A study of the relationship between self-concept and primary school readiness in 60-72 month-old children and the analysis of their primary school readiness and self-concept according to some variables

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1. Introduction

With the first breath a baby takes on its own after its birth, it understands that it is a different being than all people and things around itself and starts to develop an insight about itself. In the most general terms, self-concept can be defined as an individual's insight about herself or himself. Demoulin (1999) describes self-concept as all experiences an individual has during her or his life and the totality of positive and negative judgments which are developed accordingly. Self-concept has two sub-divisions. These are self-efficacy and self-esteem. Self-efficacy is our sensitivity towards some duties based on our motivation, trust, and the requirement to control the stress about these duties. Self-esteem is our perception of us and other significant things that have weight in our lives (Demoulin, 1999).

Our early childhood experiences that we gain from households (parents, caretaker, extended family, neighbors, TV, etc.) determine our level of basic self-concept (Demoulin, 1999). Self-concept is formed the earliest in the sixth month of a baby when it starts to realize that objects exist in the world by themselves (Shiamberg, 1988; cited in Güngör, 2010) and it starts to build ground around two years old when the child realizes what he or she can and cannot do.

Upon starting school, children try to develop skills such as reading, writing, interpersonal relations, and playing games while they also start showing interest in the process of self-evaluation. (Schiamberg 1988; cited in Güngör, 2010). Oktay (2004) notes that primary school readiness is a complex process and describes some basic factors that researchers investigate with some differences as physiological factors, intelligence factor, environmental factors, and emotional factors.

In the light of these findings, the basic interest of this study is self-concept and primary school readiness and various variables that might influence them.

The purpose of this study is to examine the relationship between self-concept and primary school readiness in 60-72 month-old children that attend pre-school and to analyze their primary school readiness and self-concept in terms of some variables.

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2. Method

The study is designed and conducted with relational survey model. Study group is 308 children at 60-72 months of age who attend preschools under Ministry of Education in Istanbul and who are chosen with random sampling method (casting lots). Teachers filled out Demoulin Self Concept Scale and the subscale of Marmara Primary School Readiness Scale. The researcher applied Marmara Primary School Readiness Scale to children. All the tests started to implement during the month of May in spring semester of 2011-2012 academic year and continued until the academic year ended.

In the study, a demographical information form that was prepared by the researcher, "Demoulin Self-Concept Developmental Scale" that was translated to Turkish, validity and reliability studies done by Kuru Turaşlı (2006), and "Marmara Primary School Readiness Scale" that was developed, standardized, and validity and reliability studies established by Polat Unutkan (2003a) were used.

Demoulin Self-Concept Developmental Scale (Kuru Turaşlı, 2006) includes expressions of children about themselves, their teachers, friends, family, and some activities at pre-school.

Marmara Primary School Readiness Scale (MPSRS) (Polat Unutkan, 2003a) is a school maturity scale which is standardized specifically for 60-78 month-old Turkish children. The scale measures children's primary school readiness in all developmental fields.

3. Findings

There were 144 girls (46,8%) and 164 boys (53,2%); 79 of them (25,6%) had no siblings, 157 (51,0%) had one sibling and 72 (23,4%) had 2 siblings.

Frequency distribution and percentage of children that participated in the study in terms of parents' level of education reveals that 107 mothers (34,70%) have primary school, 43 mothers (14,0%) have secondary school, 84 mothers (27,3%) have high school, and 74 mothers (24,0%) have university degrees. 83 of fathers (26,9%) have primary school, 51 (16,6%) have secondary school, 90 (29,2%) have high school, and 84 (27,3%) have university degrees. In terms of level of income, 76 families (24,7%) have low, 197 families (64,0%) have middle, and 35 families (11,4%) have high level of income.

Table 1 analyses findings of the first sub-problem that examines whether or not there is a significant relationship between development of self-concept and primary school readiness of 60-72 month-old children who attend pre-school.

Table 1. Pearson Correlation Results of MPSRS and Self-Concept Perception Scale Scores

		Self-Esteem	Self-Efficacy	Concept Total			Self-Esteem	Self-Efficacy	Concept Total
Mathematics	R	,118*	,087	,114*	Mental and Language	R	,133*	,138*	,149*
	p	,039*	,127	,046*		p	,019*	,016*	,009*
	n	308	308	308		n	308	308	308
Science	R	,026	,017	,024	Social Emotion-	R	,143*	,105	,138*
	p	,644	,760	,669		p	,012*	,066	,015*

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*p<		n	308	308	308	al	n	308	308	308	.05
		R	,010	-,039	-,014		R	,129*	,109	,132*	
	Sound	p	,858	,491	,803	Physical	p	,023*	,056	,021*	
		n	308	308	308		n	308	308	308	
		R	,103	,059	,091		R	,088	,098	,102	
	Line	p	,071	,304	,113	Self-Care	p	,125	,085	,075	
		n	308	308	308		n	308	308	308	
		R	,080	,073	,084						
	Labyrinth	p	,161	,202	,140						
		n	308	308	308						

When Table 1 was examined, a positive significant relationship was found between Mathematics and Self-Esteem (r=,118, p< .05) and Mathematics and Self-Concept (r=,114, p< .05). In addition, there is a significant positive relationship between Mental and Language Development and Self-Esteem (r=,133, p< .05), Self-Efficacy (r=,138, p< .05) and Self-Concept (r=,149, p< .05). There is also a significant positive relationship between Social Emotional Development and Self-Esteem (r=,143, p< .05) and between Social Emotional Development and Self-Concept (r=,138, p< .05). Lastly, there is a significant positive relationship between Physical Development and Self-Esteem (r=,129, p< .05) and Physical Development and Self-Concept (r=,132, p< .05).

Relationships and differences between demographical data from the study group and primary school readiness are examined in the following paragraphs. Results of T test of children's MPSRS-Social Emotional Development Sub-Scale Scores According to Gender Variable are examined and there is a significant difference in children's MPSRS-social emotional development sub-scale scores according to gender (t= 2,033; p<.05). This difference is in favor of girls (X= 94,48).

When the results of T test of children's MPSRS-Self-Care Sub-Scale Scores were examined, it was found that there is a significant difference in children's MPSRS-self-care sub-scale scores according to gender (t= 2,600 ; p<.05). This difference is in favor of girls (X= 44,50).

When the results of ANOVA Test of Children's MPSRS-Mathematics Sub-Scale Scores were examined, it was found that there is a significant difference between children's primary school readiness mathematics sub-scale scores according to mother's level of education variable (F=10,757, p< .01). Tamhane's T2 test was conducted to examine the source of difference and it was established that there is a significant statistical difference between children whose mothers have higher degrees.

When MPSRS-Sound Sub-Scale scores were examined, a significant difference was found according to mothers' level of education variable (F=8,353, p< .01). Tukey test was conducted to establish the source of difference and it was established that there is a significant difference between children whose mothers have higher degrees.

There is a significant difference between children's MPSRS-Cognitive and Language Development Sub-Scale scores according to mothers' level of education variable (F=3,559, p< .05). Tamhane's T2 test was conducted to examine the source of difference and it was established that there is a significant difference between children whose mothers have higher degrees.

Results of ANOVA Test of Children's MPSRS-Social Emotional Development Sub-Scale Scores According to Mothers' Education Level are examined. There is a significant difference in children's MPSRS- Social Emotional Development Sub-Scale scores according to mother's level of education variable (F=6,188, p< .01). Tamhane's T2 test was conducted to examine the source

of difference and it was established that there is a significant difference between children whose mothers have higher degrees.

According to the results of ANOVA Test of Children's MPSRS-Mathematics Sub-Scale Scores According to Fathers' Education Level; there is a significant difference in children's MPSRS-Mathematics Sub-Scale scores according to father's level of education variable (F=9,788, p< .01). Tamhane's T2 test was conducted to examine the source of difference and it was established that there is a significant difference between children whose fathers have higher school degrees.

There is a significant difference in children's MPSRS-Sound Sub-Scale scores according to father's level of education variable (F=7,935, p< .01). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference between children whose fathers have higher degrees.

According to the results of ANOVA Test of Children's MPSRS-Cognitive and Language Development Sub-Scale Scores According to Fathers' Education Level; there is a significant difference in children's MPSRS-Cognitive and Language Development Sub-Scale scores according to father's level of education variable (F=4,267, p< .01). Tamhane's T2 test was conducted to examine the source of difference and it was established that there is a significant difference between children whose fathers have higher degrees.

Results of ANOVA Test of Children's MPSRS-Social and Emotional Development Sub-Scale Scores According to Fathers' Education Level are examined; there is a significant difference in children's MPSRS-Social and Emotional Language Development Sub-Scale scores according to father's level of education variable (F=4,484, p< .01). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference between children whose fathers have higher degrees.

When the results of ANOVA Test of Children's MPSRS-Mathematics Sub-Scale Scores According to Socioeconomic Level of Families are examined; there is a significant difference in children's MPSRS-Mathematics Sub-Scale scores according to socioeconomic level of families (F=6,525, p< .01). Tamhane's T2 test was conducted to examine the source of difference and it was established that there is a significant difference between children from families with middle income level and children from families with low income level in favor of middle income level, children from families with high income level and children from families with low income level in favor of high income level.

There is a significant difference in children's MPSRS-Science Sub-Scale scores according to socioeconomic level of families (F=7,017, p< .01). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference between children from families with middle income level and children from families with low income level in favor of middle income level.

According to the results of ANOVA Test of Children's MPSRS-Sound Sub-Scale Scores According to Socioeconomic Level of Families; there is a significant difference in children's MPSRS-Sound Sub-Scale scores according to socioeconomic level of families (F=3,936, p< .05). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference in terms of sound skills between children from families with middle income level and children from families with low income level and children from families with high income level and children from families with low income level.

Relationships of and differences in self-concept of participants and demographical variances are examined in the following paragraphs. Results of T Test of Children's Self-Concept Test Scores According to Gender Variable are examined and there is a significant difference in children's self-concept test scores according to gender (t= -1,982; p<.05). When total mean scores of

self-concept test were examined, it was established that mean score of boys (X=75,32) is higher than mean score of girls (X=73,96) and that this difference is in favor of boys.

According to the results of ANOVA Test of Children's Self-Concept Test Self-Esteem Sub-Scale Scores According to Level of Education of Fathers; there is a significant difference in children's self-concept test self-esteem sub-scale scores according to father's level of education variable (F=3,688, p< .05). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference in terms of level of self-esteem between children whose fathers have university degrees and children whose fathers have primary school degrees.

When the results of ANOVA Test of Children's Self-Concept Test Self-Efficacy Sub-Scale Scores According to Fathers' Education Level examined; there is a significant difference in children's self-concept test self-efficacy sub-scale scores according to father's level of education variable (F=4,379, p< .01). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference in terms of level of self-efficacy between children whose fathers have higher school degrees.

Lastly, there is a significant difference in children's self-concept test total scores according to father's level of education variable (F=4,595, p< .01). Tukey test was conducted to examine the source of difference and it was established that there is a significant difference in terms of self-concept total scores between children whose fathers have higher school degrees.

4. Discussion

It was established that children's gender create differences in favor of girls at MPSRS social emotional development and self-care skills sub-scales and in favor of boys at self-concept scores. While level of education of parents create differences at some MPSRS sub-scales, it was determined that level of education of mothers does not create differences in terms of self-concept although level of education of fathers does create differences in terms of self-concept. Number of siblings does not create differences in primary school readiness and self-concept. It was determined that socio-economic levels of families create differences in MPSRS-mathematics, science, and sound studies sub-scales while creating no differences in self-concept. When the relationship between children's primary school readiness and self-concept was examined, it was determined that as children's self-concept scores increase their mathematical skills, mental and language development, social and emotional development and physical development increase.

When the difference between children's gender and their self-concept was examined, it was found that boys have a higher level of positive self-concept than girls. On the contrary, Çelik, Tuğrul, and Yalçın (2002), Bosacki (2007), and Bencik (2006) found that girls have a higher level of positive self-concept than boys. Turaşlı (2006), Şeremet (2006) and İkiz (2009) noted that self-concept of pre-school children does not differentiate according to gender variable. In all relevant researches conducted by Demoulin, it was determined that self-concept does not differentiate according to gender (İkiz, 2009). In light of such conflicting results, it is suggested that more studies must be conducted in our country on this subject.

It is noted that as mothers' level of education increase, primary school readiness mathematical and sound skills and cognitive and language development, social emotional development increase. Studies conducted by Erkan (2011); Edwards, Baxter, Smart, Sanson, and Hayes (2009); Kırca (2007) and Yazıcı (2002) also concluded that as mothers' level of education increase, children's primary school readiness increase.

The study also concluded that as fathers' level of education increase, children's self-concept increases. Similarly Şeremet (2006) and İkiz (2009) determined that increasing level of education of fathers is connected with increased levels of self-concept in children.

It was noted that as fathers' level of education increase, children would have a higher level of mathematical and sound skills, cognitive and language development fields and social emotional developments. Yazıcı (2002), Ahioğlu (2006) and Doyle, Cheevers, Finnegan, McEntee, and McNamara (2009), Kırca (2007) and Erkan and Kırca (2010) expressed that there is a significant difference between level of education of fathers and school readiness. Considering the fact that level of education of mothers also makes significant difference on the same areas, it can be concluded that the areas that get affected from parents' level of education.

As socioeconomic status of families develop, children's mathematics, science, and sound skill scores increase. Polat Unutkan (2007), Polat Unutkan (2006), Üstün, Akman and Etikan (2004), Taner and Başal (2005) Janus and Duku (2007); Doyle, Cheevers, Finnegan, McEntee, and McNamara (2009); Thornburg, Mayfield, Hawks, and Fuger (2009); Kelly (2010) and Erkan (2011) also reached to similar conclusions.

The significant positive relationship between self-efficacy sub-scale and only cognitive language development suggests that children's self confidence in their success can be supported by their progress in cognitive language development.

The only MPSRS sub-scale which self-concept scale and its self-esteem and self-care sub-scales in significant positive relationship is the cognitive and language development sub-scale. In other words as children's cognitive and language development increases, their perception of themselves next to others, their self-confidence in success and their general perception of themselves would develop. Cognitive and language development is seen as the key factor of success in society. In this light, it can be argued that children's cognitive and language development can increase with positive feedback from society and as a result their self-concept can be positively affected.

In light of these results, following suggestions can be made:

- This study that researched children's self-concept and their primary school readiness can be repeated in different cities of Turkey with different samples and results can be compared,
- In-service trainings on primary school readiness and self-concept can be made available to teachers to ensure more effective teaching,
- Family support programs can be developed and applied to increase awareness of families on self-concept and primary school readiness,

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