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## SHORT PAPER

### Self-Determination in Children with Intellectual Disabilities or Autism Spectrum Disorder; Perspectives of Parents from Fujian Province and Taiwan

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#### ABSTRACT

The promotion of self-determination is crucial in the field of special education, particularly for children with intellectual disabilities or autism spectrum disorder. However, little is known about the role parents play in fostering self-determination for their children with developmental disabilities outside of school. This study aims to assess the perspectives of parents in Fujian and Taiwan regarding the importance, opportunities, and capacity of self-determination. Additionally, we explore how factors such as geographic regions, children's disability categories, and grade levels influence parents' perspectives. We surveyed 404 parents of children with intellectual disabilities or autism spectrum disorder in Fujian Province and Taiwan. The results revealed that parents' perception of the importance of self-determination affected how they provided opportunities for self-determination at home. Furthermore, parents who were more inclined to provide their children with opportunities for self-determination generally perceived their children's ability to exercise self-determination as higher. However, this correlation is influenced by the specific type of disability that the child has. The study also discovered that parental perspectives on the capacity of self-determination skills varied depending on the child's disability category and grade level. These findings suggest the need for further research on implementing self-determination at home, which should focus on: 1) Providing parents with accurate information about their children's self-determination abilities; 2) Developing effective strategies for promoting self-determination in students with disabilities, especially those with intellectual disabilities and autism spectrum disorder; and 3) Emphasizing the importance of teaching self-determination skills to children with disabilities at a young age through specially designed instructional programs.

*Keywords:* Self-determination, parents' perspectives, autism spectrum disorder, intellectual disabilities

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## 1. Introduction

Self-determination stands out as a pivotal predictor of achievement, encompassing both in-school and post-school phases<sup>1)</sup>. When children, regardless of their disability status, receive explicit instruction and opportunities to develop and practice skills associated with self-determination, they are expected to achieve academic objectives of their choosing in school<sup>2)</sup>, leading to favorable outcomes after leaving school<sup>3)</sup>. However, due to the unique characteristics of children with intellectual disabilities (ID) or Autism Spectrum Disorder (ASD) compared to their non-disabled peers or individuals with other disabilities, children with ID or ASD often demonstrate poorer academic and post-school outcomes, as well as lower levels of self-determination<sup>4,5)</sup>.

Parents play a pivotal and instrumental role in fostering self-determination among their children with ID or ASD<sup>6)</sup>. Zhang et al indicated that parenting styles significantly influence children's development of self-determination<sup>7)</sup>. In contrast to educators, who also contribute to children's development, parents, as enduring influences and significant sources of support in their children's lives, possess a unique perspective from which they can observe and facilitate the cultivation of self-determination<sup>4)</sup>. Therefore, it is recommended to promote a parental perspective on the importance of self-determination and provide opportunities for their children to develop self-determination<sup>8)</sup>.

However, in the field of self-determination research, there has been a primary focus on educational institutions as the main environments for promoting self-determination, with less attention given to parents<sup>7,8)</sup>. In mainland China and Taiwan, some researchers have recognized the importance of encouraging parental support in fostering self-determination within the family setting<sup>9-12)</sup>. Additionally, several researchers have examined the strategies used to support self-determination within the family context<sup>12-14)</sup>, with a particular emphasis on educators guiding and supporting parents in creating opportunities for self-determination skill development in children with disabilities at home<sup>15,16)</sup>. However, in contrast to the focus on teachers, there is still a significant research gap regarding family involvement in promoting self-determination among children with disabilities<sup>13)</sup>. We lack knowledge about how much parents prioritize efforts to foster self-determination. Therefore, Carter et al. emphasized the importance of studying parental perspectives on self-determination to enhance our understanding in three key areas<sup>4)</sup>. Specifically, future research should explore the importance parents place on self-determination and the opportunities they provide, how parents assess a child's capacity for self-determination, and the factors that influence parents' perspectives on self-determination in children with disabilities.

Parental perspectives on self-determination are shaped by various factors. Firstly, parents from diverse cultural and economic backgrounds exhibit distinct beliefs and practices regarding their children's self-determination<sup>7,17)</sup>. Wang et al. highlighted that Mandarin culture significantly differs from Western individualism culture, emphasizing the importance of belonging to groups and adjusting oneself to meet group needs<sup>18)</sup>. Secondly, children's grade levels are critical factors that influence parental perspectives on self-determination. Alrabiah revealed that parents of high school-aged children with ID were more inclined to provide their children with opportunities for self-determination at home and assigned higher ratings to their children's ability to exercise self-determination at this developmental stage<sup>19)</sup>. Meanwhile, Carter et al. indicated that parents consistently rated the importance and opportunities of self-determination skills as high, and the capacity of their children with ID or ASD as low, across grade levels, with only nominal increases among older children<sup>4)</sup>. Thirdly, disability categories are a crucial factor in predicting parental perspectives on self-determination. Due to the unique communication and social needs of children with ASD, they have lower levels of self-determination than children with ID<sup>20,21)</sup>. Therefore, this study aimed to investigate whether geographic regions, children's grade levels, and disability

categories influence parental ratings of self-determination importance, opportunities, and capacity for their children.

There are many reasons why this study is to evaluate the perspectives of parents originating from both Fujian Province and Taiwan concerning the importance and opportunities of self-determination to examine difference and similarities in perspective of parents from Fujian Province and Taiwan, both immersed in Mandarin cultural regions, with respect to the concept of self-determination. Historically, the influence of Minnan culture, hailing from Fujian, has exerted a significant impact on Taiwanese culture across various domains<sup>22,23</sup>). Simultaneously, the cooperation between Taiwan and Fujian have engendered frequent high-level educational activities and exchanges, culminating in a similarity in the special education systems of both regions<sup>24,25</sup>). Furthermore, in the field of special education, self-determination has developed rapidly in both Fujian and Taiwan. Researchers have increasingly recognized the importance of promoting self-determination skills among children with disabilities in these regions<sup>26-28</sup>). Consequently, we postulate that there may exist certain parallels in the perspectives of parents in Fujian and Taiwan regarding importance, opportunities and children's capacity associated with self-determination. However, Deng et al. have indicated that the progress of the special education system in China proceeded slowly due to the continuous political turmoil and adverse economic conditions that endured for nearly a century<sup>29</sup>). Moreover, the two regions diverge in terms of their levels of economic development<sup>30</sup>). Gan and You have also asserted that special education is gaining more rapid traction in Taiwan in contrast to Fujian Province<sup>24</sup>). Consequently, we hypothesize that parents in Taiwan attach a greater significance to self-determination, afford their children more opportunities to exercise self-determination, and exhibit higher levels of self-determination in their children, in comparison to parents in Fujian Province.

The purpose of this study is to assess the perspectives of parents from Fujian and Taiwan regarding the importance and opportunities for self-determination at home, as well as their children's ability to exercise self-determination. Additionally, we will examine the factors that influence parents' perspectives. It is important to note that this study focuses on how parents in Mandarin cultures perceive the self-determination of their children with ID or ASD, rather than comparing the perspectives of parents in the two regions. To achieve this objective, we used quantitative research methodologies to determine: (a) the relationship between parents' ratings of self-determination importance, opportunities, and capacity, and (b) the impact of factors such as geographic region, children's disability categories, and grade levels on parental perspectives of self-determination importance, opportunities, and capacity.

## 2. Method

### 2.1. Participants

A total of 404 parents from Fujian (306) and Taiwan (98) participated in this study, and all the participants' children served under the special education school categories of ID or ASD. When asked about their relationship to the focus child, 72.5% indicated they were mother; 23.0%, the father; 4.5% noted some other relationship (e.g., grandmother, grandfather). This study only sent instruments to parents of children receiving special education services under a primarily label of ID or ASD, 243 (60.1%) of children were identified by their parents as having a primary special education category of ID, 114 (28.2%) as having ASD, 47 (11.6%) as having both ID and ASD. Their average age was 12.98 years (SD = 3.74, range = 3 to 22). 170 (42.1%) in pre-school stage, 123 (30.4%) in middle school stage and 111 (27.5%) in high school stage. For a more comprehensive understanding of the participant demographics, please refer to Table 1.

Table 1. Parent and Child Characteristics by Reported Geographic Region

Survey item	Fujian <i>n</i> = 306	Taiwan <i>n</i> = 98	Total <i>n</i> = 404
<b><i>Child's disability categories</i></b>			
ID	195(63.7)	48(49.0)	243(60.1)
ASD	69(22.5)	45(45.9)	114(28.2)
ID plus ASD	42(13.7)	5(5.1)	47(11.6)
<b><i>Child's grade level</i></b>			
Pre-school stage	131(42.8)	39(39.8)	170(42.1)
Middle school stage	92(30.1)	31(31.6)	123(30.4)
High school stage	83(27.1)	28(28.6)	111(27.5)
<b><i>Respondent's relationship to child</i></b>			
Father	80(26.1)	13(13.3)	93(23.0)
Mother	209(68.3)	84(85.7)	293(72.5)
other	17(5.6)	1(1.0)	18(4.5)

*Note.* Given that there were only 15 parents of kindergarten children involved in the study (14 from Fujian and 1 from Taiwan), the kindergarten stage was merged with the elementary school stage to establish the preschool stage.

## 2.2. Instrument

Data were collected using an online questionnaire form. The survey instrument targeting parents encapsulated three pivotal dimensions: the importance of self-determination for their child, the opportunities for fostering self-determination in home environment, and the extent to which their child demonstrates self-determination.

Firstly, the importance of self-determination skills was assessed, employing the framework expounded by Stang et al.<sup>31</sup>. It encompassed eight domains of self-determination skills, each item included a brief introduction representing the domain. For example, “*Children can identify their interests, express their preferences, and make choices*” was provided below the “choice-making” item. The wording, examples, and scale anchors for each item adhered to the standards set forth in the surveys conducted by Wehmeyer et al. and Stang et al.<sup>31,32</sup>. A 5-point Likert-type scale was employed for rating, ranging from low importance (1) to high importance (5). The instrument demonstrated robust internal consistency, with coefficient  $\alpha$  reliabilities calculated on the current sample of .96 for the scale. Table 2 provides a list of these items.

Secondly, the extent of opportunities for self-determination within the domestic domain was assessed, utilizing the parental version of the AIR Self-Determination Scale, as formulated by Wolman et al.<sup>33</sup>. This section centers on rating the children's chances to use their knowledge and abilities within the home environment. Table 2 provides an inventory of these items. Each item in this section was rated using a 5-point, Likert-type scale ranging from never (1) to always (5). The instrument demonstrated strong internal consistency, with coefficient  $\alpha$  reliabilities computed on the current sample of .85 for the scale.

Thirdly, we applied the parental version of the AIR Self-Determination Scale to assess the degree of children's capacity about self-determination within the home environment. This facet focuses on quantifying the alignment of children's

convictions about their beliefs regarding their necessities, desires, and capabilities with their expectations, choices, actions, and results. Table 2 provides a list of these items. Each item in this section was rated using a 5-point, Likert-type scale ranging from very never (1) to always (5). The instrument demonstrated strong internal consistency, with coefficient  $\alpha$  reliabilities computed on the current sample of .94 for the scale.

Table 2. Items of the Survey Instrument

Item
<b><i>Self-determination importance</i></b>
1. Choice-making skills is important for disabilities.
2. Decision-making skills is important for disabilities.
3. Problem-solving skills is important for disabilities.
4. Goal setting and attainment skills is important for disabilities.
5. Self-advocacy/leadership skills is important for disabilities.
6. Self-efficacy skills is important for disabilities.
7. Self-management/self-regulation is important for disabilities.
8. Self-awareness/self-knowledge is important for disabilities.
<b><i>Self-determination opportunities</i></b>
1. At home, people listen when my child talks about what (s)he wants and is good at.
2. At home, people let my child know that (s)he can set his or her own goals to get what (s)he wants or needs.
3. At home, my child has learned how to make plans to meet his or her own goals and to feel good about them.
4. At home, my child is allowed to act on his or her plans right away.
5. At home, my child has someone to tell him or her when (s)he is meeting his or her own goals.
6. At home, people understand my child when (s)he has to change plans to meet his or her own goals. They offer advice and encouragement.
<b><i>Self-determination capacity</i></b>
1. My child knows what (s)he needs, likes, and is good at.
2. My child sets his or her own goals to satisfy wants or needs. (S)he thinks about his or her own abilities when setting goals.
3. My child figures out how to meet goals alone. (S)he makes plans and decides what to do independently
4. My child begins work on plans to meet his or her goals as soon as possible.
5. My child checks his or her own progress when completing his or her plan. (S)he asks others what they think of his or her progress.
6. If my plan doesn't work, my child tries another one to meet his or her goals.

### 2.3. Data Analysis

Data analysis commenced with a comparative analysis of mean ratings concerning the importance, opportunities, and capacity of self-determination skills within the two distinct geographic regions (Fujian vs. Taiwan). Due to our limited sample size, a Shapiro-Wilk test of normality was conducted to determine if the “self-determination importance”, “self-determination opportunities” and “self-determination capacities” followed a normal distribution. The results indicated a

significant deviation from normality for all self-determination importance ( $W = 0.91, p < .01$ ), self-determination opportunities ( $W = 0.98, p < .01$ ) and self-determination capacities ( $W = 0.98, p < .01$ ). Therefore, statistical analyses were performed, including Spearman's rank correlation coefficient, to investigate potential interactions between self-determination importance, self-determination opportunities, and self-determination capacity. Additionally, the Mann-Whitney U test and Kruskal-Wallis tests were utilized to examine parents' rated self-determination importance, opportunity, and capacity regarding geographic regions (Fujian vs. Taiwan), children's disability categories (ID vs. ASD vs. ID plus ASD), and grade levels (pre-school stage vs. middle school stage vs. high school stage). All statistical analyses were conducted using SPSS version 26 with a significance level of  $p < .05$ .

Ethical considerations encompassed the preservation of participant anonymity, the acquisition of informed consent, and the protection of data privacy within the online survey milieu. Participants were apprised of the study's objectives, and the emphasis on their voluntary engagement persisted throughout the entirety of the data collection process (Application Number: 20210150).

### 3. Results

#### 3.1. Relationship of Parents' Rating Self-Determination Importance, Opportunities, and Capacity

Table 3 displays the average ratings given by parents for each survey item. Table 3 presents the mean assessments provided by parents for all survey items, categorized based on parents' geographic region, children's disability categories, and grade level. It highlights that parents from different subgroups demonstrate similar ratings when assessing the importance, opportunity, and capacity of self-determination. Additionally, Spearman's rank correlation was computed to assess the relationship among parents' ratings of "self-determination importance", "self-determination opportunity", and "self-determination capacity." There was found to be a statistically significant and positive relationship between parents' ratings of "self-determination opportunity" and "self-determination importance" ( $r_s(402) = .306, p < .001$ ). Moreover, a positive relationship between parents' ratings of "self-determination opportunity" and "self-determination capacity" ( $r_s(402) = .583, p < .001$ ). However, there was no statistically significant relationship between "self-determination importance" and "self-determination capacity" ( $r_s(402) = .098, p > .05$ ).

To examine the relationship between parents' ratings of "self-determination importance," "self-determination opportunity," and "self-determination capacity" based on parents' geographic region, children's disability categories, and grade level, another Spearman's rank correlation was conducted. Firstly, there was a statistically significant positive relationship was found between parents' ratings of "self-determination opportunity" and "self-determination importance" in parents from Fujian ( $r_s(306) = .31, p < .01$ ) and Taiwan ( $r_s(306) = .31, p < .01$ ). Furthermore, a positive relationship was observed between parents' ratings of "self-determination opportunity" and "self-determination capacity" in Fujian ( $r_s(306) = .60, p < .01$ ) and Taiwan ( $r_s(306) = .60, p < .01$ ). However, there was no statistically significant relationship between "self-determination importance" and "self-determination capacity" in either Fujian ( $r_s(306) = .11, p > .05$ ) or Taiwan ( $r_s(98) = .07, p > .05$ ). Secondly, there was a statistically significant positive relationship found between parents' ratings of "self-determination opportunity" and "self-determination importance" for parents of children with ID ( $r_s(243) = .399, p < .01$ ) or ASD ( $r_s(114) = .236, p < .05$ ). However, no significant relationship was identified for parents of children with both ID and ASD ( $r_s(47) = .102, p > .05$ ). Furthermore, a positive relationship was observed between parents' ratings of "self-determination opportunity" and "self-determination capacity" for parents of children with ID ( $r_s(243) = .587, p < .01$ ), ASD ( $r_s(114) = .589, p < .01$ ), or both ID and ASD ( $r_s(47) = .536, p < .01$ ). Additionally, a statistically significant relationship

was found between "self-determination importance" and "self-determination capacity" for parents of children with ID ( $r_s(243) = .155, p < .05$ ). However, no significant relationship was observed for parents of children with ASD ( $r_s(114) = .022, p > .05$ ) or both ID and ASD ( $r_s(47) = .035, p > .05$ ). Thirdly, there is a statistically significant positive relationship between parents' ratings of "self-determination opportunity" and "self-determination importance" for parents whose children are in the pre-school stage ( $r_s(170) = .27, p < .01$ ), middle school stage ( $r_s(123) = .35, p < .01$ ), or high school stage ( $r_s(111) = .35, p < .01$ ). Additionally, a positive relationship was observed between parents' ratings of "self-determination opportunity" and "self-determination capacity" for parents whose children are in the pre-school stage ( $r_s(170) = .58, p < .01$ ), middle school stage ( $r_s(123) = .48, p < .01$ ), or high school stage ( $r_s(111) = .66, p < .01$ ). Furthermore, no statistically significant relationship was found between "self-determination importance" and "self-determination capacity" for parents whose children are in the pre-school stage ( $r_s(170) = .11, p > .05$ ), middle school stage ( $r_s(123) = .08, p > .05$ ), or high school stage ( $r_s(111) = .11, p > .05$ ).

Table 3. Mean Ratings on Each Survey Item

Survey item	Geographic Regions			Disability Categories				Grade Level			
	Fujian <i>M(SD)</i>	Taiwan <i>M(SD)</i>	<i>P</i>	ID <i>M(SD)</i>	ASD <i>M(SD)</i>	ID & ASD <i>M(SD)</i>	<i>P</i>	Elementary <i>M(SD)</i>	Middle <i>M(SD)</i>	High <i>M(SD)</i>	<i>P</i>
<b><i>Self-determination importance</i></b>											
Item 1	4.21 ± .84	4.16 ± .90	.82	4.2 ± .87	4.17 ± .83	4.11 ± .81	.45	4.17 ± .86	4.27 ± .81	4.15 ± .89	.56
Item 2	4.04 ± .90	4.10 ± .89	.44	4.03 ± .90	4.11 ± .91	4.02 ± .85	.52	3.98 ± .95	4.13 ± .83	4.08 ± .88	.46
Item 3	4.04 ± .90	4.17 ± 1.0	.07	4.04 ± .93	4.13 ± .99	4.11 ± .76	.40	4.01 ± .98	4.23 ± .85	4.00 ± .92	.09
Item 4	4.03 ± .91	4.09 ± .97	.36	4.03 ± .92	4.11 ± .97	3.96 ± .86	.35	4.00 ± .96	4.14 ± .87	4.00 ± .92	.43
Item 5	4.17 ± .84	4.05 ± .93	.33	4.13 ± .86	4.18 ± .87	4.13 ± .85	.81	4.07 ± .91	4.28 ± .84	4.09 ± .80	.05
Item 6	3.98 ± .93	4.07 ± 1.03	.19	3.98 ± .96	4.09 ± .96	3.94 ± .89	.36	3.92 ± .98	4.11 ± .94	4.02 ± .91	.22
Item 7	3.96 ± .96	3.97 ± 1.04	.70	3.95 ± .94	3.99 ± 1.05	3.91 ± .97	.68	3.91 ± 1.02	4.02 ± .94	3.97 ± .95	.69
Item 8	4.07 ± .92	4.09 ± 1.0	.60	4.07 ± .91	4.11 ± .98	4.04 ± 1.0	.71	4.00 ± .99	4.16 ± .93	4.10 ± .87	.35
<b>Total</b>	4.06 ± .78	4.09 ± .85	.55	4.06 ± .79	4.11 ± .84	4.03 ± .76	.53	4.01 ± .84	4.17 ± .75	4.05 ± .79	.24
<b><i>Self-determination opportunities</i></b>											
Item 1	4.13 ± .84	4.18 ± .66	.88	4.15 ± .79	4.15 ± .74	4.06 ± .99	.98	4.12 ± .81	4.17 ± .74	4.14 ± .84	.94
Item 2	3.87 ± .83	3.95 ± .83	.38	3.93 ± .83	3.86 ± .80	3.72 ± .88	.21	3.84 ± .83	3.97 ± .79	3.88 ± .86	.29
Item 3	3.09 ± 1.05	3.24 ± 1.0	.10	3.21 ± 1.04	3.05 ± 1.02	2.85 ± 1.0	.05	3.06 ± 1.10	3.07 ± 1.00	3.28 ± .96	.15
Item 4	3.04 ± 1.08	3.17 ± .97	.27	3.14 ± 1.05	3.07 ± 1.05	2.70 ± 1.04	.02	2.98 ± 1.07	3.00 ± 1.02	3.29 ± 1.06	.03
Item 5	4.15 ± .77	4.18 ± .76	.73	4.15 ± .74	4.26 ± .79	3.96 ± .86	.06	4.15 ± .78	4.15 ± .80	4.18 ± .73	.98
Item 6	3.79 ± .96	3.95 ± .91	.17	3.84 ± .96	3.85 ± .89	3.68 ± 1.07	.68	3.76 ± .91	3.85 ± .97	3.89 ± 1.00	.32
<b>Total</b>	3.68 ± .71	3.78 ± .64	.13	3.74 ± .70	3.71 ± .65	3.50 ± .74	.08	3.65 ± .69	3.70 ± .68	3.78 ± .72	.29
<b><i>Self-determination capacity</i></b>											
Item 1	3.30 ± 1.03	3.29 ± .89	.78	3.38 ± .97	3.22 ± 1.02	3.02 ± 1.01	.04	3.21 ± .99	3.28 ± 1.00	3.44 ± .99	.14
Item 2	2.80 ± 1.05	2.90 ± 1.0	.35	2.94 ± 1.09	2.68 ± .99	2.55 ± .75	.02	2.67 ± 1.07	2.76 ± .98	3.12 ± 1.01	.00
Item 3	2.78 ± 1.03	2.72 ± .98	.66	2.85 ± 1.09	2.67 ± .92	2.55 ± .75	.12	2.62 ± .99	2.72 ± 1.03	3.04 ± 1.00	.00
Item 4	2.69 ± 1.00	2.62 ± .95	.72	2.77 ± 1.03	2.57 ± .91	2.40 ± .90	.06	2.56 ± 1.03	2.59 ± .94	2.92 ± .95	.00
Item 5	2.61 ± 1.07	2.48 ± 1.01	.29	2.73 ± 1.12	2.33 ± .86	2.40 ± 1.01	.00	2.44 ± 1.09	2.54 ± 1.00	2.85 ± 1.02	.00
Item 6	2.64 ± 1.05	2.60 ± 1.02	.96	2.74 ± 1.10	2.49 ± .91	2.36 ± .94	.04	2.50 ± 1.04	2.60 ± 1.01	2.86 ± 1.06	.01
<b>Total</b>	2.80 ± .91	2.77 ± .85	.92	2.90 ± .95	2.66 ± .79	2.55 ± .76	.02	2.67 ± .90	2.75 ± .86	3.04 ± .87	.00

### 3.2. Parents' Perspectives on Self-Determination Importance, Opportunities, and Capacity

Firstly, a Mann-Whitney U test was conducted to determine if there was a significant difference in the perceived importance of self-determination between parents from Fujian ( $M = 4.06 \pm .78$ ) and Taiwan ( $M = 4.09 \pm .85$ ). The results showed no significant difference ( $Z = .60, p > .05$ ). Furthermore, a Kruskal-Wallis analysis was performed to examine the differences in self-determination importance among different disability categories. The results indicated no significant differences ( $H(2) = 1.26, p > .05$ ). The mean rank values were 199.28 for the children with ID group, 212.58 for the ASD group, and 194.72 for the ID plus ASD group. Another Kruskal-Wallis analysis was conducted to assess the differences in self-determination importance among different children's grade levels. The results revealed no significant differences ( $H(2) = 2.89, p > .05$ ). Specifically, the mean rank values were 195.21 for the pre-school stage, 217.27 for the middle school stage, and 197.31 for the high school stage.

Secondly, a Mann-Whitney U test was employed to compare the assessments of self-determination opportunity between parents in Fujian ( $M = 3.68 \pm .71$ ) and Taiwan ( $M = 3.78 \pm .64$ ). The results indicated that there were no significant differences ( $Z = 1.51, p > .05$ ). Furthermore, a Kruskal-Wallis analysis was performed to examine the perceived opportunities for self-determination across different disability categories. The results revealed no significant difference ( $H(2) = 4.94, p > .05$ ). The mean rank values were 206.37 for the children with ID group, 208.82 for the ASD group, and 167.15 for the ID plus ASD group. Subsequently, another Kruskal-Wallis analysis was conducted to compare parents' assessments of self-determination opportunity across children in different grade levels. Once again, no significant differences were observed ( $H(2) = 2.50, p > .05$ ). The mean rank values were 193.44 for the pre-school stage, 202.93 for the middle school stage, and 215.89 for the high school stage.

Thirdly, a Mann-Whitney U test was used, and it revealed no significant difference in perceived self-determination capacity ( $Z = -.90, p > .05$ ) between parents from Fujian ( $M = 2.80 \pm .91$ ) and Taiwan ( $M = 2.77 \pm .85$ ). Furthermore, a Kruskal-Wallis analysis was performed. The results showed a significant difference in perceived self-determination capacity across children's disability categories ( $H(2) = 7.91, p < .05$ ). The mean rank values for these categories were as follows: 214.54 for the children with ID group, 191.25 for the ASD group, and 167.52 for the ID plus ASD group. In addition, a Mann-Whitney U test was conducted for multiple comparison analysis, revealing a significant difference between the children with ID group and the children with ID plus ASD group ( $p < .05$ ). Another Kruskal-Wallis analysis was employed. The findings indicated a statistically significant difference in perceived self-determination capacity across different grade levels ( $H(2) = 13.31, p < .01$ ). The mean rank values for these categories were as follows: 184.69 for the pre-school stage, 197.09 for the middle school stage, and 235.77 for the high school stage. Furthermore, a Mann-Whitney U test was conducted for multiple comparison analysis, revealing a significant difference between the high school group and the pre-school group ( $p < .01$ ), as well as between the high school group and the middle school group ( $p < .05$ ).

## 4. Discussion

### 4.1. Relationship of Parents' Rating Self-Determination Importance, Opportunities, and Capacity

This study found that parents' perception of the importance of self-determination affected how they provided opportunities for self-determination in their homes. This contradicts previous research<sup>4,34</sup>, which suggested that although parents recognized the importance of self-determination<sup>35,36</sup>, they often struggled to translate this recognition into concrete opportunities for their children<sup>37,38</sup>. The discrepancy may be since parents in Fujian and Taiwan, unlike those in Western



countries where self-determination education has always been valued, are increasingly recognizing the importance of self-determination in their children's development. As a result, they are realizing the limitations of relying solely on parental authority as an educational strategy<sup>39)</sup>. In this context, although developing self-determination skills may present challenges, parents desire better outcomes for their children than what they have observed in the past and are willing to make an effort to respect their children's desires and choices in their daily lives<sup>40)</sup>. However, when comparing the evaluations of parents with different types of disabilities, no correlation was found in the responses of parents of children with both ID and ASD. Although parents of children with ID and ASD have also become more aware of the importance of self-determination in Fujian and Taiwan<sup>7,41)</sup>, these parents may face challenges in providing opportunities for self-determination due to the cognitive and social difficulties associated with both ID and ASD<sup>39)</sup>. As a result, there is a disconnect between the increasing importance parents place on self-determination and the actual opportunities available for their children. There is a growing awareness among parents in Fujian and Taiwan about the importance of promoting self-determination. It is crucial to prevent a widening gap between parents' perception of self-determination's importance and the actual opportunities available for long-term development. Therefore, research should focus on practical self-determination strategies that can be easily applied at home. This will enable parents to effectively translate their understanding of self-determination's importance into actionable steps that enhance their children's ability to be self-determined.

Furthermore, parents who are more inclined to provide their children with opportunities for self-determination generally perceive their children's ability to exercise self-determination as higher. These findings align with the research conducted by Carter et al. and Morán et al.<sup>42,43)</sup>. Wehmeyer and Schwartz have suggested that parents can observe their children's growth and progress by offering them opportunities for self-determination<sup>44)</sup>. This includes witnessing their children's ability to make independent decisions, express their thoughts and needs, and show increased confidence and independence. As a result, these advancements will increase parents' confidence in their children's capacity to exercise self-determination. However, research suggests that children and youth with ID or ASD often have limited opportunities and support to engage in self-determined actions compared to children with other disabilities or no disabilities<sup>4,45)</sup>. This lack of opportunity may hinder their ability to effectively develop self-determination skills. Therefore, further research should specifically focus on factors that are unique to individuals with ID or ASD and factors that can be modified to improve services and support.

Moreover, the study found that the parents' assessment of their children with ASD's capacity for self-determination was not affected by the importance of self-determination. This finding aligns with previous research conducted by Tomaszewski et al. and Pierson et al.<sup>46,47)</sup>. These studies suggest that although parents recognize the importance of self-determination, they may have doubts about their child's ability to achieve it due to the specific communication and social needs associated with ASD. However, the study also revealed a positive correlation between the perceived importance of self-determination in parents of children with ID and the actual self-determination capacity of those children. As parents increasingly recognize the importance of self-determination for their children, they become more motivated to understand their child's potential to achieve this goal. Several studies have shown that implementing self-determination strategies for children with ID has yielded positive outcomes<sup>12,15)</sup>, and individuals with ID exhibit higher levels of self-determination compared to those with ASD<sup>20,48)</sup>. Therefore, although almost all parents recognize the importance of self-determination, parents of children with ID are encouraged by previous research findings to believe in their child's self-determination capacity. In future research, it is crucial to address the misconception that individuals with ID and ASD are incapable of being self-determined. One way to accomplish this is by providing accurate and comprehensive education and information to help parents understand

the self-determination capabilities of children with ID and ASD. This can involve sharing research findings and success stories with parents, as well as explaining how children can develop self-determination through appropriate support and training.

#### **4.2. Parental Perspectives on Self-Determination Importance**

The study found that parental perspectives on the importance of self-determination skills for their children were not influenced by the respondent's geographic region, their child's grade level, or disability categories. These findings were consistent with the studies conducted by Carter et al., Chu, and Wang et al.<sup>4,41,49</sup>. Chu's and Wang et al.'s studies indicated that parents in Fujian and Taiwan fully recognize the importance of self-determination<sup>41,49</sup>. Additionally, Carter et al. indicated that parents clearly emphasized the importance of their children with ID or ASD learning self-determination skills at all stages of development<sup>4</sup>. Recognizing the importance of self-determination is a critical first step in providing children with opportunities and support, as noted by Sands et al.<sup>50</sup>. Wehmeyer et al. and Palmer et al. also indicated that enabling children to learn and develop the necessary abilities is a fundamental initial step towards their becoming self-determined adults<sup>51,52</sup>. Through the results of this study, we have discovered that parents are highly aware of the importance of their child's self-determination skills. This finding highlights the potential for parental involvement in guiding their child's self-determination. Future research can explore the idea of fostering collaboration between schools and parents to offer more comprehensive instruction and support for children in developing their self-determination skills.

#### **4.3. Parental Perspectives on Self-Determination Opportunities**

The study found that parental perspectives on their children's self-determination opportunities were not influenced by geographic region. Research on self-determination in special education started earlier in Taiwan than in Fujian<sup>38</sup>. Therefore, we predicted that parents in Taiwan, influenced by the education system, would be more likely to provide self-determination opportunities compared to parents in Fujian. However, the study did not find any significant difference in the provision of self-determination opportunities between the two regions. In Taiwan, there is substantial evidence supporting the effectiveness of self-determination instruction in schools. However, there is a lack of research on how family involvement impacts self-determination in children with disabilities<sup>13</sup>. Teachers lack sufficient knowledge on how to work with parents to enhance children's self-determination skills, and parents also have limited understanding of this topic<sup>14</sup>. In recent years, researchers in mainland China, including Fujian, have begun to highlight the importance of teachers actively communicating and exchanging ideas with parents to enhance children's self-determination. This allows parents to gain a better understanding of their children's self-determination abilities and supports them in creating opportunities for their children to develop this skill. Although there have been studies on this topic, most of them are still in the theoretical stage and lack specific methodologies<sup>15,16</sup>. Therefore, the insufficient research conducted in both regions regarding families may be the reason for the absence of a notable distinction in parental perspectives<sup>7,53</sup>.

The study found no significant differences in the accessibility of self-determination opportunities for parents of children with ID and ASD. This contrasts with the findings of Chou et al. and Wehmeyer et al., who suggested that children with ASD have fewer self-determination opportunities compared to children with ID because of their unique communication and social needs<sup>20,21</sup>. Specifically, difficulties in social interaction and communication can make it challenging for children with ASD to express their desires at home, making it especially difficult for parents to provide self-determination

opportunities<sup>45</sup>). Additionally, scholars in Western countries have focused on children with ID from an early stage and have proposed various strategies to foster self-determination<sup>54,55</sup>). Consequently, parents in Western countries may face fewer obstacles in providing self-determination opportunities for their children with ID, as they can rely on established approaches. This study specifically examined parents whose children with ID and ASD attend special education schools. The lack of divergence in this study may be due to the fact that individuals with ASD are often placed in special education schools that primarily focus on intellectual disability education in Fujian and Taiwan<sup>56</sup>). Therefore, parents may challenge to accurately differentiate between the specific challenges they face in self-determination education for children with ID and those with ASD. Additionally, it is crucial to provide support for children with ID or ASD when offering them self-determination opportunities. However, parents in Fujian and Taiwan lack the necessary knowledge to effectively support and create opportunities for self-determination in both children with ID and children with ASD<sup>13,15</sup>). Future research should prioritize the development of customized self-determination guidance programs for parents, specifically tailored to different disabilities. These programs should aim to empower parents to facilitate self-determination in their children, particularly within the home environment.

The study found no significant difference in the availability of self-determination opportunities for parents across different grade levels. This finding contradicts previous research conducted by Alrabiah and Biggs et al., who suggested that parents of high school children with ID or ASD were more likely to provide self-determination opportunities compared to parents of children in primary and middle school<sup>19,57</sup>). The reason for this discrepancy could be the increased focus on self-determination in high school education in Western countries<sup>58,59</sup>). Several studies have demonstrated a direct correlation between self-determination and positive post-school outcomes. Test et al. and Shattuck et al., for instance, have highlighted that the development of self-determination skills can assist children with ID or ASD in successfully transitioning from school to society, enrolling in postsecondary education, and finding employment<sup>60,61</sup>). Consequently, both high school educators and parents exhibit a greater inclination to cultivate children's self-determination abilities<sup>62</sup>). Conversely, parents in Fujian and Taiwan often view self-determination skills as separate from other abilities, failing to grasp the positive impact of their development on their child's overall competencies in areas such as academic performance, quality of life, and vocational skills<sup>63,64</sup>). To promote the provision of self-determination opportunities for parents of children of all ages, it is crucial to raise awareness that enhancing self-determination in children with disabilities leads to improvements in all aspects of their life and learning abilities.

#### **4.4. Parental Perspectives on Self-Determination Capacity**

Contrary to the initial hypothesis, parental perspectives on their children's capacity for self-determination skills were not influenced by the geographic region. Studies by Wang et al. and Wang et al. have both indicated that Taiwan offers more opportunities for children to practice and develop self-determination in school settings<sup>28,41</sup>). In the other hand, the term "self-determination" is noticeably absent from special education instruction in mainland China<sup>65</sup>). Based on this information, it was expected that parents in Taiwan would rate self-determination higher than parents in Fujian. However, contrary to expectations, there was no significant difference in ratings of self-determination capacity between the two regions. This may be because Taiwanese parents were not actively involved in teaching self-determination skills to their children outside of school and therefore may not be aware of their children's level of self-determination. Therefore, the majority of parents were unaware of their children's level of self-determination capacity and rated them low overall.

The study found that parental perspectives on the capacity of self-determination skills varied depending on the child's disability category. Parents rated self-determination ability higher for children with ID only compared to children with both ID and ASD. This is consistent with study of Carter et al. and Wehmeyer et al.<sup>4,54</sup>. The development of self-determination skills is influenced by a combination of individual factors (such as the degree of disability) and systemic factors (such as the school and community environment)<sup>35,47</sup>. However, at the individual level, children with ID and ASD are known to experience more difficulties in sociocommunicative functioning and have higher levels of associated psychiatric issues<sup>61,66</sup>. Meanwhile, at the systemic level, youth with ID and ASD were found to have lower levels of participation in home and school activities compared to youth with ID or ASD only<sup>67</sup>. Therefore, it is not surprising that parents with ID and ASD tend to receive lower scores on measures of their children's self-determination capacity.

The study found that parents' perspectives on their children's self-determination skills varied depending on the grade level. However, it was observed that parents tended to rate high school children's self-determination abilities higher than children in other grade levels, while no significant differences were found among preschool and middle school children. This finding is consistent with Carter et al.'s findings, which showed that parents consistently rated their children's self-determination capacity as low, regardless of age, with only slight increases among older children<sup>4</sup>. This result may be attributed to the belief held by some parents that children will naturally develop self-determination skills as they mature into adults. The absence of differences at other grade levels does not mean that a child's capacity for self-determination remains the same as they get older. It is possible that parents are basing their ratings on what they would expect from their child compared to peers of a similar age<sup>4</sup>.

## 5. Limitation

There were several limitations to this study. Firstly, our sample does not fully represent the ethnic and racial diversity found nationwide. The parents from Fujian cannot be considered representative of mainland China as a whole. Moving forward, it is crucial to conduct more comprehensive research to explore parents' perspectives on self-determination across diverse cultural and geographical contexts. Secondly, in our efforts to help parents understand the eight skills that make up self-determination competencies, we have supplemented the introductory explanations based on Stang et al.'s research. However, it should be noted that Stang et al. and Wehmeyer et al.'s framework has primarily been used in the field of education. Directly applying this framework to parents may introduce bias into the results. Lastly, we did not compare the ratings provided by parents of children with disabilities to those of parents of same-age children without disabilities. This comparison could have provided insights into whether our findings reflect normal patterns among all children or if they are specific to children with disabilities.

## 6. Conclusion

Children with ID or ASD often need explicit instruction and support to develop and practice important self-determination skills. In the past, research on interventions focusing on these skills has mainly been conducted in educational settings. However, since parents play a significant role in a children's life, they likely have a crucial impact on the acquisition and application of self-determination skills in children with developmental disabilities. This study explored the perspectives of parents regarding the self-determination of their children with ID and ASD within the Mandarin culture. The study indicates that parents' understanding of the importance of self-determination influences how they create opportunities for their

children to exercise these skills at home. Furthermore, parents who are more inclined to provide their children with chances to practice self-determination tend to have a more positive perception of their children's ability to do so. However, this correlation is influenced by the specific type of disability that the child has. Additionally, our findings suggest possible connections between a child's disability category or grade level and parents' observations of their children's capacity for self-determination. In recent years, there has been a growing focus on self-determination in Mandarin cultural areas such as Taiwan and Fujian. Consequently, self-determination interventions have been gradually introduced in the field of education, and their effectiveness has been partially validated. However, due to the lack of research involving parents, it is crucial for future studies to address this gap in the literature and enhance the evidence base for interventions.

Based on the findings of this study, there are several key areas that future research should focus on when developing guidance strategies for implementing self-determination at home. Firstly, it is crucial to provide parents with comprehensive information about the self-determination abilities of children, in order to dispel any misconceptions they may have that individuals with ID and ASD are incapable of being self-determined. Secondly, there is a need to develop more effective strategies for promoting self-determination in students with disabilities who struggle with verbal expression and other challenges, particularly those with ID and ASD. Lastly, it is important to emphasize the importance of teaching self-determination skills to children with disabilities at a young age and creating instructional programs specifically designed for young children, so that parents can help nurture their children's self-determination skills from an early stage.

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