

## Essential Competencies for Teachers of Children with Special Needs in Early Intervention Programs

Yahia F. Obaidat

Special Education Department, Faculty of Education, King Abdulaziz University, KSA  
E-mail: [yobaidat@kau.edu.sa](mailto:yobaidat@kau.edu.sa), [dr.yahiakau@yahoo.com](mailto:dr.yahiakau@yahoo.com)

**Abstract:** This study aimed to determine essential competencies for teachers working in early intervention programs in Jeddah. The sample consisted of 57 female teachers. Results of the study showed that teachers' recognition of the importance of these competencies was high for the overall degree and in all dimensions. However, the degree to which they possess these competencies varied between high and moderate for the dimensions mentioned and was moderate for the overall degree. Moreover, the results showed that there were no differences in teachers' estimation of the importance of these competencies which is attributed to the variables of major and years of experience. Teachers majored in special education valued their possessed competencies higher than those who are not majored in special education; whereas those who have longer years of experience (5-10 and 10+) valued their possessed competencies with a higher degree compared to those who have shorter years of experience.

[Yahia F. Obaidat. **Essential Competencies for Teachers of Children with Special Needs in Early Intervention Programs.** *Life Sci J* 2015;12(11):8-20]. (ISSN:1097-8135). <http://www.lifesciencesite.com>. 2

**Key words:** competencies, teachers, early intervention.

### Introduction and Literature Review:

Early childhood is very important for all children, especially for the disabled. Providing early special education services can benefit those children by improving their skills in various aspects, cognitive, linguistic, social, emotional, and motor skills. It can also benefit families and the community in reducing both costs and the number of children enrolled in special education programs. However, in order to achieve this goal, qualified teachers who possess the theoretical knowledge and practical skills are considered as essential for providing these services in early intervention programs. Results of early intervention researches indicated a strong correlation between the positive results which children achieved from joining early intervention programs and the quality of these programs as well as the qualified teachers who teach those children (Campbell & Milbourne, 2005).

Moreover, Bailey (1989) identified ten major roles for special educators working in early intervention programs; these roles include assessing children needs, planning educational interventions, providing education services, coordinating interdisciplinary services, implementing consultants recommendations, assessing family needs, coordinating services from multiple agencies, planning and implementing family support services, evaluating program effectiveness, and advocating children and families.

On the other hand, competencies of teachers working in early intervention programs were in scope of interest by many organizations such as the Council for Exceptional Children (CEC) and the National Association for the Education of Young Children

(NAEYC). The CEC (2009) has set a group of competencies that are necessary for teachers of children with special needs in early intervention programs from birth to eight years respectively, foundations, development and characteristics of learners, individual learning differences, instructional strategies, learning environment and social interactions, language, instructional planning, assessment, professional and ethical practice, and collaboration.

The (NAEYC, 2010) has devised a group of standards to qualify specialists who work in early childhood settings from birth to 8 years old. They are as follows: promoting child development and learning, building family and community relationships, observing, documenting, and assessing to Support young children and families, using developmentally effective approaches, using content knowledge to build meaningful curriculum, becoming professional, and early childhood field experiences.

A study conducted by (Holst & Pihlaja, 2011) in Finland to determine the extent to which special education teachers in day care facilities are aware of competencies of early childhood indicated that those teachers have moderate-to-strong theoretical and practical competencies. Results also showed that special education teachers and kindergarten teachers possess a high degree of competencies related to child development. Results also showed statistically significant differences between teachers' possession of practical competencies related to one dimension -child development- in favor of special education teachers and with regards to the theoretical competencies related to the dimensions, planning, executing and evaluating teaching activities, determining child's

needs, providing services to the family, and working with multidisciplinary team. In general, the study showed that special education teachers, when compared with kindergarten teachers, have a higher self evaluation for both practical and theoretical competencies.

Results of another study by (Rapport *et al.* 2004) aimed to determine the competencies required for teachers in early intervention programs from the perspective of both workers and parents indicated that competencies required for teachers include teamwork skills, evaluation and diagnosis skills, individual instructional planning skills, knowledge of child development stages, and evaluation of services offered to families.

In a study conducted by (Wang, 2005) aimed to identify the professional competencies of teachers working in early childhood in Taiwan, results indicated that teachers who have more years of teaching experience evaluated their self-desired competencies as higher than those who have less years of experience on three dimensions: management, communication, and care and protection.

Additionally, the results of Karger study (1999) which aimed to identify competencies required for principals of early childhood special education programs showed that principals highly valued competencies, especially in areas related to laws, communications and interpersonal relations, and best practices of early childhood special education. Results also showed no differences in the arrangement of competencies for its importance or to the extent required for training as attributed to variables of age, sex and race. The results also showed that years of experience, coursework in special education, and characteristics of the school were positively correlated with the extent to which principals have realized the importance of competencies.

Miller and Losardo (2002) who conducted a study on a sample comprised of (91) graduates working in early intervention programs aimed to evaluate teacher preparation programs of early childhood education and early childhood special education from their own point of view. Participants indicated that the qualification programs gave them a high confidence in mastering theoretical aspect related to child development, understanding and monitoring child development from 3 - 5 years old, designing and adjusting teaching environments for the children, and gaining field training with children who have mild disabilities. Graduates, however, indicated that these programs needed further information and practical aspects in the following areas: behavior analysis strategies and classroom management, working with families of disabled children, developing the individual family service plan, applications of

technology in early childhood and working with children who have moderate and severe disabilities.

Killoran *et al.* (2001) conducted a study to identify competencies required for teachers who work with children with special needs in early childhood programs from the perspectives of paraprofessionals, teachers and service providers. Results indicated that the paraprofessionals identified ten competencies needed further training to a great extent compared to other groups. These competencies are: knowledge of causes and disability developmental stages, helping families to access information and resources, knowledge of the best practices applied in the domain of early childhood, the ability to design suitable teaching environment, the ability to communicate effectively with children, the ability to integrate effective treatment methods within the teaching environment, the ability to monitor the progress of children and make necessary changes, the ability to use adjusted methods and tools, familiarity with the program's vision and objectives, and participation in training programs during service.

Kime (1999) identified the competencies required for teachers in early childhood education and early childhood special education through a study sample which consisted of (23) teachers working in early childhood programs, (52) teachers teaching in early childhood special education programs, (39) teachers working in integrating early childhood programs, and (25) teachers working in integrate the early childhood special education programs. The questionnaire used in this study consisted of seven criteria: growth and learning characteristics of children, curriculum planning, assessment, modification of child's behavior, working with families, working with other specialists, and professional development. Results of the study indicated no differences between teachers in their appreciation for the importance of these skills. In addition, as for priority of importance the dimension of growth and learning characteristics of children ranked first, while the dimension of professional development ranked at the end. The overall teachers indicated a moderate possession of skills; particularly teachers working in early childhood special education programs possess skills with a higher-level degree than that of those possessed by the early childhood teachers in the following dimensions: child development, curriculum and instruction, assessment procedures, working with other specialists and professionalism. The results also showed that workers in early childhood programs need more training on five of the seven dimensions; whereas workers in both early childhood special education programs and early childhood programs need more evaluation-related

training, and more work with the families of children with disabilities and other specialists.

According to Stewart (1990) study, results indicated that teachers gave a very high degree of importance for the following skills and knowledge: basic information, planning and organizing programs related to children, services provided for children, services provided for families, and professional characteristics. On the other hand, teachers gave average importance to skills related to team participation and leadership. Moreover, teachers evaluated their current level of performance with less credit than their desired level in all areas, and discovered that they were more efficient in the dimension of professional characteristics and less efficient in the following dimensions: basic information, services provided to the child, team participation, leadership, planning and organizing programs for children and services provided to the family. Teachers identified their training priorities in the following dimensions: working with families, planning and organizing programs for children, curriculum, natural development of the cognitive and the linguistic aspect.

Blough- Ryan (1982) indicated that teachers believe that field experience is the best way to acquire all the skills. Teachers majoring in early childhood or teachers who have students with disabilities also gave a higher importance to competencies.

#### **Significance of the study:**

This study gains its importance from the nature of the issues that it tackles, that is, determining essential competencies for teachers of children with special needs in early intervention programs. However, we can determine the importance of this study in the following: helping decision-makers in preparing the in-service training programs in light of

the current study results, setting an orientation for the departments of special education toward changing the syllabus of some of their courses in order to develop theoretical knowledge and practical skills in early intervention major for undergraduate students, and providing a scale that helps in evaluating competencies for teachers of children with special needs in early intervention programs. In particular, the study aimed to answer the following questions:

1. What is the level of importance for essential competencies required by teachers working in early intervention programs from their own perspectives?

2. What is the level of possession for essential competencies required by teachers working in early intervention programs from their own perspectives?

3. Are there any differences in the level of importance for essential competencies required by teachers working in early intervention programs depending on major, and years of experience variables?

4. Are there any differences in the level of possession for essential competencies required by teachers working in early intervention programs depending on major, and years of experience variables?

#### **Methodology:**

##### **Research Design:**

A quantitative research methodology design was utilized for this research study to determine essential competencies for teachers of children with special needs in early intervention programs.

##### **Participants:**

The study sample consisted of (57) female teachers working in early intervention programs in Jeddah district. Table (1) provides sample distribution according to the variables of the study: major and years of experience.

Table 1. Distribution of Study Sample According to the Variables of the Study.

Variable		Number	Total
Major	Special education	36	57
	General education	21	
Years of experience	Less than 5 years	27	57
	From 5 to 10 years	17	
	More than 10 years	13	

#### **Instrument:**

A questionnaire for the current study was developed in light of previous studies in the area of competencies of teachers in early intervention programs such as (Kiem, 1999; Killoran *et al.* 2001; Holst & Pihlaja, 2011), in addition to using the Council for exceptional children standards. The questionnaire contains two sections: the first section included the key demographic variables (major and years of experience), the second section included the

competencies of teachers for children with special needs in early intervention programs which contain 57 items, distributed on seven dimensions: child development, instructional planning and teaching strategies, assessment procedures, working with family, behavior management, working with multi-disciplinary team and professional and ethical practice. In order to measure the importance and the possession of these competencies (skills and knowledge) from teachers own perspectives, a four-

point Likert scale was prepared to measure teachers perceptions of the importance of competencies and their possession of these competencies.

Teachers were asked to rate each item within the instrument in two ways; their first response represents the importance of these skills and knowledge, while their second response represents their possession of these skills and knowledge from their own perspectives. Items were scored on a four-point Likert scale. The grading scale was as follows: (very important = 4 marks), (moderately important= 3

marks), (low important= 2 marks), (not important= 1 mark). As for the second response, the grading scale was (highly possessed= 4 marks), (moderately possessed= 3 marks), (low possessed= 2 marks), (not possessed= 1 mark). This means that the total score on the 57 items for the importance ranged between 57 and 228, while for the possession the total score ranged between 57 and 228. Table 2 shows the hypothetical cut points in mean scores to define differences between teachers' responses.

Table 2: Range of Means for Each Descriptor

Mean	Descriptor
From 1.00 to less than 1.75	Not important or not possessed
From 1.75 to less than 2.50	Low importance or low possessed
From 2.50 to less than 3.25	Moderate importance or moderately possessed
From 3.25 to 4.00	High importance or highly possessed

The face validity of this questionnaire was verified by a group of professors (ten professors) specialized in special education who rated the clarity and appropriateness of the scale statements. Based on the group's observations and suggestions, necessary adjustments were made and some phrases were reworded. Professors' percentage of agreement reached 80% after implementing their suggestions. On the other hand, the value of the reliability coefficient for the questionnaire as a whole as measured by Cronbach's Alpha was 0.93 for "importance" and 0.89 for "possession".

#### Data Analysis Procedure:

Data were entered and analyzed using the statistical package for the social sciences (SPSS-20.0). Descriptive statistics (means, standard deviations) were presented in the results section. In addition, independent samples t-test was used to test for any of the statistically significant differences in major variable, and one way ANOVA was used to test any

of the statistically significant differences between teachers' years of experience variable, and the Scheffe test was also used to determine the significance of differences relevant to the years of experience variable.

#### Results:

The first research question was: "What is the level of importance for the essential competencies required by teachers working in early intervention programs from their own perspectives?" To answer this question, we calculated the means and standard deviations for each dimension and item of the scale. These means and standard deviations are manifested in tables 3, 4. Table 3 shows that teachers were assigned a high degree of importance in all dimensions. Means ranged from highest, 3.83, as for instructional planning and teaching strategies to lowest, 3.57, as for professional and ethical practice, with a mean cumulative score of 3.73 which represents a high level of importance.

Table 3: Means and Standard Deviations for Each Dimension of the Scale

Dimension	M	±S.D	Importance level	M	±S.D	Extent of possession
Child development	3.68	.384	High	3.52	.318	Highly
Instructional planning and teaching strategies	3.83	.206	High	3.47	.370	Highly
Assessment procedures	3.74	.259	High	2.82	.391	Moderately
Working with family	3.72	.337	High	2.92	.321	Moderately
Behavior management	3.78	.251	High	3.39	.490	Highly
Working with multi-disciplinary team	3.61	.306	High	3.13	.388	Moderately
Professional and ethical practice	3.57	.285	High	2.87	.758	Moderately
Cumulative score	3.73	.220	High	3.20	.270	Moderately

Table 4: Means and Standard Deviations for Each Item of the Scale						
Item no	Importance			Possession		
	M	±S.D	Importance level	M	±S.D	Extent of possession
1	3.72	.453	High	3.53	.504	Highly
2	3.68	.572	High	3.68	.469	Highly
3	3.60	.651	High	3.58	.533	Highly
4	3.61	.590	High	3.54	.569	Highly
5	3.65	.612	High	3.47	.658	Highly
6	3.67	.546	High	3.49	.571	Highly
7	3.79	.526	High	3.56	.598	Highly
8	3.70	.626	High	3.42	.625	Highly
9	3.74	.518	High	3.37	.723	Highly
10	3.95	.225	High	3.68	.469	Highly
11	3.91	.285	High	3.61	.526	Highly
12	3.84	.368	High	3.60	.530	Highly
13	3.93	.258	High	3.65	.551	Highly
14	3.82	.428	High	3.54	.569	Highly
15	3.79	.453	High	3.37	.747	Highly
16	3.74	.483	High	3.32	.631	Highly
17	3.86	.350	High	3.40	.593	Highly
18	3.75	.434	High	3.72	.526	Highly
19	3.88	.381	High	3.40	.678	Highly
20	3.79	.453	High	3.47	.684	Highly
21	3.77	.501	High	3.33	.636	Highly
22	3.75	.434	High	3.14	.854	Moderately
23	3.82	.384	High	3.40	.623	Highly
24	3.77	.501	High	2.68	.805	Moderately
25	3.79	.491	High	2.81	.789	Moderately
26	3.72	.453	High	3.04	.778	Moderately
27	3.65	.582	High	2.93	1.033	Moderately
28	3.70	.499	High	2.28	.675	Low
29	3.68	.469	High	2.89	.817	Moderately
30	3.75	.510	High	2.40	.942	Low
31	3.63	.522	High	2.72	.881	Moderately
32	3.82	.384	High	3.12	.734	Moderately
33	3.91	.285	High	3.30	.823	Highly
34	3.75	.474	High	3.28	.620	Highly
35	3.70	.462	High	2.98	.767	Moderately
36	3.82	.384	High	3.18	.805	Moderately
37	3.68	.540	High	2.65	.694	Moderately
38	3.82	.384	High	2.86	.895	Moderately
39	3.58	.596	High	2.70	.680	Moderately
40	3.65	.551	High	2.77	.682	Moderately
41	3.72	.526	High	3.39	.701	Highly
42	3.75	.434	High	3.37	.645	Highly
43	3.77	.423	High	3.33	.715	Highly
44	3.74	.483	High	3.28	.750	Highly
45	3.82	.384	High	3.51	.630	Highly
46	3.86	.350	High	3.46	.657	Highly
47	3.56	.535	High	3.21	.674	Moderately
48	3.70	.462	High	3.37	.587	Highly
49	3.67	.512	High	2.84	.751	Moderately
50	3.63	.555	High	2.91	.739	Moderately
51	3.60	.495	High	3.18	.601	Moderately
52	3.53	.504	High	3.28	.559	Highly
53	3.44	.567	High	2.72	.940	Moderately
54	3.49	.571	High	2.79	1.013	Moderately
55	3.56	.501	High	2.54	.965	Moderately
56	3.60	.495	High	2.96	.925	Moderately
57	3.75	.434	High	3.32	.827	Highly

Table 4 makes it clear that teachers were assigned “high importance” to each item as the means ranged from 3.44 to 3.95. Items 10, 13, 11 and 33 had the highest means, while items 53, 54, 52 and 47 had the lowest means; these are interpreted according to the cut points mentioned in Table 2.

The second research question was: “What is the level of possession for the essential competencies required by teachers working in early intervention programs from their own perspectives?” The means and standard deviations for each item and for each dimension of the scale were calculated. Tables 3 and 4 manifested these means and standard deviations. From Table 3 we found that child development dimension (3.52) had the highest mean score, while assessment procedures dimension (2.82) had the lowest mean score. Teachers reported they highly possessed the dimensions of child development, instructional planning and teaching strategies, and behavior management. In addition, they reported that they moderately possessed the dimensions of assessment procedures, professional and ethical practice, working with family, and working with multi-disciplinary team. Finally, the overall degree for the scale of competencies possession was (3.20), which is a Moderate level.

Table 4 also shows that 33 items of the competencies were reported as highly possessed (means ranged from 3.28 to 3.72), while the other 22 competencies were reported as moderately possessed (means ranged from 2.54 to 3.21), and two competencies were reported as low possessed (means ranged from 2.28 to 2.40) by the teachers themselves. Items 18, 2, 10 and 13 had the highest means scores, while items 28, 30, 55 and 37 had the lowest means scores.

The third research question was: Are there any differences in the level of importance for the essential competencies required by teachers working in early intervention programs depending on major and years of experience variables? To answer this question, a t-test was used with the variable of major, while analysis of variance (ANOVA) was used with years of experience variable.

For the t-test, the scores for the seven dimensions and overall degree were used. The two values of the variable of major were special education and general education. Differences in mean scores between teachers for these two groups were compared and tested for statistical significance (see table 5).

Dimension	Major	M	±S.D	T value	Level of significance
Child development	Special education	3.71	.347	.737	.464
	General education	3.63	.446		
Instructional planning and teaching strategies	Special education	3.85	.205	.939	.352
	General education	3.80	.209		
Assessment procedures	Special education	3.77	.237	1.084	.283
	General education	3.70	.292		
Working with family	Special education	3.76	.313	1.334	.188
	General education	3.64	.369		
Behavior management	Special education	3.79	.254	.362	.719
	General education	3.76	.250		
Working with multi-disciplinary team	Special education	3.62	.286	.203	.840
	General education	3.60	.343		
Professional and ethical practice	Special education	3.56	.290	-.252	.802
	General education	3.58	.282		
Cumulative score	Special education	3.75	.208	.936	.353
	General education	3.69	.241		

Table 5 shows that there were no statistically significant differences between the means for each group (special education and general education) at the level of  $p=0.05$ , thus teachers' estimates of the importance of competencies for both the overall degree and for each dimension do not differ according to major variable.

Table 6 shows the results of the ANOVA test for the differences between mean scores on the

importance of each dimension according to teachers' years of experience. Table 6 shows that there were no statistically significant differences between the means of each major at the level of  $p=0.05$ , thus teachers' estimates of the importance of competencies for both the overall degree and for each dimension do not differ according to years of experience variable.

The fourth research question was “Are there any differences in the level of possession for essential

competencies required by teachers working in early intervention programs depending on major and the years of experience variables?" To answer this question a t-test and ANOVA test were performed. For major variable, a t-test was used. Table 7 shows that there were statistically significant differences at the level of ( $p=0.05$ ) for the possession of

competencies in the following dimensions: child development (5.716), instructional planning and teaching strategies (4.627), assessment procedures (4.325), behavior management (5.366), working with multi-disciplinary team (3.580), and also for the cumulative score (5.178) due to major favoring special education group.

Table 6: ANOVA on Perceived Importance of Competencies According to the Variable of Years of Experience

Dimension	Years of experience				
	Source of variance	DF	M	F value	Significance
Child development	Between groups	2	.116	.781	.463
	Inside groups	54	.149		
	Cumulative	56			
Instructional planning and teaching strategies	Between groups	2	.001	.027	.973
	Inside groups	54	.044		
	Cumulative	56			
Assessment procedures	Between groups	2	.068	1.016	.369
	Inside groups	54	.067		
	Cumulative	56			
Working with family	Between groups	2	.133	1.177	.316
	Inside groups	54	.113		
	Cumulative	56			
Behavior management	Between groups	2	.003	.050	.951
	Inside groups	54	.065		
	Cumulative	56			
Working with multi-disciplinary team	Between groups	2	.014	.142	.868
	Inside groups	54	.096		
	Cumulative	56			
Professional and ethical practice	Between groups	2	.160	2.041	.140
	Inside groups	54	.078		
	Cumulative	56			
Cumulative score	Between groups	2	.010	.203	.817
	Inside groups	54	.050		
	Cumulative	56			

Table 7: Comparison of Means on Possession of Competencies According to the Variable of Major

Dimension	Major	M	±S.D	T value	Level of significance
Child development	Special education	3.66	.246	5.716	.000
	General education	3.26	.269		
Instructional planning and teaching strategies	Special education	3.62	.255	4.627	.000
	General education	3.22	.401		
Assessment procedures	Special education	2.97	.330	4.325	.000
	General education	2.56	.360		
Working with family	Special education	2.87	.360	-1.505	.138
	General education	3.00	.221		
Behavior management	Special education	3.61	.309	5.366	.000
	General education	3.02	.524		
Working with multi-disciplinary team	Special education	3.26	.379	3.580	.001
	General education	2.91	.301		
Professional and ethical practice	Special education	2.88	.819	.144	.886
	General education	2.85	.660		
Cumulative score	Special education	3.32	.202	5.178	.000
	General education	3.00	.257		

The means for the seven dimensions and the cumulative means were then compared according to years of experience variable using the ANOVA test. Table 8 shows that there were statistically significant differences depending on years of experience variable at the level of  $p=0.05$  for the possession of competencies on dimensions of child development ( $f= 4.011$ ) and behavior management ( $f= 5.487$ ), but not on the overall score ( $f=1.922$ ). And in order to

find which experienced group reported possession of more competencies, a Scheffe test was performed, as shown in Table 9.

Table 9 shows that the differences in possession of the competencies of child development dimension favor teachers with 5 to 10 years of experience. Regarding the dimension of behavior management, differences favor teachers with 5 to 10 and those with more than 10 years of experience.

Dimension	years of experience				
	Source of variance	DF	M	F value	Significance
Child development	Between groups	2	.366	4.011	.024
	Inside groups	54	.091		
	Cumulative	56			
Instructional planning and teaching strategies	Between groups	2	.236	1.774	.179
	Inside groups	54	.133		
	Cumulative	56			
Assessment procedures	Between groups	2	.348	2.391	.101
	Inside groups	54	.146		
	Cumulative	56			
Working with family	Between groups	2	.278	2.891	.064
	Inside groups	54	.096		
	Cumulative	56			
Behavior management	Between groups	2	1.137	5.487	.007
	Inside groups	54	.207		
	Cumulative	56			
Working with multi-disciplinary team	Between groups	2	.258	1.761	.182
	Inside groups	54	.147		
	Cumulative	56			
Professional and ethical practice	Between groups	2	.001	.002	.998
	Inside groups	54	.596		
	Cumulative	56			
Cumulative score	Between groups	2	.136	1.922	.156
	Inside groups	54	.071		
	Cumulative	56			

		Less than 5 years	From 5 to 10	More than 10
		experience	years	years
Child development	Less than 5 years experience	-	-.26(*)	-.06
	From 5 to 10 years	.26(*)	-	.20
	More than 10 years	.06	-.20	-
Behavior management	Less than 5 years experience	-	-.38(*)	-.42(*)
	From 5 to 10 years	.38(*)	-	-.04
	More than 10 years	.42(*)	.04	-

### Discussion:

Results of this study showed that teachers' recognition of the importance of competencies that were included in the questionnaire such as instructional planning and teaching strategies, behavior management assessment procedures, etc..., was high at all dimensions and for the overall degree.

This result, which was assured by Karger (1999) study, showed that principals gave the importance highly to competencies especially in areas related to laws, communications and interpersonal relations and best practices of early childhood special education. Moreover, Blough- Ryan (1982) indicated that teachers majoring in early childhood or teachers who

have students with disabilities also gave a higher importance to these competencies.

However, results of the current study indicated that teachers moderately possessed these competencies. Kime (1999) supported this result by indicating that the overall teachers' possession for the competencies was moderate.

On the dimension level, we noticed that the dimensions of instructional planning and teaching strategies, behavior management, and assessment procedures had the highest level of importance. Moreover, on the items level, we noticed that the items of the ability to plan and execute different curricular activities to improve child's development (cognitive, linguistic, social, etc...) areas, the ability to use known programs in early intervention (such as Portage and Help), the ability to employ strategies suitable to early childhood, and the ability to monitor and evaluate the child's progress had the highest rating of importance. Attributing a high rate of importance to these competencies is considered logical since these competencies represent the daily practices of teachers who work with children with special needs in early intervention programs. Teachers highly appreciate competencies that are related to the practical aspect as opposed to those related to theoretical aspects. This result was confirmed by Stewart's study (1990) indicating that teachers gave a very high degree of importance for the following skills and knowledge, that are, planning and organizing programs related to children, and the services provided for children.

On the other hand, the dimension "professional and ethical practice" and the item "the ability to identify and evaluate current trends and issues in early intervention" had the lowest level of importance. Teachers believe that the process of developing their personal skills in the area of early intervention and promoting legal issues related to services offered to the child and family are considered as requirements must be arranged by the management committee. Additionally, their poor participation in the activities of organizations that specialized in early intervention maybe related to the stress in work environment and to the financial requirements and merit of institutions specialized in early intervention and due to shortage of specialized training courses in early intervention.

This study also aimed to identify teacher's possession of the theoretical and practical skills. Results indicated that teachers possess a high degree of competencies on the following dimensions: child's development, planning instructional and teaching strategies and behavior management, whereas they possess an average degree of the competencies for both the rest of the study's dimensions and the overall degree.

On items level, the following items, as sequentially ordered, the ability to select and modify materials related to the interests and needs of the child or the group, knowledge of cognitive developmental sequence in early childhood, the ability to plan and implement various curricular activities to enhance the child's developmental progress in various fields like cognitive, linguistic, and social, and the ability to use popular programs in the field of early intervention all had the highest degree. This may be due to the fact that teacher preparation programs at universities focused on providing them with theoretical knowledge and skills, especially that these are considered an integral part of the daily work of teaching children with special needs. Moreover, Institutions supervisors usually give more efforts and concentration to these competencies during their supervision on teachers. This comes consistent with the findings of Miller and Losardo (2002), where the participants in the study indicated that preparation programs gave them high competencies in the following areas: theoretical aspect of the development of the child, design and in the modification of teaching environments for children.

Results of the current research, as manifested on the item level, indicated that teachers were assigned a low degree of possession to the following competencies: the ability to apply the assessment tools on children in early childhood in the following areas (cognitive, motor, linguistic, and self-care), the ability to write a psychological-educational report to include information and suggestions useful and meaningful to interested parties. We can explain this result with regards to the fact that teachers believe that children evaluation process and assessment report writing are only the responsibility of the psychologists. This also might be attributed to the lack of adequate training received on the application of assessment tools at college or lack of access to training courses during their service at the institute to develop their knowledge and skills in this area. This result is also consistent with the findings of (Kime, 1999; Rapport *et al.* 2004; Killoran *et al.* 2001) as they recommend that teachers and paraprofessionals need more training in the field of early intervention; they suggest that training should include evaluation and diagnosis skills, individual instructional planning skills, knowledge of child development stages, evaluation of services offered to families, teamwork skills, support offered to the family to access information and resources, knowledge of the best practices applied in the domain of early childhood, the ability to design suitable teaching environment, the ability to communicate effectively with children, the ability to integrate effective treatment methods within the teaching environment, the ability to monitor the progress of children and make necessary changes, the

ability to use adjusted methods and tools, familiarity with the program's vision and objectives, and participation in training programs during service.

Additionally, this study aimed to determine the effect of the major and years of experience variables on importance of competencies from teachers' perspectives. Results indicated that for the major variable, there were no statistically significant differences between teachers of special education and general education. This can be explained in the fact that specialist and non-specialist teachers need these competencies for proper job practice in early intervention programs. This result came consistent with Kime's (1999) findings which indicated no differences between teachers when considering the appreciation of the importance of these skills.

Results also indicated that there were no statistically significant differences between teachers as for the variable of years of experience. This may be due to the teachers' continuous need for these competencies to work successfully with children with special needs, and that importance still exist with an increased number of years of experience. This result is contradicted with Kargers' (1999) findings which showed that the variable of years of experience was positively correlated with the principals' perception of the importance of competencies.

Finally, the study aimed to determine the effect of major and years of experience variables on teachers' possession of competencies from their own perspectives. Results indicated that the significant differences which depend on major variable favor special education teachers on the total score and on the following dimensions: developmental of the child, instructional planning and teaching strategies, assessment procedures, behavior management, and work with a multi-difference of disciplines. This is a logical result as special education teachers received a sufficient number of theoretical and practical courses in the field of special education which enable them to possess more of these competencies. However, results showed no differences between the two groups in the possession of competencies on the dimensions of work with the family and professional and ethical practice. This specific result came consistent with a study for (Holst & Pihlaja, 2011) whose findings indicated that special education teachers, when compared with kindergarten teachers, had a higher self-evaluation over both practical and theoretical competencies. Moreover, Kime (1999) indicated that teachers of early childhood special education possess the skills to a higher degree than that of early childhood teachers in the following dimensions: child development, curriculum and instruction, assessment procedures, working with other specialists, and professionalism.

Results also indicated that there were statistically significant differences between teachers on the dimension of child development as related to the variable of years of experience for teachers with 5 to 10 years of experience. While on the behavior management dimension, the statistically significant differences were in favor of teachers with 5 to 10 and more than 10 years of experience. This may be related to the fact that teachers who have more years of experience have more theoretical and practical knowledge on the growth development characteristics and on treating behavioral problems. This is gained from their daily work with special needs children in the field of early intervention. This is also attributed to the fact that they may have attended more training courses which develop their skills and knowledge in this area.

This is consistent with the findings of Blough-Ryan's (1982) study in which teachers pointed out field experience as the best way to acquire educational competencies. This also agrees with Wang (2005) who finds that teachers with many years of experience possess more efficient competencies.

#### **Conclusion:**

The results of this study showed that teachers working with special needs children in early intervention programs have relatively high level of awareness for the importance of competencies required for teaching children with special needs children in early intervention programs. Moreover, they possess moderate level of these competencies. This finding urges the need to find a good correlation between the theoretical and practical aspects during teacher preparation programs. There is however a need for more intensive in-service training programs for those teachers in order to master teaching skills.

#### **Acknowledgement**

This work was funded by the Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, under grant No. (372-242-D1435). The authors, therefore, acknowledge with thanks DSR technical and financial support.

#### **References**

1. Bailey D. B. (1989). Issues and directions in preparing professionals to work with young handicapped children and their families. In Gallagher J. J., Trohanis P. L., Clifford R. M. (Eds.), *Policy implementation and PL 99-457: Planning for young children with special needs* (pp. 97-132). Baltimore, MD: Brookes.
2. Blough- Ryan, S. F. (1982). *Competencies necessary for working with preschool handicapped children: Teachers perceptions*

(Doctoral dissertation). Available from Pro Quest Dissertations and Theses database. (UMI NO. 8217723).

3. Campbell, P. H., & Milbourne, S. A. (2005). Improving the quality of infant-toddler care through professional development. *Topics in Early Childhood Special Education, 25(1)*, 3-14.
4. Council for Exceptional Children. (2009). *What every special educator must know: Ethics, standards, and guidelines for special education*. (6th ed.). Arlington, VA: Author.
5. Holst, T. K., & Pihlaja, P. (2011). Teachers' perceptions of their personal early childhood special education competence in day care. *Teacher Development, 15(3)*, 349-362.
6. Kiem, K.(1999). *Teachers' perceptions of competencies needed for working in inclusive early childhood education* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI NO. 9961053).
7. Killoran, J., Torry, T., Peters, J., & Udell, T. (2001). Identifying paraprofessional competencies for early intervention and early childhood special education. *Teaching Exceptional Children, 34(1)*, 68-68.
8. Kreger, C. M. (1999). *Competencies needed for the administration of early childhood special education programs: Perceptions of Ohio elementary principals* (doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI NO. 9963715).
9. Miller, P., & Losardo, A,(2002). Graduates' perceptions of strengths and needs in interdisciplinary teacher preparation for early childhood education: A State Study. *Teacher Education and Special Education, 25 (3)*, 309-319.
10. National Association for the Education of Young Children. (2010). NAEYC standards for early childhood professional preparation programs. Available from <http://www.naeyc.org>.
11. Rapport, M, McWilliam, R. Smith, B. (2004) Practices across disciplines in early intervention: The research base. *Infant And young Children, 17(1)*, 32-44.
12. Stewart, T. K. (1990). Competencies for teachers in intervention programs for young handicapped children: Perceptions of performance and implications for in-service training. *Principals* (doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI NO. 9029858).
13. Wang, H. (2005). *Early childhood educators' perceptions of professional competence in preschool settings* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI NO. 3202532).

**Appendix:** required competencies for teachers working in early intervention programs.

No	Statements	The degree of importance competencies				The degree of possession competencies			
		VI	MI	LI	NI	HP	MP	LP	NP
	<b>Dimension one: child's development</b>								
1	Knowledge of philosophies and theories of child's learning and development.								
2	Knowledge of developmental cognitive sequences in early childhood.								
3	Knowledge of developmental linguistic sequences in early childhood.								
4	Knowledge of developmental social and emotional sequences in early childhood.								
5	Knowledge of developmental motor sequences in early childhood.								
6	Knowledge of developmental self care skills sequences in early childhood.								
7	Knowledge of the effect of prenatal, natal and postnatal factors on child's learning and development.								
8	Knowledge of the disability; its causes, characteristics and its effect on the child's development.								
9	Knowledge of the effect of physical and social environment on child's development.								
	<b>Dimension two: instructional planning and teaching strategies</b>								
10	The ability to plan and execute different curricular activities to promote child's development in different areas (cognitive,								

No	Statements	The degree of importance competencies				The degree of possession competencies			
		VI	MI	LI	NI	HP	MP	LP	NP
	linguistic, social, etc...).								
11	The ability to employ suitable strategies in early childhood such as (play, etc...).								
12	The ability to plan and execute group activities (small groups, project).								
13	The ability to use popular programs in the field of early intervention (like Portage and Help).								
14	The ability to employ assistive technology in the children learning.								
15	The ability to use specialized instructional procedures and strategies for children with specific disabilities.								
16	The ability to plan and execute individual activities.								
17	The ability to organize time, space, resources and peers to maximize child's learning in organized and natural environments.								
18	The ability to select and modify materials related to the interests and needs of the child or the group.								
19	The ability to develop an individualized family service plan.								
20	The ability to develop an individualized educational plan for the child.								
21	The ability to integrate the goals of the individualized family service plan and the individualized educational plan for the child daily activities.								
22	The ability to employ parameters of health, nutrition, security and safety for the child.								
23	The ability to integrate suggestions and data inputs of other teachers, therapists and family members into the child's learning plan.								
	<b>Dimension three: assessment procedures</b>								
24	The ability to design the assessment plan (what to assess, participants, time and place).								
25	The ability to select suitable assessment tools that have acceptable validity and reliability aspects.								
26	The ability to use systematic observation in Data collection.								
27	The ability to develop evaluation portfolio through collecting information and activities that represent the child's performance level.								
28	The ability to apply assessment tools on children in early childhood over the following areas: (cognitive, motor, linguistic, and self-care skills)								
29	The ability to interpret results of applied tests.								
30	The ability to write and organize an assessment report including useful and meaningful information to interested parties.								
31	The ability to obtain assessment information and share them with others in useful manner.								
32	The ability to employ results of the assessment in the individualized family service plan and individualized educational plan.								
33	The ability to monitor and assess child development progress.								
	<b>Dimension four: Working with family</b>								
34	The ability to maintain contact with the family concerning child's programs, curriculum, early intervention services and the child's learning progress.								
35	The ability to help family in determining its resources and priorities towards child's development and learning.								
36	The ability to help family in interpreting information they receive from other specialists.								

No	Statements	The degree of importance competencies				The degree of possession competencies			
		V I	M I	L I	N I	HP	MP	LP	NP
37	The ability to help family obtain services from specialists and organizations based on family resources and priorities.								
38	The ability to include family members in the evaluation and development of individualized educational plan.								
39	The ability to provide family with information and tools to be used with the child at home and in society settings.								
40	Recognize and respect individual differences between families which are attributed to cultural and social differences.								
	<b>Dimension five: behavior management</b>								
41	The ability to identify suitable and unsuitable child's behaviors.								
42	The ability to develop and apply behavioral modification plan.								
43	The ability to employ classroom management strategies (organizing the schedule, physical environment).								
44	The ability to adjust content activities for children who have behavioral problems.								
45	The ability to employ positive behavior modification strategies (reinforcement, symbolic reinforcement, etc....).								
46	The ability to employ negative behavior modification strategies (exclusion cost of response).								
	<b>Dimension six: Working with a multi-disciplinary team</b>								
47	Identification of team's responsibilities in offering individual services to the child and his family.								
48	The ability to participate effectively as a team member (the use of communication skills, team building, and problem solving).								
49	The ability to observe and evaluate co-teachers, paraprofessionals, and volunteers.								
50	The ability to distribute responsibilities among specialists who work under your responsibility and monitoring them.								
51	The ability to provide counseling and training to other team members, including family (such as teaching strategies and making adjustments to extracurricular activities).								
52	The ability to design and employ transition strategies for the child between home and early intervention programs.								
	<b>Dimension seven: Professional and ethical practice</b>								
53	The ability to determine and evaluate current issues in early intervention.								
54	Familiarity with moral and legal issues related to services offered to the child and family.								
55	Participation in the activities of organizations specialized in early intervention.								
56	Exhibition of ongoing commitment to the development of personal skills in the area of early intervention.								
57	Maintaining the confidentiality of the child and his parents.								

10/20/2015