

# Collaborative Goal-Setting Approaches to Support Participation of Children With Special Educational Needs

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**Purpose:** To compare the participation ratings between children with special educational needs and their primary caregivers and investigate the activities children desire to change and their participation-based goals.

**Methods:** Twenty children with special educational needs aged 8 to 12 years were interviewed using the Functioning Scale of the Disability Evaluation System—Child to measure participation frequency and independence and select desire-to-change activities. The International Classification of Functioning, Disabilities, and Health-based Collaborative Problem Solving was used to form participation-based goals.

**Results:** Children reported participation differently from their primary caregivers. Nineteen children identified desire-to-change activities mostly related to the home and community settings and indicated a desire to change participation frequency. Children's participation-based goals reflected their desires to do their preferred activities more often.

**Conclusions:** Children with special educational needs had unique perspectives different from those of their caregivers, and they could identify desired activities and set participation goals with semi-structured methods. (*Pediatr Phys Ther* 2025;37:336–344)

**Key words:** children, goal, ICF, participation, self-report, special educational needs

## INTRODUCTION

Children with special educational needs or disabilities often experience participation restrictions. Participation refers to one's involvement in daily situations, as defined in the International Classification of Functioning, Disability, and Health (ICF).<sup>4</sup> Children with special educational needs are those who present characteristics or conditions that require additional support or

specific adaptations to ensure their full participation and progress in the educational environment.<sup>1</sup> Children with special education needs have lower participation frequency and lower levels of involvement in everyday activities compared to peers without disabilities and are more likely to have unmet needs in inclusive schools.<sup>2</sup> School-based practitioners, including physical therapists, are important members of the school community and play an important role in supporting inclusion based on individual children's needs.<sup>5</sup> Therefore, engaging children with special educational needs in collaborative goal-setting to support their participation in learning, playing, and navigating the environment is relevant in school-based practices.<sup>3</sup>

Collaborative goal setting is one of the principles of family-centered practice and is considered the gold standard in pediatric rehabilitation. The core principles of family-centered practice include information sharing, respect for and honoring differences, partnership and collaboration, negotiation, and care in the context of family and community.<sup>6</sup> Depending on the age and abilities of the client, the related term “client-centered care” is frequently used interchangeably with family-centered practice. Children can also contribute with their thoughts during the collaborative goal-setting process.<sup>7</sup>

Children's engagement in identifying experiences and goals for participation can foster motivation, feelings of being valued

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## WHAT THIS EVIDENCE ADDS

**Current evidence:** Children with special educational needs often experience participation restrictions in schools or other daily contexts.<sup>1,2</sup> Children and their primary caregivers might have different perspectives on their needs for participation. Research suggests that involving children with special educational needs in collaborative goal-setting to support their participation is critical for school-based practitioners.<sup>3</sup>

**Gap in the evidence:** Despite the literature suggesting the importance and potential benefits of collaborative goal-setting with children, research on describing methods and strategies to engage children with special educational needs in the goal-setting process is sparse. In Taiwan, no specific tools or feasible methods are available to engage children with special educational needs in identifying their desires and goals for participation. A need for meaningful goals reported by children with special educational needs was evident.

**How did this study fill this evidence gap?** This study describes an innovative and feasible method for collaborative goal-setting with children using the Functioning Scale of the Disability Evaluation System—Child (FUNDES-Child) and the International Classification of Functioning, Disabilities, and Health-based Collaborative Problem Solving (ICF-CPS). Most children with special educational needs in this study could identify their desire-to-change activities and participation-based goals. Children's desired activities are mostly related to home and neighborhood or community settings. Children's participation-based goals were based on their desires to change by doing the activities they enjoy and are interested in more often.

**Implication of all the evidence to clinicians:** Children with special educational needs can be supported to set meaningful and measurable participation-oriented goals. The FUNDES-Child and ICF-CPS provide structured and collaborative processes that enable the expression of children's needs and desires. School-based rehabilitation practitioners, including physical therapists, can collaborate with families and educators to develop problem-solving strategies and plan interventions to address child-identified goals.

and heard, self-confidence, and self-determination.<sup>8</sup> Collaborative goal-setting with children with special educational needs aligns with the international recognition of human rights and the United Nations Convention on the Rights of the Child, which recognizes children as individuals with inherent rights to self-expression, participation, and dignity. Despite the literature suggesting the potential benefits of collaborative goal-setting with children, research about the child-driven goal-setting process and its impact on achieving meaningful outcomes is scarce.<sup>9,10,11</sup>

In Taiwan, the need to engage children in goal-setting has increased based on the amendment of the Special Education Act (2023).<sup>12</sup> The Special Education Act applies to schools from preschool to senior high levels, which legislates students' attendance in their individualized education plans (IEP) meetings with a multidisciplinary team at school, including physical therapists. However, specific guidelines for physical therapists to engage students in goal-setting to inform their IEPs have not been provided. IEPs for students with special educational needs have not been well developed to address their participation needs, partly due to a lack of cooperation among school professionals, primary caregivers, and students themselves in the goal-setting process. Research is needed to establish collaborative goal-setting tools and approaches to engage children with special educational needs in identifying their participation desires and goals.

The Functioning Scale of the Disability Evaluation System—Child version (FUNDES-Child) is a validated measure of the daily functioning of children and adolescents aged 6 to 18 years in Taiwan.<sup>13,14,15,16,17</sup> It measures children's participation frequency and independence at home, school, and in the community. The FUNDES-Child is based on the ICF, a universal framework for synchronizing professionals' language and efforts across disciplines to achieve meaningful goals for children and families.<sup>10</sup> The FUNDES-Child is designed to be completed by caregiver

proxies<sup>14,15,16</sup> which might limit the scale's ability to capture children's views on their participation. Therefore, the FUNDES-Child was adapted to be administered as a scale for children's self-reporting using picture-supported conversations for children and adolescents with special educational needs.<sup>17,18</sup> There remains a gap in understanding the children's perspective and how it differs from that of primary caregivers regarding participation frequency and independence at home, school, and in the community.

After revealing children's perspectives on participation, a logical next step is to investigate activities that children desire to change (eg, doing an activity more frequently or independently). By knowing what activities children desire to change, meaningful child-driven goals can be set, and children can be encouraged to explore strategies to achieve goals. The ICF-based collaborative problem-solving (ICF-CPS) approach is theoretically applicable for supporting children with special educational needs in setting goals for individual educational plans.<sup>7,19</sup>

The ICF-CPS involves 4 semi-structured steps: problem or activity identification, problem or activity explanation, goal setting, and intervention strategies discussion.<sup>7</sup> A pediatric physical therapy program in Taiwan that uses the ICF-CPS to set family-centered goals and deliver interventions reports its effectiveness in improving child development and family outcomes.<sup>20</sup> The ICF-CPS is potentially applicable to setting goals in collaboration with children in special education settings, but empirical evidence is not yet available,<sup>7,17,20</sup> warranting further investigation.

In the present study, the FUNDES-Child and ICF-CPS were used to implement collaborative goal-setting to engage children with special educational needs in identifying desires and goals for participation. The research aims were: (1) to compare the self-rated participation frequency and independence in everyday activities between children and their primary caregivers; (2) to

investigate what activities children desired to change; and (3) to investigate the content of children's participation-based goals.

METHODS

Participants

Children with special educational needs and one of their primary caregivers were recruited via a convenience sampling approach. The children were granted special education services by the Special Education Student Diagnosis and Placement Counseling Committee in Taiwan. All children were recruited from inclusive schools, attending mainstream classes with individualized special educational support. To be included, the children needed to have basic communication and interaction skills that allowed them to understand the interview, choose between 5 options, and express their thoughts verbally or with augmentative and alternative communication. Children with uncorrected visual or hearing impairments were excluded. The primary caregivers needed to understand and speak Mandarin. The study included 20 children (mean age, 10.6 ± 1.44 years) and their primary caregivers (mean age, 45.1 ± 5.85 years) recruited from 6 primary schools. The

TABLE 1  
Demographic Data

Variables	n	%
Child sex		
Boy	13	65
Girl	7	35
Child age		
8 years	3	15
9 years	4	20
10 years	3	15
11 years	6	30
12 years	4	20
Child education placement		
Mainstream class with special education services	20	100
Type of disability		
Autism Spectrum Disorder (ASD)	8	40
Learning disability	3	15
Emotional disability	3	15
Mild intellectual disability	2	10
Attention Deficit Hyperactivity Disorder (ADHD)	2	10
ASD + ADHD	2	10
Type of verbal expression		
Simple words	2	10
Full sentences	18	90
Caregiver relationship with the child		
Mothers	17	85
Fathers	2	10
Grandmother	1	5
Caregiver age (years)		
30-39	4	20
40-49	12	60
≥ 50	4	20
Caregiver educational level		
College or University	12	60
High school	7	35
Elementary school	1	5

Abbreviations: ASD = Autism Spectrum Disorder (ASD); ADHD = Attention Deficit Hyperactivity Disorder.

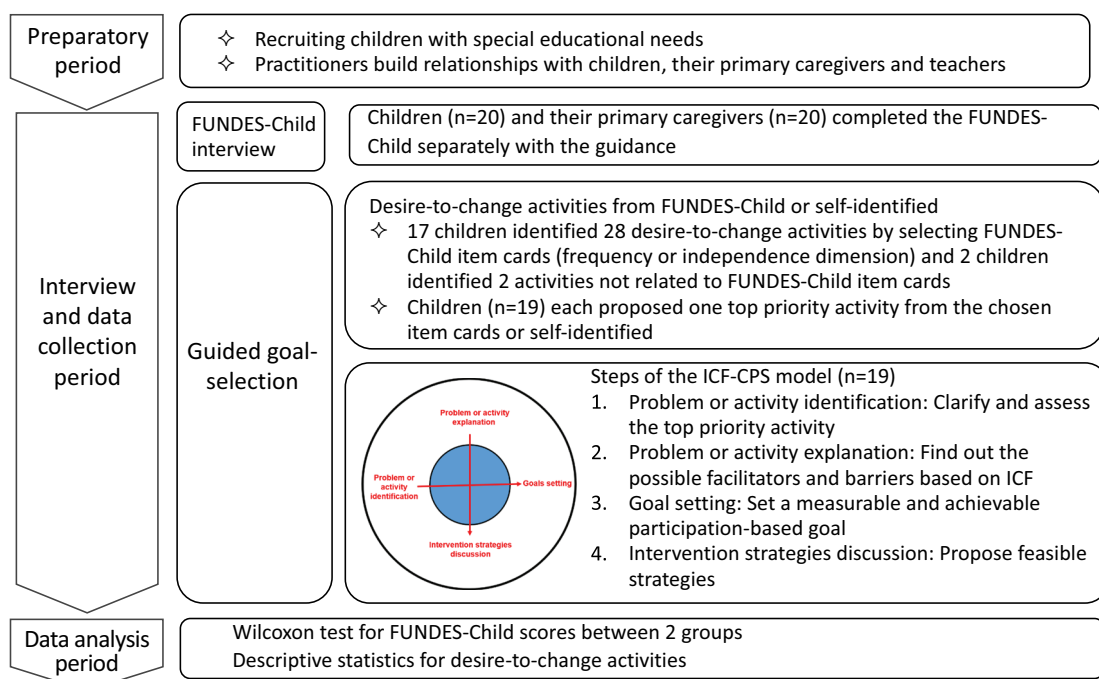
participants' demographic characteristics are in Table 1. All the students could follow instructions and communicate verbally. Ethical approval was obtained from the Research Ethics Committee Section of National Taiwan University Hospital (201703117RINB). Both the children and their primary caregivers provided written informed consent.

Measures

**The Functioning Scale of the Disability Evaluation System—Child version (FUNDES-Child).** The FUNDES-Child is a tool for assessing functioning (body function, activity, and participation) and environmental factors in the Disability Evaluation System for children and adolescents aged 6 to 18 years in Taiwan.<sup>14,15,16,21</sup> The FUNDES-Child contains 4 sections adapted from the Child and Family Follow-up Survey (CFFS)<sup>22</sup>: Section I: general information, Section II: participation, Section III: body function impairment, and Section IV: environmental factors. Similar to the CFFS,<sup>22</sup> the FUNDES-Child can be used as a whole, or each section can be used independently. This study only used Section II. There are 19 items in 4 domains of FUNDES-Child Section II: Home (6 items), Neighborhood and Community (4 items), School (5 items), and Home and Community Living Activities (HCLA) (4 items). The items are rated on a 4-point scale for 2 dimensions: frequency [age-expected frequency (0), somewhat less frequent than expected for age (1), much less frequent than expected for age (2), and did not participate (3)] and independence [independent (0), supervision or mild assistance (1), moderate assistance (2), and full assistance (3)] in the past 6 months. Higher scores indicate greater restriction in participation, reflecting lower participation frequency and less independence. It can be completed via structured interviews either with caregivers or children. When interviewing children, picture cards illustrating each item are also used to enhance the children's understanding and comprehension.<sup>17,18</sup> The FUNDES-Child (Section II: participation rated by proxy) demonstrates adequate to excellent internal consistency (Cronbach's alpha = 0.81-0.96) and adequate to excellent test-retest and inter-rater reliabilities (ICC = 0.85-0.99) for children with a variety of disabilities,<sup>14</sup> and discriminative validity between children with different severity of developmental intellectual disabilities.<sup>15</sup>

Procedure

Recruitment and data collection took place within the primary schools. The study procedures, illustrated in Figure 1, were implemented by 2 trained rehabilitation practitioners experienced in providing services in a school setting. One practitioner was a senior physical therapist and one of the developers of the FUNDES-Child; another practitioner was a paraprofessional who had been trained to use the FUNDES-Child by its developer. Both practitioners were trained to implement the ICF-CPS. Each practitioner administered the FUNDES-Child interview followed by goal-setting using the ICF-CPS with their respective child. The primary caregivers decided whether they would be present while the practitioner met with their child based on their availability. Two primary caregivers were available to be present; the other primary



Abbreviation: FUNDES-Child = Functioning Scale of the Disability Evaluation System – Child; ICF-CPS = ICF-based collaborative problem solving

**Fig. 1.** The flow chart of this study.

caregivers scheduled a separate time to complete the study procedures.

The child and their primary caregiver completed the FUNDES-Child interview separately without knowing each other's ratings. The FUNDES-Child item picture cards were used when interviewing children. After completing the FUNDES-Child interview, the child was instructed to select up to 3 item picture cards to indicate the activity they would like to change (referring to desire-to-change activities in the study). The child could also identify desired activities that are not on the FUNDES-Child items. The child was encouraged to elaborate on their experiences from participating in these activities and how they would like the participation status to be different, and then place each card on a "desire-to-change" mat to indicate whether they would like to change the frequency (eg, attending more diverse activities or doing an activity more often) or independence (eg, doing things on their own or performing an activity better) dimension of the activity (see Supplemental Digital Content 1, available at: <http://links.lww.com/PPT/A631>, which illustrates a child's selection of 3 desire-to-change activities).

The ICF-CPS in this study describes a 4-step problem-solving process ranging from problem identification to intervention strategies discussion implemented by the practitioners to support a child in developing measurable participation-based goals based on that child's desired activities. In Step 1 (problem or activity identification), the practitioner facilitated the child to prioritize one activity they would like the most to set a measurable and participation-based goal. Setting one goal at a time helped the participants stay focused and delve deeply into their top priority. Each child was guided to describe the current status and problems of their top prioritized activity using the 4W1H questions to gather specific information: who (characteristics of the child),

what (details of the activity in daily life), when (which routine or time slot allocation of the activity), where (which context or environment), and how (frequency or independence level of the activity or degree of participation restriction). In Step 2 (problem or activity explanation), the practitioner and the child identified possible explanations or causes of the problems related to the child's prioritized activity. The practitioner asked the child what factors (eg, body function/structure, personal, activities/participation, and environmental factors) might have made it easier or harder for them to participate in the prioritized activity. This provided information on the child's perceived facilitators and barriers associated with the prioritized activity based on the ICF framework. In Step 3 (goal setting), the practitioner used the information obtained from the previous steps to set a measurable participation-based goal collaboratively with the child. The criteria of goal achievement were determined by how much the child wanted the activity to be changed. The criteria were also judged based on the degree of modifiable barriers and the availability of facilitators in reality. The practitioner wrote the goals following the "SMART" principle (ie, specific, measurable, attainable, routine-based, realistic, relevant, and time-bound).<sup>23</sup> The structure of the participation-based goal was as follows: "For a specific activity in their routine, the child will participate in the activity (with the frequency or degree of independence that meets the child's expectations) with the support or assistance needed to make the goal attainable) and doing this for a certain period (depending on the goal)." The practitioner confirmed the written goals with the child. In Step 4 (intervention strategies discussion), the practitioner worked with the child to propose potentially feasible methods to achieve their desired goals. After completing the 4 steps with the child, the practitioner presented the child's goals and proposed strategies to the primary caregiver

TABLE 2

Comparison of the FUNDES-Child Scores Between Children and Their Primary Caregivers

FUNDES-Child Scores	Children (n = 20)		Caregiver (n = 20)		Statistics	
	Median	IQR	Median	IQR	P	$\eta^2$
<b>Frequency dimension</b>						
Whole scale	0.82	0.34	0.58	0.46	.040	.210
Home	0.83	0.63	0.50	0.63	.002	.475
Neighborhood and community	1.00	0.94	0.63	0.75	.072	.162
School	0.30	0.60	0.20	0.40	.013	.310
HCLA	0.75	1.00	0.75	1.00	.450	.029
<b>Independence dimension</b>						
Whole scale	0.16	0.41	0.63	0.72	.004	.407
Home	0.08	0.29	0.50	0.94	.049	.193
Neighborhood and community	0.13	0.50	0.38	0.94	.022	.261
School	0.00	0.20	0.20	0.70	.009	.340
HCLA	0.50	0.69	0.88	1.00	.036	.219

\*  $P < .05$  by Wilcoxon signed ranked test (2-tailed).

Abbreviations: FUNDES-Child = Functioning Scale of the Disability Evaluation System—Child; HCLA = home/community living activities; IQR, interquartile range.

and teacher. The primary caregiver and teacher provided input to the written goals, especially regarding the criteria for goal achievement. The practitioner also collaborated with the primary caregiver and teacher to develop problem-solving strategies that would be feasible for achieving the child's goals in real-life contexts (Supplemental Digital Content 2, available at: <http://links.lww.com/PPT/A632>, which describes a case scenario to demonstrate the study procedures). Detailed information on the ICF-CPS strategies is out of the scope of this current study and, thus, will be reported elsewhere.

All children in this study responded to the FUNDES-Child interview and participated in goal-setting using the ICF-CPS with the practitioner's guidance. The 2 primary caregivers who attended the children's ICF-CPS meetings were asked not to provide active input until their child completed the 4 steps. This ensured that, although caregivers were present, their minimal verbal involvement reduced the likelihood of influencing the children's responses. The practitioners used multiple means of communication, including asking open questions, providing multiple choices or true-false options, and using handwriting or drawing to facilitate the children's descriptions of their goals. Two children (with Autism who communicated using simple words) needed additional prompts. All children in this study could benefit from these developmentally appropriate communication techniques and complete all study procedures.

### Data Analysis

Statistical analysis was conducted using IBM SPSS Statistics 24.0 (Armonk, NY, USA). The FUNDES-Child scores did not meet the assumption of normality; thus, the Wilcoxon signed-ranked test was used to compare the scores rated by children and their caregivers. Effect sizes ( $\eta^2$ ) were calculated from the Wilcoxon test statistics<sup>24</sup> and interpreted as small ( $\eta^2 = .01$ ), medium ( $\eta^2 = .06$ ), and large ( $\eta^2 = .14$ ) effects on the group differences.<sup>25</sup> The  $p$  values were set to .05 (2-tailed). The

number of activities the child desired to change was calculated based on their selection of FUNDES-Child activity item picture cards across each of the 4 FUNDES-Child domains.

## RESULTS

### Comparison of Participation Ratings Between Children and Primary Caregivers

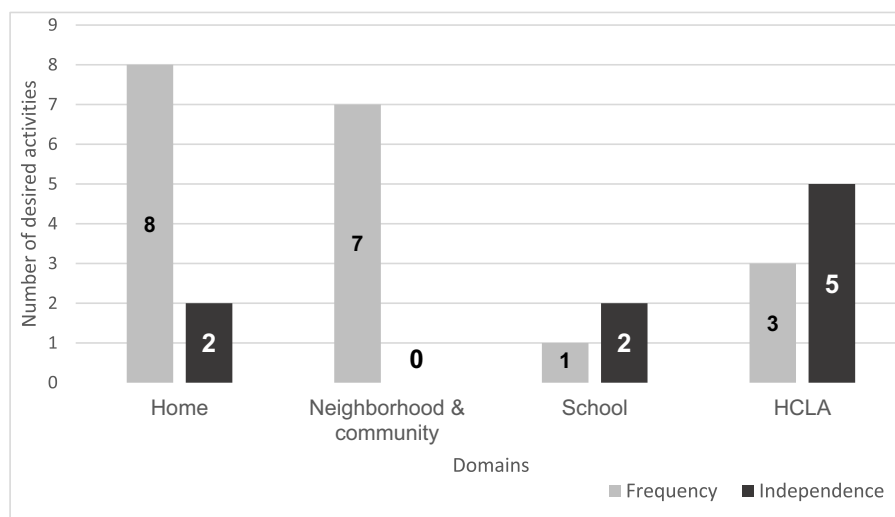
All 20 children and their primary caregivers completed the FUNDES-Child interviews. The children's self-rated scores of participation frequency were significantly higher than the scores of their caregivers on the total and Home and School domains ( $P < .05$ ) with large effect sizes ( $\eta^2 = 0.21$ - $0.48$ ), indicating that the children perceived themselves as having a lower frequency of participation than their primary caregivers perceived (Table 2). Among the 4 domains, both children and primary caregivers perceived the least restriction regarding the frequency of participation in school. Children perceived the highest restriction in the neighborhood and community, while primary caregivers perceived the children as having the highest restriction in the HCLA domain.

The children's self-rated scores of independence were significantly lower than the scores of their parents across the total and 4 domains ( $P < .05$ ) with large effect sizes ( $\eta^2 = 0.19$ - $0.41$ ), indicating that the children perceived themselves as being more independent than their primary caregivers perceived (Table 2). Among the 4 domains, both children and primary caregivers perceived the highest independence in school and the lowest independence in the HCLA domain.

### Activities Children Desired to Change

Nineteen (95%) of the 20 children identified the activities they desired to change. Among them, 17 identified a total of 28 desire-to-change activities by selecting 1 to 3 FUNDES-Child item picture cards, and 2 children each identified 1 activity





HCLA = Home/community living activities

FUNDES-Child = The Functioning Scale of the Disability Evaluation System – Child

**Fig. 2.** Number of desire-to-change activities on the 2 dimensions of the 4 domains of the FUNDES-Child.

not on the FUNDES-Child. One child (an 11-year-old boy with Attention Deficit Hyperactivity Disorder) did not choose nor self-report any activities he desired to change, even after a long discussion. The 28 desire-to-change activities selected by the children from the FUNDES-Child covered all 4 domains, with more activities pertaining to home (10 activities), neighborhood and community (7 activities), and HCLA (8 activities) than school (3 activities). Children indicated a desire to change in the frequency for 19 activities and in the independence for 9 activities (Figure 2). Table 3 presents the examples of the activities chosen from each domain. In addition, the 2 self-identified activities were “*I want to go to a Cat Village to see cats*” and “*I want to read more books to make myself cleverer.*”

### Participation-Based Goal-Setting

Using the ICF-CPS model, the 19 children who identified activities they desired to change were guided to decide on 1 top priority, elaborate to provide further description about that activity, and set criteria of goal achievement to develop into a measurable participation-based goal. Table 3 includes examples of participation-based goals in home, neighborhood and community, school, and HCLA domains. All children, primary caregivers, and teachers reviewed and agreed upon the participation-based goals.

### DISCUSSION

The FUNDES-Child and ICF-CPS provide innovative methods to actively engage children with special educational needs in reporting participation, selecting desire-to-change activities, and setting participation-based goals. The study








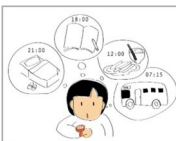
addresses an important gap regarding how the voices of children with disabilities are heard and concerning new methods applicable to the local context.<sup>9,11</sup> Our findings suggest the feasibility of a sequential and structured process to engage children in collaborative goal-setting.<sup>19</sup> The goals corresponded to children’s wishes and expectations and also reflected their caregiver’s or teachers’ inputs on the criteria of goal achievement, such as the child’s potential level of independence or opportunities for participation in the selected activity.

The participation ratings using the FUNDES-Child showed different views between children and their caregivers. It is noteworthy that caregivers’ reports do not always reflect their children’s perceptions of participation,<sup>26,27,28</sup> highlighting the need to capture children’s perspectives in research and practice. The different perceptions of caregivers and children can partly be explained by that some children may have difficulties relating their overall experiences in the past 6 months to the 4-point scales of frequency and independence.<sup>28</sup> Guidance and prompts from the practitioners might help children recall their past experiences and understand the scales. Children and their primary caregivers might use subjective judgment to report the levels of age-expected frequency and assistance needed when the children participated in the activities. However, their ratings can still be considered valid as the FUNDES-Child interview provides the respondents’ perceptions of frequency and independence based on subjective experiences.

The children in this study reported a higher level of independence than their caregivers reported, but they also reported greater restrictions in the frequency of attending activities than their caregivers reported. The results imply that children perceived that they could perform activities independently to a greater extent than their caregivers perceived, but

**TABLE 3**

Examples of Children's Top Priority Activities and Participation-Based Goals

Domain	FUNDES-Child Item Card/ Dimension <sup>a</sup> (Score)	Child's Top Priority Activity Description	Participation-Based Goals
Home	"Social, play, or leisure activities with family members"/F (1) 	I want to play with my mom and brother at home, for at least 30 minutes a week.	By the end of the school term, child A will participate in games and leisure time with the family members at home for at least 30 minutes per week, doing this for 4 consecutive weeks.
	"Social, play, or leisure activities with friends"/F (3) 	I want my best friend to come over and play.	By the end of the school term, child B will participate in interactive game time with friends at home, inviting 1 to 2 best friends to his home to play the diabolo at least twice a month, doing this for 3 consecutive months.
	"Structured events and activities"/F (3) 	I want to join more club activities after school.	By the end of the school term, child C will participate in group lessons in the resource class, continuously learning skills in playing the ocarina and balloon modelling, achieving this twice per week for 3 consecutive months.
Neighborhood and community	"Social, play, or leisure activities with friends" / F (0) 	I want to go to my best friend's home to play during the weekend. Hope his family welcome me.	By the end of the school term, child D will be able to visit his best friend's home, stay and play for 1.5 hours, and conclude the visit happily at least once during the weekend.
	"Educational activities with classmates"/I (1) 	I want to be independent in class without adult (like a shadow teacher) assistance.	By the end of the school term, child E will participate in class time at school and will attend Social Studies and Health classes independently, without assistance from a teaching aide, attending 6 classes per week, doing this for 2 consecutive months.
	"Communicating with other children and adults"/F (2) 	I want to chat with my classmates more, maybe at least twice a day.	By the end of this school term, under the support of a "guardian angel" classmate, Child F can participate in chatting time with 1 or 2 classmates on any topic twice per day, 3 days per week for 4 consecutive weeks.
HCLA	"Household activities" / F (3) 	I want to do more housework.	By the end of the school term, child G will participate in household chores, helping his mother do laundry every Saturday, doing this for 4 consecutive weeks.
	"Managing daily schedule"/I (1) 	I want to do the right thing at the right time during routines.	By the end of the school term, child H will participate in time management at home, managing her routine schedule to do homework and self-care activities and finishing without delays for at least 3 days a week for 4 consecutive weeks.

Note: <sup>a</sup>F = Frequency dimension; I = Independence dimension.

Abbreviations: FUNDES-Child = Functioning Scale of the Disability Evaluation System—Child; HCLA = home/community living activities.

they may not have the opportunities to participate as frequently as they want. This explains our finding that children desire changes in the frequency dimension more than the independence dimension. The findings support rehabilitation practices that ensure children have the opportunities and resources to access the activities they prefer and are capable of doing. All practitioners who provide services to children with special educational needs are encouraged to listen to the viewpoints of children and their caregivers to understand the extent to which the services meet the needs of children and families. Different viewpoints and desires expressed by children and their caregivers should be openly discussed to resolve the differences and make mutually agreed-upon decisions. An ongoing discussion process<sup>19</sup> may empower children with special educational needs to learn to advocate for themselves and make decisions with the caregivers' support in intervention or daily life.

Children's desire-to-change activities are mostly related to social and leisure activities in the home and neighborhood or community settings, such as social, play, or leisure activities with family members and friends at home and structured events and activities in the community. They tend to desire a change toward doing the activities they enjoy or are interested in more often. Children also desired to engage in educational activities with classmates, interact with other children and adults at school more frequently, and manage the daily schedule more independently. These goals, expressed by the children, provide important information for developing their collaborative IEP goals by the team in the school setting. In the current practices in Taiwan, IEP goals focus on the student's academic performance and ability to perform mandatory activities in school. It is important to recognize that children's desired activities are usually not part of their IEP goals; thus, they may receive less support in the activities they desire. Our results are aligned with a study indicating that children with disabilities aim to perform better in various life skills that are not limited to school activities. In contrast, parents want to focus on school task performance and teachers on improving motor and cognitive skills in school-based therapy services.<sup>29</sup> Children in that study, however, chose goals from the activities that they felt less physically competent with,<sup>29</sup> which might not capture the child's preferences to engage in the activities they like more often. Despite that the goals may be different, children's desired goals are achievable to the same extent as their caregivers' goals.<sup>30</sup> The findings of this study stress the importance of school-based practitioners addressing the most relevant issues as perceived by the children. The child's IEP team needs to focus on participation in desired activities when generating IEP goals.

There are barriers when engaging children in collaborative goal setting. One child in the study did not express any desire for activities. This child had no experience being engaged in a conversation about his wishes, always followed the adult's instructions, and never considered what he wanted. When the child was asked about the activities he desired to perform or his wishes and goals, he kept saying that he had no desires or goals for his life. From this case, we learned that children need to have opportunities to express and make decisions in their daily

lives, which may facilitate their engagement in a formal conversation about goal setting.

Several limitations of this study inform further research needs. The study included a convenience sample with a small sample size of children who communicated verbally; the methods should be adapted if applied to non-verbal children. No instruments were used to assess the children's cognitive abilities in this study. We obtained information from the child's medical records and the reports of primary caregivers and teachers to understand the child's abilities to understand and communicate. We did not collect the participants' experiences and perceptions during the study process through a qualitative design. Therefore, we do not know what they think about the methods of the FUNDES-Child and ICF-CPS. A follow-up study is needed to examine the implementation and effectiveness of these approaches further by using a larger sample size.

## Implications for Practice

Advances in self-advocacy, ie, self-confidence and self-determination, and individually determined goals have meaningful impacts on the design of support systems for individuals with disabilities. Goal-setting with children improves their ownership of these goals and motivation to work on goal achievement. The goals contain specific criteria to measure goal achievement and thus can be incorporated into IEP goals. The criteria reflect the children's expectations as well as the caregivers' hope for achievement in the near future.

School-based practitioners, including physical therapists, play a role in collaborating with multiple members of the educational team and developing goals based on family concerns and children's strengths and needs in the context of school activities and routines.<sup>5</sup> School-based practitioners can use the FUNDES-Child and ICF-CPS to enhance children's engagement in expressing themselves, analyzing possible barriers and facilitators, and making activity choices and decisions, which may further encourage them to share the power and responsibility for decision-making. Practitioners' positive attitudes and effective guiding skills are critical to support children. It is also important to recognize that facilitating children's development of goal-setting and problem-solving skills is an ongoing process and requires continued collaboration among people involved in the goal-setting process, ie, the team around the child.<sup>11,19</sup> Practitioners need to serve as active collaborators and create a team spirit during the school-based practices. The partnership among the team can be built during regular visits to the children and teachers, the IEP meetings, or through online platforms or email. Such partnerships among the team around the child are necessary to develop problem-solving strategies and plan interventions to address the child-identified participation-based goals.<sup>19</sup>

## CONCLUSION

The study used the FUNDES-Child and ICF-CPS to engage children with special educational needs in identifying the



desires and goals for participation. Children reported participation differently from their primary caregivers, suggesting the need to include the child's and caregiver's perspectives in goal-setting during the therapy process. Children mostly desired to change the frequency of participation in activities outside school, especially in home and community settings. With professional guidance and support, child-driven participation goals can be set based on the child's and caregiver's desires and expectations. Though further research is warranted, the findings suggest an innovative and feasible method to engage children with special educational needs in collaborative and participation-focused care planning.

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