

# Evaluation the Extent to which Families Participate in the Early Language Intervention Programs for Children with Intellectual Disabilities: from the Families' Perspective

Raghda Amin Batawi<sup>1†</sup> and Derar Mohammed Alqudah<sup>2††</sup>,

Umm Al-Qura University, College of Education, Kingdom of Saudi Arabia

## Abstract

The current study aimed to evaluate the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective. To collect the data for the study, the researchers designed a questionnaire. The questionnaire was distributed to the study sample which consisted of (256) families in the city of Mecca al-Mukarramah. The findings of the study indicated an average level of family participation. The findings have also indicated that there were no statistically significant differences in terms of the families' participation in the early language intervention programs for children with intellectual disabilities due to the gender variable, except for the dimension of (the forms of family participation, mechanisms of activating family participation, in the total degree) which came in favor of females. Further, the findings concluded that there were no statistically significant differences due to the variables of educational qualification and economic level. Finally, the study concluded that there were no statistically significant differences attributable to the variable of age, except for the dimension of (the forms of families' participation and the mechanisms of activating family participation in early language intervention programs) in favor of participants who are (less than 25 years) and (46 years and over), and in the total degree and in favor of (46 years and above).

## Keywords:

*Family participation, Language early intervention programs, Intellectual disability, Early intervention.*

## 1. Introduction

The scientific research's field has provided strong evidence that early childhood experiences have an in-depth as well as a long-term influence on the processes of learning and development as the early age stage is considered critical to the development of all children, especially those with intellectual disabilities who often suffer from developmental delays, which leads to the need of designing special and effective plans and programs that will be implemented in critical periods of development, i.e., in the first six years of the child's life, during which the child has

the ability to learn a lot of sensory, cognitive, language and perceptual skills.

The importance of the first years of a child's life as a very important stage because at this stage, some nerve and sensory centers in the child's nervous system are still in the process of formation, which makes it easy to modify and develop, so that children with intellectual disabilities can master these skills like other normal children, and they need special educational programs that have been planned in advance; where early intervention experts agreed that early programs are the best option to be utilized [13, 5].

Moreover, early intervention programs take many forms, including: home visiting programs to support parents, school programs to improve children's social and emotional skills, early intervention at the center or home for children, and the early intervention through counseling [7].

Additionally, there is no doubt that language development is an important part of the general development of any child, especially for a child with an intellectual disability, as it supports the ability of a child with an intellectual disability to communicate and express, and supports his ability to think and helps him develop and maintain relationships, and supports early language intervention programs for people with disabilities. The intellectual development of the basic language of reading and writing skills for children with intellectual disabilities during their entry into and progress in school, and these programs work to improve the language skills for each child's social progress and life in general and the pursuit of learning [4].

In fact, the concept of 'early language intervention' refers to the deliberate arrangement of experiences that enhance children's understanding and expression of language and prevent and prevent language problems from arising, so that the child has the appropriate language foundation for success in social interaction and academic education [9].

To activate early intervention programs, the institutions are responsible for educating children with intellectual disabilities must plan and implement educational programs

that help develop the skills of children with intellectual disabilities, and develop language development programs for children with intellectual disabilities that not only help in acquiring language skills, but also bring many benefits for disabled children. Intellectually, one of the most important of these is to increase the opportunities for growth and learning available to them.

On the same line, in order to increase the effectiveness of early intervention programs, the new trend of specialists has become to partner with families of children with intellectual disabilities; the family's participation in the process of bringing up their children is very important; because of its positive impact; as this participation reduces the rate of language delay for people with intellectual disabilities, and this participation also leads to activating their social and emotional aspects, which makes them feel safe in their place of residence. intellectually; because the family that has an intellectually disabled child imposes psychological pressure on it as a result [12, 1].

To the best knowledge of the researchers of the current study, previous studies and research, such as the study [3], the researchers confirmed the significance of the current research topic as the cooperation of the family in early language intervention programs for children with intellectual disabilities is considered one of the important and influential factors in the growth and development of the child with intellectual disabilities, as well as in the family's life and the success of the programs provided to them [5]. On the basis of the need for family cooperation in early language intervention programs for children with intellectual disabilities and their impact on educational programs, family have an effective role in the development and progress of children with intellectual disabilities. The researchers noted the lack of Arabic studies in the reality of family participation in early intervention programs. Linguistically speaking for children with intellectual disabilities from the families' point of view, hence the research problem was formulated, which consisted of the following questions:

1. What is the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective?
2. What are the challenges associated with family participation in early language intervention programs for children with intellectual disabilities from the families' perspective?
3. Are there statistically significant differences at the significance level ( $\alpha = 0.05$ ) of the families' participation in early language intervention programs for children with intellectual disabilities from the families' perspective according to the variables of (gender, economic level, scientific level, and age)?

This paper is organized as follows. The next section describes the previous studies. Section 3 discusses the methodology. In section 4, we discussed the findings of the study. Section 5 discusses the findings of the study. Finally, in section 6, we demonstrate the conclusion.

## 2. Previous studies

We examined a number of studies related to the reality of family participation in early language intervention programs for children with intellectual disabilities from the families' perspective, which were presented according to their recentness as follows:

Al-Qudah [2] conducted a study which aimed at evaluating the early intervention programs for mentally handicapped children in Saudi Arabia from the point of view of the families of the beneficiary children and its relationship to the variables of the child's gender and age. To achieve this goal, the researchers prepared a tool for evaluating early intervention programs provided for mentally handicapped children in Saudi Arabia. The research sample consisted of (148) families whose mentally handicapped children are enrolled in early intervention programs in Saudi Arabia. For the mentally handicapped from the point of view of families attributed to the gender and age of the child.

Melvin et al., [11] conducted a study about how does the family that participated in early intervention look like from the perspective of Australian speech-language pathologists. Melvin et al., adopted a mixed-method approach to explore the pathologists' views. In addition, the pathologists work with children aged (0-8) and their families. Hence, the pathologists intended to explore the nature of the early intervention using 'the concept system' program. The participants agreed that all aspects of the families' participation are significant, as the relationship between the families, the speech-language pathologist, and the families' continuity to invest in early intervention at home are rated by the participants as the highest factor that plays a significant role in the success of the intervention process.

Klatte et al, [8] carried out a study that aimed to identify the perspectives of the therapists about parents' participation in a mutual parent-child therapy program, which seeks to increase the parents' awareness through teaching them 'language stimulation strategies' to enhance their children in everyday situations when communicating with them. A total number of (10) speech and language therapists. The findings of the study concluded that the role of the speech and language therapist in supporting parents and developing their participation is highly important. Furthermore, there is a need to train the speech and language therapist in the best possible ways to involve parents, with a focus on mutual understanding, and creating constructive relationships

between therapists and parents, as well as empowering the parents to eventually overcome any barriers.

On the other hand, Mallush [10] conducted a study which aimed to identify the extent to which parents participate in the early language intervention programs for children with delays from the parents and the speech and language therapists' perspective in light of the National Vision (2030). The researcher utilized the descriptive approach through the adoption of a survey that was distributed to the sample of the study that is consisted of (237) therapists and a total number of (340) of the parents from various regions of the Kingdom of Saudi Arabia. The findings of the study concluded that the most prominent aspects of the parental participation must be directed towards the options given for their children while the most prominent obstacles to parental participation is the father and the mother's belief that the therapist is directly responsible for the child's language development.

Additionally, Sobuh [14] carried out a study that aimed to identify the level of participation of families of children with mental disabilities in early intervention programs and the obstacles that prevent them from participating. The study sample consisted of (122) mothers of children with mental disabilities enrolled in special education centers in the governorates of Amman and Zarqa city in the Hashemite Kingdom of Jordan. The findings of the study concluded that the level of participation of families of children with mental disabilities in early intervention programs was at an average level. Further, the findings of the study have also concluded that there were no statistically significant differences in the participation of families of children with mental disabilities in early intervention programs due to the variables of (mother's age, mother's educational level, number of family members). The findings of the study have also indicated that there are statistically significant differences in the participation of families of children with mental disabilities in early intervention programs due to the socio-economic level variable between the high and low levels in favor of the high level. The findings of the study have further demonstrated that there are differences between the medium and low levels in favor of the medium, and the absence of differences between High level and medium level. Also, there were prominent obstacles that prevented families from participating in early intervention programs, such as feeling constant stress, lack of sufficient time to participate, preoccupation with family duties and other children, and the inability to leave children alone at home and go to the center.

Al-Rashidi and Turkestani [3] conducted a study that aimed to identify the reality of parental participation and its obstacles in early intervention services for deaf and hard of hearing children in Kuwait from the point of view of specialists and parents. The researchers have adopted a questionnaire as the study tool for collecting data. In addition, the study sample consisted of (97) parents of deaf

and hard of hearing children, and (88) specialists. The findings of the study demonstrated a high level of parental participation in early intervention services. The findings of the study have also demonstrated that the most obstacles to parental participation are: the low educational level of parents, the absence of laws and regulations that obligate parents to parental participation, early intervention services, and the lack of training and awareness sessions provided to parents.

Finally, Cossio et al., [6] have explored the benefits and level of participation in early intervention from the perspective of mothers of children with autism spectrum disorder. The sample of the study consisted of (6) mothers of children with autism spectrum disorder ranging in age from (3 to 6) years. The qualitative approach was adopted by the researchers. The findings of the study indicated that all participants had the benefits of early intervention in the various areas of their children's development, and most of the mothers felt satisfied and supported and they were informed of their rights. The findings have also asserted that mothers of children with autism spectrum disorder had a positive interaction relationship with early intervention specialists, and that the families that participated in the individual family service plan specify their goals, their interests and priorities, and further participated in the implementation of the plan in its natural context.

### 3. Methodology

The nature of the current study necessitated the use of the descriptive analytical method for its relevance to the purposes of the study, as it seeks to evaluate the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective. The research sample (which was selected through the random and simple method) consisted of (256) families of children with intellectual disabilities who benefited from language early intervention programs, and this includes all families of children with intellectual disabilities in the city of Makkah who benefit from linguistic early intervention programs for the second academic year of the year 2021 and the first semester of the year 2022.

The researchers have adopted a questionnaire to collect data. The questionnaire consisted of (37) items that measured the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective. The items of the questionnaire were distributed on three main dimensions. In addition, the questionnaire's apparent validity as well as the appropriateness of the study's questions and objectives was verified through a committee consisting of (9) specialized specialist from the faculty members who are specialized in (special education) and to ensure the suitability and ability of the adopted tool to

achieve the objectives of the research. Accordingly, the questionnaire was modified based on the notes recorded and the modifications attached by the arbitrators, as it was in the initial image (47) items, which after certain modification and deletion, the items numbers became (37) items, for the sake of designing a research instrument that is capable of representing what was prepared in order to be measured.

Furthermore, the internal consistency of the research instrument was also verified by applying it to an exploratory sample consisted of (30) individuals as an experimental sample, in order to measure the values of ‘Pearson's Correlation Coefficients’ for the relationship of the instrument’s items with the dimension to which they belong. The ‘Cronbach's alpha coefficient’ was also calculated, as it is considered as an indicator of the internal homogeneity. The internal stability coefficient (Cronbach's alpha) was (0.903) which is very high degree that indicates the stability of the research instrument. The stability coefficient was further calculated using the half-segmentation method, where the stability coefficient (the total stability coefficient of the half-segmentation) was (0.752), which is very high and indicates the stability of the research instrument as well. Due to the nature of the study and the goals that it sought to achieve, the data were analyzed using the Statistical Package for Social Sciences (SPSS) programs, and the results were extracted according to the following statistical methods: percentages and frequencies, Pearson correlation coefficient: to calculate internal consistency, and Cronbach’s alpha coefficient to calculate the stability of the research instrument, arithmetic means, standard deviations, and multiple quartile analysis of variance.

**4. The findings of the study**

The findings related to the first question, which dealt with evaluating the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families’ perspective, showed that the level of the families’ participation in language early intervention programs designed for people with intellectual disabilities was average, with an arithmetic mean for the research instrument as a whole which reached (3.64). Table (1) demonstrates the previous mentioned findings:

**Table (1):** Arithmetic means and standard deviations of the dimensions of the adopted research instrument.

Level	Rank	standard deviations	Arithmetic means	The dimension
High	1	0.76	3.97	Forms of family participation in early language intervention programs.
High	2	0.90	3.68	Mechanisms of activating family participation in early language intervention programs.

medium	3	0.81	3.44	Challenges of family participation in early intervention language programs.
medium	-	0.66	3.64	The instrument as a whole

The first dimension came in the first level (forms of family participation in early intervention language programs) with an arithmetic average of (3.97) and a high degree, followed by the second dimension (mechanisms of activating family participation in early intervention language programs), which got the second rank with an arithmetic average of (3.68). Finally, at a high degree, the third dimension (challenges of family participation in early language intervention programs) ranked third, with an arithmetic mean of (3.44) and a medium degree.

As for the second question, which dealt with the challenges associated with family participation in early language intervention programs for children with intellectual disabilities from the families’ perspective, where the arithmetic mean of the dimension as a whole was (3.44) with a medium degree. Table (2) demonstrates the previous mentioned findings:

**Table (2):** Arithmetic averages and standard deviations of the items in the "Family Participation Challenges in Language Early Intervention Programs’ dimension.

Level	Rank	standard deviations	Arithmetic means	The dimension
High	1	0.97	4.36	Weakness in activating family counseling and training services to enroll in early language intervention programs for children with intellectual disabilities.
High	2	0.94	4.31	The family's low knowledge of the opportunities available to them and the areas of their participation in language early intervention programs for children with intellectual disabilities.
High	3	1.06	4.19	The lack of a program or system that obliges the family to participate in early language intervention programs for children with intellectual disabilities.
medium	4	1.25	3.54	Poor communication between the family and those in charge of early language intervention programs.
medium	4	1.22	3.54	Professionals control decision-making more than the family, as they are most experienced than the family.
medium	4	1.34	3.54	The family's low interest in consulting specialists due to their exposure to some negative situations.
medium	7	1.35	3.51	The low ability of specialists to deal effectively with the family as an important partner in implementing early language intervention programs for children with intellectual disabilities.

medium	7	1.25	3.51	The low educational level of the family prevents them from participating in the language early intervention programs for children with intellectual disabilities.
medium	9	1.35	3.50	Lack of family awareness of the benefits of early language intervention programs for children with intellectual disabilities prevents their active participation in these programs.
medium	10	1.33	3.48	The long distance between the house and the center makes the family unable to attend the meetings.
medium	11	1.29	3.47	The family's preoccupation with work that prevents their effective participation in language early intervention programs for children with intellectual disabilities.
medium	12	1.44	3.38	Lack of interaction of speech therapists with the family.
medium	13	1.33	3.18	The family belief that the development of children with intellectual disabilities is the responsibility of the specialist.
medium	14	1.32	3.06	The low family conviction of the feasibility of participating in early language intervention programs for children with intellectual disabilities.
medium	15	1.40	2.99	The family's reluctance to participate in the language early intervention programs for children with intellectual disabilities because it was convinced that they were unable to participate in the early intervention programs.
medium	16	1.29	2.93	The low level of family expectations about what can be achieved by early language intervention programs for children with intellectual disabilities.
medium	17	1.55	2.89	The content of the training program that the child receives is not sent to the family.
medium	18	1.46	2.59	The family's reluctance to participate in language early intervention programs for children with intellectual disabilities due to the shame of their child's disability.
medium	-	0.81	3.44	<b>The dimension as a whole</b>

As for the findings of the third question, which focused on the extent to which there are statistically significant differences at the significance level ( $\alpha = 0.05$ ) for the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective according to the variable (gender, economic level, educational qualification, the age).

The findings have also indicated that there were no statistically significant differences attributable to the effect

of gender in the dimension of (challenges of family participation in early intervention language programs), while there were statistically significant differences in the dimension of (forms of family participation in language early intervention programs) and the dimension of (mechanisms of activating family participation) in language early intervention programs. It is worth mention that the differences were in favor of females. Also, there were no statistically significant differences due to the effect of educational experience and economic level in all dimensions and in the total degree of the research instrument.

Besides, the findings demonstrated that there were no statistically significant differences between the averages of the study sample members, which were attributed to the effect of age in the dimension of (the challenges of family participation in early language intervention programs), while there were statistically significant differences among the averages of the study sample members in the dimension of (forms of family participation in the early Intervention language programs) between (less than 25 years old) and (from 26-35) and for (less than 25 years old), and between (less than 25 years old) and (from 36-45) and in favor of (less than 25 years old), as well as between (36-45) and (46 years and over) and in favor of (46 years and over).

In addition to the existence of statistically significant differences between the averages of the study sample members, which are due to the effect of age in the dimension of (the mechanisms of operating family participation in early language intervention programs, the total degree), between (less than 25 years old) and (from 26-35) and in favor of (less from 25 years), and there are statistically significant differences between the averages of the study sample members for the effect of the age variable between (less than 25 years old) and (from 36-45) in favor of (less than 25 years old), and there are statistically significant differences between the averages of the study sample members For the effect of the age variable between (26-35) and (46 years and over) and in favor of (46 years and over), as well as the presence of statistically significant differences between the averages of the study sample members for the effect of the age variable between (36-45) and (46 years and over) In favor of (46 years and over).

The findings further demonstrated that there were statistically significant differences between the average scores of the study sample members for the effect of the age variable between (less than 25 years) and (46 years and over) in favor of (46 years and over), and there were statistically significant differences between the average scores of the study sample members for a variable effect. Age between (36-45) and (46 years and over) and in favor of (46 years and over).

## 5. Discussion of the findings

The findings related to the first question demonstrated that the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective was at the average level, and this can be explained as a result of parents' awareness of the role of their participation in language early intervention programs in improving the linguistic aspect of their children and carrying out appropriate interventions that limit the aggravation of language problems struggled by their children. In addition, the families' awareness of the role of their participation in reducing conflicts within the family, and increasing their and their children's sense of family satisfaction.

These findings can also be explained by the role of the specialists in correcting misconceptions about the family's inability to develop language skills for their children, and training them on how to meet these linguistic needs, and guiding and directing them towards ways to deal effectively with early intervention programs, and involving them in meetings for the case study of their children which contributes to increasing the level of their participation in language early intervention programs. These results are in agreement with the findings of the following studies: [10, 3, 12, 6, 8].

The findings of the second question have demonstrated that the family's participation in early language intervention programs for children with intellectual disabilities from the families' perspective reached the arithmetic average as a whole (3.44), to a medium degree, and this may be attributed to the lack of adequate guidance and training for families that contributes to the family's low efficiency in applying the early intervention program specialized in the linguistic aspect in an effective and required manner due to the families' lack of required training and guidance. In addition, the lack of effective and continuous communication between specialists and families reduces their level of knowledge of the areas of participation in which they can participate with their children. Furthermore, the lack of guidance programs on areas of family participation in early intervention programs contributes to the low level of knowledge of these areas. All of the previous mentioned findings are consistent with the findings of the following studies: [3, 10] which all pointed to a set of challenges that impede the family participation process in early intervention programs.

The findings related to the third question indicated that there were no statistically significant differences due to the effect of gender in the dimension (challenges of family participation in language early intervention programs), and this is due to the fact that the family's participation in language early intervention programs does not differ in its level or impact, whether on the part of the mother or the father. A child's disability affects different family members,

since the requirements for family participation in terms of care, rehabilitation programs and effort are the same, as these requirements and pressures do not differ when the participant is the father or the mother.

Moreover, the study concluded that there are statistically significant differences in the dimensions of (forms of family participation in linguistic early intervention programs) and (mechanisms of activating family participation in early intervention language programs), in the total degree, which differences came in favor of females, and this can be explained by the psychological features that characterizes females who direct all their feelings towards their children, and the reality that they always preoccupied with their children all the time, especially if her child/children have intellectual disabilities, then their interest will be doubled. Furthermore, females, especially in the field of education, their participation in early intervention programs provided to children with intellectual disabilities is more than males. Finally, the previous mentioned findings differed with Al-Qadas' [2] study findings.

Besides, the study concluded that there were no statistically significant differences due to the effect of the educational qualification and the economic level in all dimensions and in the total degree of the research instrument. In fact, the findings related to the educational qualification variable is due to the fact that families of children with intellectual disabilities have equal interests and their keenness to provide an appropriate level of education for their children regardless of their educational qualifications, and their eagerness to participate in presenting any initiative that would support their education or treatment in early intervention programs, and therefore their estimates were close. The previous mentioned findings results agreed with Al Sobuh [14]. However, the same findings differed with the findings of Al-Rashidi & Turkestani's [3] study findings.

The findings related to the economic level can also be explained through the fact that families of children with intellectual disabilities, whether they have high incomes or low incomes, do not hinder their economic level from participating in early intervention programs for their children as such participation does not require saving big sums of money to do it, but rather it is an individual effort that is not directly related to the economic level. The previous mentioned finding agreed with Al-Rashidi & Turkestani's [3] study findings.

As for the findings of the age variable, it can be explained that the age group (less than 25) is considered the youth group, which indicates that the first-born member of any family may suffers from intellectual disabilities, which may cause feelings of shock and frustration to the family, which ends with the stage of searching for special education services that can be provided for their children, which increases the level of their participation in early intervention

language programs in order to obtain a greater understanding of the language problems faced by their children and to contribute more to these programs than the researchers' vision theoretically. In addition, the previous mentioned finding contradicts with the findings of a similar study carried out by Al-Qadah [2].

## 6. Conclusion

The current study aimed to identify and evaluate the extent to which families participate in the early language intervention programs for children with intellectual disabilities from the families' perspective. In fact, the current study suggests emphasizing the significance of involving parents in language early intervention programs by special education institutions. Further, the current study suggests facilitating communication between special education specialists and families of people with intellectual disabilities and to educate families of children with intellectual disabilities about the importance of their participation in early language intervention programs offered to their children. Additionally, the study asserts providing those families with adequate support to ensure their effective participation in these programs.

Finally, the current study also recommends conducting more similar studies about language early intervention programs for families of children with intellectual disabilities in other regions to increase the possibility of generalizing the results, and to provide more training and guidance courses for families of children with intellectual disabilities and enlighten those families about the significance of their effective role in participating in early language intervention programs and to improve the level of their participation.

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