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**Research Paper** 

# The Relationship Between Sense of Competence and Parental Involvement in Caring for Children with Special Needs

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#### Abstract

This research was conducted to determine the relationship between competent parental involvement in caring for, handling, and educating children with birth impairment children. It involved 185 Bandung-based parents of children with a birth impairment. *Skala Evaluasi Diri Kompetensi-Anak Berkebutuhan Khusus* or SEDKO-ABK (Self-Evaluation Competence Scale for Parents with Children with Special Needs) was used as the instrument to measure the sense of competence, while parental involvement was measured using *Kuesioner Keterlibatan Orang Tua dalam Pengasuhan Anak* or KUKOPA (Questionnaire on Parental Involvement in Caring for Children). The results show that parental involvement in caring for, handling, and educating children with special needs. Based on the results of this research, training for parents is important to their understanding and skills in caring for children with a birth impairment.

Keywords Children with special needs, parents, parental involvement, sense of competence

#### **INTRODUCTION**

Every child has the right to grow and develop optimally, as mentioned in the Convention on the Rights of the Child, which was approved by the United Nations General Assembly (1989). Growth refers to the increase in body size, cell number, and in-between cell tissues. On the other hand, Wijaya (2011) mentions that development refers to the increase of more complex structures, functions, and skills in a child in the sensory, motoric, cognitive, social, creative, moral, and spiritual aspects. It is a fundamental right for every child, including children with a birth impairment. According to Suran (Mangunsong, 2009), children with a birth impairment display significant differences in several important dimensions of human processes and functions. There are some categories of special needs, including visual impairment, hearing impairment, speech impairment, intellectual disability, physical disability, autism, and giftedness. Each special need has unique characteristics and issues, and therefore, it requires specific treatments. Early and proper treatment of the issues will help the children develop optimally while preventing the existing issues from becoming bigger and more complex. (Dworkin, 2001).

On that note, Kandel and Merrick (2007) stated that parents serve as central liaisons and figures in caring for, educating, and monitoring children with a birth impairment. In addition, Özyürek (2012) noted that they play an important role in determining the services required by children and updating their medical information. This implies that full parental involvement is important in the development of children with a birth impairment, and a lack thereof results in significant negative impacts. Specifically, the lack of parental participation may lead to improper or unhealthy educational programs for children with a birth impairment (Wade, 2008). Without parental involvement, children are at risk of receiving insufficient and improper services (Burke, 2013).

Their Myriad studies have demonstrated the benefits of parental involvement in handling children with a birth impairment. Studies conducted by Elder (2013), Karst and Van Hecke (2012),

Negri and Castorina (2014), Shie and Wang (2007), and Xu and Filler (2008) showed that parental involvement in handling children plays an important role in the effectiveness of the intervention (treatment) on children with special needs. Another study by Rudy (2013) also showed that parental involvement not only supports the effectiveness but also helps reduce the cost of the children's treatment or handling. In addition, Mandelberg et al. (2014) stated that for the parents themselves, their involvement in handling children can decrease the chance of conflict or loneliness.

Parental involvement is, in actuality, a part of the parenting process. Belsky (1984) developed a model of the parenting process to demonstrate that parents' role or function in parenting (including their involvement) results from an interaction involving several variables. This can be further categorized into three determinant domains: parents' psychological resources, children's characteristics, and stress source and contextual support. Parental psychological resources include personality, experience, and competence (Belsky, 1984). On that account, based on the model, one of the variables related to the degree of parental involvement is the parent's sense of competence (or their perceived competence).

To be able to effectively get involved in managing and monitoring their children, parents require a proper level of competence, whether it be their knowledge of special needs or methods of working with children with special needs. A study by Yan and Hou (2023) revealed that parents' competence is significantly correlated with their involvement. Furthermore, Oranga et al. (2022) found that a lack of knowledge and skills was one of the factors hindering parental involvement in handling children with intellectual disabilities. In line with this, Wright and Taylor (2014) highlighted the importance of sharing support, knowledge, and skills with parents to help them handle and care for children with special needs. The aforementioned studies thus show that parents' competence is highly correlated with their involvement. However, there has been a difference in opinions on the correlation between parents' competence and their behavior (including parenting behavior or style). According to DiClemente (1989) and Fisher and Fisher (1992), knowledge is indeed an important element of competence.

However, mere knowledge is not enough to produce or result in the expected behaviors (Ajzen et al., 2011). Contrary to the opinions of DiClemente (1989) and Fisher and Fisher (1992), Ajzen et al. (2011) stated that information accuracy is insignificant and insufficient to form a behavior. What determines a goal and an action are pieces of information held subjectively (for instance, a spiritual or religious belief) that associate behavior with either positive or negative results, normative expectations from an individual or a referred group, and controlling factors that either facilitate or hinder behavior formation. Consequently, it is important to note that behavior formation does not require the accuracy of information; it requires the information an individual has and how it affects one's goal and action, regardless of its accuracy. Thus, we assume that parents' beliefs about their competence (sense of competence) are related to their involvement.

The relationship between competence and parental involvement needs to be reinvestigated to confirm the aforementioned difference in opinions on the two variables. This study thus aims to determine the relationship between parents' sense of competence and their involvement in caring for, handling, and educating children with special needs.

# LITERATURE REVIEW

Various studies have shown that parental involvement is related to parental competence (Wright & Taylor, 2014). However, we assume that what is related to parental involvement is not only objective parental competence but also parents' beliefs regarding their competence (sense of competence). This is supported by the opinion of Ajzen et al. (2011), who stated that information accuracy is insignificant and insufficient to form behavior. Behavior formation does not require the accuracy of information; it requires the information an individual has and how it affects one's goal

and action, regardless of its accuracy. Because what determines a goal and an action are pieces of information held subjectively that associate behavior with either positive or negative results and normative expectations from an individual or a referred group. Thus, this assumption must be tested in research. Therefore, therefore examined whether there was a connection between parents' sense of competence and their involvement in caring for, handling, and educating their children with a birth impairment.

#### **RESEARCH METHOD**

This study was conducted using a quantitative approach with a correlational design. There are two variables in this research: independent and dependent. Parents' competence in caring for, handling, and educating their children with a birth impairment served as the independent variable, while parental involvement served as the dependent variable.

Participants were 185 Bandung-based parents with children with a birth impairment. Specifically, the number comprised 162 women and 23 men, with academic qualifications ranging from elementary to postgraduate levels. Each participant had a child with varying special needs, from intellectual disorders (mild to serious), autism, and learning difficulties to hearing impairment and cerebral palsy. According to Kerlinger and Lee (2000), the minimum number of samples for quantitative research is 30. The number of samples involved in this research was sufficient and representative for the analysis (Hans & Prasetio, 2023).

Two instruments were employed in the research: *Skala Evaluasi Diri Kompetensi Orangtua Anak Berkebutuhan Khususus* (SEDKO-ABK or Self-Evaluation Competence Scale for Parents with Children with Special Needs) and *Kuesioner Keterlibatan Orangtua Dalam Pengasuhan Anak* (KUKOPA or Questionnaire on Parental Involvement in Caring for Children). Designed by Herlina et al. (2022), SEDKO-ABK was used to measure parents' self-evaluation of their competence in handling their children. The scale consists of 14 items that measure cognitive competence, psychomotor competence, and affective competence. The Likert scale features seven choices and scores ranging from one to seven, with an alpha reliability of 0.929. The results of the validity and reliability tests of the instrument are presented in Tables 1 and 2.

Table 1. Trequentist scale Kenability statistics o	
Estimate	McDonald's ω
Point estimate	0.925
95% confidence interval (CI) lower bound	0.909
95% confidence interval (CI) upper bound	0.941

Table 1. Frequentist Scale Reliability Statistics of SEDKO-ABK

Table 2. Frequentist Individua	l Item Reliability Statistics of SEDKO-ABK
Item	Item-rest correlation
A-1	0.682
A-2	0.708
A-3	0.548
A-4	0.746
A-5	0.735
A-6	0.704
A-7	0.610
A-8	0.720
A-9	0.687

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Item	Item-rest correlation
A-10	0.695
A-11	0.597
A-12	0.601
A-13	0.587
A-14	0.599

Table 2. Frequentist Individual Item Reliability Statistics of SEDKO-ABK

Source: Author's Analysis

On the other hand, KOKUPA was used to measure parental involvement in caring for, handling, and educating children with a birth impairment. The questionnaire was designed based on Finley and Schwartz (2008). The instrument has 20 items to measure emotional involvement, instrumental involvement, and monitoring and advising involvement dimensions. The questionnaire uses a Likert scale with five choices (rarely, rarely, sometimes, often, almost always) and has an alpha reliability of 0.918. The results of the validity test of the instrument are presented in Table 3.

Item	Item-Total
	Correlations
I allocate dedicated time to unwind with my child.	0.508
I am playing with my child.	0.478
I engage in activities that my child enjoys at home.	0.444
I take care of my child's everyday necessities, such as clothing and food.	0.467
I listen to my child's grievances	0.572
I introduce etiquette when talking to others to my child	0.589
I provide healthy and nutritious food and drinks to my child.	0.589
I involve my child in religious worship	0.570
I train my child to be responsible through various activities, such as	0.618
asking them to tidy up their toys, dispose of trash, and tidy up their	
room.	
I teach my children independence through various activities like	0.555
dressing themselves and eating without assistance.	
I teach my child manners	0.646
My child will be introduced to various career fields	0.632
I take care of my child	0.278
I create a daily schedule for my child.	0.444
I ensure that my child follows their daily schedule.	0.544
I choose a school/therapy center for my child.	0.468
I monitor my child's school/therapy activities	0.511
I train various skills that my child must master.	0.512
I assist my child with home-learning	0.594
I provide various learning resources for my child, such as books and	0.561
educational toys.	

Table 3. Item-total correlation of 20 KUKOPA items

Data were obtained using Spearman's rank correlation coefficient and t-test. Spearman's

technique was employed to determine whether or not there is a correlation between competence and involvement. The t-test, on the other hand, was used to determine whether or not there are demographical influences, including gender, educational level, and type of special needs, on competence and involvement.

#### FINDINGS AND DISCUSSION

#### **Analysis Descriptive of Variables**

Based on the descriptive analysis results, the minimum score of the participants' competence in caring for, handling, and educating their children with special needs was 5, and the maximum score peaks at 25, with a mean score of 17.832. For the involvement variable, the minimum score was 38, the maximum score was 100, and the mean score was 82.154.

The standard deviation is a measure indicating the dispersion of data to the mean. The higher the deviation, the greater the variation in the dataset. The competence variable has a deviation of 4.491, meaning that the variability in parents' competence is relatively low. On the other hand, the deviation in the aspect of parental involvement peaks at 9.871, indicating a higher variability in the involvement rate.

	Competence	Parental Involvement
N	185	185
Mean	17.832	82.514
Standard deviation	4.491	9.871
Minimum	5.000	38.000
Maximum	25.000	100.000

**Table 4.** Descriptive Statistics of Parents' Competence and Involvement in Children with

 Special Needs

#### Analysis of the Demographical Influence on Parents' Competence and Involvement

The results of the gender-based competence comparison (between fathers and mothers) showed that, on average, the mothers had better competence (mean = 52.593). However, the t-value of 1.789 and p-value of 0.075 are not significant compared to the fathers (mean = 48.435). This indicates that there is no difference between mothers and fathers in their competence in caring for children with a birth impairment.

Table 5. T-test	on Intergender Inde	ependent Samples of Cor	npetence and Parental Involvement
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		N	Mean	SD	Т	Р
Competence	Mother	162	52.593	10.771	1.789	0.075
F	Father	23	48.435	7.458		
Knowledge	Mother	162	18.117	4.588	2.316	0.022
8-	Father	23	15.826	3.143		
Skill	Mother	162	17.568	4.327	1.366	0.174
JKIII	Father	23	16.261	4.048		

Affective	Mother	162	16.907	3.330	0.755	0.451
	Father	23	16.348	3.284		0.101
Involvement	Mother	162	83.130	9.802	1.461	0.146
	Father	23	79.957	9.325		
Expressive	Mother	162	33.451	4.092	1.242	0.216
involvement	Father	23	32.304	4.497		
Instrumental	Mother	162	37.346	5.032	1.323	0 187
involvement	Father	23	35.870	4.818		0.207
Mentoring	Mother	162	12.333	1.962	1.284	0,201
Involvement	Father	23	11.783	1.622		

Looking closer at each dimension of competence, for the cognitive competence (knowledge) dimension, the test result shows that, on average, mothers score significantly better (18.117) than fathers (15.826), with a t-value of 2.316 and a p-value of 0.022. This indicates that mothers have better knowledge and understanding of children with a birth impairment. At the skill dimension, mothers scored higher (17.568) than fathers (16.261), although not significantly (t = 1.366, p = 0.174). This shows that there is no skill difference between mothers and fathers in caring for, handling, and educating their children. In addition, regarding the affective aspect (with t = 0.755 and p = 0.451), there was no difference in affectional competence as, on average, mothers scored slightly higher (52.593) than fathers (48.435).

Moving onto the involvement aspect, the results of the gender-based involvement comparison (between fathers and mothers) showed that, on average, mothers were more involved (83.130) than fathers (79.957). However, the difference is not significant. In addition, a low t-score (1.559) and high p-value (0.121) further indicated that there was no significant difference between the two genders in the involvement level or rate.

When observing each dimension closer, at the expressive involvement dimension, there is a slight score difference between mothers (83.130) and fathers (79.957), yet once again, is insignificant. As with the gender-based involvement comparison, a low t-score (1.559) and high p-value (0.121) indicate that there is no significant difference between the two genders in their parental involvement. At the mentoring involvement dimension, the t-test result indicates that with a t-value of 1.285 and a p-value of 0.201, mothers scored higher (12.333) than fathers (11.783), yet not significantly. This also implies that there is no difference between the two genders in their mentoring roles.

The next aspect observed is the difference in parents' competence and involvement based on their educational background or level. The ANOVA test result shows a significant difference in the overall competencies (F: 5.281; p<0.001) based on educational level. In the cognitive (F: 4.764; p=<0.001) and skill (F: 5,281; p<0,001) dimensions, the difference is significant. However, at the affective dimension, the difference was insignificant (F: 2.226; p: 0.068).

For the involvement variable, the educational level did not trigger or lead to a significant difference (F: 2.181; p:0.073). By specifically observing each dimension, no significant difference was observed in the expressive involvement (F: 1.401; p: 0.236) and mentoring involvement (F: 0.797; p: 0.529) dimensions. However, during instrumental involvement, parents' varying educational levels lead to significant differences.

Educat ional level	N	Compete nce		Compete Cognitive/Kno nce wledge		Skill	Skill Affectiv e			Involvem ent		Expressi ve Involve ment		Instrume ntal Involve ment		Mentorin g Involvem ent	
		Me an	SD	Mean	SD	Me an	SD	Me an	SD	Me an	SD	Me an	SD	Me an	SD	Mea n	SD
< = Primar y High	4 7	47. 38	11. 62	15.96	4.92	15. 38	4. 42	16. 04	4, 09	79. 53	12. 402	32. 21	5, 49	35. 40	6, 18	12. 000	1.9 67
Second ary High	7 7	52. 06	9.9 5	17.71	4.39	17. 62	4. 07	16. 73	3, 25	82. 92	9.2 65	33. 42	3, 76	37. 45	4, 66	12. 312	2.0 15
Diplom a	2 2	57. 31	7.9 4	19.77	3.28	19. 14	3. 96	18. 41	2, 28	86. 04	7.8 77	34. 45	3, 28	38. 95	3, 86	12. 818	1.5 32
Bachelo r's Degree	3 7	54. 27	9.1 2	19.02	3.88	18. 22	3. 99	17. 03	2, 62	83. 16	7.9 57	33. 73	3, 21	37. 54	4, 28	12. 135	1.9 32
Master' s Degree	2	64. 50	7.7 8	23.00	2.83	22. 50	2. 50	19. 00	1, 41	86. 00	1.4 14	34. 50	3, 54	40. 50	0, 71	13. 000	1.4 14
F-score (p)		5.281 (<0.001)		4.764 (0.001)		4.954(<0. 001)		2.226 (0.068)		2.181(0.07 3)		1.401(0.2 36)		2.569 (0.040)		0.797 (0.529)	

Table 6. T-test on Independent Samples of Parents' Knowledge and Involvement across
Educational Levels

# **Table 7.** T-test on Independent Samples of Parents' Knowledge and Involvement across Various Special Needs

Types of Special	N	Competence		Knowledge (Cognitive)			Affective	Parental Expressive Involvement Involvement			Instrun Involve	nental ment	Mentoring Involvement			
Needs		Mean	SD	Mean	SD	Mean	SD	Mean SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Autism	24	52.46	11.421	17.83	4.87	17.46	17.46	17.17 2.85	84.79	10.12	33.79	4.20	38.04	5.34	12.958	1.781
Cerebral Palsy	7	52.86	8.971	18.000	4.93	16.00	16.00	17.25 2.50	79.25	11.27	32.75	3.50	34.25	5.62	12.250	3.775
Moderate Intellectual Disability	26	50.50	9.754	17.192	3.87	16.75	16.75	18.25 1.71	91.50	6.24	37.25	2.22	41.00	2.83	13.250	1.500
Severe Hearing Impairment	5	50.40	3.647	17.800	3.70	18.43	18.43	16.43 3.36	75.71	7.74	33.14	5.24	32.29	4.15	10.286	2.138
Mild Intellectual Disability	6	51.83	8.472	17.667	4.37	16.92	16.92	16.38 3.71	81.11	10.44	32.85	4.02	36.38	5.56	11.885	1.883
Speech Delay	2	57.00	16.971	18.500	9.19	14.80	14.80	17.80 2.17	80.00	4.18	31.60	2.70	36.80	2.39	11.600	1.140

Types of Special Needs	N	Competence		Knowledge (Cognitive)		Skill		Affective	Parental Involvement		Expressive Involvement		Instrumental Involvement		Mentoring Involvement	
		Mean	SD	Mean	SD	Mean	SD	Mean SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Learning Disability	19	46.42	12.808	15.368	5.13	16.83	16.83	17.33 3.01	85.17	10.38	33.33	4.03	38.67	5.09	13.167	1.835
Speech Impairment	16	49.87	10.039	16.375	4.83	19.00	19.00	19.50 0.71	85.00	4.24	34.50	3.53	38.50	0.71	12.000	0.000
Moderate Hearing Impairment	72	54.40	9.940	18.986	3.99	15.74	15.74	15.32 4.36	80.00	7.02	32.53	3.27	35.53	3.70	11.947	1.900
ADD/HD	4	48.75	15.714	15.50	6.56	17.62	17.63	15.87 3.07	79.81	14.54	31.94	6.35	36.12	6.51	11.750	2.049
Others	4	55.75	7.274	20.75	2.22	18.15	18.15	17.26 3.24	84.32	8.84	33.74	3.89	38.09	4.60	12.486	1.808
F Score (p)		1.202 (<0.29	3)	1.60 (0.10	)2 )9)	0.845 (<0.54	48)	0.997 (0.468)	1.521 (	(0.135)	1.401 (0	).236)		1.838 (0.057)	1.781 (	0.067)

Post-hoc analysis on variables depicting differences, namely competence, cognitive, skill, and instrumental involvement, shows that compared to other groups, elementary and primary high school graduates display a huge difference. Overall, elementary and primary high school graduates have lower competence than the associate degree (I-III) group (t: -3.833; p: 0.002) and the associate degree (IV)/bachelor's degree group (t: -3.123; p: <0.028). Elementary and primary high school graduates also scored lower than the associate degree (I-III) group (t: -3.420; p: 0.007) and the associate degree (IV) and bachelor's degree groups (t: -3.234; p: 0.012) in the cognitive variable. In addition, they also scored lower than the associate degree (I-III) group (t: -2.786; p: 0.046) at the instrumental involvement dimension.

The study also included an analysis of the difference in competence level and parental involvement based on the children's special needs. The conditions observed in this research were autism, ADD/ADHD, intellectual disability, hearing impairment, cerebral palsy, speech impairment, speech delay, and learning disability. The analysis shows that there was no significant difference influenced by the type of special needs in terms of both parents' competence and involvement.

#### Analysis of the Correlation Between Competence and Parental Involvement

The data revealed that parents' competence was significantly correlated (<0.001) with their involvement (0.393). The knowledge or cognitive dimension was closely correlated (<0.001) with parental involvement in general (r = 0.387), expressive involvement (r = 0.345), instrumental involvement (r = 0.373), and mentoring involvement (r = 0.249). The skill dimension is correlated significantly (<0.001) with parental involvement in general (r = 0.264), expressive involvement (r = 0.174). There was also a significant correlation between affective competence (<0.001) and parental involvement in general (r = 0.353), expressive involvement (r = 0.352), instrumental involvement (r = 0.319), and mentoring involvement (r = 0.204).

Variable	Mean/SD)	1	2	3	4	5	6	7
1. Self-Competence	52.08 (10.49)							
2. Knowledge/Cognitive	17.83 (4.49)	0.907**	—					

Table 8. Analysis of the Correlation between Competence and Parental Involvement

Variable	Mean/SD)	1	2	3	4	5	6 7
3. Skill	17.405 (4.30)	0.893**	0.734**	_			
4. Affective	16.838 (3.32)	0.775**	0.562**	0.531**	_		
5. Parental Involvement	82.73 (9.78)	0.393**	0.387**	0.281**	0.353**	_	
6. Expressive Involvement	33.31 (4.15)	0.367**	0.345**	0.264**	0.352**	0.872**	_
7. Instrumental Involvement	37.162 (5.02)	0.369**	0.373**	0.264**	0.319**	0.935**	0.677** —
8. Mentoring Involvement	12.26 (1.93)	0.242**	0.249**	0.174*	0.204**	0.507**	0.679**

\*\* (<.001) \* (<.05)

### DISCUSSION

As the name suggests, parental involvement refers to parents' interaction and involvement in their children's lives (Si & Pei, 2013) initiated by themselves as a part of their responsibilities for the children's psychosocial and educational development (Mo & Singh, 2008). According to Finley and Schwartz (2008), involvement can be categorized into three aspects: expressive, instrumental, and mentoring/advising. Expressive involvement in exciting activities with children. These activities include spending free time, having fun, and playing together, as well as building friendships, sharing interests and hobbies, and focusing on the children. Instrumental involvement is reflected in protective behaviors, allocating income for the children, developing children's responsibilities and independence, promoting children's etiquette/moral and career development, and showing concern toward children's school life or homework. On the other hand, mentoring involvement refers to parents' involvement in developing children's competence, mentoring/educating, advising, and improving their intelligence (Si & Pei, 2013)

The results of this study demonstrate parental involvement in their children with a birth impairment is significantly and positively correlated with competence in caring for, handling, and educating children. The correlation is positive, meaning that the higher the competence, the higher the involvement. This echoes a process of the parenting model by Belsky (1984) results, highlighting that parents' knowledge or competence is positively related to their involvement in handling children with special needs (Aarthun et al., 2019). Solish and Perry (2008) stated that the relationship between knowledge and involvement is formed because parents—equipped with knowledge of their children's condition and the programs designed for them—have more information regarding the potential benefits of their involvement in the children's programs. Walker et al. (2005) further explained that parents make decisions regarding their involvement based on their thoughts regarding the potential outcomes of their involvement. Specifically, parents are motivated to get involved in activities when they are confident that they have skills and knowledge that will benefit them in certain activities. In other words, a sense of competence in successfully caring for, handling, and educating children with a birth impairment can determine parents' involvement.

Improving parents' involvement in caring for, handling, and educating their children requires initiatives to provide training to improve their competence. Various trainings aimed at improving parents' competence (at knowledge/cognitive, skill, and affective dimensions) have been proven effective in reaching their objectives—participants gaining better competence in handling and educating their children with special needs (Khairiyah et al., 2019). In addition, Adler et al. (2015) identified 37 knowledge needs of parents with children with special needs, further divided into nine categories: knowledge of condition or disorder, knowledge of support, knowledge

of medication, knowledge of children's daily care, knowledge of future, knowledge of the way children's condition is explained to others, knowledge of equipment, knowledge of organizational issues, and knowledge of the influence of the condition/disorder on the family.

This research examines the relationship between 3 dimensions of sense of competence, cognitive, psychomotor, and affective, with 3 forms of parental involvement, emotional involvement, instrumental involvement, and monitoring and advising involvement. We found that all forms of sense of competence and parental involvement were significantly related with strengths ranging from 0.174 to 0.373. The relationship with the smallest strength is between Mentoring Involvement and a sense of competence in the skills aspect, namely, 0.174, while the strongest relationship is between instrumental involvement and a sense of competence in the science in the cognitive aspect, namely, 0.373.

Further enriching the information regarding parental competence and involvement in caring for children with special needs, this research incorporates demographic data, such as gender, educational level, and type of special needs, to determine whether the mentioned factors are related to competence and involvement. The analysis of gender difference and parental involvement, both generally and specifically (per dimension), revealed no significant difference in the involvement level between fathers and mothers. This, however, does not align with the results of the study conducted by Sharabi and Marom-Golan (2018), which revealed a significant difference in the involvement level between fathers and mothers in caring for their autistic children. Specifically, the mothers displayed a higher level of involvement than the fathers. In addition, Si & Pei (2013) found that there is a difference in expressive involvement and mothers' mentoring involvement. In this case, mothers were more involved in expressive activities and mentoring with their children.

In addition, the analysis of the relationship between educational level and parental involvement shows that, in general, there is no significant difference across educational levels in terms of parental involvement. However, during instrumental involvement, there is a difference triggered by participants' educational background. Specifically, participants in primary high school or lower groups have a lower level of involvement than those in higher education groups. The difference might also be present because lower educational levels indicate a lower income than higher educational levels, meaning that parents face difficulties in providing facilities and fulfilling their children's financial needs. On the other hand, the research conducted by Green et al. (2007) revealed that educational levels are not correlated with parental involvement. In general, the result agrees with this study's result. However, Ozgun and Honig (2005) found that educational attainment is a predictor of parental involvement. The inconsistency in various findings regarding the role of parents' educational level in their involvement implies that similar studies should be conducted to determine the tendency of various results highlighting the relationship between the aforementioned two variables.

Moreover, the results of the present study show that the type of special needs of a child does not lead to differences in parents' involvement levels. Certain types of special needs, such as autism, are considered more complex developmental disorders than others (Purnamasari et al., 2020), resulting in greater pressure, difficulty, and responsibility parents have in caring for, handling, and educating their children. However, according to the result, it does not cause a difference in involvement level.

The impact of gender, educational level, and type of special needs on parental involvement was not significant. Based on this finding, the intervention program to improve parental involvement in caring for, handling, and educating their children can be designed in a general fashion. This notion, however, still requires further reconfirmation through similar studies because of the inconsistency found in the results of this study and the preceding ones.

# CONCLUSIONS

This study was conducted to determine if there is a relationship between parents' sense of competence and their involvement in caring for, handling, and educating their children with a birth impairment. The results show that there is a positive, significant relationship between the two aspects. However, it also implies that entraining parents with children with a birth impairment is required to improve their competence in caring for, handling, and educating their children, thus improving their involvement.

# LIMITATION OF RESEARCH

This research involved only a few samples related to specific special needs. There are still many types of special needs that were not included in this research, such as visual and social disabilities. Therefore, it needs to be refined by conducting similar research involving all types of special needs.

# REFERENCES

- Aarthun, A., Øymar, K. A., & Akerjordet, K. (2019). Parental involvement in decision-making about their child's health care at the hospital. *Nursing Open*, 6(1), 50–58. https://doi.org/10.1002/nop2.180
- Adler, K., Salanterä, S., Leino-Kilpi, H., & Grädel, B. (2015). An integrated literature review of the knowledge needs of parents with children with special health care needs and of instruments to assess these needs. *Infants & Young Children, 28*(1), 46–71. https://doi.org/10.1097/IYC.00000000000028
- Ajzen, I., Joyce, N., Sheikh, S., & Cote, N. G. (2011). Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology*, *33*(2), 101–117. https://doi.org/10.1080/01973533.2011.568834
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55(1), 83–96. https://doi.org/10.2307/1129836
- Burke, M. (2013). Improving parental involvement: Training special education advocates. *Journal* of *Disability Policy Studies*, 23(4), 225–234. https://doi.org/10.1177/1044207311424910
- DiClemente, R. J. (1989). Prevention of human immunodeficiency virus infection among adolescents: The interplay of health education and public policy in the development and implementation of school-based AIDS education programs. AIDS Education and Prevention, 1(1), 70–78.
- Dworkin, P. H. (2001). *Early detection of developmental delays How do you "measure up"*?. Pediatric Wright State University School
- Elder, J. (2013). Empowering families in the treatment of autism. Dalam M. Fitzgerald (Ed.), *Recent advances in autism spectrum disorders Volume I* (hlm. 13–26). IntechOpen. https://doi.org/10.5772/54303
- Finley, G. E., Mira, S. D., & Schwartz, S. J. (2008). Perceived paternal and maternal involvement: Factor structures, mean differences, and parental roles. *Fathering*, 6(1), 62–82. https://doi.org/10.3149/fth.0601.62
- Fisher, J. D., & Fisher, W. A. (1992). *Changing AIDS-risk behavior*. *Psychological Bulletin*, 111(3), 455–474. https://doi.org/10.1037/0033-2909.111.3.455
- Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations

for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, 99(3), 532–544. https://doi.org/10.1037/0022-0663.99.3.532

- Hans, B., & Prasetio, E. A. (2023). Applying multiple linear regression method to measure the impact of human capital, social media, business sector and founder gender on advanced-stage startup funding in Indonesia. *Applied Quantitative Analysis*, *3*(2), 86–100.
- Herlina, H., Kosasih, I., Ihsan, H., & Dahlan, T. H. (2022). Relationship between religious coping and self-competency assessment with parenting stress in parents of children with special needs. *Pedagogia: Jurnal Ilmu Pendidikan*, 20(3), 171–180. https://doi.org/10.17509/pdgia.v20i3.52177
- Kandel, I., & Merrick, J. (2007). The child with a disability: Parental acceptance, management, and coping. *The Scientific World Journal*, 7, 1799–1809. https://doi.org/10.1100/tsw.2007.265
- Karst, J. S., & Van Hecke, A. V. (2012). Parent and family impact of autism spectrum disorders: A review and proposed model for intervention evaluation. *Clinical Child and Family Psychology Review, 15*(3), 247–277. https://doi.org/10.1007/s10567-012-0119-6
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Harcourt College Publishers.
- Khairiyah, K. Y., Lestari, T., Dianasari, E. L., & Wisma, N. (2019). Pelatihan kompetensi guru sekolah inklusif dalam pemahaman anak berkebutuhan khusus di Kabupaten Karimun. *Jurnal Minda*, 1(1). Universitas Karimun
- Mandelberg, J., Frankel, F., Cunningham, T., Gorospe, C., & Laugeson, E. A. (2014). Long-term outcomes of parent-assisted social skills intervention for high-functioning children with autism spectrum disorders. *Autism, 18*(3), 255–263. https://doi.org/10.1177/1362361312472403
- Mangunsong, F. (2009). Psikologi dan pendidikan anak berkebutuhan khusus. Depok: LPSP3 UI.
- Mo, Y., & Singh, K. (2008). Parents' relationships and involvement: Effects on students' school engagement and performance. *RMLE Online*, 31(10), 1–11.
- Negri, L. M., & Castorina, L. L. (2014). Family adaptation to a diagnosis of autism spectrum disorder. Dalam J. Tarbox, D. R. Dixon, P. Sturmey, & J. L. Matson (Eds.), *Handbook of early intervention for autism spectrum disorders* (hlm. 95–116). Springer. https://doi.org/10.1007/978-1-4939-0401-3\_7
- Oranga, J., Obuba, E., Sore, I., & Boinett, F. (2022). Parental involvement in the education of learners with intellectual disabilities in Kenya. *Open Access Library Journal*, *9*(4), 1-18.
- Özgün, Ö., & Honig, A. S. (2005). Parental involvement and spousal satisfaction with division of early childcare in Turkish families with normal children and children with special needs. *Early Child Development and Care,* 175(3), 259–270. https://doi.org/10.1080/0300443042000235749
- Ozyurek, A. (2012). The effect of parental acceptance in the success of inclusion in preschool education. *The International Journal of Social Sciences* 3(1): 1-10.
- Purnamasari, A., Wahyuni, S., & Purnama, P. A. (2020). Hubungan pola asuh orang tua terhadap perilaku anak autis di Pusat Pelayanan Autis Kendari. *Nursing Inside Community, 3*(1), 32-37.

Rudy, L. J. (2013). Should parents provide their own children's autism therapy? *About.com*.

- Sharabi, A., & Marom-Golan, D. (2018). Social support, education levels, and parents' involvement: A comparison between mothers and fathers of young children with autism spectrum disorder. *Topics in Early Childhood Special Education*, 38(1), 54–64. https://doi.org/10.1177/0271121418762511
- Shie, J. J., & Wang, T. M. (2007). Using parent empowerment in parenting program for a young child with autism. *Department of Special Education, the National Taiwan Normal University*.
- Si Han, Y., & Pei Jun, W. (2013). Parental involvement in child's development: Father vs. mother. *Open Journal of Medical Psychology,* 2(4B), 1–6. https://doi.org/10.4236/ojmp.2013.24B001
- Solish, A., & Perry, A. (2008). Parents' involvement in their children's behavioral intervention programs: Parent and therapist perspectives. *Research in Autism Spectrum Disorders*, 2(4), 728–738. https://doi.org/10.1016/j.rasd.2008.03.001
- United Nations General Assembly. (1989). *Convention on the Rights of the Child*. Office of the High Commissioner for Human Rights.
- Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., & Sandler, H. M. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal*, 106(2), 85–104. https://doi.org/10.1086/499193
- Wade, V. F. (2008). The IEP meeting: Perceptions of parents of students who receive special education services. *Preventing School Failure: Alternative Education for Children and Youth*, *53*(1), 8–14. https://doi.org/10.3200/PSFL.53.1.8-14
- Wijaya, A. M. (2011). Kebutuhan dasar anak untuk tumbuh kembang yang optimal. *Ditjen Kesehatan Masyarakat, Kementerian Kesehatan RI*.
- Wright, A. C., & Taylor, S. (2014). Advocacy by parents of young children with special needs: Activities, processes, and perceived effectiveness. *Journal of Social Service Research*, 40(5), 591–605. https://doi.org/10.1080/01488376.2014.896850
- Xu, Y., & Filler, J. (2008). Facilitating family involvement and support for inclusive education. *The School Community Journal*, *18*(2), 53–71.
- Yan, T., & Hou, Y. (2023). The effect of parenting sense of competence on emotional and behavioral adjustment of children with special education needs: A chain mediating model. *ECNU Review of Education*, 6(2), 123–140. https://doi.org/10.1177/20965311231167196