. Cultural capital encompasses educational goods such as books, computers, credentials, and is linked to educational institutions such as schools, universities, and libraries (Grenfell & James, 1998; Robbins, 2000). Bourdieu points to the harmony between culture of an individual and the culture of the institutions in the community or wider society, and uses the concepts of habitus and field to define this harmony. Habitus is regarded as tendencies resulting from social education and past experience (Brubaker, 2004; Reed-Danahay, 2005) and is defined as thinking in a certain way, grasping experience in a certain way and acting in a certain way (Grenfell & James, 1998). Since cultural capital comprises the sum total of cultural tendencies (Brubaker, 2004), it can be difficult to separate between habitus and cultural capital (Robbins, 2000). Habitus may be considered as traits or a set of traits belonging to an individual. Notwithstanding the fact that an individual or a family has cultural capital, cultural capital is mostly perceived as the compatibility between the educational ways of the family habitus and the values and practices in the educational system which the family interacts with. A field is defined as social associations that constitute and structure at a micro and macro level. When habitus of individuals is compatible and consistent with the values and practices in the educational system, they benefit from social advantages (Lareau & Horvat, 1999).

Bourdieu views social capital, which is associated with parental involvement, as a means to obtain socially desirable aims or ends, and argues that the concept of social capital requires social associations or social networks that ensure access to resources and must be actively continued (Lareau, 2001). Bourdieu stresses the inequalities in the amount of capital that individuals have or can acquire, and calls attention to inequalities in relationships and access to resources. When cultural capital of an individual is larger, he or she has a greater advantage in obtaining additional capital that family members can enjoy. In the process of "habitus" formation, some individuals have inherited the cultural capital that helps them become comparatively more successful students or actors in the field of education (Grenfell & James, 1998). Conversely, individuals who have less cultural capital meet constraints and difficulties that bring about unequal access to institutional resources (Lareau, 2001). Economic or material capital shows the power to buy products, goods and services; similarly, cultural capital for parents in terms of their children's education shows the power to enhance academic development of their children (Grenfell & James, 1998). While financial capital represents to material resources that may be measuresd by wealth or income, human capital of the family is associated with the skills and capacities of individuals that may be measured by education level of the parents. Although it is asserted that the concept of social capital is less tangible compared to financial and human capital, it is stated that social capital occurs in the associations among individuals and may be concretely observed. The strength of the association and interaction between parents and child, which is employed as a measure of the social capital available to the child in the family, allows children to have access to a wide variety of resources (Coleman, 1988).

The social capital theory is identified as a beneficial theoretical framework for examining parental involvement in education across the three main areas of social relations at home, at school, and in community. The concept of social capital is linked to parental involvement, and educational researchers focus on how parents constitute resources through their social networks to enhance school achievement of students (Shin, 2009). The development of the quality of social relationships within the family rests on the existence of adults in the family, and parents demonstrate willingness to devote and spend time and resources to help their children establish an educational and academic foundation (Coleman, 1988). Examining three forms of social capital, namely reciprocal expectations and obligations, norms and social control, and knowledge channels, Coleman (1988) views social capital as a tool to achieve an outcome. Social capital has a function and plays a pivotal role as a tool for parents to enhance academic success and educational attainment of children. Social capital acquired through school visits can take a form of knowledge about approaching organizations or existing enrichment, educational and intellectual activities as well as a form of

skills such as how to help with homework and reading at home, and how to undertake types of parenting. On the other hand, social capital can take the form of access to resources such as books, auxiliary resources, study helpers, as well as social control resources such as school-home contract over behavioral expectations and educational values. All these elements of social capital can enhance the school achievement of children and adolescents. When parents interact with other parents while attending parent-teacher association sessions or volunteering at school, parents may provide useful knowledge, resources available and parenting skills in the social network these parents represent. Parents pay attention to and are involved in their children thanks to this social capital. When parents can devote time to support education of their children at home, the education-related social capital that parents have, or the social capital obtained through their involvement and attention at school, improves children's school success (Coleman, 1988). Educational research focuses on parental involvement as social capital to investigate differences or changes across educational, academic, cognitive and behavioral consequences. As an aspect and dimension of parental involvement, parents' conversations and discussions with their children about education and school improves and enhances academic achievement and consistently reduces behavioral problems of children and adolescents (McNeal, 2001). Social capital is regarded as one of the most popular concepts used to account for the disparities in the educational and academic consequences of students (Ream, 2005), and has become a concept commonly preferred in educational sociology to describe the resources that enable educational and academic achievements in children and adolescents (Kao, 2004). Research pertaining to parental involvement examines different educational and academic outcomes within the framework of social capital (Hango, 2007; McNeal, 2001; Schlee, Mullis, & Shriner, 2009).

In order to examine the inequalities and gaps in cognitive and academic outcomes observed between children from lower SES families and higher SES children, parental involvement that can vary and differentiate in relation to level of parental education has been discussed. Parents from different social backgrounds or different socioeconomic strata may demonstrate different types of involvement owing to their differences in habitus as tendencies and predispositions towards definite forms of perceptions, attitudes and behaviors. Changes in the relationship between habitus and parental involvement can stem from differing in terms of having monetary resources, educational knowledge, and experiences or feelings with and confidence for the educational system (Grenfell & James, 1998). On the basis of their habitus, parents from lower socio-economic status can display less parental involvement in school of their child. For example, parents with low levels of education feel less confident about communicating and talking with teachers, administrators and another staff in school because they have less or lack information about the school system and familiarity with educational language or conversations and have their own negative educational experiences. Hence, lower educated parents can be less involved in school of their child. Parents have different cultures can value educational involvement at home more compared to involvement at school. While these changes in habitus can cause some parents to have less cultural capital towards the school, some parents can still be actively involved in their children at home in accordance with the values and practices in the school system (Lee & Bowen, 2006). Parents across social status or social classes highly value education. Laboring mothers from lower social class or socio-economic status value education of their children although they live negative experiences and misgive about the educational system (Grenfell & James, 1998).

Finding changes in the types of involvement displayed by parents from different social class or socio-economic status and social origins confirm Bourdieu's assertion that families change with regard to educational habitus. Based on the theory suggesting that individuals from different backgrounds and socioeconomic status differ with regard to educational habitus and cultural capital, the levels and impacts of parental involvement on academic achievement differed among families of different social backgrounds and socioeconomic status (Lee & Bowen, 2006). Children from upper socioeconomic status or upper social class families largely inherit different forms and quantities of cultural capital compared to their working class or low-income peers (Lareau, 2003). To extend the application of his conception of cultural capital, Bourdieu stresses the concept of habitus and describes habitus as a system to transpose lastingly tendencies in order to integrate all past experiences and functions as a pattern of perceptions, evaluations and behaviours at any time. Individuals from lower socioeconomic status tend to have less cultural capital or less acknowledged forms of cultural capital (Villalpando & Solorzano, 2005) and may benefit less from cultural capital in educational contexts or use less cultural capital (Strayhorn, 2010).

Bourdieu's theory of cultural capital, used for social stratification research in schools, asserts that schools reproduce a stratified social class system in society by bolstering the cultural capital of upper or middle-class individuals (Bourdieu & Passeron, 1990). Educational expectations, parental involvement and parenting style can impact academic attainment and academic achievement in view of the fact that they exhibit certain values that can be transferred to children. With respect to these values, education guides academic success and academic attainment when it is accepted as a tool for social mobility, social position, social status, social esteem, prestige and power. According to the cultural production

arguments of Bourdieu and Passeron (1990), parents' cultural resources try to explain the transmission of educational inequality across generations (De Graaf, De Graaf, & Kraaykamp, 2000). By exerting concerted cultivation efforts, parents contribute to the educational achievement of children and adolescents through cultural reproduction. Cultural reproduction theory maintains that children and adolescents from a more advantageous socioeconomic status reap the most benefit from their parents' educational involvement, as parents from higher socioeconomic status are best equipped to pass their cultural and social capital on to their children. This assertion underlines that higher SES parents socialize their children more academically and that this academic socialization is associated with the educational achievement of children and adolescents. Cultural socialization and education process that children are subjected and exposed to at home can equip children with interpersonal skills, connections and educational practices that are valued and rewarded by dominant social institutions like schools as social capital (Lareau 2003). Socialization and educational practices of parents introduce children family-specific cultural skills and speech or linguistic skills that continue along their lives. Children from families with higher socioeconomic status learn to value formal culture and are inclined to participate in intellectual activities such as visiting museums and reading, whereas children from families with lower socioeconomic status are less acquainted with such cultural activities and are provided with less information. As schools highly value and reward the possession of intellectual linguistic and cultural skills, the children of culturally talented from families in higher socioeconomic status are apt to perform better at school and gain a higher educational level compared to their peers in lower socioeconomic status (Bourdieu & Passeron, 1990). Less educated parents and their children who have historically performed more poorly in school may be coping with a value tension and parents can lower the thresholds of acceptable levels of educational achievement in a reconciling manner with their sense of efficacy (McLoyd, 1998).

Method

The current study addresses the relationships between parental involvement and students' academic achievement, and whether or not socioeconomic status mediates these relationships. It determines what the parents' involvement in children in terms of education is and how it is defined. It also examines whether there is a positive association between parental involvement and children's academic achievement, or whether applications resulting from parental involvement positively influenced children's academic performance. The author has identified studies examining parental involvement and its relationship with children's academic achievement through literature searches in PsycINFO, ERIC, and ISI Web of Science databases. This literature review selected and included research that (a) addressed the relationship between parental involvement and the academic achievement of preschool, primary, and secondary school children, (b) clearly provided definitions, measures, and academic outcomes of parental involvement, and (c) examined studies published in journals since 2003. The present study focuses on various research questions such as "Is there a positive correlational relationship between parents' involvement in education of their children in preschool, primary school, and secondary school and children's academic achievement?", "Does parental involvement influence children's academic success?" and "Does socioeconomic status play a role in the relationship between parental involvement and children's academic achievement?" and examines and analyzes studies within this framework.

In order to examine the relationship between parental involvement and academic achievement of preschool children, the present study is based on a total of 18 studies conducted mostly in the United States (15), as well as in Germany (1), Slovenia (1) and Greece (1) with research samples ranging from 82 to 20459 subjects. Studies included in this review ranged from Early Childhood Longitudinal Study-Kindergarten sample (ECLS-K) with relatively larger samples (N= 21260; N= 20459; N= 20356; N= 17212) conducted by researchers such as Aikens and Barbarin (2008), Chang, Choi and Kim (2015), Cooper, Crosnoe Suizzo and Pituch (2010), Schulting, Malone and Dodge (2005) respectively to studies with relatively small samples (N= 82; N= 103; N= 117; N= 167) by researchers such as Manolitsis, Georgiou and Tziraki (2013), Hill and Craft (2003), Crosby, Rasinski, Padak and Yildirim (2015), Dearing, McCartney, Weiss, Kreider, and Simpkins (2004) respectively. The present research attempts to address the impact of educational involvement of parents on their children's achievement in reading, mathematics, science, and social studies at kindergarten entry, and also to determine whether parental involvement is related to academic achievement at school entry. Moreover, the author focuses on cross-sectional and longitudinal studies demonstrating the role of socioeconomic status in the relationship between parental involvement and academic achievement of preschoolers. The research, for instance, addresses a longitudinal study (Englund, Luckner, Whaley, & Egeland, 2004), on the impact of maternal educational qualifications on both intelligence and academic achievement in the 1st and 3rd grades of children from low-SES families during pre-school years. On the other hand, it also focuses on both the effect of parental expectations on parental involvement and the effect of parental involvement on academic achievement. Reexamining another longitudinal study (Aikens & Barbarin, 2008), he focuses on the impact of socioeconomic status on children's primary reading skills so as to describe the reading trajectories of children from kindergarten to 3rd grade, and examines the literacy environment at home, parental

involvement in child's school and the contribution of family characteristics, such as parents' role tensions and difficulties, to reading inequalities in the kindergarten. Another study that generated longitudinal data on low-income children (Dearing, McCartney, Weiss, Kreider, & Simpkins, 2004) focuses on the effect of family educational involvement on children's feelings about literacy during preschool and on children's literacy achievement from kindergarten to 5th grade. Examining research studies conducted on kindergarten children and their mothers from different socioeconomic status families, the author analyses whether children's reading achievement, academic skills, academic and social abilities mediate mostly positive relationships between parent-school involvement and academic achievement, and whether they can explain this relationship.

In the studies conducted, multiple choice or open-ended tests are used to measure and evaluate children's basic skills such as understanding or familiarizing with writing, recognizing printed letters, initiating and terminating of sounds, rhyming sounds, proficiency in word recognition, as well as using receptive vocabulary, understanding and listing words in context. Their reading ability and skills were measured and evaluated using tests and scales such as the Peabody Individual Achievement Test-Revised (Markwardt, 1989), the Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1989), the Primary Test of Cognitive Skills (Huttenlocher & Levine, 1990), the Test of Early Reading Ability (Reid, Hresko, & Hammill, 1981) and the Woodcock-Johnson Tests of Achievement-Revised (Woodcock & Bonner, 1989), the Oral Language Development Scale (Duncan & DeAvila, 1986). In these studies, children's reading ability and capacity are evaluated in terms of their recognition of printed letters, initiation and termination of sounds as well as their ability to recognize and understand words. Children's mathematical ability and capacity are also evaluated in terms of their understanding of numbers, figures, shapes, sizes or size comparisons as well as addition, subtraction, multiplication and division. Measurements of parental involvement in education are based on the Home Observation for the Measurement of the Environment (HOME) Scale (Caldwell & Bradley, 1984) to measure the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), which is used by many studies (Gershoff, Aber, Raver, & Lennon, 2007; Magnuson, Meyers, Ruhm, & Waldfogel, 2004). This scale includes (a) providing cognitively stimulating materials at home, the number of children's books, records or CDs, the computer they use, (b) outdoor activities such as art, sports, music, (c) learning activities at home, parents' reading, telling stories and singing songs to children at home, nature and science, art, building, creating, playing games or soolving puzzles, doing daily routine household chores and activities related to physical practices. School-based involvement measurements include items measuring the frequency of parents' contacting and communicating with the teacher, attending open houses, parent counseling group meetings, parent-teacher conferences, school or classroom organizations, or volunteering at school.

Research has determined predictors of parental involvement as the frequency of both reading with their chidren, telling stories, nature and science, art, playing games, solving puzzles, singing songs as well as physical practices, building things, and daily routine household chores with their children during the preschool period (Cooper, Crosnoe, Suizzo, & Pituch, 2010). Parental behaviors or activities such as using grammatically correct sentences while talking to children, encouraging their children's language development, visiting the library with them were assessed as the quality of the family environment or family involvement (Fekonja-Peklaj, Marjanovic-Umek, & Kranjc, 2010). In the same way, parents have shown their involvement in their children before they start first grade as the frequency of language and literacy activities at home such as reading books, telling stories, playing alphabet or word games with patterns and blocks of the letters of the alphabet, writing letters or words, reading signs and labels aloud and singing songs (Foy & Kennedy, 2008). Researchers measured and assessed the level of involvement parents' exhibited by asking how often they teach their children to read letters, sounds and words at home in terms of literacy, as well as identifying the names of written numbers and digits, counting different objects, sorting different objects according to their size and shape, counting in a line number such as 1, 2, 3, 4 and doing simple calculations such as 1 + 1, 2-1 (Manolitsis, Georgiou, & Tziraki, 2013).

In an attempt to examine the relationship between parental involvement and academic achievement of primary and secondary school children, the present study is based on a total of 18 studies mostly conducted in the United States (7), as well as in Germany (2), China (2), in Hong Kong (2) , Taiwan (2), Western Europe (1), Ethiopia (1), France (1), Netherlands (1), Sweden It is based on a total of 24 studies conducted in (1), Japan (1), Singapore (1), Chile (1) and Greece (1) with research samples ranging from 18 to 55401 subjects. This review includes from studies with relatively larger samples (N= 55401; N= 43870; N= 10885; N= 10000) conducted by researchers such as Gubbins and Otero (2016), Hemmerechts, Agirdag and Kavadias (2017), Kloosterman, Notten, Tolsma and Kraaykamp (2011) and Myrberg and Rosen (2009) respectively to studies with relatively small samples (N= 18; N= 60; N= 203; N= 231) conducted by researchers such as Sheldon and Epstein (2005), Assefa and Sintayehu (2019), Tazouti and Jarlegan (2019), Rogers, Theule, Ryan, Adams, and Keating (2009) respectively. The author examines not only the relationship between parents' educational involvement and children's academic achievement but also the role of socioeconomic status plays on the relationship between parental involvement

and children's academic achievement. He also focuses on the influential factors associated with parents, such as parental involvement at home and school, the encouragement and support they provide for their children, their belief and trust in their abilities, and their expectations for their educational and academic success, as well as their impact on the academic achievement of primary and secondary school students. For instance, while reviewing a study of 415 third to fifth-grade students (Lee & Bowen, 2006), the author examines the effect and level of parental involvement on the academic achievement of primary school students according to race/ethnicity, socioeconomic status, and *parental educational attainment*. While he focuses on the strongest observed relationship between the educational involvements of non-poor, more educated European-American parents and their children's academic achievement, he also argues that poor, low-educated parents have obtained less benefit from their involvement efforts as far as their children's academic success is concerned. Cultural capital in families and especially *parents*' *level*s of *education* are regarded as the most important dimension of socioeconomic status that affects school performance in children. The present research, for instance, re-examining a study of 10000 students in grade 3 (Myrberg & Rosen, 2009), examines whether variables such as the number of books at home, early literacy activities, and emergent literacy abilities at the time for school start mediate the impact of parents' education on children's literacy development or the association between the education level of the parents and the reading success level of the children. At this point, attention is drawn to the impact of parent-initiated cultural reproduction through reading aloud activities with their children in informal environments during very early childhood, and the effect of children's knowledge of the written language at the time for school start on their reading acquisition. In a study (Kloosterman, Notten, Tolsma, & Kraaykamp, 2011) which employed panel data from four waves of the Dutch primary education cohort study (PRIMA), the level of parents' educational involvement for their children and the degree of reading education and socialization they provided and the success of lower- SES parents throughout primary school as well as its contribution to the differences and gaps in academic performance observed between children from low-SES and higher- SES families were examined. While re-examining a longitudinal study (Dearing, Kreider, Simpkins, & Weiss, 2006), the present research focuses on the association between the educational involvement of low-income families for their children from kindergarten to 5th grade and their literacy performance, and calls attention to the positive relationship between increased school involvement in families and improved levels of literacy performance in children. At this point, it looks at a cause-effect relationship in such a way that when parental involvement levels are low, achievement gaps are seen in average literacy performance between the children of highly-educated and lower-educated mothers, and that no gaps exist when levels of parental involvement are high. In a simiar manner, a re-examination of a study (Hemmerechts, Agirdag, & Kavadias, 2017) conducted on children with an *average age of 10 years* in the Western European region focuses on parental involvement in literacy activities prior to primary education and the positive association with an increased level of literacy in children and parent education. Reviewing a study (Gubbins & Otero, 2016) that employes data from a sample of 55401 students, the present study examines the impact of parental involvement perceived by fourth-grade students on their language and mathematics performance, and evaluates parental involvement style, household income and educational attainment of parents. It calls attention to the fact that factors such as education level are associated with and significantly predict higher student scores in language and mathematics tests. Evaluating a study conducted on 1309 pairs of sixth-grade students and their parents (Gonida & Cortina, 2014), different types of parental involvement in homework such as autonomy support, control, interference and cognitive engagement for completing homework and the association between academic achievement in primary school and secondary school students are examined. The positive effect of parental involvement in homework on learning and academic achievement is also emphasized. Tests and scales used to measure and evaluate the academic achievement or literacy performance of primary and secondary school students included the Woodcock-Johnson Psycho-Educational Battery-Revised (WJ-R; Woodcock & Johnson, 1989), the Letter–Word Identification subscale, Peabody Individual Achievement Test (PIAT), and the Progress in International Reading Literacy Study (PIRLS) tests and scales as reading attitude indicators (Martin, Mullis & Kennedy 2007). Evaluations, grades and scores reported by teachers in basic academic fields such as reading and mathematics are also considered as a measure or indicator of academic achievement of students.

Analyzing the Association between Parental Involvement and Academic Success of Preschool Children

When we review the studies dealing with the parental involvement in the education of children during the preschool period, the relationships between parents' home involvement, such as reading to children and engaging them in learning activities, as well as school involvement, and academic success of children were examined. Literacy activities home at undertaken by parents for their children were conceptualized as written speaking experiences in which children interactively engage with their parents (Burgess, Hecht, & Lonigan, 2002; Kirby & Hogan, 2008; Tafa, 2011). Home activities are divided into two distinct categories of

Table 1: The relationship between parental involvement and academic achievement of preschool children in the studies

Authors	*Sample and Country*	*Type of Parental Involvement Indicator*	*Academic Outcome*	*Effect*	*Mediating Factor*
1. Hill and Craft (2003)	N = 103 U.S.	(1) Valuing education, (2) engaging children in educational activities at home (3) engagement in school activities	Reading and math achievement	Positive	
2. Dearing, McCartney, Weiss, Kreider and Simpkins (2004)	N = 167 U.S.	(1) Making school visits (2) volunteering in the classroom, (3) participating in Parent Teacher Association (PTA)	Literacy skills	Positive	Maternal Education
3. Englund, Luckner, Whaley and Egeland (2004)	N = 187 U.S.	(1) Parents' expectations for their children's educational attainment (2) parental involvement in children's lessons and school activities, (3) participation in parent conferences and other meetings with teachers	Academic development	Positive	
4. Schulting, Malone and Dodge (2005)	17212 U.S.	(1) Participating in school or classroom organizations, (2) paremt-teacher conferences, (3) parent-teacher association (PTA), (4) parent-advisory group or political committee meetings and (5) volunteering at school,	Reading, general knowledge and math achievement	Positive	Socio-economic Status
5. Hughes and Kwok (2007)	443 U.S.	(1) Parent-school relationship rated and reported by teachers	Reading and math achievement	Positive	
6. Aikens and Barbarin (2008)	21260 U.S.	(1) Home literacy activities of parents for their children, (2) parents' involvement in children's school	Reading achievement	Positive	Socio-economic Status
7.Cooper, Crosnoe, Suizzo and Pituch (2010)	20356 U.S.	(1) Engaging children in home learning activities, (2) providing materials for cognitive stimulation of children, (3) signing up children in organized activities outside the home, (4) parents' involvement in school of their children	Reading and math achievement	Positive	
8.Fekonja-Peklaj, Marjanovic-Umek and Kranjc (2010)	229 Slovenia	(1) Quality of the home learning environment	Literacy skills	Positive	Socio-economic Status
9. Durand (2011)	2051 U.S.	(1) Parents' engaging chidren in school readiness activities at home such as reading with them, telling stories, singing songs, doing house chores, (2) parents' participating in school organizations, teacher conferences, Parents Teacher Association (PTA) meetings and parent advisory groups, and volunteering at school,	Literacy skills	Positive	
10. Graves and Brown Wright (2011)	14951 U.S.	(1) Parents' reading books to their children, telling stories, and playing games, (2) taking children to library, museums and sporting event, (3) *setting rules* for*TV-viewing* (4) parents' involvement in children's school	Reading achievement	Positive	

Authors	*Sample and Country*	*Type of Parental Involvement Indicator*	*Academic Outcome*	*Effect*	*Mediating Factor*
11. Stylianides and Sytylianides (2011)	10369 U.S.	(1) Parental involvement and interactions such as reading and telling stories to their children at home	Reading, science and math achievement	Positive	Socio-economic Status
12. Youn, Leon and Lee (2012)	17565 U.S.	(1) Parents' talking to children at home, reading books, telling stories (2) taking children to educational trips such as visiting library, visiting museums, attending concerts, (3) participating in school organizations, volunteering at school, and fundraising activities.	Reading and math achievement	Positive	
13. Manolitsis, Georgiou and Tziraki (2013)	82 Greece	(1) Parents' teaching their children letter sounds, reading to them and the number of children's books at home, (2) teaching children to identify the names of written numbers and digits, to count different objects, to sort different objects according to their size and shape, as well as counting in a line number such as 1, 2, 3, 4 and doing simple calculations such as 1 + 1, 2-1	Reading and math fluency	Positive	
14. Chang, Choi and Kim (2015)	20459 U.S.	(1) Parents' informal contact and phone contact with school (2) parents' participating in parent-teacher conferences (3) parents' participating in voluntary school activities	Math achievement	Positive No effects	Socio-economic Status
15. Crosby, Rasinski, Padak and Yildirim (2015)	117 U.S.	(1) Parents' reading to their children, (2) parents tutoring for their children reading	Literacy achievement	 Positive	
16. Kicklighter, Dove, Neuharth-Pritchett, Wright and Wallinga (2015)	3808 U.S.	(1) Parents' discussing the school day with their children (2) parents' participating in school activities, (3) parents' keeping contact with teachers (4) parents' volunteering at school	Literacy achievement	Positive No effects	
17. Ogg and Anthony (2020)	2352 U.S.	(1) Home-based parental involvement such as telling children stories, singing songs with them, helping them do arts and crafts, engaging them in daily household chores, playing games or doing puzzles, talking about nature or science projects, Parents' engagement with their children at home, such as building something or playing with construction toys, playing a sport or exercise together, reading, writing or working with numbers, reading books	Reading, math and science achievement	Positive	Socio-economic Status
18.Mikus, Tieben and Schober (2021)	1632 Germany	1) Cognitive stimulation of children as an indicator of concerted cultivation (2) engaging children in organized leisure-time activities (3) engagement in music events	*Cognitive skill development* Math and reasoning skills development	Positive	Socio-economic Status

activities as formal and informal literacy activities (Sénéchal, Lefevre, Thomas, & Daley, 1998). Formal literacy activities are described as children's direct engagement with written concepts through parents' teaching their children to read or write letters and words. Studies refer to parental mediation in teaching children to read or write letters and words (Aram & Levin, 2002; Umek, Podlesek, & Fekonja, 2005). Direct parental involvement in teaching children to read or write letters and words contributed to reading ability of children through the impact of letter knowledge and phonological awareness (Foy & Mann, 2003; Hood, Conlon & Andrews, 2008; Sénéchal & LeFevre, 2002; Stephenson, Parrila, Georgiou & Kirby, 2008). Meanwhile, informal literacy activities are defined as exposing children to writing through joint literary activities such as shared reading and library visits, and these activities contributed to later reading by influencing vocabulary (Roth, Speece, & Cooper, 2002; Sénéchal & LeFevre, 2002; Torppa, Poikkeus, Laakso, Tolvanen, Leskinen & Leppanen, 2007). Parents' engaging their children at home with school readiness activities such as reading, telling stories, singing songs, and doing household chores positively affected literacy skills of children (Durand, 2011). The home learning environment was significantly related to reading and math achievement (Anders, Rossbach, Weinert, Ebert, Kuger & Lehr, 2012; Rodriguez & Tamis-LeMonda, 2011). Parents' undertaking activities related to reading and science for their children at home was associated with reading and math achievement of children and apperared to be more closely compatible with the academic demands they encountered in the classroom compared to other home learning activities (Cooper et al., 2010). While parents' teaching of literacy skills to children predicted reading fluency through the impacts of letter knowledge and phonological awareness, their teaching their children counting and numeracy skills predicted mathematical fluency in children through the impacts of verbal counting. Both home literacy and digital environment played a crucil role in attaining early reading and mathematics achievements, and these literacy and numeracy skills mediated the effects of literacy at home and digital environment (Manolitsis et al., 2013). As another type of involvement, parental involvement in school of their children showed the frequency and quality of parents' contact and communication with teachers and participation in school events. Studies have revealed that a positive relation exists between parents' involvement in school of their child and the academic success of preschool children (Aikens & Barbarin, 2008; Chang et al., 2015; Cooper et al., 2010; Dearing et al., 2004; Englund et al.,2004; Hill & Craft, 2003; Hughes & Kwok, 2007; Sibley & Dearing, 2014). Parental involvement in school of their child such as attending school or classroom organizations, parent-teacher conferences, parent-teacher association (PTA), parent-advisory group or policy committee meetings, and volunteering at school significantly and positively predicted reading and math performance of children (Schulting, Malone & Dodge, 2005).

Analyzing the Relationship Between Parental Involvement and Academic Achievement of Elementary and Secondary Children in the Studies

Research has established many aspects and dimensions of parents' involvement in the education of their primary and secondary school children. Parents' educational aspirations and expectations, encouraging and supporting children to learn as well as early home reading activities such as reading to children, telling stories and other types of home-based parental involvement, and academic socialization processes such as supervising and helping with homework, talking about and discussing educational topics with children have been addressed in these studies. On the other hand, parental involvement in school of children is defined by elements such as attending conferences with teachers, attending Parent-Teacher Association (PTA) meetings, visiting the classroom and volunteering at school.

As can be seen, studies dealing with the association between parental involvelment and academic results of primary and secondary school students, reading and mathematics achievement in particular, were analyzed in Table 2. At this point, levels of positive relationships ranging from small to medium were observed between parental involvelment and school success of students. Academic socialization of children was described as a type of involvement exhibited by parents. Parents tried to educate and socialize their children academically by conveying the value and importance of education and their educational aspirations and expectations to children. Parental expectations reflected parents' assumptions that their children would improve academic performance and that they would perform well in school at present and in future. In a study they conducted on a sample of 55401 students, Gubbins and Otero (2016) have found that parents' expectations regarding the highest level of education their children can reach in the future have a positive and significant impact on children's performance in language and mathematics and can explain 15.8% of children's language performance and 19.3 % of their mathematical performance. Another study established that a positive and significant association existed between the parents' educational expectations for their children and self-regulated learning (SRL), and the standard regression coefficient of parents' educational expectations of their children on self-regulated learning (SRL). It was also found that it had the strongest beneficial effect with standardized regression coefficients ($\beta = 0.22$). The positive effect of parents' educational goals and aspirations on children's self-regulated learning processes was most probably realized by means of their positive influence on children's self-motivation and self-assessment standards

Table 2: The relationship between parental involvement and academic achievement of elementary and secondary children in the studies

Authors	*Sample and Country*	*Type of Parental Involvement Indicator*	*Academic Outcome*	*Effect*	*Mediating Factor*
19. Domina (2005)	1445 U.S.	(1) Parents' helping with children's homework, (2) checking homework, (3) attending conferences with teachers and Parent-Teacher Association (PTA meetings (4) volunteering in and outside the class,	Reading and math achievement	Positive	
20. Sheldon and Epstein (2005)	18 U.S.	(1) School practices aimed at involving parents in education of their children	Math achievement	Positive	
21. Dearing, Kreider, Simpkins and Weiss (2006)	281 U.S.	(1) Attending Parent-Teacher Association (PTA) meetings (2) visiting the classroom and volunteering at school	Literacy achievement	Positive	Socio-economic status
22. Lee and Bowen (2006)	415 U.S.	(1) Parents' educational expectations for their children, (2) talking about and discussing educational topics with their children (3) managing time of their children on literacy and nonliterary activities, (4) helping with homework (5) visiting the school, volunteering in the classroom/school and attending Parent-Teacher Association (PTA) meetings	Reading and math achievement	Positive	Socio-economic status
23. Hung (2007)	261 Taiwan	(1) Parents' educational aspirations and expectations, (2) children's perceptions of the support they receive at home, (3) parents' involvement in school of their children	Reading and math achievement	Positive	
24. Myrberg and Rosen (2009)	10000 Sweden	(1) Early reading activities at home such as reading to children and telling them stories	Reading achievement	Positive	Socio-economic status
25. Rogers, Theule, Ryan, Adams and Keating (2009)	231 U.S.	(1) Parents' encouring and supporting their children for learning, (2) actively managing the learning environment	Reading and science achievement	Positive	
26. Tam and Chan (2009)	1309 Hong Kong	(1) Parents' supporting autonomy during the process of involvement in homework (2) providing structure	Reading performance	Positive	Socio-economic status
27. Xu, Kushner Benson, Mudrey-Camino and Steiner (2010)	10120 U.S.	(1) Parents' educational expectations from their children, (2) involvement of parents in school, (3) providing extra-curricular activities	Reading achievement	Positive	
28. Kloosterman, Notten, Tolsma and Kraaykamp (2011)	10885 Netherland	(1) Parents' educating and socializing their children for reading, (2) parental involvement in school	Reading and math achievement	Positive	Socio-economic status
29. Phillipson and Phillipson (2012)	1279 Hong Kong	(1) Home involvement of parents in their children's education, (2) parental expectations for children (3) Parents' beliefs in their children's ability (4) parental involvement in school	English and Chinese language achievement and math performance	Positive	Socio-economic status
30. Stright and Yeo (2013)	712 Singapore	(1) Parents' talking about and discussing school issues, (2) Providing help with homework	English, science and math achievement	Positive	

Authors	*Sample and Country*	*Type of Parental Involvement Indicator*	*Academic Outcome*	*Effect*	*Mediating Factor*
31. Dumont, Trautwein, Nagy and Nagengast (2014)	2830 Germany	(1) Parents' responsiveness for their children's homework and provide parental structure	Reading achievement	Positive	
32. Gonida and Cortina (2014)	282 Greece	(1) Parents' supporting autonomy during the process of involvement in homework, (2) checking children's homework, (3) interfering with homework	Composite score based on school grades in language and math	Positive Negative	
33. Moroni, Dumont Trautwein, Niggli and Baeriswyl (2015)	1685 Germany	(1) Parents' showing supportive attitutude during the process of involvement in homework (2) parents' intrusive behaviour	Reading achievement and language scores	Positive	
34. Gubbins and Otero (2016)	55401 Chili	(1) Parents' educational expectations for their children	Language and math performance	Positive	
35. Hemmerechts, Agirdag and Kavadias (2017)	43870 Western Europe	(1) Parents' late parental involvement such as listening to children's reading, talking about and discussing reading in classrooms, helping children to read for school,	Reading achievement	Positive	Socio-economic status
36. Loughlin-Presnal and Bierman (2017)	356 U.S.	(1) Parents' educational expectations for their children	Reading achievement	Positive	
37. Jhang and Lee (2018)	8810 Taiwan	(1) Parents' talking and discussing with children, (2) setting family rules, (3) parents' school-based participation	Reading and math achievement	Positive	
38. Assefa and Sintayehu (2019)	60 Ethiopia	(1) Parents' encouraging and supporting their children's education and learning by spending time, resources and effort, (2) *parental expectations* of their children's *academic success,* (3) encouraging children about the importance of homework, (4) talking about and discussing school events with children	Class scores	Positive	
39. Otani (2019)	3192 Japan	(1) Parents' educational aspirations and expectations for their children, (2) talking about and discussing school issues with children	Academic scores	Positive	Socio-economic status
40. Tazouti and Jarlegan (2019)	203 France	(1) Parents' educational aspirations and expectations for their children, (2) helping children's lessoms, schoolwork and homework, (3) discussing a school day with children, (4) participating in school life such as attending school trips	French and math achievement	Positive	Socio-economic status
41. Xiong, Qin, Wang and Ren (2021)	2381 China	(1) Parents's talking about and discussing with children the subjects that children study at school, know what they do and how they do it at school, spending time with their children on issues related to schoolwork, (2) helping children with homework, (3) getting to know teachers and attending parent-teacher conferences	Chinese, math and English grade points	Positive	

Authors	*Sample and Country*	*Type of Parental Involvement Indicator*	*Academic Outcome*	*Effect*	*Mediating Factor*
42. Zhang, Jiang, Huang, Ming, Ren and Wang (2021)	842 China	(1) Parents' socializing their children academically by selecting extra classes, talking about and discussing school activities that children attend as well as topics related to what they study at school, and planning for future education, (2) parental involvement in supervising their children at home, such as checking homework of their children, limiting their television viewing and going out (3) parental involvement in school, such as attending parent meetings, talking about children's school performance with teachers face-to-face, on the phone or on the Internet, visiting the classroom, going to school organizations attended by their children	Chinese and math achievement	Positive	Socio-economic status

(Xu, Kushner Benson, Mudrey-Camino, & Steiner, 2010). Parents encouraging and supporting their children to learn and actively managing learning environment were positively associated with school success of children. Providing encouragement and support for children's learning, such as praising their efforts, performance and progress and informing children know that they matter them and their school achievement and performance significantly associated with higher academic success (Hung, 2007; Rogers, Theule, Ryan, Adams, & Keating, 2009). A positive and significant association was found between the parental provision of appropriate environments and materials supporting learning and the academic achievement of children. Assigning homework that requires student-parent interaction, conversation and discussion about mathematics, providing and using math materials and resources recommended by teachers at home have been an effective support for students to learn math. Certain types of effective support were found to be positively related to math success of students even after controlling for influential variables such as prior school success of students (Sheldon & Epstein, 2005).

Studies have revealed a positive relationship between parental involvement in homework and school success of children. Patall, Cooper, and Robinson (2008) concluded that parental involvement in homework was weakly associated with children's school success and had at best a slightly positive overall effect on children's academic success. Another study suggested that such an involvement was beneficial for students when parents were engaged in children's homework process. Parental involvement in homework has positively affected the academic success of students by enhancing the development of attitudes and qualities such as children'motivation and self-regulation skills that support learning (Xu et al., 2010). In the same manner, Tam and Chan established that parents' helping with and checking homework were positively related to children's school success. When parents were trained to provide help for their children, their help with homework was significantly related to students' positive attitudes about math homework and math achievement. Parental involvement in homework was positively related to school success of students when it included attributes such as supporting autonomy, good structure, positive influence, positive beliefs, and emotional support (Cooper et al., 2010; Dumont, Trautwein, Nagy & Nagengast, 2014; Pomerantz et al., 2007). Another study has revealed similar findings. Parental involvement in homework seems to be positively associated with students' academic success provided that it is supportive, and when students are perceived as intrusive and controlling in the process of doing homework, parental assistance is negatively related to school success of students (Moroni, Dumont, Trautwein, Niggli & Baeriswyl, 2015).

Studies have pointed to parental involvement in homework as well as their involvement in their children's reading, and reported that reading to children at home was significantly associated with primary school children's literacy performance. Using data from the 2006 wave of Progress in International Reading Literacy Study (PIRLS) conducted on 43,870 pupils (with an average age of 10 years) in 10 Western European regions, Hemmerechts, Agirdag, and Kavadias (2017) reported that late parental involvement such as listening to children's reading, talking about and discussing reading in classrooms, helping children to read for school, etc. had a positive impact on children's reading success in school. Parents who employ early reading activities at home, such as reading and telling stories for children, contributed to their children's reading achievement in school (Myrberg & Rosen, 2009). The extent to which parents instruct or socialize children to read at the beginning of their educational career was related to children's academic and language performance in subsequent elemantary school classes. In the process of reading instruction or socialization,

parents trained and socialized their children by providing reading examples. Parents deliberately and purposefully encouraged, nurtured and developed their children's proficiency and reading skills through direct education such as reading aloud to their children or talking and discussing books with their children (Kloosterman, Notten, Tolsma, & Kraaykamp, 2011). Children were informed by replicating the behavior of their parents, such as acquiring reading preferences and involvements, by imitating and modeling, thus expanding their linguistic capital (Lareau, 2003). Towards the process of entry into the primary school, parents' setting an example as reading role-models for their children, giving them reading examples and guiding them for reading as well as providing an initial familiarity with reading positively affected the academic performance of children (Kloosterman et al., 2011). Another study pointed out that the parental involvement in school and the educational expectations of parents each had the largest positive effects on students' reading achievement both with a standardized regression coefficients of $\beta = 0.22$ (Xu et al., 2010). Attending meetings with teachers and Parent-Teacher Association (PTA) meetings, volunteering in and outside the classroom as parents' involvement in their children's school were all positively related to academic achievement test scores (Domina, 2005; Dearing, Kreider, Simpkins, & Weiss, 2006; Hung, 2007; Kloosterman et al., 2011; Lee & Bowen, 2006).

Analyzing the Relationships between Socioeconomic Status, Parental Involvement and Children's Academic Achievement

Socioeconomic status played a pivotal role in the relationship between parental involvement and school success of students. Family income and education level of parents were considered as indicators of socioeconomic status. Using data from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) on 20,356 kindergarten students, Cooper, Crosnoe, Suizzo, and Pituch (2010) assessed in their research not only children's reading performance in terms of recognizing letter and starting and finishing sounds, seeing and understanding words but also their numerical or mathematical performance in terms of recognizing and understanding numbers, shapes, relative sizes, addition and subtraction, multiplication and division, and rated them as medium or high. In the study, parental involvement in education partially mediated the relationship between poverty in the family and children's kindergarten achievement in math and reading. On the other hand, a separate examination of the learning activities at home revealed that activities associated with reading and science explained the relationship between family poverty and children's kindergarten success. Poor parents ensured less cognitively encouraging and progressing material for their children, less engaged them in organized activities such as arts, sports, and music, and less involved in their children's education compated to wealthier parents. In a study carried out on mothers with different education levels and 229 Slovenian children who attended kindergarten *prior to primary school* for different periods (such as five years, three years or zero years), the quality of mother's education and family environment or family involvement as an indicator of socio-economic status was found to have a significant impact on the storytelling skills of preschool children. Children of mothers with high education showed more advanced storytelling skills compared to children of mothers with low-education. It was observed that the difference in the storytelling skills of children whose mothers had either high or low levels of education was greatest among those who entered preschool in the first year of life (Fekonja-Peklaj et al., 2010). In another study they conducted to examine the relationship between parent-child literacy activities, socio-economic status, and reading literacy, Hemmerechts, Agirdag, and Kavadias (2017) used data from the 2006 wave of International Literacy Research Progress (PIRLS) on 43,870 students with an average age of 10 years in 10 Western European regions and found a positive association between early parental involvement in literacy activities prior to elemantary school and an enhancing level of reading literacy and parental education. Children from families in lower socioeconomic status had lower reading literacy and reading attitudes compared to their peers from families in higher socioeconomic status. They experienced later involvement of parents in literacy activities in the fourth year of their formal education. Parents' late involvement in literacy activities was an adjustment for worse or better reading literacy during primary school. In the same manner, another study pointed to a strong positive association between parental education and children's subsequent language and numeracy performance in elemantary school. Parental socialization and education of their children to read and parental school involvement accounted for some of the academic performance disparities observed between children in lower socioeconomic status and children in higher socioeconomic status, particularly in terms of children's language achievement. Children who were trained and socialized in reading by their parents preserved or expanded their advantage by exhibiting higher language performance than their peers who did not receive early reading training and socialization (Kloosterman et al., 2011).

In their longitudinal research of socioeconomic status conducted on 187 low-income children, Englund, Luckner, Whaley and Egeland (2004) established that the education level of the parents was related to both the quality of the education ensured by parents to their children and the intelligence of their children. They also found that it was associated with parental involvement and educational expectations for their children. When the children were 42 months old, the researchers, who measured the quality of the the mother's instruction in a videotaped laboratory environment where the

mother-and-child pairs participated in four developmentally proper sets of problem-solving situations, rated how well the mother structure the situation and coordinated her behavior to activity and needs of the child for aid and support. Mothers with higher education levels ensured more support for their children in pre-school problem-solving situations, were more involved in their children's schooling, and had higher educational expectations for their children in first grade. Compared to children of mothers who were uninvolved in their children or failed to ensure proper structure for their children in laboratory tasks, children of mothers who ensured proper structure for their children and coordinated their own behavior to their activities in problem-solving tasks during early childhood had higher IQ scores. In turn, children with higher IQ scores obtained higher academic success in first grade. High academic success in first grade resulted in higher parental expectations, greater parental involvement and higher success in third grade. Children's high academic success in primary school contributed to a process that supported high academic success at later ages. In the same manner, another longitudinal study of 167 children from low-income families found that low-income parents' educational involvement in their children in kindergarten indicateed its impact on children's literacy achievement and their feelings about literacy. It also examined whether the effects on literacy skills of children were greater for children of less educated mothers compared to other children. The study also established that the development of children's feelings about literacy between kindergarten and fifth grade was associated with the joint impacts of maternal education and parental educational involvement. Children of more educated parents who were highly involved in education of their children notified the most positive feelings about literacy across the research period, whereas children of less educated parents who were also highly involved in education of their children notified the least positive feelings about literacy in kindergarten. Higher levels of parental involvement in educational settings were significantly related to higher literacy performances, particularly in children whose mothers were less educated. The educational involvement provided by low-income parents for their children, who may be at risk for educational and academic failure, was most important and beneficial for the children of the least educated mothers. Although parental involvement was related to higher academic success for children came from higher socioeconomic status and social class or higher socioeconomic status origins and could be partially explained by the educational level of mothers, no existing evidence of academic achievement gaps was found among children of higher-educated and less-educated mothers when parental involvement was high (Dearing et al., 2004). Another study of socioeconomic status conducted on 372 Korean and 309 Japanese first and second year students revealed that socioeconomic status was associated with students' competence, the interaction between the maternal education and parenting self-efficacy was significant, and the positive impacts of maternal education were increased by higher parental self-efficacy. In the Japanese sample, maternal education was significantly associated with school-associated ability of children, and more educated mothers mediated the relationship between parenting self-efficacy, maternal education, and school-related competence of children, with higher parenting self-efficacy of more educated mothers offering their children increased advantages. In the Korean sample, on the other hand, family income seemed to be related to parental involvement, and parenting self-efficacy partly mediated the association between family income and school success of children (Holloway, Campbell, Nagase, Kim, Suzuki, Wang, Iwatate & Baak, 2016). In their study of 415 third through fifth grade students, Lee and Bowen (2006) found that poverty, low income, and race/entity consistently played a significant role in predicting school success of children above and beyond the impacts of parental involvement. As an indicator of socio-economic status, the education level of the parents had positive effects on the school success of the children while the parental involvement mediated these positive impacts of the parental education on the school achievement of the children. When parents canalized their direct parental involvement or social capital, they were able to transfer their educational achievements to their children as human capital so that they could develop their own human capital or increase their academic achievement. These research findings seemed to be consistent with Coleman's (1988) theory of social capital. Parental involvement in school and their educational expectations were most strongly associated with educational success of children. Non-poor and non-low-income higher-educated European-American parents were found to be more involved in schooling of their children and conveyed higher educational expectations to their children. These findings that supported the concept of cultural capital originating from the consistency between family habitus and education and providing academic benefits for dominant groups revealed that higher educational expectations of parents for their children were related to higher academic success across different SES families. This seemed to be consistent with previous research findings emphasizing the importance of parents' higher educational expectations for their children (Fan & Chen, 2001; Feuerstein, 2000; Seginer & Vermulst, 2002; Smith-Maddox, 1999).

Discussion

It has been established that parental involvement is consistently associated with children's school success in various aspects and dimensions. The strongest relationship was observed between the patental educational expectations and aspirations and the

academic achievement of the children. Parental beliefs and attitudes predicted higher academic achievement as compared to behavioral types of parent involvement. High parental educational expectations for their children encouraged, nurtured and enhanced their motivation to involve and engage in the education of their children (Yamamoto & Holloway, 2010). Eccles's expectancy-value theory (EVT) related to academic achievement motivation argues that individuals' expectations and subjective task value (STV) have a direct impact on students' academic success and performance. Educational expectations are defined as individuals' current perceptions of activities and parental beliefs about children's skills and academic success in the future (Brown & Putwain, 2021). When parents expected higher educational consequences for their children, they were highly motivated to involve and engage in education of their children, they were able to ensure learning prospects and opportunities to improve academic performance of their children, and they were able to continue positive communication and interaction with their school (Jhang & Lee, 2018). Educational aspirations and expectations of parents for their children have been associated with increased reading and math scores for children, regardless of socioeconomic status or ethnicity (Chen & Gregory, 2010; Lee & Bowen, 2006). Although it has often been claimed that parental involvement only decreases as children advance into middle school and high school (Desforges & Abouchaar, 2003), it is indicated that parental involvement does not decrease as children grow into young adulthood. The current re-examination most likely concluded that parental involvement did not necessarily wane, and the parental involvement changed more over time and direct parental involvement activities for their children decreased as they grew older. Practices based on direct parental involvement such as reading and learning together with their children and guiding learning or learning styles were most beneficial to children in kindergarten and primary school during early or earlier phases of education. It was discussed that when children grew older, it was more important for parents to produce conditions that could encourage, nurture and enhance academic achievement, rather than guiding or helping their children to learn. Parents were able to positively affect their children's academic outcomes to the extent that they set high academic expectations for the education of their children, refrain from interfering or controling, and encourage, motivate and support their children for learning and academic achievent by creating opportunities for them.

A multitude of studies have attempted to identify whether socioeconomic status is related to students' academic achievement or whether it affects students' academic achievement. Parental involvement was positively related to children's school success, regardless of socioeconomic status or social class, when measured with respect to parental educational expectations or aspirations for their children. It was argued that there was a consistent relationship between parents' higher educational aspirations and expectations for their children and children's higher academic success, irrespective of socioeconomic status or social class. All children, regardless of socioeconomic status or social class, benefited from parents who expected them to perform well in school (Lee & Bowen, 2006). Previous research has found the mediating role of parents' educational expectations in the relationship between socioeconomic status and children's academic achievement (Zhan, 2006; Zhou, 2013). Expectancy-value theory focuses on the role of family and individual factors in enhancing the academic development and success of children and adolescents. Parental and family characteristic such as socioeconomic status could influence children's and adolescents' educational expectations and beliefs through education and socialization processes (Jacobs & Eccles, 2000). It has been indicated that the socioeconomic status is positively and strongly *correlated* with educational expectations from childhood and adolescence to adulthood and educational expectations of children and adolescents (Mello, 2009; Trusty, 1998). The values and expectations of children and adolescents could directly impact their academic achievement performance, persistence and career choices (Eccles & Wigfield, 2002). Adolescents with higher educational expectations were more academically motivated to strive harder to maintain and pursue their academic goals, and therefore were far more likely to perform well in school and obtain higher educational attainment (Ou & Reynolds, 2008; Wigfield & Eccles, 2000). Educational expectations were positively correlated with higher academic achievement in children and adolescents (Guo, 2014). Socioeconomic status has been associated with academic achievement via educational expectations. Compared with their peers from families in low-**S**ocioeconomic status, adolescents from families in higher-socioeconomic status had greater expectations for future educational outcomes and performed better on academic tests (Ren, Zhang, Jiang, & Huang, 2021). Academic expectations, subjective task value (STV) and their interaction had a mediating role in the relationship between socioeconomic status and academic achievement. Parent education was directly associated with students' academic achievement, whereas socioeconomic status was indirectly correlated with students' grades via parental expectations, STV and their interaction. Students from families with higher parental educational attainment and more property, wealth, and economic assets performed better on exams based on their parents' higher expectations. Higher expectations and subjective task value (STV) were associated with higher education levels of parents. Parents with higher socioeconomic status and higher education attainment communicated their educational expectations to their children, guided their

educational trajectories and career aspirations, and acted as role models for their children. They have provided their children with more essential educational resources and more and better educational experiences. Children from families with higher SES and higher education levels are educated and socialized with socio-cultural expectations and values according to their families' socioeconomic status. Acting as role-models, parents provided these children with more diverse experiences and encouraged, nurtured and enhanced their learning and academic achievement for better educational aspirations and educational outcomes (Brown & Putwain, 2021). On the other hand, the researchers stressed that the profits of parental educational expectations were weaker in low-income and poor children, and suggested that the same high levels of educational expectations in poor and non-poor families were related to lower academic achievement of children in low-income and poor families and that these differences often reflected lower levels of human, cultural, and social capital in lower-income families compared to their middle- and upper-income peers (Lee & Bowen, 2006). The interaction between educational expectations and poverty appears to be more consistent and compatible with Bourdieu's theory of habitus and cultural capital and inequalities in capital utilization prospect rather than Coleman's concept of social capital. Differences in the level of involvement of parents from various socioeconomic backgrounds supported Bourdieu's concept of habitus. The most common type of involvement and high educational expectations of non-poor and non-low-income higher-educated European-American parents as the dominant groups demonstrated its strongest relations with academic achievement that could be attained as a result of better consistency among educational practices, skills, knowledge and values that were appraised and rewarded at school by the habitus of these parents.

Socioeconomic status or social class created the advantaged and disadvantaged conditions for children regarding education and had an effect on the association between parental involvement and students'academic achievement. Higher socioeconomic status parents were more skilled and capable in positively influencing their children's academic performance and their children's schooling because they had more benficial cultural assets under their control compared to lower socioeconomic status parents (Kalmijn & Kraaykamp, 1996). They were more involved and engaged in general development and schooling of their children, which would be beneficial to their career. They also participated more in school activities and played an important role in their education (Lareau, 1987; McNeal, Jr.1999; Fan & Chen, 2001). Higher socioeconomic status parents invested more in school-associated activities and generally spent more time with their children compared to lower socioeconomic status parents (Zick, Bryant, & Österbacka, 2001; Sayer, Gauthier, & Furstenberg, Jr, 2004) and they were more intensively engaged in education of their children (Bianchi & Robinson, 1997; Lareau, 2003). All these favorable social conditions were able to lead children from high SES families to be more successful in school compared to their peers from low SES backgrounds (Lareau, 1987; Fan & Chen, 2001; Shumow & Miller, 2001). Despite the fact that cultural reproduction studies traditionally measured the cultural assets of parents through participating in intellectual cultural activities such as visiting museums and going to theaters, they indicated that more cognitive elements of parental cultural assets, or more precisely reading practices, were more related to children's school achievement (De Graaf et al., 2000; Sullivan, 2001). Parental reading practices were positively related to cognitive development, cultural knowledge, reading sufficiency, linguistic competence and problem-solving skills of children, which were highly relevant to academic achievement (Bus, Van IJzendoorn, & Pellegrini, 1995; Notten, Kraaykamp & Ultee, 2008). Given these considerations, school-related parental involvement during early childhood had a positive impact on the school performance of children on the process of transition into primary school. The variation across the levels of parental involvement between lower SES parents and higher SES parents partly accounted for the inequalities observed in children's academic performance. As emphasized earlier, parents who were involved and engaged in their children's education positively affected their children's education (McNeal, Jr, 2001; Englund et al., 2004; Schlee, Mullis & Shriner, 2009).

Unequal transmisson of advantageous cultural, social, and economic resources across generations and the variation in the level of parents'educational involvement towards their children likely led to early inequality in academic performance between children from families in lower socioeconomic status and those from families in higher socioeconomic status. Children were specifically receptive to acquire socialization experiences early in life (Leseman & De Jong, 1998; Kraaykamp, 2003; Dumais, 2005). Differences were observed between parents in lower socioeconomic status and parents in higher socioeconomic status in terms of early reading instruction and socialization and these differences partly explained the disparities in school performance of children. Children who are advantaged in terms of parental resources may obtain increasingly more academic achievement at an early age than children who lack these beneficial resources of parents. Inequalities in children's school performance were most obvious in the primary school age and led to variations in children's later educational careers (Kloosterman et al., 2011). Early childhood is seen as an important period for the development of skills that lay the foundation for higher academic success. Parents' early practices were likely to effectively determine school performance of children even in the later years of education and schooling. It has been indicated that the impact of

socioeconomic status on school performance of children already exists at the beginning of the children's educational career, and it remains effective as schooling progresses. Studies revealed findings indicating that early parent-child interactions provided a basis for later educational activities and that early childhood experiences were fundamental and important for later academic achievement (Duncan, Dowsett, Claessens, Magnuson, Huston & Klebanov, 2007; Sylva & Roberts, 2010; Torppa, Poikkeus, Laakso, Tolvanen, Leskinen & Leppanen, 2007). For instance, as parents taught their children some letters and numbers, they came to kindergarten with the knowledge of some letters and numbers (Manolitsis & Tafa, 2011; Passolunghi & Lanfranchi, 2012; Sylva, Chan, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010). When children were 42 months old, the quality of mother's instruction, which was related to the mothers' education level, created a significant change in predicting their children's IQ as a basic indicator of socioeconomic status, and had a significant and indirect effect on children's school success in first and third grades. Variables such as the quality of mother's education, parental involvement in their children's schooling and parental educational expectations significantly affected the academic achievement of children in the third grade, over and above educational level of mother, IQ of children and the previous success of children. These variables explained 41% of the variance in academic success of children in third grade (Englund et al., 2004).

Parental involvement in the education of their children has been examined as a factor in explaining the association between socioeconomic status and children's academic performance (Flouri & Buchanan, 2004). The relationships between parents' educational involvement and children's academic consequences could be determined by various aspects of family socio-economic status (Wang & Sheikh-Khalil, 2014). The educational involvement exhibited by parents may vary depending on their education level; however, the education level of parents was related to their ability to encourage, nurture, and enhance their children's socio-emotional and academic development. Studies have shown the impact of socioeconomic status on various aspects of cognitive, intellectual, academic and social development through parental behaviors (Ashiabi & O'Neal, 2015; Bradley & Corwyn, 2002). Both maternal responsiveness such as the degree of anger, hostility, sensitivity, and autonomy support, and maternal support such as the degree of *cognitive-social development* and positive regard mediated the relationship between socioeconomic status and children's cognitive, intellectual, academic, and social outcomes (Bøe, Sivertsen, Heiervang, et al., 2014; Mistry, Biesanz, Chien, Howes, & Benner, 2008). Parents with better and more educational attainment were able to have more information about their children's development and to use more effective strategies for their children's cognitive, intellectual, academic and social development (Bornstein et al., 2003). Socioeconomic status has been linked to children's cognitive development outcomes and parental education and socialization practices (Bradley & Corwyn, 2002; Conger & Donnellan, 2007). Parental goals and values mediated and explained the relationship between socioeconomic status and parenting (Hoff, Laursen, Tardif, & Bornstein, 2002). Parents in high-socioeconomic status appreciated their children's autonomy, showed them more warmth and affection, and implemented less punitive practices (Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004). On the other hand, parents in lower-socioeconomic status attached more importance and value to compliance and obedience, and were more inclined to resort to more severe disciplinary practices, more control and restraint (Luster, Rhoades, & Haas, 1989).

Compared with parents in low-socioeconomic status, parents in higher-socioeconomic status demonstrated more cognitively stimulating and advancing behaviors, positive emotions, and responsiveness towards their children, and directed their behavior by using fewer imperatives or commands (Tamis-LeMonda, Briggs, McClowry, et al. & Snow, 2009). Socioeconomic status was closely correlated with the quality and quantity of parent-child interactions, and parents with higher socioeconomic status engaged more in social, cultural, academic, cognitive, and intellectual activities, interactions and exchanges, and talked more with their children (Hoff, 2003). Socioeconomic status has been linked to greater amount of and richer parent-child communication and interaction such as displaying direct speech and language skills, and behaving appropriately and nicely (Hoff, 2003; Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Rowe & Goldin-Meadow, 2009). Parents in higher-socioeconomic status shared more exchanges in their communication, relationships and interactions with their infants and children, and provided them with more verbal and non-verbal inputs and information (Koşkulu, Küntay & Uzundag, 2021). Compared to parents in lower-socioeconomic status, parents in higher-socioeconomic status tended to use both larger, more diverse, and *sophisticated* vocabulary (Hoff, 2003) as well as expressions with *more complex sentence structures* and higher numbers of *phrases per sentence* (Huttenlocher et al., 2002). Such parents spent more time looking at pictures, reading books and having discussions with their children (Volodina, Heppt & Weinert, 2021). As far as language and speaking skills are concerned, children from families in low-socioeconomic status often obtain lower levels of receptive and expressive speech and language skills, as well as lower levels of vocabulary, compared to their peers from families in higher-socioeconomic status (Noble et al., 2005; Weinert & Ebert, 2013). Compared to parents in higher-socioeconomic status, parents from lower-socioeconomic status were inclined to live in more stressful

living conditions and less advantageous neighborhoods, which were associated with less responsive and less supportive parenting. The negative emotions, influence and controlling behaviors of lower-SES parents who are more exposed to and deal more with less advantageous neighborhood conditions and stressful life events may bring about poorer cognitive, intellectual, academic and social outcomes in children (Ceballo & McLoyd, 2002; Conger & Conger, 2002; Hoff et al., 2002). Lower socioeconomic status was generally linked with economic hardship that caused higher levels of parenting stress. The stress, tension and low morale experienced by parents stemming from economic hardship were associated with their negative behaviors (Conger & Donnellan, 2007) and could result in lower frequency of interactions such less mutual engagement. More crowded and noisy conditions, which often exist in lower SES families, provided fewer opportunities for mothers to spend time with their toddlers and children, communicate, interact, and exchange (Lecheile, Spinrad, Xu, Lopez, & Eisenberg, 2020). On the other hand, regardless of low-income, highly-educated parents generally formed more realistic views of their children's actual performance compared to less-educated parents, (Alexander, Entwisle, & Bedinger, 1994), had higher expectations for educational consequences of their children (Halle, Kurtz- Costes & Mahoney, 1997), provided a more cognitively stimulating environment in the home (Davis-Kean, 2005), and experienced less parenting stress with regard to educating, socializing and raising their children (Parkes, Sweeting, & Wight, 2015). Under stressful circumstances, highly educated mothers had reasonable expectations for educational consequences of their children and performed better than less-educated mothers in overcoming stress and barriers thanks to their higher involvement in education of their children (Jhang & Lee, 2018). Well-educated and higher socioeconomic status parents were more engaged in the kinds of involvement that schools valued by means of the human, monetary, and cultural capital they had accumulated; also, they acquired more knowledge about educational opportunities and resources for their children, were able to perceive a greater impact on their children, and were more involved and engaged in their education (Lareau, 2003; McWayne, 2015). They sent their children to schools that they believed provided better quality education (Crosnoe, 2006). Mothers with higher socioeconomic status seemed to be more effective than their peers with lower socioeconomic status, read more to their children, monitored and observed their homework, and cared more about their attunement to classroom activities (Yamamoto, 2015; Yamamoto, Holloway, & Suzuki, 2006). Children came from higher socioeconomic status or social class backgrounds had more academic advantages compared with their peers from lower socioeconomic status or social class origins. Many studies included in this re-examination confirmed that children came from families in higher socioeconomic status outperformed peers came from families in lower socioeconomic status (Choi et al., 2015; Hemmerechts et al., 2017). Academic inequalities and gaps observed between children came from families in lower socioeconomic status and those came from families in higher socioeconomic status could be partially explained by the characteristics of parents. As emphasized earlier, parents with higher socioeconomic status were more involved and engaged in education of their children compared to their peers with lower socioeconomic status since they had more cultural capital that facilitates or enables academic progress of their children. More educated parents were more likely to stimulate and enhance cognitive learning experiences for their children, such as attending concerts and visiting museums, and also engaged their children in cultural conversations about books or on sociopolitical issues. They expressed and conveyed higher educational aspirations and plans for further education of their children (Hartas, 2015; Park & Holloway, 2013). Higher socioeconomic status parents, who benefited from their cultural capital to engage their children in conversations and discussions, used their cultural capital to encourage their children to explore and discover facts and ideas, enhance their creativity, and guide children to make independent decisions. They also tried to model linguistic and speaking competence. Parents conveyed their high academic aspirations and expectations to their children as a means to enable successful academic socialization. Parents who possessed, adopted and internalized more cultural capital as detailed and intimate information of the education system in order to encourage, support and monitor their children's learning were better able to guide their children on school topics, assist them with homework, make sure that their children engage in developmentally appropriate activities, and pick and buy proper learning resources. Parents with more cultural capital were able to engage more in schooling of their children, and were able to feel and radiate more confidence in communicating and talking with teachers. These parents struggled more actively to provide services, activities, materials, and experiences that support learning of their children (Kellaghan, 2001; Reay, 1998).

As opposed to parents from higher socioeconomic status, parents from lower socioeconomic status tended to be less involved and less engaged in education of their children owing to the barriers they needed to overcome (Hill & Taylor, 2004; Malone, 2017; Wang, Deng, & Yang, 2016). The financial difficulties and time poverty may limit parental involvement (Newman & Chin, 2003). Time and energy constraints of low-income parents related to hard work (Waanders, Mendez & Downer, 2007) and hardships, stresses and tensions associated with low social support and lack of financial resources (Reynolds, 1992) were likely to undermine and obstruct the motivation and self-efficacy

of low-income parents in involving and engaging in the education of their children (Bandura, 1997). Low-income parents exhibited low self-efficacy when they were involved in education of their children and rather viewed teachers as the "experts" in education (Crozier, 1999). Compared with their wealthy peers, they did not feel comfortable with or capable of helping children with homework (Conger et al., 1994). Apart from struggling with difficulties often stemming from low income and economic stress, differences in educational parental involvement related to socioeconomic status, as well as inequalities and gaps in children's academic achievement were also emphasized. Parents from low-socioeconomic status tended to express lower educational expectations for their children as compared to higher-income parents (Davis-Kean, 2005; Carolan & Wasserman, 2015) and were, on average, less involved in education of their children both at home and at school (Cheadle & Amato, 2011; Roksa & Potter, 2011). Experiencing economic hardship might harm parental educational involvement in lower SES families by undermining and obstructing their expectations for the educational attainment of their children in the future. Parents reflected their expectations with the beliefs they formed towards their children's future educational attainment by evaluating the resources that support education of children and their academic capacity (Yamamoto & Holloway, 2010). The disadvantaged economic status of poor and low-income parents was related with a lack of efficiacy in aiding their children to succeed in school, such as getting better school grades in particular (Bandura, 1997). Although they maintained high aspirations and expectations for their children like parents from higher socioeconomic status, parents from lower socioeconomic status might feel and be less effective at changing academic achievement and behavior of their children through their involvement in their education (Chavkin & Williams, 1989; Hill et al., 2004). While a high sense of efficiacy led parents to develop high educational expectations for their children, low self-efficacy of parents could undermine or obstruct parental expectations, even when academic performance of children was relatively high (Bandura, Barbaranelli, Caprara & Pastorelli, 1996). Compared to their wealthy peers, poor and low-income parents, particularly those with low self-efficacy, tended to report, on average, lower expectations for their children's educational attainment (Benner & Mistry, 2007; Crosnoe, Mistry & Elder, 2002). When parents held relatively low educational expectations for their children, they were less motivated to spend their time and energy in parental involvement activities aimed at improving and enhancing academic performance and achievement of their children (Jhang & Lee, 2018). They were less involved and engaged in educational activities of their children both at home and at school (Bronfenbrenner & Morris, 1998; Crosnoe et al., 2002).

It was found that parents in lower socioeconomic status who reported their limited times and resources and insufficient knowledge for their children's homework, and problems in communicating with their children as barriers to their home and school involvement (Wang et al., 2016) had less time, resources, and knowledge to promote greater involvement in education of their children and were more likely to exhibit a hesitant attitude and behavior in their interactions with schools due to a perception of lack of talent or lack of ability. In terms of time and resource availability, working parents from lower socioeconomic status might not have the flexibility to allocate time to attend school meetings and means to receive support to provide childminding on domestic premises (Hornby & Lafaele, 2011; Malone, 2017). These barriers reduced parental motivation and self-efficacy to involve and engage in the education of their children (Crozier, 1999). Parents perceived that they were particularly diffident about helping their children with homework when they started secondary school (Hornby & Lafaele, 2011). Parents uninvolved in children's school owing to constraints and inadequacies might lack important knowledge about school performance and progress of their children, about reinforcement of learning and educating at home, and about school resources and school services because they failed to contact with teachers and school administrators (Lareau, 2003). These parents were less likely to support and shape their children's academic development. When poor or low socioeconomic status parents provided their children with less materials that aid prepare them for education and school, that are beneficial and valuable for their education, and less engaged them in organized activities such as arts, sports, and music, their children remained in a disadvantaged position. Although the educational gap between poor and wealthier children at the begining of school was associated with insufficient financial resources and economic hardship, researchers showed that parental involvement had a role in the educational life of economically disadvantaged children (Cooper et al., 2010). Lower parental involvement of economically disadvantaged parents did not bode well for poor or low socioeconomic status children's ability to transition to school. Poor or low socioeconomic status children started school with significantly lower cognitive skills compared to their higher socioeconomic status peers, and this gap widened as they moved through the education system. Significant inequalities and gaps in academic achievement of children at the start of school fed and supported the reproduction of poverty across generations (Lee & Burkam, 2002). As noted earlier, socioeconomic status was associated with the school performance and achievement of children and adolescents, and children raised in wealthier families often surpassed and outperformed their less rich peers on each standard measure of school success and engagement (Huston & Bentley 2010; Reardon 2011; Sirin 2005).

Social stratification research generally indicated the significance of parents' cultural, social and economic resources to account for the association between socioeconomic status and children's school achievement (Kalmijn & Kraaykamp, 1996; De Graaf et al., 2000), whereas child development studies asserted that parental involvement played a significant and substantial role in the education and instruction of children (Shumow & Miller, 2001; Senechal & LeFevre, 2002). *Parental involvement* in *education* of children was likely to provide an educational advantage for students from less involved families as it reflected the degree of contact between parents and teachers (McNeal, Jr, 2001; Englund et al., 2004), parents participating in school-related activities (Fan & Chen, 2001), parents' level of communication with teachers, and *conversations* and discussions between parents and *their children* regarding *school-related issues* (Fan & Chen, 2001; McNeal, Jr., 2001). The associations between both involvement at home and academic socialization of parents and student engagement were *stronger* for children from lower-socioeconomic status families as *compared* to *their peers from wealthier families* (*Wang & Sheikh-Khalil, 2014*). In a similar manner, children from lower socio-economic backgrounds benefited more academically, both in reading and math success, from their parents' involvement in home-based activities, such as attending a concert or visiting a museum (Roksa & Potter, 2011). Children came from less affluent families were more likely to profit most from parental engagement in concerted cultivation, or from a deliberate and continous effort to foster development of children and improve their cognitive and social skills (Lareau, 2003). Concerted cultivation generally associated with three aspects or dimensions, namely parental involvement at home, academic socialization, and involvement at school, had a stronger effect on children, particularly from families in low socioeconomic status (Greenman et al., 2011; Jæger, 2011). Parents' involvement in education of children was particularly crucial in economically disadvantaged families. Longitudinal studies conducted on preschoolers, primary school children, and adolescents from low-income families found that active involvement of parents fostered longtime academic benefits such as general academic success (Englund et al., 2004), literacy performance (Dearing et al, 2006), and overall high school grades and educational attainment (Benner et al., 2016). While SES indicators such as parents' education level might limit the level or amount of educational involvement, other characteristics of children such as their previous success levels, encouraged less-involved parents to actually engage more in educational involvement activities that benefit greatly for their children (Benner et al., 2016). When parents increased their involvement in education, children from low socioeconomic status families benefited more from their parents' educational involvement (Dearing et al., 2006). A study indicating that more highly-educated parents were more efficient and effective in involvement activities found that children up to fifth grade had more positive feelings about literacy compared to children of mothers who exhibited less involvement in education, regardless of education level of parents. An analysis of the average literacy performance and fifth grade literacy performance revealed that variations in parents' involvement in education of their children brought about changes in literacy performance of children, and increasing parental involvement in school helped them improve their children's school performance. Children of less educated mothers showed below-than-average literacy performance when their educational involvement was low; however, this gap did not exist when parental involvement was high. In low-income families, interventions by parents resulting from their involvement in their children's education were more beneficial to children living in family environments characterized by low parent education (Dearing et al., 2004). The benefits that might emerge from the active involvement of parents protected children from stressful conditions (Shumow et al., 1999), reduced the disconnection between home and school environments (Mendez & Fogle, 2002), gradually taught and impressed on children positive educational values (Cheung & Pomerantz, 2015), and improved the self-perceived ability and motivation of children (Gonzalez-DeHass, Willems, & Doan Holbein, 2005). On the other hand, parents' involvement in schooling of their children had a positive impact on school success of their children and contributed to their progress in primary school. Parental involvement as social capital generally produced a beneficial effect on school achievement of children (Desforges & Abouchaar, 2003). Intensive involvement of parents in schooling led children to recognize the importance and value of education, made children feel more the importance and value of education at home and in school, and encouraged them to succeed in academies. When parents supported their children's education, children cooperated more and attached greater importance to school (Kloosterman et al., 2011).

Conclusion

This re-examination analysed the results of 42 studies which investigated parental involvement and academic achievement of children. Findings in these studies published between 2003 and 2021 that were selected and included in this re-examination confirmed that parental involvement was significantly associated with school success of children. Correlational research revealed relationships ranging from small to medium between various types of parental involvement and students' school success in various form such as (a) parents' reading to their children at home, (b) maintaining high aspirations and expectations for education of their children, (c) establishing communication and discussing school issues with their children and (d) providing encouragement and support for learning.

Recommendations

In view of the fact that parental involvement has the potential to produce a positive effect on the school success of children and adolescents, the Government, the Ministry of Education, educational experts and consultants should convey the value and significance of parents' engagement in education of their children at face-to-face sessions, interviews, conferences, or through mass communication and social media. Parental involvement is more important, beneficial and valuable for children in lower SES families as it has the potential to reduce or eliminate the educational disadvantages, unfavorable conditions and risks for academic failure likely to be encountered by the children of poor and less educated parents. Educational programs aimed at providing detailed information and skills about the behaviors, activities, practices, directions and guidance that encourage and enhance the academic development of their children and how to implement them as well as enhancing their academic socialization competencies should be prepared and offered to poor and less educated parents. Apart from cultural practices and interventions that can reduce or eliminate the disadvantages and risks stemming from the low educational level of parents, household income should be increased in an effort to reduce and eliminate the factors restricting parental involvement owing to poverty or low income level. When household income is increased in such a way as to facilitate parental involvement and allow parental involvement, poor families will be able to afford to purchase materials, activities, experiences and services that contribute and provide benefit to children's education.

Research Limitations

The current research only focused on parental involvement and its association with the academic success of preschool, primary and secondary school children and examined how socioeconomic status affected the association between parental involvement and school success of children. The research did not take into account and did not examine the culture and race/ethnicity variables, which might play a role as not only in socioeconomic status but also in parental involvement in education, academic socialization processes and the academic achievement of children. Examining how culture and race/ethnicity may play a role in the association between parental involvement and children's academic success, and how families of diverse racial and ethnic backgrounds can provide unique academic socialization experiences by making use of cultural beliefs and resources to enhance their children's academic development can lead us into better comprehending the effect of parental involvement on the school success of children.

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