

Turkish Early Childhood Educators' Perceptions of Child Development and Education in the Preschool Years

Emine Ahmetoğlu

Trakya University, Edirne, Turkey

İbrahim Hakkı Acar

İstanbul Medipol University, İstanbul, Turkey

Manolya Aşık-Öztürk

Trakya University, Edirne, Turkey

Considering the importance of how perceptions of teachers affect their practice in early childhood education, the purpose of the current study was to examine how teachers perceive children's developmental and educational experiences in relation to children's learning outcomes perceived by teachers. We recruited 219 preschool teachers (90.9% are female) from different regions of Turkey via an online survey. Teachers' age ranged from 20 to 53 years old (Mean $[M] = 27.83$, standard deviation $[SD] = 5.66$) and 57.5% of them were single. Average teaching experience was 4.62 years ($SD = 4.85$), which ranged from one to 31 years. Teachers reported on their perceptions of the importance given to children's developmental and educational experiences, and children's learning outcomes. Results from canonical correlations showed that the importance given to educational and developmental experiences of children, and the importance to children's learning outcomes were significantly associated. Further, the importance of the current findings in early childhood education is discussed.

Keywords: early childhood education, teacher perceptions, child development, learning outcomes

Introduction

Child development and early childhood education have been the central phenomenon of many studies in the fields of health, psychology, education, and philosophy, as it has been recognized as a critical period for laying the foundations of future development and education. Another reason is that early childhood education is a tool to help children become socially and economically more competent individuals in the modern globalized world (Dahlberg & Moss, 2005). The growing number of children enrolling in early childhood programs is a reflection of the benefits of early childhood education with its learning and developmental outcomes (Adams, Tout, & Zaslow, 2007). Early childhood education aims to improve children's cognitive, linguistic, and motor skills as well as social and emotional skills, because early childhood education programs are usually the first social environment for many children (Epstein & Barnett, 2012). In line with this purpose, curriculum and educational programs usually focus on similar developmental areas targeting the development of

Emine Ahmetoğlu, Ph.D., professor, Department of Preschool Education, Trakya University.

İbrahim Hakkı Acar, Ph.D., assistant professor, Department of Early Childhood Education, İstanbul Medipol University.

Manolya Aşık-Öz türk, M.D., lecturer, Uzunköprü School of Applied Sciences, Trakya University (Corresponding author: manolyaasik@trakya.edu.tr).

social-emotional skills, physical well-being or motor development, language and literacy, mathematics or cognitive skills, science and nature, environmental literacy, arts and creativity, and morals and values, with an emphasis on developmentally appropriate practices (DAP).

DAP is a framework based on scientific research on how young children develop and learn effectively to help practitioners support children's optimal development and learning in all areas of development. Knowledge of child development, children's individual needs and families' values, expectations, and beliefs is crucial to provide children with meaningful, relevant, and respectful learning experiences (National Association of Education of Young Children [NAEYC], 2009). Research has shown that teachers who have more developmentally appropriate beliefs are more likely to create more developmentally appropriate environments where the stress level is less (Hyson, Hirsh-Pasek, & Rescorla, 1990; Burts et al., 1993). McCarthy, Abbott-Shim, and Lambert (2001) investigated the relationship between teacher beliefs and the quality of learning environment, and they found that the teachers of lower classes were not as good as the teachers of higher classes at discriminating appropriate and inappropriate practices. In addition, Daniels and Shumow (2003) showed that teachers' views of development of intelligence affected their classroom practices and their approaches to learning. For instance, teachers, such as Montessori preschool teachers with maturationist views (e.g., education should passively support the development of children and provide them with prompts instead of getting the child filled with information) tend to address children's stage-related developmental needs more, while preschool teachers who perceive intelligence quotient (IQ) as a fixed trait are more likely to utilize competitive and didactic approaches in classroom. So, the examination of teacher beliefs and perceptions may provide insight into the improvement of early childhood care and education programs.

Literature Review

Socio-emotional development is defined as the growing ability of children who are aged between 0 and 5 to establish intimate and secure bonds with their peers and the others, while experiencing, exploring, learning, regulating, and expressing their emotions appropriately within the context of family, community, and culture (Yates et al., 2008). Preschool years are vital for the development of social-emotional skills, such as self-regulation (Kochanska, Murray, & Harlan, 2000) and peer interactions and collaboration (Göncü & Weber, 2000). During this period, emotional expression begins to be regulated by cultural and social norms because of children's increasing understanding of the self and others' emotions (Louie, Wang, Fung, & Lau, 2014). As teachers are important agents of child socialization just like parents, their perceptions of socially and emotionally appropriate behavior may be one of the determinants of socio-emotional development in preschool years. For instance, Poulou (2017) examined teachers' perceptions of their own emotional intelligence and students' social skills and their relation to students' emotional and behavioral difficulties and she found that teacher perceptions were important predictors of students' emotional and behavioral difficulties. Similarly, Merritt et al. (2012) found that higher teacher emotional support predicted lower levels of child aggression and higher levels of self-control regardless of the sociodemographic risk factors. In their experimental study, where they utilized the responsive classroom (RC) approach, Curby, Rimm-Kaufman, and Abry (2013) also found an association between higher levels of emotional support at the beginning of the year and higher instructional support at the end of the year. In classrooms where the students are cared and nurtured for their emotional,

social, and academic needs, they are more likely to show academic progress and effort (Hughes & Kwok, 2007). What is more, in classrooms where teachers use more commands and threats, children tend to show less compliance to the rules as observed by Wachs, Gurkas, and Kontos (2004). This evidence underlies the role of teachers' social and emotional support in classroom as well as knowledge of child development. Therefore, studying teacher perceptions of socio-emotional skills, including peer acceptance, prosocial, and antisocial behavior seems to be quite important to support children's development.

Math skills, which are an aspect of cognitive development, include a number of integrated areas, such as measurement, geometry, statistics, or probability, and it is more than paper and pencil computations (Sperry-Smith, 2012). Research has shown that early education and care programs have positive short- and long-term effects on cognitive development (Burger, 2010) with gains in mathematics and literacy, school success and readiness, reduced grade retention, and reduced placement in special education (Mitchell, Wylie, & Carr, 2008; Isaacs & Roessel, 2008; Barnett, 1995). During their free play or guided activities, preschoolers can explore patterns, shapes, and spatial relations, make comparisons, count, and classify what they have or play with regardless of their income level and gender (Clements, 2004; Kyoung-Hye & Ginsburg, 2004). However, it is not only play, but also teacher's knowledge, children's understanding and perceptions of mathematical thinking that shapes the development of early math skills (Kühne, van den Heuvel-Panhuizen, & Ensor, 2005). These perceptions may be influenced by various factor, such as gender (Robinson-Cimpian, Lubienski, Ganley, & Copur-Gencturk, 2014) and ethnicity (Cooper, Baturo, Warren, & Doig, 2004), so it is of great importance to probe them to promote optimal development of children.

Nature and science or environmental education incorporates life science and knowledge of the nature while emphasizing the promotion of emotions, dispositions, relationships and skills (North American Association of Environmental Education [NAAEE], 2001). Environmental education in early childhood is relatively a new research area compared to the other domains as the preservation of the environment has gained much more importance compared to past (Heimlich, 2002). However, studies show that positive teacher perceptions of nature not only enhance classroom instruction and teacher motivation, but also support students' learning and reduce attendance problems (Castelli, 2004; Ko & Lee, 2003). Thus, a deeper understanding of teachers' perceptions of nature or environmental education may improve teacher education programs to better equip preservice teachers with theoretical and practical knowledge.

Creativity is defined as the production of original and valuable ideas, and sometimes, described as a phenomenon, which requires newness, difference, transformation, and reinterpretation of thought and sensitivity to problems (Torrance, 1988). Early childhood education seems to contribute to the development of creative and artistic skills, such as visual perception, critical thinking, and symbolic expressions, which is also closely related to cognitive development (Danko-McGhee & Slutsky, 2007). Early child is a period when children's way of thinking is very imaginative and flexible, and full of fantasy and fiction, so the people who play a significant role in shaping children's environment can either encourage or destroy children's creativity (Wright, 2010). So, the attitudes, beliefs, and theoretical knowledge of early childhood educators seems to be one of most important the factors affecting teaching and learning processes in preschool classrooms (Maier, Greenfield, & Bulotsky-Shearer, 2013) that needs to be understood more deeply.

In sum, teachers are important agents of the development and education of young children (Pianta, 1999), because children's academic, social, emotional, and linguistic growth during preschool period is greatly

influenced by the teacher related issues, such as the quality of teacher-child interactions (Curby et al., 2009; Hamre et al., 2012; Fantuzzo et al., 2011), teacher qualifications, and teacher-students ratio in classrooms (Gorey, 2001). Main characteristics of teachers regarding child development and education are classroom management, teaching strategies, emotional, organizational, and instructional support (Pianta, La Paro, & Hamre, 2008) and teacher-student interactions are quite important for student learning (Pianta et al., 2008). In addition, teachers' beliefs and perceptions of child development and learning are important as they seem to shape their practice and expectations while affecting the classroom climate and interactions, student motivation and achievement (Abry, Latham, Bassok, & LoCasale-Crouch, 2015; Teaching and Learning International Survey [TALIS], 2009). While early childhood educators seem to emphasize the importance of early childhood education in general, they may put more or less emphasis on some domains compared to the others and opt for certain methods or activities. Given that teachers' beliefs and perceptions can have certain implications, it is of the great importance to analyze teacher views on different areas of development and the factors contributing to their views.

Considering the importance of how perceptions of teachers affect their practice in early childhood education, the purpose of the current study was to examine how teachers' perceive children's developmental and educational experiences in relation to children's learning outcomes perceived by teachers.

The Method

Participants

We recruited 219 preschool teachers (90.9% are female) from different regions of the Turkey via online survey. Teachers' age ranged from 20 to 53 years old (*Mean* [*M*] = 27.83, standard deviation [*SD*] = 5.66) and 57.5% of them were single. Average teaching experience was 4.62 years (*SD* = 4.85), which ranged from one to 31 years. Teachers reported that 81.3% with bachelor, 8.2% with associate degree, 7.8% with post-graduate, and 2.7% with vocational high school degree. A total of 84.5% teachers were from state-funded and 15.5% were from private-funded schools.

Participants were contacted through e-mails and social media platforms (e.g., Facebook) for recruitments. Each teacher received a link to the questionnaires and was asked if he/she wanted to voluntarily participate to the study. First section of the online survey explained the purpose of the study and asked for the consent of teachers. Once a teacher agreed to participate, he/she continued the completing questionnaires. Completion of the questionnaire took about six months, from March to August.

Measures

The importance of experiences in early childhood (IEEC). The IEEC (Torquati, Cutler, Gilkerson, & Sarver, 2013) was used to assess teacher's perceptions regarding the importance of certain experiences in early childhood that children should have. The 39-item measure is a 5-point Likert type scale (1 = "Not very important" and 5 = "Very important"). The scale included five subscales: mathematics with $\alpha = 0.89$ (four items, e.g., sorting and classifying), language and literacy with $\alpha = 0.92$ (four items, e.g., reading books with a teacher), art and creativity with $\alpha = 0.89$ (five items, e.g., painting or dance and movement), DAP with $\alpha = 0.96$ (14 items, e.g., large group peer interaction or cutting and pasting), and science and nature with $\alpha = 0.97$ (14 items, e.g., learning about the seasons or exploring the elements [rain, wind, sun, and snow]). Item 29 (caring for animals) was considered for both DAP and science and nature subscales (see Table 1).

Table 1

Item Statistics for the IEEC

Item	Scale M if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's α if item deleted
Mathematics	$\alpha = 0.89$			
Item 3	13.51	7.11	0.58	0.93
Item 23	12.65	6.54	0.83	0.84
Item 33	12.54	6.74	0.85	0.84
Item 34	21.58	6.81	0.84	0.84
Language and literacy	$\alpha = 0.92$			
Item 4	13.28	7.13	0.80	0.91
Item 5	13.30	7.31	0.84	0.89
Item 10	13.17	7.48	0.87	0.88
Item 11	13.10	7.44	0.79	0.91
Art and creativity	$\alpha = 0.89$			
Item 7	17.09	12.36	0.57	0.91
Item 16	16.93	11.48	0.79	0.86
Item 17	17.03	11.29	0.74	0.87
Item 31	16.57	11.58	0.81	0.85
Item 37	16.56	11.56	0.80	0.85
DAP	$\alpha = 0.96$			
Item 1	56.38	115.96	0.79	0.96
Item 2	56.19	115.65	0.74	0.96
Item 6	56.19	114.41	0.81	0.96
Item 8	56.18	113.68	0.88	0.96
Item 9	56.31	115.78	0.80	0.96
Item 12	56.21	114.27	0.87	0.96
Item 13	56.60	117.78	0.64	0.97
Item 14	56.01	114.56	0.89	0.96
Item 15	55.96	114.64	0.90	0.96
Item 22	56.71	118.40	0.63	0.97
Item 29	56.25	115.20	0.84	0.96
Item 30	56.06	114.34	0.89	0.96
Item 32	56.10	114.34	0.90	0.96
Item 38	56.34	117.33	0.77	0.96
Science and nature	$\alpha = 0.97$			
Item 18	49.82	100.20	0.68	0.97
Item 19	49.58	97.32	0.88	0.96
Item 20	49.84	96.08	0.81	0.96
Item 21	49.85	96.08	0.81	0.96
Item 24	49.59	96.74	0.85	0.96
Item 25	49.83	96.95	0.86	0.96
Item 26	49.73	97.89	0.86	0.96
Item 27	49.71	96.66	0.88	0.96
Item 28	50.00	97.80	0.80	0.96
Item 29	49.62	96.91	0.85	0.96
Item 35	49.78	96.54	0.86	0.96
Item 36	50.05	96.73	0.80	0.96
Item 39	49.78	98.46	0.69	0.97

The importance of learning outcomes in early childhood (ILOEC). The ILOEC (Torquati, Cutler, Gilkerson, & Sarver, 2013) was used to assess teacher's perceptions regarding the importance of certain learning outcomes (skills, attitudes, and knowledge) in early childhood that children should gain. The 36-item measure is a 5-point Likert type scale (1 = "Not very important" and 5 = "Very important"). The scale included five subscales: mathematics with $\alpha = 0.81$ (three items, e.g., Counting and recognizing numbers 1-10), language and literacy with $\alpha = 0.82$ (six items, e.g., spelling their own name or making up stories), social emotional with $\alpha = 0.96$ (nine items, e.g., respecting all living things or communicating effectively with peers), science and nature with $\alpha = 0.95$ (14 items, e.g., understanding the life cycle of animals, insects, and people), and art and creativity with $\alpha = 0.87$ (two items, e.g., appreciating art and beauty). Item 22 (hopping, skipping, and climbing) and Item 23 (throwing and catching thing balls) were not considered as part of any subscales on the ILOEC (see Table 2).

Table 2

Item Statistics for the ILOEC

Item	Scale <i>M</i> if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's α if item deleted
Mathematics	$\alpha = 0.81$			
Item 1	8.39	2.50	0.68	0.72
Item 24	8.37	2.75	0.65	0.76
Item 33	8.52	2.40	0.66	0.75
Language and literacy	$\alpha = 0.82$			
Item 2	17.18	21.26	0.67	0.77
Item 3	16.68	21.53	0.71	0.76
Item 4	17.11	21.27	0.66	0.77
Item 5	15.81	28.13	0.18	0.85
Item 6	17.34	19.79	0.62	0.78
Item 7	16.73	20.33	0.62	0.78
Social emotional	$\alpha = 0.96$			
Item 10	36.67	36.60	0.84	0.95
Item 15	35.71	36.05	0.90	0.94
Item 16	35.86	36.25	0.84	0.95
Item 17	36.33	36.81	0.58	0.96
Item 18	35.90	35.84	0.87	0.95
Item 19	35.72	36.07	0.91	0.94
Item 20	35.75	36.13	0.85	0.95
Item 21	36.10	36.47	0.77	0.95
Item 36	35.72	36.35	0.88	0.95
Science and nature	$\alpha = 0.95$			
Item 8	51.96	100.31	0.78	0.94
Item 9	51.95	99.46	0.82	0.94
Item 11	51.64	101.31	0.69	0.94
Item 12	51.57	102.30	0.67	0.94
Item 25	52.07	98.11	0.75	0.94
Item 26	51.95	99.88	0.75	0.94
Item 27	52.92	97.89	0.68	0.94
Item 28	52.66	96.21	0.74	0.94
Item 29	51.75	100.31	0.77	0.94
Item 30	52.68	97.80	0.71	0.95

(Table 2 to be continued)

Item 31	52.06	98.72	0.83	0.94
Item 32	52.83	96.97	0.65	0.94
Item 34	51.62	100.73	0.74	0.94
Item 35	51.74	100.24	0.78	0.94
Art and creativity	$\alpha = 0.87$			
Item 13	4.21	0.95	0.77	
Item 14	4.24	0.90	0.77	

The Results

Item Statistics

We followed the conceptualizations of Torquati, Cutler, Gilkerson, and Sarver (2013) to establish the subscales for both measures. We ran item analyses to see the conceptual items were also statistically held together. As shown in Tables 1 and 2, internal consistency (Cronbach's α) ranged from 0.89 to 0.97 for the IEEC. In addition, internal consistency (Cronbach's α) ranged from 0.81 to 0.95 for the ILOEC. As seen in Table 1, item-total correlations ranged from 0.58 to 0.84 for mathematics, 0.79 to 0.87 for language and literacy, 0.57 to 0.81 for art and creativity, 0.64 to 0.90 for developmentally appropriate practices, and 0.68 to 0.88 for science and nature subscale. Table 2 shows item statistics for the ILOEC. Parallel to the IEEC, item-total correlations ranged from 0.65 to 0.68 for mathematics, 0.18 to 0.67 for language and literacy, 0.58 to 0.91 for social emotional, and 0.65 to 0.78 for science and nature.

Table 3 shows bivariate correlations among all variables. All experience variables were significantly and positively related to learning outcome variables (ranged from 0.37 to 0.81).

Table 3

Descriptive Statistics and Intercorrelations Among Study Variables

	1	2	3	4	5	6	7	8	9	10
Experiences										
1. Mathematics	-									
2. Language and literacy	0.85**	-								
3. Art and creativity	0.86**	0.84**	-							
4. DAP	0.92**	0.91**	0.92**	-						
5. Science and nature	0.82**	0.82**	0.91**	0.89**	-					
6. Mathematics	0.75**	0.63**	0.68**	0.69**	0.68**	-				
7. Language and literacy	0.44**	0.37**	0.39**	0.40**	0.41**	0.53**	-			
Importance										
8. Social emotional	0.78**	0.76**	0.74**	0.81**	0.72**	0.76**	0.44**	-		
9. Science and nature	0.62**	0.59**	0.61**	0.63**	0.70**	0.75**	0.64**	0.72**	-	
10. Art and creativity	0.58**	0.61**	0.69**	0.63**	0.69**	0.59**	0.41**	0.70**	0.71**	-
Mean	4.24	4.40	4.21	4.32	4.15	4.21	3.36	4.48	3.93	4.22
SD	0.85	0.89	0.84	0.82	0.82	0.76	0.92	0.75	0.77	0.91
Range	1-5	1-5	1-5	1-5	1-5	1-5	1.17-5	1-5	1-5	1-5
Skewness	-2.16	-2.65	-2.11	-2.86	-1.89	-1.84	-0.22	-3.31	-1.26	-1.71
Kurtosis	5.37	6.81	5.02	8.47	4.25	5.06	-0.71	12.37	2.64	2.99

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed).

Canonical Correlations

We ran canonical correlation analysis (CCA) to examine multi-variate associations between teachers' perceptions of the IEEC and learning outcomes in early childhood. The CCA is a tool to examine the

association between two sets of variables (Sherry & Hanson, 2005). We followed Sherry and Hanson's (2005) guidelines to interpret significance of the CCA findings:

1. We checked Wilk's λ for significance of the full model and explained variance ($1 - \lambda = R_c^2$) between variable sets;
2. We examined significance of extracted function via criteria that explained variance should be larger than 10% for a function (squared canonical correlation [R_c^2]);
3. We picked the variables from each function that had structure coefficients (e.g., the weights) larger than |0.45|. We further interpreted the variables that met these criteria.

The CCA yielded five functions with squared canonical correlation (R_c^2) of 0.70, 0.30, 0.14, 0.14, and 0.01, respectively. Collectively, the full model across all functions was statistically significant using the Wilks's $\lambda = 0.14$ criterion, $F(25, 655.31) = 17.58, p < 0.001$. Because the Wilks's λ represents the variance unexplained by the model, $1 - \lambda$ yields the full model effect size in an r^2 metric. Thus, for the set of three canonical functions, the r^2 type effect size was 0.86, which indicates that the full model explained 86% of the variance shared between the variable sets.

The dimension reduction analysis allows the researcher to test hierarchal arrangement of functions for statistical significance. As noted, the full model with Functions 1 to 5, $F(25, 655.31) = 17.59, p < 0.001$, with Functions 2 to 5, $F(16, 541.38) = 8.44, p < 0.001$, with Functions 3 to 5, $F(9, 433.36) = 6.73, p < 0.001$, and with Functions 4 to 5, $F(4, 358.00) = 7.29, p < 0.001$ were statistically significant. Function 5 did not explain a statistically significant amount of shared variance between the variable sets, $F(1, 180) = 0.01, p = 0.93$.

Given the R_c^2 effects for each function, only the first three functions were considered noteworthy in the context of this study (70.65%, 30.38%, 14.94%, and 14.50% of shared variance, respectively). The last function only explained approximately 1% of the remaining variance in the variable sets after the extraction of the prior functions.

Table 4

Canonical Solution for Experiences in Early Childhood and Learning Outcomes Gained in Early Childhood

Variable	Function 1			Function 2			Function 3			Function 4			h^2 (%)
Experiences	Coef.	r_s	r_s^2 (%)	Coef.	r_s	r_s^2 (%)	Coef.	r_s	r_s^2 (%)	Coef.	r_s	r_s^2 (%)	
Mathematics	0.45	<u>0.97</u>	94.09	-0.27	-0.06	0.36	1.42	0.10	1.00	2.06	0.18	3.24	<u>98.69</u>
Science and nature	0.05	<u>0.90</u>	81.00	2.08	0.39	15.21	-1.17	-0.14	1.96	1.16	-0.03	0.09	<u>98.26</u>
DAP	0.34	<u>0.98</u>	96.04	-1.97	-0.04	0.16	-2.44	-0.13	1.69	-0.80	-0.06	0.36	<u>98.25</u>
Art and creativity	0.11	<u>0.93</u>	86.49	0.37	0.19	3.61	2.32	0.14	1.96	-1.86	-0.08	0.64	<u>92.70</u>
Language and literacy	0.06	<u>0.91</u>	82.81	-0.03	-0.02	0.04	-0.09	-0.15	2.25	-0.58	0.33	10.89	<u>95.99</u>
R_c^2			70.65			30.38			14.94			14.50	
Learning outcome													
Mathematics	0.34	<u>0.88</u>	77.44	0.08	0.12	1.44	1.34	0.24	5.76	0.76	0.36	12.96	<u>97.60</u>
Science and nature	-0.10	<u>0.77</u>	59.29	0.96	<u>0.46</u>	21.16	-1.49	-0.30	9.00	0.81	0.27	7.29	<u>96.74</u>
Social and emotion	0.64	<u>0.96</u>	92.16	-1.35	-0.13	1.69	-0.80	-0.19	3.61	-0.50	-0.07	0.49	<u>97.95</u>
Art and creativity	0.16	<u>0.76</u>	57.76	0.81	<u>0.49</u>	24.01	0.71	0.03	0.09	-1.10	-0.39	15.21	<u>97.07</u>
Language and literacy	0.04	<u>0.51</u>	26.01	-0.25	0.14	1.96	0.40	0.09	0.81	0.06	0.32	10.24	39.02

Notes. Structure coefficients (r_s) greater than |0.45| are underlined; Communality coefficients (h^2) greater than 45% are underlined; Coefficient = standardized canonical function coefficient; r_s = structure coefficient and r_s^2 = squared structure coefficient; h^2 = communality coefficient.

Table 4 presents the standardized canonical function coefficients and structure coefficients for Functions 1, 2, 3, and 4. The squared structure coefficients are also given as well as the communalities (h^2) across the two functions for each variable. Looking at the Function 1 coefficients, one sees those children's experiences with developmentally practices, mathematics, arts and creativity, language and literacy, and science and nature related activities primarily contributed to the syntactic predictor variable. This conclusion was supported by the squared structure coefficients. Furthermore, these all variables had the same sign, indicating that they were all positively related. Regarding the criterion set in Function 1, all learning outcome variables were positive and significantly contributed to criterion variable.

Variables

Because the structure coefficients were positive, they were positively related to all predictor variables. We labeled Function 1 as "supportive experiences for learning outcomes in early childhood."

As seen in Table 4, the functions did not have variables met the criteria (structure coefficients [e.g., the weights] larger than $|0.45|$), we did not interpret them. Some of the variables (e.g., science and nature) had larger standardized canonical function coefficient but small structure coefficient. This was may be due to the multicollinearity that these variables had with other variables.

Discussion

In the current study, we examined the associations between developmental and educational experiences and importance of children's learning outcomes perceived by teachers. There are two main findings from the current study worth discussion. Firstly, teachers' perceptions of given importance to educational and developmental experiences, and importance to children's learning outcomes were significantly associated. Secondly, the constructs assessing educational and developmental experiences in early childhood, and importance to children's learning outcomes emerged as sound measure with Turkish children.

It appears that the teachers give importance to what preschool children should experience in terms of development and education in relation to their learning outcomes. We examined following experiences: mathematics, language and literacy, art and creativity, developmentally appropriate practices, science and nature, and developmentally appropriate practices as experiences. In line with these experiences, we examined the following areas as learning outcomes: mathematics, language and literacy, social emotional outcomes, science and nature, and art and creativity. It appears that when teachers perceived afore-mentioned experiences as important in early childhood in relation to children's learning outcomes. This is commensurate with the precise research and conceptualizations that socio-emotional learning experiences and DAP are supportive for children's both social and academic learning outcomes (Epstein, 2007; Linares et al., 2005; McClelland, Acock, & Morrison, 2006; NAEYC, 2009; Takanishi & Bogard, 2007).

The current finding and the previous findings suggest that teachers with the knowledge of children's learning experiences, such as executing activities targeting children's academic and social outcomes are likely to have children with better learning outcomes including social and academic aspects. Keeping in mind that implementing developmentally appropriate programs also requires teacher to have knowledge about children as groups and individually, so that they could promote children's learning and development (NAEYC, 2009). From this perspective, we know that learning and development in early childhood likely to occur hand in hand. Therefore, teachers should provide experiences for children to improve their both development and learning.

Further, providing such effective experiences mats require intentionality by which teacher are intentional in their setting up the learning environment, planning curriculum, utilizing a variety of materials, and interacting with children. By doing so, children could have enriched learning and developmental experiences for better outcomes in early childhood.

There is also the other finding worth discussing is that adaptation of the two measures in the current study into Turkish context. As the item analyses showed that the two current measures assessing teachers' perceptions of given importance to educational and developmental experiences, and importance to children's learning outcomes. These measures could be used in the future research, so that researchers will have information about teachers' perceptions regarding these two constructs. Afterwards, researchers and program makers will be able to design programs pertaining to needs of support in teachers' areas of educational and developmental experiences of children, and importance to children's learning outcomes in early childhood. Considering early child is an important period where children develop important developmental and learning outcomes, supporting teachers in their scaffolding of children's learning and development could be an essential part of the early childhood education (Curby et al., 2009; Hamre et al., 2012; Fantuzzo et al., 2012; Pianta, 1999).

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