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Teachers' perspectives on parental participation in the Individual Educational Program for students with intellectual disabilities

وجهات نظر المعلمين حول مشاركة أولياء الأمور في البرنامج التربوي الفردي للطلاب ذوي الإعاقة الفكرية

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Abstract

This study sought to investigate the factors influencing parental participation in the IEP for students with intellectual disabilities from educators' perspectives, while discerning any statistically significant differences based on gender, academic qualifications, experience, and training courses. The descriptive method was used, via a two-part questionnaire, with the first section collecting demographic information while the second part containing 24 items dealing with factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from teachers' perspectives. The findings indicated factors that play a role in activating parental participation in the IEP process can be classified into three types: factors related to parents, the teacher, or the educational institution. This study highlighted the importance of teacher awareness regarding the benefits of parental participation in their children's IEPs. No differences were found between male and female teachers regarding the factors contributing to the activation of parental participation in the IEP. Conversely, significant differences were found by qualification. Teachers who had attained PhDs proved to be more aware of the factors contributing to the activation of parental participation in the IEP. The findings of the study will provide educators and parents with information regarding parental involvement in the IEP process

Keywords: perspectives, parental participation, Individual Educational Program (IEPs).

المستخلص

هدفت الدراسة إلى التحقق من العوامل المساهمة في تفعيل مشاركة أولياء الأمور في البرنامج التربوي الفردي للطلاب ذوي الإعاقة الفكرية من وجهة نظر معلمين مع التحقق من وجود فروق ذات دلالة إحصائية وفقاً للمتغيرات التالية، الجنس والمؤهلات العلمية والخبرة والدورات التدريبية. تم استخدام المنهج الوصفي وتم استخدام استبانة مكونة من جزأين، الجزء الأول خاص بجمع المعلومات الديموغرافية، بينما يحتوي الجزء الثاني على 24 فقرة تتناول العوامل المساهمة في تفعيل مشاركة أولياء الأمور في برنامج التعليم الفردي للطلبة ذوي الإعاقة الفكرية من وجهة نظر المعلمين. أشارت النتائج إلى أن العوامل التي تلعب دوراً في تفعيل مشاركة أولياء الأمور في عملية برنامج التعليم الفردي يمكن تصنيفها إلى ثلاثة أنواع: عوامل تتعلق بأولياء الأمور، أو المعلم، أو المؤسسة التعليمية. مع الأخذ بعين الاعتبار أن الدراسة أبرزت أهمية وعي المعلمين فيما يتعلق بفوائد مشاركة أولياء الأمور في البرامج التربوية الفردية لأبنائهم. وأشارت النتائج إلى أنه لا توجد فروق بين المعلمين والمعلمات فيما يتعلق بالعوامل التي تساهم في تفعيل مشاركة أولياء الأمور في البرامج التربوية الفردية. وعلى العكس من ذلك، تم العثور على اختلافات كبيرة حسب المؤهلات العلمية حيث أثبت المعلمون الحاصلون على درجة الدكتوراه أنهم أكثر وعياً بالعوامل التي تساهم في تفعيل مشاركة أولياء الأمور في البرامج التربوية الفردية. ستزود نتائج الدراسة المعلمين وأولياء الأمور بالمعلومات المتعلقة بمشاركة الوالدين في عملية برنامج التعليم الفردي (IEP).

وجهات نظر؛ مشاركة الوالدين؛ البرنامج التربوي؛ الدالة الكلمات (IEPs).

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Introduction

Students with special needs in public schools require customized education plans, which are a part of their overarching Individualized Education Program (IEP). It is imperative all relevant stakeholders are involved and present during the IEP process, including the creation of the individualized plan, as well as during the meetings, to ensure the best plan is created and executed for individuals with disabilities (Sanderson, 2023). However, while experts with years of experience are key participants in the development of IEPs, parents or guardians also have an important role as they help teachers and policymakers know the target students better (Alquraini, 2019). Notably, the Individuals with Disabilities Education Act (IDEA, 2004) highlights the vital role of parents or legal guardians of students with disabilities as integral members of the IEP team. Parental involvement, according to Sanderson (2023), enables IEP programs to be more personalized and better tailored to the needs of the target students by helping to identify the various needs and interests of their children. This illustrates the significance of parental participation in the individual educational program (IEP) as it translates assessment procedures into tailored annual programs based on the students' unique needs. Parental involvement also encourages ongoing evaluation and the selection of appropriate services, while actively engaging parents of students with intellectual disabilities within the multidisciplinary team (Yahya, 2017).

Parents hold a central position in the IEP team, as they possess comprehensive knowledge of their child's strengths, weaknesses, learning strategies, preferences, interests, and motivating factors that play a key role in improving the effectiveness of IEP initiatives (Alquraini, 2019). As noted earlier, the core objective of the individual educational program is to enhance the social and personal competence of individuals with intellectual disabilities, recognizing their potential to benefit from standard educational programs, albeit to a lesser extent than typical students (Alquraini, 2019; Sanderson, 2023). Parents are often knowledgeable of their child's critical goals, making them a key source of information to share with other team members.

As with any educational policy, the development of individual educational programs hinges on organized teamwork among team members, leveraging their specialized experiences to meet students' needs comprehensively (Sanderson, 2023). Effective collaboration is key to successful IEP implementation, emphasizing the importance of fostering positive working relationships within the multidisciplinary team for optimal outcomes for both the child and the family (Alquraini & Gut, 2012). Parental teamwork and collaboration is an integral part of this process (Al-Dosari & Al-Hano, 2018).

However, despite the important role of parents in these programs, their involvement is faced with a number of barriers and challenges that often have a negative impact on program success (Alquraini, 2019; Scanlon et al., 2017). For example, teachers have a lot of responsibilities with a heavy work-load and their time available to allocate to parents is limited, specifically to focus on the specific needs and strengths of each individual student (Hornby & Blackwell, 2018). The involvement of parents can also cause unwanted division between students with special needs and their parents, as they may have difficulty accurately expressing their thoughts regarding students' needs, strengths, and interests. Conversely, some parents are unaware of their student's specific needs, so their participation is not effective (Hornby & Blackwell, 2018). Additionally, some students are not honest and straightforward with their parents, so students' reflection of their day and their achievements at school may not provide an accurate depiction of what is actually occurring (Hornby & Blackwell, 2018). Therefore, parents' IEP participation may not be helpful in these cases. Despite the aforementioned challenges, Al-Dosari & Al-Hano (2018) express the crucial need for parental involvement in students' IEPs. Regardless of research affirming the importance of parental participation, Al-Otaibi (2009) found insufficient involvement by parents in the IEP of their student.

While collaboration between parents, teachers, and support providers is essential for crafting an educational plan aligned with the student's abilities, challenges also often emerge during the development of individualized programs and plans, leading to infrequent positive experiences during IEP meetings (Scanlon et al., 2017). These meetings are sometimes described as contentious, with parents advocating strenuously to secure services for their children with disabilities (Blackwell & Rosetti, 2014; Burke & Hodapp, 2014). Al-Dosari & Al-Hano's (2018) study identified differing perspectives on the obstacles to parental participation, with teachers highlighting parents' lack of confidence in the effectiveness of their involvement, while parents believed that teachers dismissed their contributions to educational program planning. Zeitlin & Curcic's (2014) surmised the discrepancy and varying perspectives of teachers and parents could be due to their different areas of expertise, as educators and administrators are trained and highly educated on how to teach students with special needs, while parents are knowledgeable of their child's individual needs and strengths.

This study aims to investigate the factors influencing parental participation in the IEP for students with intellectual disabilities from educators' perspectives. It also seeks to discern any statistically significant differences based on variables, such as gender, academic qualifications, experience, and training courses, all at a

significance level of ($\alpha = 0.05$). The findings of the study will provide educators and parents with information regarding parental involvement in the IEP process, which could improve the IEP process for educators, parents, and administrators. Enhancing the IEP process and ensuring students with disabilities receive a supportive and inclusive learning environment also has the potential to improve the learning experience for students.

Research questions

- From the perspective of teachers in Taif City, what factors play a role in stimulating parental involvement in the individualized educational programs for students with intellectual disabilities?
- What are the key factors that promote parental engagement in individualized educational programs for students with intellectual disabilities among teachers in Taif city?

Literature review

According to a study by Al-Qadi (2019), there are numerous challenges hindering the effective implementation of these IEPs. Conducted among teachers working with students with learning difficulties in general education schools in Riyadh, this study, utilizing descriptive-analytical methodology, encompassed 456 participants. Several distinctive challenges were brought to light, including the absence of assistant teachers in classrooms, a notable lack of competence among those involved in individual educational programs, and variations in the preparation of individual educational plans for different students (Al-Qadi, 2019). Furthermore, a lack of well-defined protocols for team meetings in the preparation of these programs and disparities in viewpoints among female teachers and educational supervisors regarding individual educational programs within schools were also revealed (Al-Qadi, 2019). The study also exposed insufficient familiarity with the regulatory guide for special education, inadequate collaboration among teachers (particularly in language and mathematics), and teachers' resistance to accepting input from others in the preparation of individual educational programs. This study, which is also in Saudi Arabia similar to the current research, implies gender could be an influencing factor contributing to the implementation of IEPs. However, the current research is needed, as it provides a unique perspective focusing on parental involvement.

Rashid and Wong (2023) similarly found teachers were lacking in their knowledge, skill, and attitudes regarding IEPs (Rashid & Wong, 2023). The results revealed a lack of adequate knowledge about IEPs ($f = 3$; 42%) as one of the biggest barriers that affect the implementation of IEPs. This can be attributed to the fact that while teachers generally recognize the unique needs of students with learning disabilities, they generally lack the skills needed to meet their needs since they are often trained with a focus on the general student population. A general lack of motivation ($f = 4$; 66%) among teachers was also discovered with respect to the implementation of IEPs. While teachers generally appreciate the need to meet the unique needs of students with disabilities, there is often a general lack of commitment beyond basic recognition and support for students with learning disabilities (Rashid & Wong, 2023). These challenges could be attributed to teachers' extensive responsibilities, high work-load, and limited time, as Hornby & Blackwell (2018) found teachers to have little extra time to allocate to students' individual needs. However, these studies are only about the implementation of IEPs rather than parental involvement, which warrants the current research.

Al-Dosari & Al-Hano's (2018) study aimed to assess parental involvement in IEPs for individuals with intellectual disabilities, as perceived by both teachers and parents themselves. The study also delved into the significance of parental participation in the success of these programs and identified the barriers impeding parental involvement. This research included a sample of 156 teachers and 30 guardians of students with intellectual disabilities in schools across the southern governorates of the Riyadh region (Al-Dosari & Al-Hano, 2018). The study's key findings highlighted the critical role of parental participation in achieving the intended objectives of individual educational programs for students with intellectual disabilities (Al-Dosari & Al-Hano, 2018). Notably, when exploring the obstacles to parental involvement, teachers believed that parents were deterred from participating, due to a belief that their contributions might not yield positive results for their children. The study further proposed recommendations aimed at improving the impact of parental participation in individual educational programs for children with intellectual disabilities. This implies teachers perceived inaccurate perceptions by parents to be a contributing factor in parental participation in the IEP process. Therefore, training and education to remove inaccurate views could be beneficial and improve parental involvement. More research is needed to affirm these findings.

Tamzarian et al. (2012) substantiated the need for parental involvement with regards to individualized education programs in their integrative review study, which assessed previous literature on this topic. Their findings indicated cross-cultural communication was one of the primary challenges to effective parental participation. Tamzarian et al. (2012) affirmed the need for cross cultural communication in the development of IEPs, as bureaucratic procedures, communication styles, including both verbal and nonverbal, and cultural assumptions

regarding disabilities and education can all be challenges in the creation of the IEP and the process itself, as well. It is imperative that there is not any mis-communication in this process. In school settings, parents from minority ethnic groups such as immigrants and native populations often face significant communication barriers owing to the fact that cultural trends in local communities, including communication, are often influenced by the dominant culture. It seems an empathetic approach is needed to improve communication and break down any barriers inhibiting parental participation during the creation and implementation of students' IEP. This provides implications for the current research as well, suggesting effective communication could promote parental engagement for students on IEPs for all students, but especially those who are an ethnic minority.

Lehman (2018) also called for a proactive approach after conducting a review study to examine current trends in the efforts to raise parental involvement following the implementation of IDEA 2004. Their research substantiated the need for parental involvement during the entire IEP. The researchers found parents utilized a passive approach (Lehman, 2018). This substantiates the findings by Rashid & Wong (2023), which found parents were not particularly motivated to be involved with their children's IEP. Therefore, the authors recommend parents take on a proactive approach to their child's education process (Lehman, 2018). Conversely, Barrera-Osorio et al. (2020) proposed low-cost, group-based interventions as a potential strategy for improving parental involvement. This was a randomized controlled trial study that used data from previous interventions conducted in Mexico. The first phase of the study involved providing financial resources to parent associations as a source of motivation to enhance their involvement in school educational programs. The second phase of the research project involved providing information to parents regarding potential strategies that they could use to improve their children's learning. Findings showed that the first intervention had varying outcomes, including provision of financial resources and increased awareness among parents (Barrera-Osorio et al., 2020). On the other hand, the second intervention was found to have a significant impact on parental involvement, especially among native populations whose children were likely to face learning difficulties due to discrimination or social exclusion (Barrera-Osorio et al., 2020). These findings provide implications for the current study, suggesting the provision of information regarding effective strategies could lead to increased parental involvement. Additional research is needed to affirm these findings.

Methodology

To identify the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from their teachers' perspectives, the researcher used the descriptive method. Defined by Al-Assaf (2012, p. 211), the descriptive method is "the method in which all members of the research population or a large sample of it are surveyed with the aim of describing the target phenomenon in terms of its nature and frequency without attempting to explore relationships or identify causes." It is the most appropriate method for the current study because through it, the researchers can construct a realistic and authentic description of the phenomenon, analyze the results, and draw conclusions in light of the current reality.

Research population and sample

The population of the current study consists of all intellectual disability teachers in the city of Taif (n = 406) based on statistics from the Special Education Department for the second semester of the year 2022.

A random sample of 140 teachers of students with intellectual disabilities in Taif City was selected to represent the study population. Table 1 shows the characteristics of the sample in terms of gender, qualification, experience, and training courses.

Table 1.
Distribution of the participants according to study variables.

Gender	Qualification		Years of Experience				Training courses ¹				
	Type	Number	Percentage	Qualification	Number	Percentage	Experience	Number	Percentage	Courses	Number
Male	98	%70	Bachelor's	104	%74.29	1-5 years	28	%20.00	5 courses or less	30	%21.43
			Master's	32	%22.86	6-10 years	30	%21.43	6-10 courses	28	%20.00
Femal	42	%30	PhD	4	%2.86	11 years and over	82	%58.57	11 courses or more	82	%58.57

Source: (Own authorship)

The research instrument

The required data was collected via a questionnaire developed in the light of previous literature. It aimed to identify the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from their teachers' perspectives, while also revealing the effect the variables of gender, qualification, experience, and training courses had on the identified factors. The literature related to the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities was reviewed and employed in the construction of the questionnaire. In its preliminary version, the questionnaire had two parts. The first part collected data on the demographics of the participants, namely gender (male and female), academic qualification (bachelor, master, and PhD), experience (1-5 years, 6-10 years, and 11 years or more), and training courses (5 courses or less, 6-10 courses, and 11 courses or more). The second part had 24 items dealing with the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from teachers' perspectives. The 24 items comprised three main dimensions: factors related to parents (11 items), factors related to teachers (8 items), and factors related to the educational institution (5 items).

The questionnaire's validity

The questionnaire content was validated by six referees specialized in special education. They were invited to judge the wording and clarity of items, their relevance to the measured construct, and their inclusion under their respective dimensions. Based on their feedback, some items were re-worded and two items were linguistically corrected. The content validated questionnaire was then written in Google Forms and electronically administered to a pilot sample of teachers of students with intellectual disabilities ($n = 20$). The questionnaire's internal consistency was then established by calculating correlations among items, total scores of their respective dimensions, correlations among dimensions and the questionnaire's total score. The correlation results are presented in table 2.

Table 2.
Pearson correlation coefficients among items and their respective dimensions

	The first dimension	The second dimension	The Third dimension
1	**0.684	**0.604	**0.847
2	**0.883	**0.678	**0.596
3	**0.898	**0.577	**0.854
4	*0.448	**0.683	**0.798
5	**0.782	*0.537	**0.845
6	**0.825	*0.521	
7	**0.740	**0.688	
8	**0.936	**0.851	
9		*0.479	
10		**0.624	
		*0.497	

**Significant at the 0.01 level, *Significant at the 0.05 level

Source: (Own authorship).

It is clear from table 3 that correlations among items and their dimensions are significant ($p = 0.01, 0.05$), indicating that the questionnaire is internally consistent.

Table 3.
Pearson correlation coefficients among dimensions and the questionnaire's total score

Dimension	Cor. with the total score
Factors related to parents that contribute to the activation of parental participation in the IEP	0.937**
Factors related to teachers that contribute to the activation of parental participation in the IEP	0.902**
Factors related to the educational institution that contribute to the activation of parental participation in the IEP	0.905**

**Significant at the 0.01 level, *Significant at the 0.05 level

Source: (Own authorship)

The questionnaire’s reliability

The reliability of the questionnaire was established by using the split-half method and Cronbach’s Alpha.

Table 4 shows the reliability coefficients for each dimension of the questionnaire.

Table 4.
Reliability coefficients of the questionnaire and its dimensions.

Dimension	Split-half	Coefficient α
Factors related to parents that contribute to the activation of parental participation in the IEP	0.755	0.825
Factors related to teachers that contribute to the activation of parental participation in the IEP	0.846	0.904
Factors related to the educational institution that contribute to the activation of parental participation in the IEP	0.825	0.849
Total	0.923	0.897

It is clear from table 4 that the reliability coefficients are acceptable, indicating that the questionnaire is reliable enough to be used for data collection in the present study. The reliability coefficients of the questionnaire’s dimensions are high.

The final version of the questionnaire

The final version of the validated questionnaire had two parts. The first part included a description of the questionnaire, completion instructions, and the participants’ demographic information. The second part had 24 items distributed under three dimensions, as shown in table 5.

Table 5.
The questionnaire’s dimensions and items

Dimension	Number of items
Factors related to parents that contribute to the activation of parental participation in the IEP	11
Factors related to teachers that contribute to the activation of parental participation in the IEP	8
Factors related to the educational institution that contribute to the activation of parental participation in the IEP	5
Total of items	24

Source: (Own authorship)

Results and discussion

Factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from their teachers’ perspectives.

To identify the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities from their teachers’ perspectives, frequencies, percentages, means, and standard deviations were used. These results are shown in table 6.

Table 6.

The descriptive statistics of the participants' responses to the questionnaire.

No.	Item	No. & %	SD	D	N	A	SA	M	SDs	%	Rank
Factors related to the parents themselves that contribute to activating their participation in the IEP											
1	I encourage parents to participate in planning IEP	No.	0	0	4	34	102	4.70	0.52	94	1
		%	0	0	2.86	24.29	72.86				
2	I explain to parents the importance of their cooperation with the school administration and teachers regarding the IEP	No.	0	0	0	42	98	4.70	0.46	94	2
		%	0	0	0	30	70				
3	I encourage parents to attend courses or seminars offered at the school on IEPs	No.	0	2	6	46	86	4.54	0.65	90.8	6
		%	0	1.43	4.29	32.86	61.43				
4	I make sure to keep parents informed of the instructional strategies used in the IEP	No.	0	2	8	52	78	4.47	0.67	89.4	8
		%	0	1.43	5.71	37.14	55.71				
5	I encouraging parents to monitor their children's academic progress in the IEP	No.	0	0	6	40	94	4.63	0.57	92.57	3
		%	0	0	4.29	28.57	67.14				
6	I conduct direct meetings with parents of students with IDs	No.	0	0	10	64	66	4.40	0.62	88	9
		%	0	0	7.14	45.71	47.14				
7	I set aside a specific time to contact parents to discuss their children's academic performance	No.	0	2	22	48	68	4.30	0.78	86.00	11
		%	0	1.43	15.71	34.29	48.57				
8	I allocate a specific time to contact parents to discuss points related to their children's' behavior	No.	0	4	16	44	76	4.37	0.80	87.43	10
		%	0	2.86	11.43	31.43	54.29				
9	It is easier for parents to participate in preparing the IEP through remote communication if they are unable to be present at school.	No.	0	4	8	40	88	4.51	0.73	90.29	7
		%	0	2.86	5.71	28.57	62.86				
10	It is easier for parents to follow up on any scientific or behavioral observations about their children on an ongoing basis	No.	0	0	4	46	90	4.61	0.54	92.29	4
		%	0	0	2.86	32.86	64.29				
11	I ensure that parents participate in identifying their children's strengths and needs in the IEP	No.	0	2	4	44	90	4.59	0.62	91.71	5
		%	0	1.43	2.86	31.43	64.29				
Total		No.	0	16	88	500	936	4.53	0.63	90.60	
		%	0	1.04	5.71	32.47	60.78				
Factors related to the teachers that contribute to the activation of parental participation in the IEP											
1	I make sure to communicate with parents early to program a suitable time to discuss the IEP	No.	0	0	8	54	78	4.50	0.61	90.00	3
		%	0	0	5.71	38.57	55.71				
2	I make sure to involve parents within the work team to plan their children's IEP	No.	2	4	14	52	68	4.29	0.87	85.71	7
		%	1.43	2.86	10.00	37.14	48.57				
3		No.	2	2	10	60	66	4.33	0.79	86.57	6

	I make sure to involve parents in the work team to implement their children's IEP	%	1.43	1.43	7.14	42.86	47.14				
4	I make sure to involve parents in the work team to evaluate their children's IEP	No.	0	4	16	62	58	4.24	0.77	84.86	8
		%	0	2.86	11.43	44.29	41.43				
5	I make sure to clarify the roles required of the parent as a member of the work team	No.	0	0	8	62	70	4.44	0.60	88.86	5
		%	0	0	5.71	44.29	50.00				
6	I make sure to use electronic applications to ensure parental participation in the IEP	No.	2	0	8	52	78	4.46	0.73	89.14	4
		%	1.43	0	5.71	37.14	55.71				
7	I make sure to reinforce parents when they participate in the IEP	No.	0	2	6	50	82	4.51	0.65	90.29	1
		%	0	4.29	35.71	58.57					
8	I make sure to provide clear activities for people with intellectual disabilities in which parents participate	No.	0	4	2	54	80	4.50	0.67	90.00	2
		%	0	2.86	1.43	38.57	57.14				
	Total	No.	6	16	72	446	580	4.41	88.18	0.71	
		%	0.54	1.43	6.43	39.82	51.79				
Factors related to the educational institution that contribute to the activation of parental participation in the IEP											
1	The school administration provides means to introduce the importance of parental participation in the IEP	No.	0	6	4	56	74	4.41	0.75	88.29	2
		%	0	4.29	2.86	40.00	52.86				
2	The school administration provides designated places for holding parent-teacher councils	No.	0	4	4	58	74	4.44	0.69	88.86	1
		%	0	2.86	2.86	41.43	52.86				
3	The school administration provides all communication tools in the places designated for parent-teacher councils	No.	0	4	8	60	68	4.37	0.72	87.43	3
		%	0	2.86	5.71	42.86	48.57				
4	The school administration provides courses and seminars for parents on the IEP	No.	6	2	10	50	72	4.29	0.98	85.71	4
		%	4.29	1.43	7.14	35.71	51.43				
5	The school administration is keen to choose evening times that are suitable for working parents to meet with teachers	No.	6	16	32	38	48	3.76	1.17	75.14	5
		%	4.29	11.43	22.86	27.14	34.29				
	Total	No.	12	32	58	262	336	4.25	0.86	85.09	
		%	1.71	4.57	8.29	37.43	48.00				

Note: SD = strongly disagree, D = disagree, N = neutral, A = agree, SA = strongly agree, SDs = standard deviations

Source: (Own authorship)

Table 6 illustrates the factors contributing to the activation of parental participation in the IEP. Regarding the first factor, the results in table 6 show that the number of the “Strongly Agree” responses was 936, with a frequency of 60.78%. The number of the “Agree” responses was 500, i.e., a frequency of 32.47%. This means that the majority of the sample agreed on the total factor. The general mean of this factor was 4.53, which suggests very strong agreement by the participants. The standard deviation of this factor was 0.63, indicating homogeneity in the participants’ responses to this factor. The results of the second factor indicated that the number of “Strongly Agree” responses was 580, which generates a frequency of 51.79%. The number of “Agree” responses was 446, with a frequency of 39.82%. Therefore, the majority of the sample agreed on the total factor. The general mean of this factor was 4.41, which reveals very strong agreement on the part of the study sample. The standard deviation of the sample’s responses reached 0.71, indicating homogeneity in the participants’ responses to this factor.

Regarding the third factor, the number of the “Strongly Agree” responses was 336, with a frequency of 48.00%, and the number of the “Agree” responses was at 262, with a frequency of 37.43%. This shows that the majority of the sample agreed on the total factor. The general mean of the factor was 4.25, indicating that the participants strongly agreed. The standard deviation of the sample’s responses to this factor was 0.86, revealing homogeneity in the participants’ responses. It is clear from the results that the participating teachers strongly agreed to a number of factors contributing to the activation of parental participation in the IEP. These factors are classified into three categories: factors related to parents, factors related to teachers, and factors related to the educational institution. These results emulate previous results. For instance, Al-Dosari and Al-Hano (2018) affirmed the importance of parental participation in the IEP for students with intellectual disabilities. They concluded that parental participation in the development of the IEPs for their children achieves the desired goals of those programs. Abunayyan (2015) found that educational supervisors are aware of the necessary aspects to activate parental participation in the IEP. Al-Ayed (2010) concluded that the services provided to students with learning difficulties were satisfactory to parents, which enhancing their contribution to their children’s learning.

A possible explanation for the high agreement of the participating teachers to the questionnaire’s factors is that parents of students with intellectual disabilities have a great interest and awareness of the importance of educating and rehabilitating their children, so they are highly motivated to participate effectively in their children’s IEPs. Parents of students with intellectual disabilities participated effectively in parent/ teacher meetings and, therefore, were updated on individual plans developed for their children. Teachers are also fully aware of the importance of parental participation in developing the IEPs. Also, the increasing cooperation between schools and families fosters effective communication between teachers and parents. Differences in the participants’ responses to the factors contributing to the activation of parental participation in the IEP for students with intellectual disabilities by gender, qualification, experience, and training courses.

To identify if there were statistically significant differences in teachers’ views regarding the factors contributing to the activation of parental participation in the IEP by gender, qualification, experience, and training courses, the t-test for independent samples and the ANOVA test were used.

Differences by gender

No statistically significant gender differences were found in the teachers’ views concerning the factors contributing to the activation of parental participation in the IEP. Table 7 shows these results.

Table 7.

The t-test for the gender differences in the teachers’ responses to the questionnaire.

Factor		N	M	SD	t-value	df	Sig.
Factors related to parents that contribute to the activation of their participation in their children’s IEP	Males	98	49.67	5.04	0.598-	138	0.551
	Females	42	50.19	3.74			
Factors related to teachers that contribute to the	Males	98	35.22	4.74	-0.197	138	0.844
	Females	42	35.38	3.07			

activation of parental participation in the IEP							
Factors related to the educational institution that contribute to the activation of parental participation in the IEP	Males	98	21.02	3.47			
	Females	42	21.86	2.47	-1.417	138	0.159
Total	Males	98	105.92	12.00			
	Females	42	107.43	8.08	-0.746	138	0.457

Source: (Own authorship)

Lack of gender differences in the teachers’ views concerning the factors contributing to the activation of parental participation in their children’s IEP reveals that both male and female teachers concur on the factors. This finding is in line with the study of Al-Ghasawneh (2007) which found no statistically significant ($\alpha \geq 05.0$) gender differences in the evaluation of the programs offered in special education classes in general schools in Taif from the teachers’ perspectives. On the other hand, this finding is inconsistent with the study by Al-Zahrani & Al-Zahrani (2020) which aimed to identify the obstacles to implementing the individual educational plans for students with learning difficulties in the primary school in Jeddah from their teachers’ perspectives, as well as to identify the effect of gender, qualification, and experience on the teachers’ ratings. The results revealed statistically significant differences in teachers’ ratings of the obstacles in favor of male teachers.

Differences by qualification

One way analysis of variance was calculated to determine if there were statistically significant differences in teachers’ views concerning the factors contributing to the activation of parental participation in the students’ IEPs by qualification. These results are presented in tables 8 and 9.

Table 8.
The teachers’ responses to the questionnaire by qualification

Factor		N	M	SD
Factors related to parents that contribute to the activation of their participation in their children’s IEPs	Bachelor	104	49.77	4.53
	MA	32	49.44	5.19
	PhD	4	54.50	0.58
	Total	140	49.83	4.68
Factors related to teachers that contribute to the activation of parental participation in children’s IEPs	Bachelor	104	34.92	4.30
	MA	32	35.81	4.21
	PhD	4	40.00	0.00
	Total	140	35.27	4.30
Factors related to the educational institution that contribute to the activation of parental participation in children’s IEPs	Bachelor	104	21.31	2.83
	MA	32	20.69	4.20
	PhD	4	25.00	0.00
	Total	140	21.27	3.21
The Total Questionnaire	Bachelor	104	106.00	10.41
	MA	32	105.94	12.49
	PhD	4	119.50	0.58
	Total	140	106.37	10.96

Table 9.

The ANOVA test for differences in the teachers' views concerning the factors contributing to the activation of parental participation in the IEP by qualification.

Factors	Sum of squares	Df	Mean squares	f-value	Sig.	
Factors related to parents that contribute to the activation of their participation in their children's IEPs	Between groups	92.55	2	46.27	2.15	0.121
	Within groups	2951.34	137	21.54		
	Total	3043.89	139			
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	Between groups	111.43	2	55.71	3.11	0.048
	Within groups	2456.26	137	17.93		
	Total	2567.69	139			
Factors related to the educational institution that contribute to the activation of parental participation in the IEPs	Between groups	66.66	2	33.33	3.34	0.039
	Within groups	1369.03	137	9.99		
	Total	1435.69	139			
The total questionnaire	Between groups	709.81	2	354.91	3.04	0.051
	Within groups	15994.88	137	116.75		
	Total	16704.69	139			

Source: (Own authorship)

From table 9, it is clear that the means of PhD holders were higher than those of bachelor and MA holders. It is also clear that there were statistically significant differences ($p = 0.05$) in the second factor, i.e., factors related to teachers, where the f-value was 3.11 at a significance level of 0.048. Furthermore, there were statistically significant differences in the third dimension, i.e., factors related to the educational institution where the f-value was 3.34 at a significance level of 0.039. The results also indicated that there were no statistically significant differences ($p = 0.05$) in the first dimension, i.e., factors related to the parents. Also, no statistically significant ($p = 0.05$) differences were found in the questionnaire as a whole.

To determine the direction of differences in the second and third factors, the LSD test was used. These results are shown in table 10.

Table 10.

The LSD test for differences in teachers' views concerning the second and the third factors by qualification.

	Variables	Mean difference	Sig.	
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	BC	MA	0.88942-	0.301
		PhD	*5.07692-	0.020
	MA	BC	0.88942	0.301
		PhD	4.18750-	0.064
	PhD	BC	*5.07692	0.020
		MA	4.18750	0.064
Factors related to the educational institution that contribute to the activation of parental participation in the IEPs	BC	MA	0.62019	0.333
		PhD	*3.69231-	0.023
	MA	BC	0.62019-	0.333
		PhD	*4.31250-	0.011
	PhD	BC	*3.69231	0.023
		MA	*4.31250	0.011

Source: (Own authorship)

As shown in table 10, differences in the second dimension (factors related to teachers) were in favor of PhD holders. The difference between the means of the PhD and bachelor holders was 5.07692, which is statistically significant ($p = 0.020$). Similarly, differences in the third dimension (factors related to the educational institution) were in favor of PhD holders. The difference between the means of the PhD and bachelor holders was 3.69231, which is statistically significant ($p = 0.020$).

This study's finding of lack of statistically significant differences in the factors related to parents that contribute to the activation of their participation in their children's IEPs by qualification is in line with the study of Al-Ayed (2010) which did not find any significant differences in the level of parents' satisfaction with the services provided by the resource rooms for their children with learning difficulties. However, it conflicted with the study by Al-Zahrani and Al-Zahrani (2020), which found no statistically significant differences in teachers' views regarding the obstacles to applying the individual educational plan for elementary school students with learning difficulties by qualification. Al-Otaibi (2009) found a general satisfaction, although not high, with the services provided to students with special needs in special education institutes and programs. Contrary to the results of the current study, satisfaction clearly varied according to the educational level of the parents.

This study's finding that there were statistically significant differences in the factors related to the teacher and the educational institution that contribute to the activation of parental participation in their children's IEPs in favor of PhD holders did not concur with the study of Al-Ghasawneh (2007) which found no statistically significant differences in teachers' evaluation of the programs offered in special education classes in general schools in Taif by qualification. Likewise, the study of Al-Rashidi and Al-Najjar (2015) contradicted the current study in that it reported no statistically significant differences in teachers' assessment of the efficiency and obstacles to planning and implementing the IEP by the educational status.

Differences by experience

To identify if there were statistically significant differences in the teachers' views concerning the factors contributing to the activation of parental participation in the IEP by experience, the ANOVA test was used. These results are shown in tables 11 and 12.

Table 11.

The descriptive statistics of the teachers' responses to the questionnaire by experience.

Factor Experience	N	M	SD	
Factors related to parents that contribute to the activation of their participation in their children's IEPs	1-5 years	28	49.929	4.154
	6-10 years	30	50.733	4.975
	≥ 11 years	82	49.463	4.746
	Total	140	49.829	4.680
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	1-5 years	28	35.714	2.623
	6-10 years	30	36.467	3.521
	≥ 11 years	82	34.683	4.901
	Total	140	35.271	4.298
Factors related to the educational institution that contribute to the activation of parental participation in children's IEPs	1-5 years	28	21.857	2.138
	6-10 years	30	22.267	2.532
	≥ 11 years	82	20.707	3.619
	Total	140	21.271	3.214
The Total Questionnaire	1-5 years	28	107.500	7.361
	6-10 years	30	109.467	10.122
	≥ 11 years	82	104.854	12.048
	Total	140	106.371	10.963

Table 12.

The ANOVA test for differences in the teachers' views concerning the factors contributing to the activation of parental participation in the IEP by experience.

Factors	Sum of squares	df	Mean squares	f-value	Sig.	
Factors related to parents that contribute to the activation of their participation in their children's IEPs	Between groups	35.77	2	17.89	0.815	0.445
	Within groups	3008.11	137	21.96		
	Total	3043.89	139			
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	Between groups	76.75	2	38.37	2.111	0.125
	Within groups	2490.94	137	18.18		
	Total	2567.69	139			
Factors related to the educational institution that contribute to the activation of parental participation in the IEPs	Between groups	65.41	2	32.71	3.270	0.041
	Within groups	1370.27	137	10.00		
	Total	1435.69	139			
The total questionnaire	Between groups	511.98	2	255.99	2.166	0.119
	Within groups	16192.71	137	118.19		
	Total	16704.69	139			

Source: (Own authorship)

From the data in table 11, it is clear that the mean score of the teachers with 6-10 years of experience was higher than the mean scores of teachers with 1-5 years of experience and of 11 years or more in the third dimension (factors related to the educational institution). The difference was statistically significant ($F = 3.72$, $p = 0.41$).

The results revealed no statistically significant differences ($p = 0.05$) in the first dimension (factors related to the parents) and the second dimension (factors related to the teacher) by experience. Similarly, no statistically significant differences were found for the questionnaire as a whole.

To determine the direction of differences for the third dimension, the LSD test was used, and the results were as shown in the following table.

The results of the LSD test in table 13 indicate that the differences in the third dimension (factors related to the educational institution) were in favor of teachers with 6-10 years of experience. The difference between the means of teachers with 6-10 years of experience and those with 11 or more years of experience was 1.55935. It was statistically significant ($p = 0.022$) in favor of teachers with experience from 6-10 years.

Table 13.

The LSD test for differences in teachers' views concerning the second and the third factors by experience.

Variables		Mean difference		Sig.
Factors related to the educational institution that contribute to the activation of parental participation in the IEPs	1-5 years	1-5 years	-1.56	0.073
		6-10 years	-0.41	0.623
		≥ 11 years	1.15	0.099
	6-10 years	1-5 years	0.41	0.623
		≥ 11 years	*1.55935	0.022
		≥ 11 years	1-5 years	-1.15
		6-10 years	*-1.55935	0.022

Source: (Own authorship)

The lack of differences in the factors related to parents and teachers by experience concurred with the study of Al-Zahrani and Al-Zahrani (2020) that aimed to identify the obstacles to implementing the individual educational plans for students with learning difficulties in the primary school in Jeddah Governorate from their teachers' perspectives, as well as to identify the effect of gender, qualification, and experience on the teachers' ratings. The results revealed no statistically significant differences in teachers' ratings of the obstacles by experience. The result of the current study also concurred with the study of Al-Rashidi and Al-Najjar (2015) where no statistically significant differences were found in the teachers' assessment of the efficiency and the obstacles to planning and implementing the IEP by experience.

Differences by training courses

To determine if there were statistically significant differences in the teachers' views concerning the factors contributing to the activation of parental participation in the IEP by the number of training courses, the ANOVA test was used. These results are presented in table 14 and 15.

Table 14.

The descriptive statistics of the teachers' responses to the questionnaire by training.

Factor No. of courses		N	M	SD
Factors related to parents that contribute to the activation of their participation in their children's IEPs	≤ 5 courses	30	48.87	5.79
	6-10 courses	28	51.36	3.30
	≥ 11 courses	82	49.66	4.56
	Total	140	49.83	4.68
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	≤ 5 courses	30	34.87	4.50
	6-10 courses	28	35.79	3.47
	≥ 11 courses	82	35.24	4.50
	Total	140	35.27	4.30
Factors related to the educational institution that contribute to the activation of parental participation in children's IEPs	≤ 5 courses	30	20.80	2.93
	6-10 courses	28	22.43	1.99
	≥ 11 courses	82	21.05	3.57
	Total	140	21.27	3.21
The Total Questionnaire	≤ 5 courses	30	104.53	11.48
	6-10 courses	28	109.57	7.22
	≥ 11 courses	82	105.95	11.69
	Total	140	106.37	10.96

Source: (Own authorship)

Table 15.

The ANOVA test for differences in the teachers' views concerning the factors contributing to the activation of parental participation in the IEP by training

Factors	Sum of squares	df	Mean squares	f-value	Sig.
Factors related to parents that contribute to the activation of their participation in their children's IEPs	Between groups	95.551	2	47.776	
	Within groups	2948.334	137	21.521	2.220
	Total	3043.886	139		0.113
Factors related to teachers that contribute to the activation of parental participation in children's IEPs	Between groups	12.383	2	6.191	
	Within groups	2555.303	137	18.652	0.332
	Total	2567.686	139		0.718
Factors related to the educational institution that contribute to the activation of parental participation in the IEPs	Between groups	48.224	2	24.112	
	Within groups	1387.462	137	10.127	2.381
	Total	1435.686	139		0.096
The total questionnaire	Between groups	402.557	2	201.279	
	Within groups	16302.129	137	118.994	1.692
	Total	16704.686	139		0.188

Source: (Own authorship)

As listed in table 15, there were no statistically significant differences ($p = 0.05$) in the dimensions of the questionnaire and in the questionnaire as a whole. That is, the number of training courses did not affect teachers' views regarding the factors contributing to the activation of parental participation in the IEP.

The results could be attributed to teachers' awareness of the importance of parental participation and the importance of communicating with them regarding the IEP for students with intellectual disabilities. Teachers who had attained PhDs proved to be more aware of the importance of the role of the teacher and the educational institution in getting parents to contribute to IEPs. Those teachers with PhDs also seemed more familiar with scientific research that emphasizes the need for the teacher to be a link between school and families, and that educational institutions serving students with intellectual disabilities should keep communicating with families in order to achieve the goals of IEPs for students with intellectual disabilities.

Teachers with 6-10 years of experience seemed to spend much more time and be more involved in the education of students with intellectual disabilities compared with other teachers. They seemed to be more aware of the importance and role of the educational institution in getting parents to contribute to the IEP. The number of training courses teachers participated in did not affect teachers' views on the factors contributing to the activation of parental participation in the IEP. It seems that teachers' views on the factors are similar regardless of whether they have extra training. It is worth noting that the researchers could not find a previous study addressing the effect of scientific courses on increasing the participation of parents in preparing and implementing the IEP for their children.

Conclusions

The results of the study revealed factors that contribute to the activation of parental participation in the IEP. These factors are classified into three types: factors related to parents, factors related to the teacher, and factors related to the educational institution. This study highlighted the importance of teacher awareness regarding the benefits of parental participation in their children's IEPs. No differences were found between male and female teachers regarding the factors contributing to the activation of parental participation in the IEP. Conversely, significant differences were found by qualification. Teachers who had attained PhDs proved to be more aware of the factors contributing to the activation of parental participation in the IEP.

In light of the results, the researchers recommend placing considerable attention to activating the participation of parents in the IEPs for students with intellectual disabilities. Parents should participate in planning, implementing, and evaluating the IEPs. Educational institutions serving students with disabilities

should strengthen their communication with families, by encouraging parents to visit schools and cooperate with them to help achieve the goals of the IEPs. There should be continuous dialogue between the school and parents. Institutions should inform parents of the challenges regarding the education of students with intellectual disabilities. Parents should get involved in schools' advisory committees. The researchers could not find previous studies confirming or negating the effect of the number of training courses on teachers' views on the factors contributing to the activation of parental participation in the IEP, so the researchers suggest conducting more studies on the importance of the academic attainment of parents and teachers in activating parental participation in implementing the IEP.

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