

### RESEARCH ARTICLE



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# The Adverse Role of Poverty in the Socialization Processes in the Family and in the Cognitive Development of Children and School Performance

### Turhan ŞENGÖNÜL

Ege University, Faculty of Education, İzmir / Turkey

### **A**BSTRACT

The present literature review examines the adverse role of poverty in children's cognitive development and school performance. Surveys selected in the present study include those related to the family stress model and family investment theory conducted on preschool, primary, secondary and high school students and their parents. This literature review discusses less sensitive, less warm and less affectionate behaviours of poor parents in the process of socialization and child-rearing owing to negative emotions and conditions such as demoralization, distress, anger, anxiety, stress and frustration and their resorting to harsh, inconsistent and negligent practices. On the other hand, it focuses on socio-economic and cultural inclinations, such as the fact that poor parents attach more importance to the values of harmony and obedience, that their education expectations and demands from their children are relatively low, and they do not pay much attention to developing the intellectual curiosity in their children. The study handles them as independent variables and makes an analysis. Findings demonstrate that decreased affection and support for children in families and increased harsh and inconsistent parental practices induced by demoralization, distress, anger, anxiety, stress and frustration caused by poverty undermine socialization and child-rearing processes. It has been established that disadvantages resulting from the fact that poverty limits purchasing of materials, goods, services, and activities that will contribute to cognitive development and school performance; poor parents spend less time and money for their children's education; and they participate less in activities that encourage, nurture and enhance their children's cognitive development and school performance increase the risk of low intelligence scores, low cognitive skills, low educational attainment and low school achievement for low-income children.

Keywords: Poverty, family stress model, socialization processes, low cognitive development, low school performance

### 1. Introduction

Family poverty is defined as the condition or the state of not having adequate income level to meet essential needs such as, nutrition, clothing and shelter (McDonald, 2013). Theorists and researchers have suggested that poverty reduces the socialization practices that play a role in the cognitive performance and academic achievement of children such as parental sensitivity, cognitive stimulation and support towards children (Downer & Pianta, 2006; Duncan, Magnuson, & Votruba-Drzal, 2017; Guo & Harris, 2000; Yeung, Linver, & Brooks-Gunn, 2002). The foundations of the Family Stress Theory related to economic hardship, which tries to explain the impact of children on socialization processes and academic achievement in the family, date back to accumulation of data in 1929 on the economic and social consequences that occurred in the society with the emergence of the great crisis of capitalism. According to this theory, poverty and economic hardship caused by the great crisis of capitalism in society have an adverse impact on the lives of families, impairs family functioning and effectiveness, and damages the socialization processes in families (Conger, 2005). The family stress theory related to economic hardship proposes that poverty and economic difficulties lead to economic pressure in the family and predictors of economic hardship including low income or

poverty, reduction of material resources, the level of wealth and higher debts, increase in economic demands and inability to meet these demands as well as instability in occupational and professional life adversely affect the lives of families and create parental stress. Poor families face the risk of failing to adequately satisfy their basic, essential and urgent survival needs. They have difficulty in meeting the costs of education, social and cultural life, adequate and regular nutritional needs, dressing, housing, health care, and electricity, water and heating natural gas bills. The fact that families with difficulty in meeting their needs because of poverty experience greater

Corresponding Author e-mail: turhan.sengonul@ege.edu.tr

ORCID Number: 0000-0003-4760-2204

**How to cite this article:** ŞENGÖNÜL T (2021). The Adverse Role of Poverty in the Socialization Processes in the Family and in the Cognitive Development of Children and School Performance. Pegem Journal of Education and Instruction, Vol. 11, No. 2, 2021, 1-13

Source of support: Nil

Conflict of interest: None.

**DOI:** 10.14527/pegegog.2021.00

**Submission**: 29/12/2020 **Revision**: 18/03/2021 **Acceptence**: 20/03/2021 **Publication**: 23.04/2021

economic pressure and stress has an adverse effect on the family's functioning, effectiveness and socialization processes (Conger, 2005).

Daly and Kelly (2015) argue that parents feel bad, become anxious, feel guilty and frustrated when they are unable to provide their children's needs due to low financial resources; when they cannot give pleasant things to them, and when they fail to meet their basic needs. Families living in poverty begin to lose their capacity to maintain the necessary and crucial interests and qualities for their ideal functions (Okech, Howard, & Kim, 2013). Parenting stress can lead to parental depression and other negative physical and mental health conditions, increased marital conflict, harsh practices in socialization and child rearing processes, eventually leading to demonstration of more social, emotional and behavioral problems by children (Duncan et al. 2017). When parents have family tensions stemming from poverty, their ability for well-being is adversely affected and weakened and they could cause potential harm to their children (Threlfall, Seay, & Kohl, 2013). People living in poverty suffer from depression, and maternal depression has an adverse relationship with academic and behavioral outcomes of children (Wickham, Whitehead, Taylor-Robinson, & Barr, 2017).

The family stress theory proposes that, when the economic hardship and pressure in families are high, parents get demoralized, upset; become anxious, feel annoyed; have a tendency towards alienation and secession; and the risk of substance abuse, and anti-social behavior behaviour increases in families. Emotional and behavioural problems stemming from poverty increase family conflicts, decrease warmth, love and support, and undermine parents' efforts towards education and socialization of their children. When parents are upset, worried, angry, and furious because of poverty and economic difficulties, they treat their children less warmly, less lovingly and are less engaged in their daily activities, and they may more easily become annoyed with their children, treat them harshly and act inconsistently in the socialization process. Such attitudes and behaviours of parents disrupt their children's education and socialization. The level of parents' education as well as the interest they take in their children play a significant role in children's physical, cognitive, emotional, behavioural development and their general well-being. When the negative effects brought about by poverty and economic difficulties threaten parental education and socialization processes of children, the positive and successful development of children is at risk (Conger et al. 2002). Risk factors such as stressful life events, parental stress and parental demoralization reduce the capacity of parents to foster their children cognitively and also acknowledge and treat them sensitively (Bradley & Whiteside-Mansell, 1997; McLoyd, 1990). It has been suggested that children exposed to poverty are under a greater risk with respect to experiencing

negative emotions such as lower cognitive and social skills as well as lower school performance, showing less affection and loyalty to their parents, and displaying demoralization, anxiety and behavioural problems such as aggression and anti-social behaviour (Conger & Donnellan, 2007).

### 2. OBJECTIVE OF THE RESEARCH

The main objective of this study is to address and examine the family stress model (FSM), which tries to explain the negative impacts of poverty on the socialization process and cognitive development of children and adolescents in their school performance as well as on related research studies that support the family stress model. The study attempts to determine how child-rearing behaviours of parents mediate in the relationship between poverty and children's cognitive development and school achievement in socialization processes of their children. For this reason, economic pressures caused by poverty and economic difficulties as well as experiencing consequent negative emotions such as distress, anxiety, anger and alienation portray a tendency to decrease parental sensitivity, warmth and supervision and also increase conflictive, neglectful, inconsistent and harsh parenting as well as severe punishment. The research also aims to determine how poverty increases the risk of having negative consequences such as low intelligence scores, low cognitive skills, low educational attainment, and low school performance in children and adolescents by harming and disrupting the family's functioning, effectiveness and socialization processes.

### 3. Method

This review focuses on the family stress model and on specific research studies related to the family stress model from the studies investigating the economic and social consequences of the Capitalism's Great Depression of 1929 to the present day. The studies are being examined with regard to theoretical frameworks, concepts, findings and results they rest on. This review attempts to analyze the studies conducted on samples containing various age groups from childhood to adolescence. The study demonstrates an approach that takes into account certain variables such as income, levels of education, occupation, low income level and personalities, life orientations, values, socialization and child-rearing practices of poor parents on the basis of their work life as well as parents' educational expectations, academic achievement. The economic, social and cultural conditions of lower SES parents have been expressed.

## 3.1 Values and working conditions of poor or lower socieconomic status parents

Theorists and researchers have argued that poor or working class parents are more directly observed and supervised but are

not allowed to conduct and manage their work independently. They usually work under the conditions designed by tools and machines, and do whatever their employers, engineers, technicians and foremen tell them to do. Professionals and managers, such as engineers, architects, doctors, lawyers, are considered to be in the middle socioeconomic status and their positions, duties and works often involve complex, deep and effective thinking, creativity, self-management, and managing others; whereas, poor or working class individuals are involved in jobs regarded as less prestigious in society, and perform repetitive, routine and standard jobs or tasks that do not necessarily require complex and creative thinking (Kohn, 1995).

Parents' jobs and occupations affect childrens' their values, goals, behaviours and socialization practices. Lower-SES parents and middle-SES parents differ from one another regarding their personalities and life orientations, and goals and priorities they set for their children in life also change in time. While working-class parents generally attach more value to conformity and obedience in the process of socializing and educating their children, they do not think much about developing intellectual curiosity in their children or cannot play a successful role in improving their intellectual curiosity and they do not demonstrate sufficient role-model behaviours. These parents cannot adequately engage their children in education and lessons (Kohn, 1995). Menaghan and Parcel (1991) argued that parental those parents' Job that parents' jobs and occupations had a role in the socialization of children and that parents with lower levels of cognitive skills provided their children with less cognitive support.

Senechal and LeFevre (2002) suggested that parents living in poor and low economic conditions demonstrated more authoritarian attitudes while communicating with their children and that those children were not expected and encouraged to be engaged in complex thinking. During the socialization process, middle-SES parents were more involved in meeting, negotiating, concluding, and inductive reasoning with their children; whereas, poor or working-class parents made less use of ways and methods of expressing, explaining and reasoning and they preferred giving orders instead (Lareau, 2003). Low-SES parents demonstrated more authoritarian attitudes and behaviours using a more rigid and harsher approach to their children during socialization processes, used physical punishment more often and spoke to them less in terms of positive and beneficial as well as negative or detrimental consequences of their behaviour towards others. Moreover, they provided fewer explanations and used less inductive reasoning with their children (Hoff, Laursen, & Tardif, 2002). Low-SES parents focused on the actual and apparent behaviour itself and could immediately resort to physical punishment in the process of socialization rather than investigating the underlying causes of their children's behaviour (Conger & Dogan, 2007).

Researchers discussed the socialization processes and cognitive skills of children, or their standards of living stemming from the family's socioeconomic status that affected their children's school performance as well as the opportunities, advantages and disadvantages they offered to their children.

## 4. RESEARCH FINDINGS AND DISCUSSIONS SUPPORTING FAMILY STRESS MODEL RELATED TO ECONOMIC HARDSHIP

## 4.1 Difficulty Experienced by Poor Families Investing in their Children

Researchers have argued that poverty leads to disadvantages in families and have negatively affected and limited the investment and education opportunities parents provide for their children. The investment model have suggested that financial resources play a significant role in enabling parents to buy certain goods that affect children's cognitive development and academic achievement. When their financial resources increased, parents were able make more educational investments in their children as they could buy better goods and services that contributed to their children's education. Family income was in association both with adequate nutrition and food expenses, and with investments in children's education (Loopstra & Tarasuk, 2013). Poverty indicated a lack of income or a low income level, inadequate nutrition and housing, limited access to services as well as the stress experienced by parents who failed to achieve the goals they have set, mental health and sense of self-worth. Economic disadvantages exerted pressure on the mental health of parents and had a negative impact on parental investments supporting the cognitive promotion of their children and their academic achievement (Bruckauf & Chzhen, 2016). Low income or poverty had a role in the cognitive development of children through certain parental approaches including sparing time and caring for children, doing activities with them, buying goods and services contributing to children's cognitive development and academic achievement. Limited financial resources forced parents to invest less in their children (Bruckauf & Chzhen, 2016).

In a similar manner, Mayer (1997) asserted that low-income or poor families had difficulties in meeting their children's basic and essential requirements, such as adequate and regular nutrition, shelter, clothing and health care. Furthermore, children in those families lived in worse conditions, consumed less food, had fewer toys promoting cognitive skills and were less occupied with cognitive development activities. Compared to other parents, poor parents had relatively less knowledge and fewer skills in terms of human capital; less income as economic capital; and less social environment and fewer communication skills provided by the profession as social capital. Therefore,

they spent less time with their children and provided them with less social capital (Mayer, 1997).

Duncan et al. (2017) argued that poverty restricted obtainable family financial resources that encouraged, nurtured and enhanced cognitive and social-emotional development in their children and increased their knowledge and skill acquisition as part of human capital. Families under the pressure of low and limited financial resources offered their children fewer opportunities to benefit from socially enriching and educational activities, such as educational toys and learning materials as well as getting music classes and visiting museums that require purchasing or spending money (Duncan et al. 2017). Not only a great number of difficulties associated with inadequate and limited resources but also the parents' preoccupation with finding/changing jobs had a detrimental and harmful impact on parental mental health. Responsibility to achieve the goals that had been set was a constant source of stress and concern for poor parents (Daly & Kelly, 2015).

Compared to parents who worked in higher income jobs, an unstable work-life and loss of jobs were more commonly experienced among low income parents. They were hurt particularly when they lost their jobs and this had a negative impact on the educational attainment of their children. On the one hand, the unemployed position or loss of jobs limited the economic resources of families, and consequently diminished the likelihood of purchasing resources essential for physical, cognitive, emotional, social and behavioural development including products, educational services, food, accommodation and shelter in a safe neighbourhood. On the other hand, these economic conditions reduced parents' psychological resources and the quality of socializing and parenting their children. The instability of low-income parents in work life seemed to be associated with higher levels of behavioural problems in children due to a higher level of psychological distress and stress experienced by parents and a reduced ability to provide effective care (Yoshikawa, Weisner, & Lowe, 2006). McLoyd (1998) and Elder (1999) also obtained similar findings in their research. Low wages, poverty, stressful jobs led to demoralization, stress and anxiety in parents, and reduced the capacity of parents to provide a warm, supportive and consistent family environment for their children in the socialization process. Low-SES parents demonstrated more negative and harsher behaviours towards their children during the process of socialization and had lower energy levels and less social support; moreover, they experienced more negative feelings such as demoralization, anger and anxiety and felt more strain and distress in their work life. As a consequence of all these conditions, they displayed less warm and sensitive behaviour towards their children and monitored or observed them less. Poor parents experienced difficulties in motivating, stimulating and encouraging their children to deal with and

engage in learning opportunities offered by schools and to gain new experiences promoting cognitive abilities (McLoyd, 1998; Elder, 1999).

## 4.2 Harmful Impacts of Poverty on Socialization Processes and Cognitive Development of Children

Researchers discussed on the basis of FSM how economic pressures caused by economic hardships including financial events such as low income and job loss led to parental stress and how this stress harmed the socialization processes and children's cognitive development in the family. Masarik and Conger (2017) hypothesized that the day-to-day hassles and strains created by unstable economic conditions in families, such as difficulty paying bills or being unable to purchase basic necessities, led to economic pressures. Eventually, these economic pressures generated psychological distress in parents. Exposure to poverty increased negative life events, created greater stress in parent-child relations and interactions, and reduced positive parenting practices (Duncan & Brooks-Gunn, 1997; Guo & Harris, 2000). Researchers highlighted that poverty appeared to be more strongly associated with neglect (Proctor & Dubowitz, 2014) and increased the likelihood of parents to neglect their children under certain risk factors such as poverty, economic hardship, distress and stress (Slack et al. 2011). Children living in low-SES families were neglected seven times more often than their peers living in richer families (Sedlak et al. 2010). Families experienced economic difficulties in poverty and this economic hardship led families to neglect and ignore their children (Slack, Holl, McDaniel, Yoo, & Bolger, 2004). In their research, Warren and Font (2015) examined the relationships between housing insecurity and the risk of parental maltreatment in lower SES families. Housing insecurity was directly associated with child neglect and stressed mothers showed a tendency towards maternal abuse and neglect.

In a study conducted on 1,142 mothers and their children living in high-poverty, maternal questionnaires were applied and mother-child interactions were collected across 4 time points (6, 15, 24, and 36 months). The economic pressure in families was significantly related to a variety of symptoms such as depression, hostility and anxiety, and at the same time it reduced parents' sensitive and supportive attitudes and behaviors in the processes of depression, socialization and child-rearing. Demoralization and anxiety mediated the relationship between economic pressure and sensitive and supportive behaviors of parents (Newland, Crnic, Cox, & Mills-Koonce, 2013). In a longitudinal study, 273 mothers, fathers and their children were observed when they were 2, between 3 to 5, and 6 to 10 years of age and prospective data were collected. Information and data regarding economic hardship and economic pressure were assessed during toddlerhood. On the other hand, parental emotional distress, couple conflict, and harsh parenting practices were collected during early childhood. Study results were found to be consistent with predictions from the FSM in that economic hardship led to economic pressure which was related to parental emotional distress and couple conflict. This parental conflict was associated with harsh parenting and child problem behavior during socialization and child-rearing processes. (Neppl, Senia, & Donnellan, 2016). In another study, Nievar, Moske, Johnson and Chen (2014) addressed the family and home environment and the pathways between family income and maternal depression, and also examined the interrelations between parent-child attachment as well as self-regulation in the preschool period and cognitive outcomes in first grade during the whole process of socialization and child rearing. The researchers tested the pathways between parent and family characteristics, the home environment at 15 months, children's attachment security at 24 months, children's selfregulation in early childhood, and cognitive outcomes in first grade, controlling for site location, ethnicity and race, and child gender on endogenous variables. Family income and maternal depression had a substantial effect on socialization and child-rearing practices. Children of parents who did not display negative reactions to episodes of depression presumably maintained healthy attachment styles. The process of socialization and child-rearing, which was directly affected by family income, was the most important predictor of children's cognitive development. Parents who provided a safe and stimulating environment for their children, despite limited financial resources or mental health issues, generally had children who were ready to start school. (Nievar et al. 2014). In a study that addressed socioeconomic status and socialization and child-rearing processes in ethnic minority families, Emmen et al. (2013) examined a sample consisting of 107 Turkish-Dutch mothers and their 5- to 6-year-old children. The researchers tested a model regarding the stress in minority families using a general family stress pathway, as well as a pathway specific to ethnic minority families. As they come from a lower SES background, minority families may have experienced additional stressors associated with their minority status, such as acculturation stress. In the study, positive parenting was observed during a 7-min problem-solving task. In addition, mothers reported their daily hassles, psychological distress, and acculturation stress. The relation between SES and positive parenting was partially mediated by both general maternal psychological stress and maternal acculturation stress. Stressors specific to minority status displayed more resemblance to general demographic and family stressors in understanding socialization and child-rearing behavior in ethnic minority families. (Emmen et al. 2013).

As indicated by findings in more recent studies Mayer (1997) also emphasized that family income and poverty were associated with family structure, psychological factors

of parents and the quality of socialization and parenting of children and these elements mediated the relationship between family income and children's cognitive skills as well school performance. Likewise, family relationship processes mediated the relationship between the income level and cognitive development of children (Grant et al. 2006). In consistency with the family stress model related to economic hardship, types of stress such as demoralization, stressful life situations and marriage-related conflicts increased in families experiencing economic difficulties, and these stress patterns reduced parents' ability to respond sensitively to children. It was also observed that this situation was inversely proportional to the positive results in children. Socioeconomic disadvantages mediated stress in stressful life situations and the processes of socializing and parenting their children. It was pointed out that demoralization, an important type of stress, reduced parents' ability to respond to their children sensitively (Jackson, Brooks-Gunn, Huang, & Glassman, 2000; Trapolini, Ungerer, & McMahon, 2008). In the process of socializing and parenting children under depressed conditions, it was observed that there was a significant association between more negative and more intervening behaviours or more shy and more passive behaviours (Field, 2010). In the process of socialization, demoralization reduced parental responsiveness towards their children and, as a natural consequence of this process, it diminished parents' ability to provide a family environment at home promoting cognitive development such as parental engagement in teaching activities (Oxford & Lee, 2011). Lovejoy, Graczyk, O'Hare and Neuman (2000) asserted that parents feeling demoralized and distressed for experiencing poverty were involved in less verbal communication and interactions with their children and demonstrated less sensitive, loving and encouraging behaviour towards their children. Children of parents exhibiting such behaviours received lower cognitive ability test scores in early childhood and had difficulty in concentrating and focusing their attention on performing complex tasks in middle childhood (Lovejoy et al. 2000). It was established that children living in poverty had higher chances of scoring worse behavioural, cognitive and health outcomes compared to their richer peers (Berger, Paxson, & Waldfogel, 2009).

Researchers highlighted that harsh or negative behaviours of low-SES parents with lower education, less prestigious professions and lower income levels, especially during socialization process, had a significant relationship with lower cognitive abilities and discordant behaviours of children and adolescents (Bradley & Corwyn, 2002). Both low income levels and poverty played a negative role in children's cognitive development, cognitive skills, or academic achievement. It was revealed that low income levels and poverty in families had a strong relationship with low educational attainment, low intelligence scores and low academic achievement in children

and adolescents (Şirin, 2005). It was found that a negative relationship existed between poverty and children's reading and math achievement. Mothers' communicating with children, reading for them and engaging in home learning activities all had a role in children's' cognitive development (Burchinal, Vernon-Feagans, Cox, & Investigators, 2008). Cooper and Stewart (2017) revealed that poverty was effective for childrearing behaviors, and that socialization and child parenting style played a role in the negative association between poverty and children's cognitive and behavioral outcomes. Parenting style mediated this negative association between poverty and cognitive and behavioral outcomes of children and indirectly affected and explained this relationship. In their research, Holmes and Kiernan (2013) analyzed the outcomes of poverty in children of 5 years of age and identified four factors, which were (1) promotion of reading and learning (2) parent-child relationships, (3) family structure, and (4) negative discipline. Children from poor families were less likely to experience positive and appropriate socialization processes compared to their non-poor peer. The parenting style explained 40-50% of the relationship between poverty and children's cognitive and academic outcomes (Holmes & Kiernan, 2013). Votruba-Drzal (2003) revealed that compared to middle and upper SES mothers, poor mothers exerted less effort to teach their children reading as well as letters, numbers and shapes. Gaps in cognitive development or academic achievement between the children of low-SES families and those of middle and upper-SES families especially became apparent at school entry (Reardon, 2013). Researchers emphasized that children from poor families showed lower performance in cognitive tests compared to their peers, were more likely to complain about physical and mental conditions and were at greater risk of academic failure and early dismissal from school (Duncan et al. 2017). Evidence from another study, which followed the same group of children as they grow up, showed that children from wealthier backgrounds tended to do better in cognitive tests from as early as the age of 2 or 3 years (Waldfogel, 2013). Adverse conditions in families such as low income, poverty and the length of time spent in poverty played a significant role in the cognitive development and school preparation of children younger than 5 years of age (Anand & Lea, 2011; Burney & Beilke, 2008; Dahl & Lochner, 2005; Smith, Brooks-Gunn, & Klebanov, 1997).

Dickerson and Popli (2016) conducted a cohort study of 19,000 children to examine the impact of poverty, especially long-term poverty on early childhood cognitive development. The researchers measured and monitored the cognitive development of children up to 7 years of age using a series of standard tests. Children born in poverty had significantly lower test scores at 3 years, 5 years and 7 years. Even after controlling various socioeconomic background and parental investment characteristics, living in poverty was associated with lower scores in cognitive tests. The cognitive development test scores

for children who were persistently in poverty throughout their early years were almost 20 percentile ranks lower at age 7 years than for children who had never experienced poverty. Concurrently, the impacts of short-term poverty on cognitive ability were smaller compared to long-term poverty. The traits children inherit due to living in long-term poverty in the early years adversely affected their cognitive development in a progressive manner. Consequently, a significant interrelationship was observed between educational attainment and cognitive development of children, and low income or poverty (Dickerson & Popli, 2016).

A recent cohort study conducted on children born in 1991-92 found that 5-year-old children from lower-income family backgrounds did not perform as well as their peers from middle and higher-income families in a series of cognitive tests. Children from most disadvantaged backgrounds who attained high cognitive test scores at age 7 performed worse than their lower achieving counterparts from the least disadvantaged families by age 14-16. For children with low cognitive attainment levels, the chances of educational success can be limited due to the multiple disadvantage and persistent socio-economic gradient (McKnight, 2015). "Bradbury, Corak, Waldfogel and Washbrook (2015)". (2015) stated that children from families with poor or less advantageous socioeconomic status had a poorer performance in language and reading skills, social and behavioral development, and physical health compared to their peers owing to the adverse affect of poverty on child development. Another study found that differences in cognitive abilities were associated with childhood socioeconomic status (SES). This study examines how early-life SES is related to differences in cognitive ability in early adulthood in 473 men born in 1934– 1939. In this context SES led to considerable differences in the developmental environments of children, who experienced both the long shadow of the Capitalism's Great Depression of 1929 and the shock of the Second World War. Income in early childhood was consistently linked to adult cognitive abilities. The socioeconomic status in the early stages of life consistently predicted the cognitive abilities of men born in the 1930's. Education and nutritional status were mediators of this relationship. As mechanisms of early-life socioeconomic status on cognitive abilities, cognitive stimulation and nutritional status had an impact on their cognitive skills (Olkkola, 2015).

According to Entwisle and Alexander (1993) initial socioeconomic cultural inequalities substantially increased the academic achievement gaps in school over time. The effect of poverty in the family on cognitive development and academic achievement started in early childhood and continued during school years. Children from families with poor or low socioeconomic status remained at lower levels in perception of literacy and reading comprehension, and these children entered school with lower levels of skills associated

with literacy such as letter recognition and comprehension (Dyson, Hett, & Blair, 2003). As a predictor of the lower socioeconomic status (SES), children from poor areas were lagging behind their peers in terms of letter recognition and basic literacy skills (Duncan & Seymour, 2000). The children of low-SES parents had significantly lower reading and math scores while entering preschool class (Baker, Cameron, Rimm-Kaufman, & Grissmer, 2012; Crosnoe & Cooper, 2010). Another study revealed that children from low-SES families entered preschool with lower levels of reading and math skills compared to their peers, and that they suffered from these disadvantages that persisted throughout their school years (Lee and Burkam, 2002). Likewise in another study, school-age children of poor and unemployed parents in need of economic and social assistance and welfare support obtained lower verbal skill test scores compared to their peers (Sampson, Sharkey, & Raudenbush, 2008).

In a study of a nationally representative sample comprising 753 preschool children between 3 and 5 years of age from families who were quite different and diverse in terms of family structure, socioeconomic status, place of residence and ethnicity, Yeung et al. (2002) found that there was a bilateral relationship between lower income or poverty and lower letter-word scores of children. Mothers mediated the relation between family income and children's first literacy skills, by initiating learning activities and providing cognitive materials and experiences at home. Consistent with the family stress model related to economic hardship, stress processes stemming from poverty and economic difficulties reduced parental warmth and love towards children. In such a family environment, a significant relationship was observed between the socialization processes or parenting behaviours and lower cognitive skills and higher problem behaviours in children. When feeling demoralized and distressed due to poverty, parents were less engaged in activities that contributed to their children's cognitive development, cognitive skills, and school performance such as engaging them in reading or prolific, substantial conversation and helping them with homework (Yeung et al. 2002). Using the Early Childhood Longitudinal Study, Gershoff, Aber, Raver and Lennon (2007) experimentally tested a nationally representative sample of 21,255 kindergarten children. They examined dual components of family income and material difficulties along with parent mediators of stress, positive parenting, and investment as predictors of 6-year-old children's cognitive skills and socialemotional competence. Researchers referred to the relationship between both income and economic hardship and cognitive and social-emotional skills in children. Economic hardship contributed to increasing parental stress and reducing parental investment in education and positive parenting practices. When the family income increased, parental investments and resources enhancing cognitive and academic skills in

children also increased. Higher family income eased economic difficulties and stress, and reduction of economic hardship and stress in family increased positive socialization and parenting practices as well as reducing problem behaviours in children. A bilateral relationship was also observed between academic achievement and parental investments. When economic difficulties were corrected and improved, and thus parental stress was reduced, the problem behaviours were somewhat eliminated (Gershoff et al. 2007).

### 4.3 Negative Impacts of Poverty on the Academic Achievement of Adolescents

In studies on adolescents in early and middle childhood stages, researchers obtained findings consistent with the family stress model related to economic difficulties. Cumulative effects of poverty affected dynamic and developmental processes and played a negative role in the development of children at later stages of life. Using longitudinal analysis of national data in their studies, the researchers found that life-time demoralization rates increased in individuals with lower socioeconomic status and that low-SES parents had a consistent and significant relationship with family disruption, residential instability and parental demoralization during childhood and adolescence stages from early childhood to 14 years of age (Gilman, Kawachi, Fitzmaurice, & Buka, 2003). Another study addressed parents and adolescents with an average age of 13.5 in 305 low-income urban African-American families and tested the family stress model related to economic difficulties. Study findings revealed that economic difficulties led to parental distress and that psychological distress was positively associated with more negative and less positive parent-adolescent relations, which predicted lower positive and higher negative socialization practices (Gutman, McLoyd, & Tokoyawa, 2005). On the basis of the family stress model, according to Conger, Conger and Martin (2010) parents were more likely to practice harsh, inconsistent and neglectful parenting in their socialization processes when they experienced economic difficulties. In a study they carried out on seventh grade children, Conger et al. (2002) examined the relationship between parent response to economic difficulties and pressures and students' problems and school performance. They found that poverty increased the stress and tensions of families in their daily lives, reducing their capacity to display loving and warm parenting and to involve them in cognitive activities during the socialization process. As a result, economic hardship had an adverse affect on school performance.

The researchers stressed that low income and poverty caused negative emotions in parents including stress, demoralization, anxiety and anger, and negatively affected their psychological and emotional well-being; thus, reduced parental warmth, sensitivity and support in parent-child

relationships and interactions during socialization processes and increased the likelihood of resorting to harsh approaches, physical punishment and inconsistent practices. They also pointed out that such a family environment mediated the relationship between economic income and cognitive development in children. Employing samples of firstly 205 seventh-grade boys and secondly 220 girls living in intact Caucasian families in rural areas, Conger et al. (1992, 1993) openly tested the family stress model related to economic hardship and confirmed the arguments proposed by the family stress model (Conger et al. 1992; 1993). In another study, the researchers examined 422 male and female fifth grade students from families with different socioeconomic status, from very poor to high-income. Of these, 39% were living with their biological mothers and fathers, 33% with their stepmothers or fathers, and 28% with their mothers and grandmothers. The response of biological mothers and fathers, stepmothers or fathers, and mothers and grandmothers to poverty and economic difficulties they were exposed to as family caregivers emerged in the form of demoralization, distress, stress, tension and anxiety. The socialization process of children was adversely affected by decreased warmth and love as well as increased conflicts, anger and harsh or inconsistent disciplinary practices in families (Conger et al. 2002).

Studies also exposed relationships caused by economic difficulties, economic pressures and psychological distress. Parental distress disrupted the socialization process of children by decreasing the warmth, love, and increasing harsh and inconsistent disciplinary practices. A significant correlation was observed between disrupted socialization processes and negative outcomes such as lower cognitive abilities, fewer social skills, lower school achievement and more behavioural problems in children and adolescents (Conger, 2005). In another study, Mistry, Vandewater, Huston and McLoyd (2002) examined a poor urban sample of 419 students from primarily ethnic minority families (57% African American, 28% Hispanic) headed by a single parent (83%). Children ranged in age from 5 to 12 years for the 419 families in the study. In this study, too, findings obtained by the researchers were consistent with the family stress model related to economic difficulties. The low level of income and the economic pressure felt as its natural consequence played an important role in the processes of socialization and parenting, by adversely affecting the psychological and emotional well-being of parents. The study established that demoralized and distressed parents reported feeling less effective and less capable in their interactions with their children. It was also observed that these parents were less affectionate and less loving in their interactions. Povertyrelated demoralization and distress in parents mediated the relationship between the economic problems in the family and the disruption of child-rearing processes in single-parent families. In Finland, a research conducted by Solantaus,

Leinonen and Punamaki (2004) evaluated the impacts of economic hardship on 527 triads of 12-year-old adolescents as well as their mothers and fathers from a population sample similarly revealed findings supporting the family stress model related to economic difficulties. Poverty-related demoralization and stress experienced by parents increased marital conflict, and this conflict disrupted socialization processes and parenting behaviours, decreased parental warmth and love, and increased the likelihood of exercising more punishment on children. Research findings were found to be quite consistent with the family stress model, which posited that children were at risk owing to economic pressures, parental demoralization and distress, and worsening, deteriorating relationships in the family. In another study, Parke et al. (2004) examined the impact of economic hardship on fifth-grade students from 111 European American and 167 Mexican American families living in urban areas and obtained findings quite consistent with the family stress model. Poverty mediated the relations between economic hardship and parental socialization processes or their negative practices in child rearing. Variables such as demoralization, distress, and anxiety caused by poverty in families were seen to be negatively associated with positive parental behaviours (Parke et al. 2004).

A study investigating the impact of income growth in poor families showed that a number of families in the Indian American community increased their income levels with revenues from casino operations and thus moved out of poverty, which eventually improved children's economic conditions and significantly decreased their psychiatric disorders. The increase in income levels eased the problems of families in the socialization and parenting processes and the problems observed in children. Increased positive and effective behaviours in socialization or parenting processes mediated and explained the relationship between the increase in household income and well-being of children (Costello, Compton, Keeler, & Angold, 2003). With increases in family income, children's cognitive abilities and social - emotional competence improved (Dahl & Lochner, 2005; Duncan & Brooks-Gunn, 1997; Mayer, 2002; McLoyd, 1998; Seccombe, 2000). Increases in family income eased the economic pressures and psychological distress experienced by parents and improved the processes of socialization or parenting. When income increased in impoverished families and they moved out of poverty, family members started to feel psychologically well, and this positively affected the physical, social, psychological and cognitive development of children and adolescents. Improvements in family income revealed results confirming the arguments proposed by family stress model (Gennetian & Miller, 2002; Leventhal & Brooks-Gunn, 2003). In his longitudinal research, Strohschein (2005) found that the increase in family income reduced depression and anti-social behaviour in children. Poverty and especially deep and extreme poverty disrupted family functioning, prevented cognitive development in children and increased behavioural problems.

## 4.4 Studies on the Family Stress Model Conducted in Turkey

As for the studies conducted in Turkey, Kağıtçıbaşı and Ataca (2005) carried out in 1975 a research on a nationally representative sample of 2305 people and another research in 2003 on 1025 low, middle and high SES people living in a metropolitan center of Istanbul and two rural areas in Western and Eastern regions. In the Value of the Child (VOC) study, which was based on longitudinal, cross-sectional comparisons, Kağıtçıbaşı and Ataca (2005) found that children's economic / beneficiary value decreased and their psychological value increased based on socioeconomic development in the community and especially increasing educational levels. The researchers maintained that in rural communities, in view of the monetary / financial contribution of each child in terms of economic / utilitarian value, more children meant more material benefits, and they claimed that parents could derive all the joy, love and other psychological satisfaction from only a few children and did not need more. The decline in fertility and the number of children in the present-day urban society indicated a decrease in the economic / beneficiary value and an increase in the psychological value of children. The tendency of youths to gain independence and separate from their parents, owing to education and industrialization in Turkey, generated a nuclear family model in industrial urban society; however, this change did not emerge as a Western family pattern with respect to separation and independence, but instead created a different family relationships model that united and combined economic and material independence with emotional attachment. Such a family relationships model differs from the middle-class Western family pattern both in terms of the decline in economic-material dependence of children on their parents as seen in the patriarchal extended family structure in the rural and agricultural society, and the emotional attachment of children to parents as seen in the traditional rural family structure. As in the example of the rural patriarchal extended families in agricultural societies with strong traditional attachments, parents receive economic and material benefits from their children and expect care, assistance and support from them when they become dependent on them in older age. Thus, in their effort to socialize their children, parents want their children to obey them, to show conformity and loyalty, to maintain their relationship and attachment with the family, and to retain their loyalty to the family. As autonomous children grow as separate and independent young adults who tend to put their own needs before their families' demands, the development of autonomy in children is not desired. Economic and material dependencies

across generations decreased with economic development and urbanization in societies. Rather than seeing them as individuals generating income and revenues for their families, families spent money on their children in many areas including education and met their expenses. While parents continue to expect their children to care for them when they get older, they have many choices in present-day urban life. They are offered increased opportunities of social and economic security and may benefit from institutions serving the elderly. On the one hand, urban lifestyle, school achievement and specialized jobs, professions required autonomy in children and adolescents, and families still cherished emotional relationships and humanitarian loyalties between parents and children; on the other hand, as a change required by modern urban life, the development of autonomy in socialization or education processes were more extensively addressed (Kağıtçıbaşı & Ataca, 2005). In another longitudinal study, the researchers examined the level of involvement and interaction of mothers of 3 to 5 year-old children living in low income areas. When the mothers were asked how often they gave their full attention to their children outside of meal times, 22% answered "never" or "almost never". Low involvement was also observed among more than 40 % of the mothers, who answered "seldom" to the same question. The research revealed findings that supported the arguments proposed by the family stress model (Kağıtçıbaşı, Sunar, & Bekman, 2001). In a study on parental values, low-SES parents expected gratitude from their children, while parents in the middle and upper socioeconomic status placed greater importance to development of autonomy in their children, and they wanted them to show affection to the family as well as gratitude (İmamoğlu, 1987).

Authors	Study Results
Newland, Crnic, Cox, and Mills-Koonce (2013)	Due to the economic pressure associated with economic hardships caused by poverty, parents experienced a variety of symptoms such as depression, distress, extreme anger and anxiety reduced supportive attitudes and behaviors of parents towards their children at 6, 15, 24 and 36 months of age.
Emmen et al. (2013)	As they came from lower socioeconomic background of ethnic minority, Turkish—Dutch mothers who experienced daily hassles as well as psychological distress and stress partly mediated the relationship between socioeconomic status and positive socialization and parenting. Findings were found to be consistent.
Loopstra and Tarasuk (2013)	Family income was associated with adequate nutrition, food expenses and investments in education of children.
Holmes and Kiernan (2013)	Children from poor families experienced less positive and appropriate socialization processes compared to their non-poor peers.

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Authors	Study Results
Waldfogel (2013)	Compared to their poor peers, children from wealthier backgrounds tended to do better in cognitive tests as they grow up from as early as the age of 2 or 3 years.
Nievar, Moske, Johnson and Chen (2014)	Family income and maternal depression had a substantial effect on socialization and child-rearing practices. Parents who provided a safe and stimulating environment for their children, despite limited financial resources or mental health issues, generally had children who are ready for grade 1 in their schools.
Bradbury-Jones and Taylor (2015)	Owing to the adverse affect of poverty on child development, children from families with poor or less advantageous socioeconomic status had a poorer performance in language and reading skills, social and behavioral development, and physical health compared to their peers.
McKnight (2015)	5-year-old children from lower-income family backgrounds did not perform as well as their peers from middle and higher-income families in a series of cognitive tests.
Olkkola (2015)	The socioeconomic status in the early stages of life consistently predicted the cognitive abilities of men born in the 1930's.
Daly and Kelly (2015)	Not only a great number of difficulties associated with inadequate and limited resources but also the parents' preoccupation with finding/changing jobs had a detrimental and harmful impact on parental mental health, and it was a constant source of stress and concern.
Warren and Font (2015)	Housing insecurity was directly associated with child neglect and increased the likelihood of maternal abuse and neglect by stressed mothers.
Bruckauf and Chzhen (2016)	Economic disadvantages exerted pressure on the mental health of parents and had a negative impact on parental investments supporting the cognitive promotion of their children and their academic achievement.
Dickerson and Popli (2016)	Standardized cognitive test scores for children who were persistently in poverty throughout their early years were significantly lower at age 3, 5 and 7 years compared to the scores for children who had never experienced poverty.
Neppl, Senia and Donnellan (2016)	Economic hardship led to economic pressure which was related to parental emotional distress and couple conflict. There was a meaningful relationship between harsh parenting towards children of 2, between 3 to 5, and 6 to 10 years of age and child problem behavior during socialization and child-rearing processes.
Cooper (2017)	Poverty was effective for parenting behaviors, and socialization and parenting style played

Authors	Study Results
	a role in the negative association between poverty and children's cognitive and behavioral development.
Duncan, Magnuson, and Votruba-Drzal (2017)	Families under the pressure of low and limited financial resources offered their children fewer opportunities to benefit from socially enriching and educational activities, including educational toys and learning materials as well as getting music classes and visiting museums that require purchasing or spending money. Children from poorer families showed lower performance in cognitive tests compared to their peers from families with socioeconomic advantages.
Masarik and Conger (2017)	The day-to-day hassles and strains created by unstable economic conditions in families, such as difficulty paying bills or being unable to purchase basic necessities, led to economic pressures and accordingly they generated psychological distress in parents.

### 5. Conclusion

The findings revealed by this literature review show that poverty adversely affects the primary parental forms of investments namely money and time - for the education of children. Owing to fewer or limited financial resources, low-income and poor parents have either no or few opportunities to purchase goods, services, activities, experiences and materials that contribute to the cognitive development and academic achievement of their children. The economic pressure experienced by parents due to their difficulty in meeting their vital, urgent, fundamental and compulsory needs leads to demoralization, stress and anxiety in poor parents. Demoralization, stress and anxiety experienced by poor parents adversely affect socialization and parenting practices, and reduce parental capacity to provide a warm, supportive and consistent family environment for their children. Poor parents who exhibit less warmth, sensitivity and responsiveness to their children may have difficulty encouraging their children to learn and involving them in learning opportunities in order to improve their cognitive development and academic achievement.

#### 6. Suggestions

Parents or the government should protect children from negative and detrimental effects of low income or poverty on cognitive abilities and school performance of children in early childhood and adolescence. Family income should be raised to meet the investments and expenditures that parents make in order to enhance children's cognitive abilities and school performance. Poor families should have the necessary income for adequate nutrition, shelter, clothing and health care, and should also be able to purchase materials, products and services that nurture and enhance cognitive development and academic performance

of children. With implementation of effective intervention programs, the government, the media industry and teachers should give priority to educational activities and practices that meet the educational needs of children and adolescents from, low-income undereducated families in order to eliminate their disadvantages and to contribute to their cognitive abilities and academic performance. Training programs should be designed and made available to raise awareness of parents in their effort to provide activities, experiences and materials that promote cognitive skills of children.

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