
| RESEARCH ARTICLE

Parental Satisfactions and Expectations: Evaluating the Impact of an After-School Program for Children with Special Needs

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| ABSTRACT

This study evaluated parental satisfaction and expectations regarding an After-School Program (ASP) at a public elementary school's Special Education (SPED) Center in Cebu, Philippines, for the School Year 2024–2025, addressing a critical service void in inclusive education. After-School Programs are recognized as vital for providing essential academic, social, and emotional support for children with special needs (CSNs). A quantitative survey design assessed the implementation of various activities and correlated them with overall parental satisfaction. Results showed parents were Highly Satisfied overall with the program's ability to support their child's special needs, particularly commending staff communication, the inclusive environment, and a comprehensive developmental approach. However, significant implementation gaps were noted in specific activity areas. Life Skills Training and Social Skills development were the most successful and demonstrated a strong-to-moderate positive correlation with parental satisfaction, establishing them as primary drivers of program approval. Conversely, Yoga/Gymnastics and Coding were rated as partially implemented. Despite poor implementation, all academic components (Reading, Science, and Coding) showed a significant positive correlation with satisfaction, indicating high parental value and expectation for comprehensive cognitive development. Therefore, these findings validate the ASP as a high-quality intervention while identifying specific areas, particularly STEM and certain physical activities, that require immediate restructuring to fully meet parental expectations and optimize outcomes.

| KEYWORDS

Special Education, After-school program, Parental Satisfaction and Expectations, Individual with special needs

| ARTICLE INFORMATION

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1. Introduction

Equitable access to education for learners with special needs is a national imperative in the Philippines, mandated by legislation such as the Magna Carta for Persons with Disabilities (RA 7277) and DepEd Order No. 72, s. 2009 (Jimenez & Cabaluna, 2021; Baoga et al., 2022). Within the framework of the K-12 Inclusive Education Program (RA 10533), After-School

Programs (ASPs) are recognized as critical services that extend learning beyond regular class hours, providing essential academic, social, and emotional support vital for holistic development (Violon & Violon, 2024).

Despite strong legislative support, the reality of inclusive education in the Philippines often lacks comprehensive After-School Programs (ASPs) for children with special needs (CSNs). Widespread challenges like inadequate funding, a critical shortage of trained SPED teachers, and insufficient materials prioritize core instructional demands. This often leaves extended, non-mandated ASPs as an unfulfilled ideal, even as developed countries are increasingly keen on ASP implementation as a cornerstone of inclusive practice.

The absence of structured, after-hours support creates a significant disparity in developmental opportunities for CSNs. They miss crucial time for social skills training, supplementary academic remediation, and emotional practice. In urban areas like Cebu, this case forces working parents to seek specialized, often expensive, external services, directly impacting family resources and raising concerns about the true quality of inclusion. This service void necessitates an exploration of existing programs. When ASPs are available, their scope and effectiveness vary, directly influencing parental trust and participation. Understanding parent satisfaction is critical, as they view these activities as essential, not supplemental, to bridge the learning deficits that the standard school day cannot fully address.

Therefore, this study aims to address this critical gap by exploring parental satisfaction and expectations regarding the after-school program at a public elementary school's Special Education (SPED) Center in an urban setting in Cebu, Philippines, for the School Year 2024–2025. Specifically, this study assesses the observable implementation of the ASPs' activities concerning the developmental, social, and educational needs of CSNs. Furthermore, it evaluates parent satisfaction with the ASPs and examines the correlation between this satisfaction level and the observed implementation.

2. Literature Review

This section of the examines the expansive scope of ASPs, shifting focus from their traditional role in childcare to their critical function in holistic development. The review synthesizes current research across four domains: the foundational models and evolving social-educational goals of ASPs; the demonstrated program impact and child outcomes across academic, physical, and socio-emotional areas; the significant influence of parental perceptions and engagement; and the crucial organizational and staff factors that determine overall program quality.

2.1 Foundations and Model of After-School Programs (ASP)

The after-school program has shifted from a care-focused social pedagogy toward a more educational system feature [3]. However, this growing demand for learning has eclipsed its collective and social goals with individualistic arguments, often limiting participation for resource-poor children and leading to segregation in support activities (Karlsudd, 2020). Despite this academic focus, ASPs offer diverse activities, from socializing and homework help to physical activity and arts. With increased funding, ASPs have grown as crucial settings for supporting children's social-emotional learning (SEL) and holistic development beyond academics (Olive et al., 2020). Nevertheless, the excessive academic focus in after-school programs ignores their potential to build interest, identity, and social capital, especially for low-income students of color disengaging from school. All youth deserve access to enrichment that fosters upward mobility (Philp & Gill, 2020).

To address developmental needs, in a particular after-school program model, out-of-school hours care offers a chance for needed early intervention to boost children's well-being. A co-designed, group mentoring approach was created, focused on resilience, community connection, and engagement, marking the first such program for these services (Milton et al., 2021). Generally, after-school programs are widely accepted as part of the educational system, as they are demonstrated to or theorized to lead to various positive outcomes for youth. Central to achieving these benefits are the strong relationships that are typically fostered and developed within the program setting (Ndlovu, & Simba, 2021). These benefits are often influenced by socioeconomic factors, as Socioeconomic status (SES) influenced after-school activities; higher-SES children engaged more in sports, homework, and reading, while lower-SES children used screen-based activities. For lower-SES children, higher well-being linked to more sports, homework, reading, and friend time (Kennewell et al., 2022).

2.2 Program Impact and Child Outcomes

Academic after-school engagement enhances divergent thinking in adolescents. This boosted divergent thinking is, in turn, a predictor of their increased and sustained participation in such activities over time (Delany & Cheung, 2020). In addition to cognitive benefits, before- and after-school programs significantly boost children's and adolescents' daily physical activity

(PA), also offering cognitive and social-emotional benefits. Program leaders should focus on careful structuring to maximize these potential advantages for youth (Dauenhauer et al., 2022). Specifically, for CSNs, participation in ASP is linked to lower ADHD severity and reduced school absenteeism in children with ADHD. Optimizing outcomes for those with ADHD should include encouraging their engagement in these activities (Lax et al., 2021). However, equitable access remains a challenge, as a local sample of African American children with ADHD/DBDs showed higher sedentary but lower physically active/sport program participation than peers.

While less unsupervised overall, those with Oppositional Defiant or Conduct Disorder were more frequently unsupervised. Support models are needed to boost equitable participation (Ramer et al., 2024). Regardless of school type, after-school sports programs significantly impact primary school pupils' mental health. These findings offer useful insights for developing policies and programs in Nigeria aimed at promoting pupils' well-being (Saadu, 2023). When reviewing a variety of inclusive programs, a scoping review found that inclusive, out-of-school physical activity (PA) programs for children with social or cognitive impairments showed mixed impacts across fitness, motor skills, well-being, and socialization. Experts suggest varied programs and longitudinal studies are needed (Orr et al., 2021). Overall, programs are effective at improving learning performance in math, science, and digital skills, especially for disadvantaged students. Longer duration positively affects educational and socio-emotional development, particularly for younger participants and those in "Second Chance" programs (Grigoriu et al., 2024).

2.3 Parental Actions and Thoughts on ASP

Secondary analysis in Japan found that financially struggling parents reported lower satisfaction with the local parenting environment and support. This low satisfaction was significantly linked to a lack of parenting support and being unable to use after-school clubs. In a different geographical context, in urban China, the mismatch between work hours and school times necessitates developing After-Class Care Services (ACCS). Parent satisfaction is key, yet quality gaps exist in reliability, responsiveness, and empathy, driven by low parental involvement and staff's limited understanding of diverse family needs (Li et al., 2025). Despite potential challenges, parents also provide positive evaluation, as parents and guardians in Nova Scotia assessed their children's cognitive, social, and emotional health after participating in the BOKS after-school physical activity program. Despite COVID-19 restrictions, parental reports suggested the program had a protective effect, maintaining children's health within the normal range (Caldwell et al., 2022).

A study by Arai & Goto (2023) highlighted a high demand for after-school children's clubs across all financial status groups. However, this demand was tempered by low satisfaction, which was largely tied to parents' inability to utilize these clubs. Furthermore, for financially struggling families, satisfaction was further lowered by a lack of a strong parenting network. Building on this, other research underscores the broader benefits of after-school programs. Specifically, studies indicate that parents' awareness of a child's whereabouts after school positively impacts their own parenting practices and the child's mental health (Daly et al., 2021). In fact, children's program participation has also been consistently reported to reduce the risk of depression in the parents, a benefit observed regardless of their financial status (Kreski et al., 2023; Daly et al., 2021).

2.4 Organizational and Staff Factors in ASP Quality

Training and supporting after-school staff to deliver a physical activity and academic enrichment program is an effective, feasible way to boost children's moderate to vigorous physical activity and improve some executive functions. This successful, evidence-based intervention and partnership model is a vital approach for targeting health and developmental outcomes in this setting (Veldman et al., 2020). Beyond staff training, program quality is also determined by internal management, as organizational stress and staff proficiency predict after-school program quality. Better perceived quality correlates with fewer child behavior problems. Overall, the data informs efforts to enhance organizational capacity for supporting children's social and behavioral development (Frazier et al., 2021). Furthermore, the staff's relationship with students is key to engagement, because effective physical activity (PA) programs, delivered both in-school and after-school, can boost students' awareness, competence, and motivation for future PA. Students' positive perceptions of their teachers significantly encourage more self-determined participation, overcoming potential obstacles (He et al., 2023). Program leaders and staff must carefully structure before- and after-school offerings. This attention is critical for maximizing the potential benefits for youth, which include increased daily physical activity, enhanced cognitive health, and improved social-emotional wellbeing (Dauenhauer et al., 2022).

Drawing together these points, the literature confirms that After-School Programs (ASPs) are vital for holistic development, significantly benefiting children with special needs through academic gains and socio-emotional growth. Evaluating their success demands factoring in Parental Satisfaction and expectations, alongside measurable child outcomes.

Ultimately, effective ASPs rely on strong organizational factors and well-supported staff, validating these programs as a necessary component for high-quality, inclusive, and sustainable education.

3. Methodology

This section outlines the research design, locale, respondents, instrument, the methods of collection, treatment and analysis of data.

3.1 Design.

As the sub-problem evaluates the parents' level of satisfaction with the ASPs and explores the relationship between their satisfaction and the observed implementation, this recent study employs a quantitative correlational study. Such utilization is appropriate since a quantitative correlational study is a research design that statistically examines relationships between two or more variables, without manipulation, to determine the strength and direction of their association, but not causation (Dix, 2021).

3.2 Environment and Respondents

Using the combined purposive and convenience sampling, 43 parents and/or guardians, who have CSNs enrolled at a public elementary school's Special Education (SPED) Center in Cebu, Philippines, were taken in as respondents to this recent study. They were selected to provide insights into their experiences, satisfaction, and expectations regarding the program's impact on their children's development, including social, emotional, academic, and behavioral growth. Much research relies on convenience and purposive samples, which can be selected either randomly or non-randomly. A convenience sample comes from sources readily available to the researcher, while a purposive sample is chosen based on specific characteristics relevant to the study (Andrade, 2021).

3.3 Instrument

To collect the necessary data, a researcher-made survey questionnaire was developed and adapted from an existing instrument created by the Montana Office of Public Instruction, originally designed to assess parental satisfaction in educational settings. The adapted version was customized to reflect the local context, particularly addressing the needs of Filipino parents whose children were enrolled in special education programs. Prior to full implementation, the instrument underwent pilot testing with a small group of respondents who shared characteristics similar to those of the target population. This step was essential to establish the validity and reliability of the tool. The reliability of the instrument was assessed using Cronbach's Alpha, which measured internal consistency across the two main components of the questionnaire. Expected reliability coefficients were as follows: parental satisfaction ($\alpha=0.89$), parental expectations ($\alpha=0.82$), and program impact ($\alpha=0.78$). These indicators suggested high internal consistency and appropriateness for educational research. The survey questionnaire consisted of two major parts.

3.4 Data Gathering

To begin the research, a formal transmittal letter was submitted to the School Principal or the Division Office of the Department of Education, in compliance with DepEd Order No. 16, s. 2017. Approval from the Schools Division Superintendent or authorized representative allowed the researcher to distribute a pre-validated instrument, developed in consultation with the school's SPED coordinator, to parents or guardians of children enrolled in the after-school program. Coordination with school administrators ensured proper scheduling, smooth distribution, and timely collection of responses while minimizing disruption to school activities.

The finalized survey questionnaire, administered in paper-based format, was conducted within a designated school area approved by the administration. Ethical considerations were strictly observed, including informed consent, voluntary participation, confidentiality, and adherence to the Data Privacy Act of 2012. Respondents were informed of their right to withdraw without consequence, and SPED teachers assisted in facilitating communication with parents. After collection, responses were tabulated, analyzed, and interpreted using statistical tools. Findings were summarized and submitted to both the school and DepEd Division Office for transparency and possible integration into improvement plans.

3.5 Ethical Consideration and Data Privacy

The study strictly adhered to ethical standards to safeguard the rights and welfare of participants. Informed consent was obtained from parents or guardians, who were fully informed of the study's purpose, nature of participation, their rights, and

the voluntary nature of involvement, including the option to withdraw without penalty. Confidentiality and anonymity were maintained by ensuring that no personally identifiable information was disclosed or linked to responses. The research process was conducted with cultural sensitivity, ensuring respect for participants' context and values. In compliance with the Data Privacy Act of 2012 (Republic Act No. 10173), appropriate technical and organizational measures were applied to protect sensitive data. Participants were informed of the purpose of data collection, usage, and their legal rights regarding data privacy. Access to personal information was restricted to authorized personnel, securely stored, and stripped of identifiers after analysis to further uphold confidentiality and protect participant privacy.

3.6 Treatment of Data

In analysing survey data gathered through a Likert scale, the frequency count, weighted mean and standard deviation were applied to described the respondents' answers and measure overall patterns and variation. Additionally, the the Pearson r coefficient was utilized to infer the probable relationship between the parents' satisfaction and the observed ASPs' implementation since is a suitable statistical tool to measure the strength and direction of a linear relationship between two continuous variables (Pan et al., 2024).

4. Results and Discussions

This chapter presents the statistically-treated data from the responses of the parents of CSNs. It included satisfaction levels, expectations, and perceived impacts on child development, highlighting challenges and insights regarding the program's effectiveness. The results clearly showed how the program met the needs of children and their families.

Table 1. Functional Life Skills/Physical Coordination

No	Life Skills Training	$\bar{x}$	SD	VD
1	The program supports the learners in developing practical life skills essential for daily living.	3.60	0.66	FI
2	The program activities promote the learners' independence and confidence in handling real-life situations.	3.58	0.54	FI
3	The program offers comprehensive life skills training, including safety awareness, social communication, and self-care tasks.	3.53	0.67	FI
<i>Aggregate Value</i>		3.57	0.62	FI
No	Physical Exercises	$\bar{x}$	SD	VD
4	The program allows the learners to actively engage in structured physical activities, such as basketball and badminton, with guidance from the teacher.	2.95	0.79	Mol
5	The program fosters the development of improved coordination, balance, and motor skills through regular engagement in sports and movement activities.	3.23	0.75	Mol
6	The physical activities provided are appropriate and inclusive for the learners' developmental level	3.30	0.91	FI
<i>Aggregate Value</i>		3.16	0.82	Mol
No	Music and Dance	$\bar{x}$	SD	VD
7	The program facilitates the development of rhythmic awareness and coordination in learners by integrating music and dance.	3.16	0.78	Mol
8	The program fosters creative engagement and promotes active participation within group music and dance sessions.	3.23	0.78	Mol
9	The program allows learners to enhance their coordination, rhythmic ability, and musical skills through structured activities.	3.00	0.87	Mol
<i>Aggregate Value</i>		3.13	0.81	Mol
No	YOGA or Gymnastic	$\bar{x}$	SD	VD
10	The program advocates enhancing physical flexibility, balance, and strength by incorporating structured yoga exercises.	2.00	0.93	PI

11	The program facilitates the development of physical flexibility, balance, and strength by implementing guided yoga exercises.	1.93	0.88	PI
12	The program fosters learners' emotional well-being by integrating mindfulness and relaxation techniques during yoga sessions.	1.88	0.91	PI
<i>Aggregate Value</i>		1.94	0.90	PI
<i>Overall</i>		2.95	0.79	Mol

Legend: 3.25-4.00 Fully implemented (FI); 2.50-3.24 Mostly Implemented (Mol); 1.75-2.49 Partially implemented (PI); 1.00-1.74 Minimally implemented (MI)

The statistical analysis of parental satisfaction regarding functional life skills and physical coordination components reveals distinct implementation levels across program areas. Life Skills Training demonstrates the highest aggregate mean score, indicating consistent parental recognition of program effectiveness in developing practical competencies essential for daily living. Physical Exercises and Music and Dance components show comparable aggregate means within the moderately implemented range, suggesting adequate but improvable delivery of these activities. Notably, the YOGA or Gymnastic component presents the lowest aggregate mean, falling within the partially implemented category, indicating significant room for enhancement in this particular area of the program.

The results indicate that parents perceive the after-school program as most successful in delivering life skills training, which aligns with the fundamental developmental needs of children with special needs. The moderate implementation ratings for physical exercises and music/dance activities suggest that while these components are present and functional, they may require additional resources, training, or structural modifications to achieve optimal effectiveness. The poor performance of the yoga/gymnastic component represents a critical area requiring immediate attention, as this finding suggests either inadequate program design, insufficient instructor preparation, or misalignment between program offerings and participant needs. These findings collectively suggest that parents' value practical skill development most highly while identifying specific areas where program enhancement could significantly improve overall satisfaction and educational outcomes.

Table 2. Creative Skills and Social Development

No	Social Skills	$\bar{x}$	SD	VD
1	The program enhances emotional regulation and understanding through role-playing and social narratives.	3.51	0.77	FI
2	The program promotes collaboration and teamwork during cooperative tasks.	3.53	0.74	FI
3	The program enhances problem-solving and conflict resolution skills in social interactions.	3.35	0.90	FI
4	The program helps learners build friendships by showcasing appropriate social behaviors.	3.58	0.63	FI
5	The program teaches appropriate manners and etiquette for interacting with peers and adults, reinforcing visual supports and teacher modeling during social skills instruction.	3.56	0.55	FI
6	The program encourages learners to respond positively to direct instruction and reinforcement, using praise and rewards for social skills.	3.67	0.57	FI
<i>Aggregate Value</i>		3.53	0.86	FI
No	Arts and Crafts	$\bar{x}$	SD	VD
7	The program encourages creativity and fine motor development through various arts and crafts activities, including coloring, painting, and sculpting.	3.21	0.99	Mol
8	The program provides opportunities for learners to express themselves artistically while enhancing their problem-solving skills through hands-on craft activities.	3.26	0.95	FI
9	The program supports learners in developing the ability to follow detailed, step-by-step instructions while completing arts and crafts projects.	3.09	1.00	Mol
<i>Aggregate Value</i>		3.19	0.98	Mol
No	Art Therapy	$\bar{x}$	SD	VD
10	The program facilitates learner engagement through drawing and coloring activities, which serve as a medium for therapeutic expression.	3.40	0.82	FI
11	The program incorporates various painting activities utilizing diverse materials to foster creative expression and enhance artistic development.	3.40	0.85	FI
12	The program provides opportunities for exploring sculptural activities using clay,	3.19	1.01	Mol

	playdough, and various sensory materials.			
13	The program fosters creativity and sensory engagement through organized collage-making activities.	3.47	0.93	FI
	<i>Aggregate Value</i>		3.36 0.90	FI
		<i>Overall</i>	3.36 0.86	FI

Legend: 3.25-4.00 Fully implemented (FI); 2.50-3.24 Mostly Implemented (Mol); 1.75-2.49 Partially implemented (PI); 1.00-1.74 Minimally implemented (MI)

As can be gleaned, this table demonstrates predominantly positive implementation ratings across all measured domains. Social Skills emerges as the strongest component with the highest aggregate mean, reflecting comprehensive parental satisfaction with interpersonal skill development activities. Art Therapy follows as the second-highest rated component, indicating substantial parental approval of therapeutic creative interventions. Arts and Crafts presents the lowest aggregate mean among the three components, though still maintaining a moderately implemented status. The standard deviation values reveal considerable variability in parental responses, particularly within the Arts and Crafts domain, suggesting diverse individual experiences and expectations regarding program delivery effectiveness.

These findings demonstrate that parents highly value the program's social skill development initiatives, recognizing their critical importance for children with special needs in building essential interpersonal competencies and behavioral regulation. The strong performance of Art Therapy components suggests that parents appreciate therapeutic approaches that combine creative expression with developmental benefits, indicating successful integration of clinical and educational methodologies. The moderate rating for Arts and Crafts activities, while still within acceptable implementation ranges, indicates potential opportunities for program enhancement through improved instructional methods, resource allocation, or activity structure modifications. The overall positive ratings across all domains suggest that parents view creative and social development programming as effectively addressing their children's developmental needs, though continued attention to program refinement could optimize outcomes further.

Table 3. Academic Enrichment/Cognitive Skills or Development

No	Reading	$\bar{x}$	SD	VD
1	The program involves individualized or small group reading activities with teacher supervision, tailoring support to each learner's needs.	3.23	0.84	Mol
2	The program promotes literacy by supporting independent reading for advanced learners and guided reading for those needing extra help.	3.30	0.80	FI
3	The program enhances reading comprehension and vocabulary through storytelling, diverse texts, and developmentally appropriate instruction.	3.19	0.96	Mol
	<i>Aggregate Value</i>	3.24	0.87	Mol
No	Science	$\bar{x}$	SD	VD
4	The program engages learners in hands-on science experiments that promote active participation and discovery.	2.35	0.95	PI
5	The program fosters curiosity and understanding of scientific concepts through guided, interactive activities.	2.49	0.86	PI
6	The program encourages learners to follow instructions and participate safely in science-based tasks.	2.56	0.93	Mol
	<i>Aggregate Value</i>	2.47	0.91	
No	Coding	$\bar{x}$	SD	VD
7	The program supports the development of problem-solving and logical thinking skills through engaging coding activities.	2.21	1.08	PI
8	The program fosters creativity and builds confidence in exploring technology and coding.	2.42	1.14	PI
9	The program provides a supportive learning environment that encourages exploration and experimentation in coding.	2.09	1.00	PI
	<i>Aggregate Value</i>	2.24	1.07	PI
	<i>Average Value</i>	2.65	0.95	Mol

Legend: 3.25-4.00 Fully implemented (FI); 2.50-3.24 Mostly Implemented (Mol); 1.75-2.49 Partially implemented (PI); 1.00-1.74 Minimally implemented (MI)

Moreover, such empirical results reveal significant disparities across program components. Reading activities demonstrate the strongest performance with an aggregate mean approaching the fully implemented threshold, indicating substantial parental confidence in literacy-focused interventions. Science programming presents concerning results with an aggregate mean falling within the partially implemented range, suggesting inadequate delivery of hands-on experimental activities. Coding instruction emerges as the most problematic component, recording the lowest aggregate mean and highest standard deviation values, reflecting both poor implementation and considerable variability in parental experiences. The substantial standard deviation across all components indicates inconsistent program delivery and diverse parental expectations regarding academic enrichment effectiveness.

These findings disclose that parents perceive reading instruction as the program's academic strength, likely due to its fundamental importance for children with special needs and the availability of established pedagogical approaches for literacy development. The poor performance of science programming suggests significant challenges in implementing developmentally appropriate experimental activities, possibly due to safety concerns, resource limitations, or insufficient instructor training in adaptive science education. The particularly low ratings for coding instruction indicate that this technologically-focused component may be inappropriate for the target population or inadequately designed for children with special needs. Overall, these results suggest that while basic literacy skills receive adequate attention, the program requires substantial restructuring of STEM-related activities to meet parental expectations and provide meaningful cognitive enrichment opportunities for participants.

Table 4. Level of satisfaction with the after-school program to support their child's special needs

No	Parents' Level of Satisfaction	$\bar{x}$	SD	VD
1	I am satisfied with the safety measures and secure environment provided by the After-School Program for my child.	3.60	0.62	HS
2	I am satisfied with the program's comprehensive approach to outlining and implementing activities that effectively address my child's developmental and learning needs.	3.63	0.62	HS
3	I am satisfied that the program fosters an inclusive and welcoming atmosphere where my child feels accepted and supported.	3.63	0.62	HS
4	I am satisfied with the variety and quality of activities that are engaging, developmentally appropriate, and considerate of my child's needs.	3.56	0.73	HS
5	I am satisfied with the program as it effectively supports my child's academic learning and functional skills development, helping them build competencies essential for daily life.	3.47	0.63	HS
6	I am satisfied with the program's efforts to develop my child's social skills and facilitate positive peer interactions.	3.65	0.57	HS
7	I am satisfied with how the program effectively accommodates my child's sensory needs through appropriate environmental adaptations and calming activities.	3.51	0.67	HS
8	I am satisfied with how the program staff use alternative communication methods to support my child, especially considering their verbal and non-verbal communication challenges.	3.56	0.67	HS
9	I am satisfied with how the staff effectively manage and support my child's behavioral needs, using positive interventions when necessary.	3.58	0.63	HS
10	I am satisfied with the program as it supports my child's emotional well-being by helping them develop coping strategies to manage stress and frustration.	3.58	0.59	HS
11	I am satisfied with the staff's knowledge, skills, and training in handling children with significant developmental challenges, including behavioral and communication support.	3.56	0.63	HS
12	I am satisfied with the staff's communication and cooperation. They keep me informed about my child's progress and actively involve me in supporting their development, which makes a positive difference in our experience.	3.67	0.52	HS
13	I am satisfied with the program as it provides opportunities for my child to develop practical life skills and encourages participation in community-based activities.	3.51	0.67	HS
14	I am satisfied with the program's flexibility and how it accommodates my family's needs, including schedule adjustments and individualized support.	3.49	0.59	HS
15	I am satisfied overall with the quality and effectiveness of the After-School Program, which is designed to address my child's social, educational, and developmental	3.63	0.58	HS

needs.

Overall 3.58 0.62 HS

Legend: 3.25-4.00 Highly Satisfied (HS); 2.50-3.24 Moderately Satisfied (MoS); 1.75-2.49 Slightly Satisfied (SS); 1.00-1.74 Minimally Satisfied (MS)

For this table, the statistical examination of parental satisfaction levels shows consistently high ratings across all dimensions of the after-school program for children with special needs. All individual satisfaction items achieved means within the highly satisfied range, with minimal variation between components. Staff communication and cooperation, along with the program's comprehensive developmental approach and inclusive atmosphere, recorded the highest satisfaction ratings. Program flexibility and academic support demonstrated the lowest means within the highly satisfied category, though still maintaining strong parental approval. The consistently low standard deviation values across all items indicate remarkable consensus among parents regarding program quality, suggesting uniform positive experiences and aligned expectations throughout the participant population.

These findings establish that parents overwhelmingly perceive the after-school program as effectively meeting their children's complex developmental needs across multiple domains. The exceptionally high satisfaction with staff communication and inclusive environment indicates successful implementation of family-centered approaches and culturally responsive programming essential for special needs education. The strong ratings for safety measures, behavioral support, and sensory accommodations suggest that fundamental program infrastructure successfully addresses the specialized requirements of children with developmental challenges. While all areas received high satisfaction ratings, the relatively lower scores for program flexibility and academic support, though still within the highly satisfied range, may represent opportunities for continued program enhancement. Overall, these results indicate that parents view the program as a comprehensive, high-quality intervention that significantly supports their children's social, educational, and developmental progress.

Table 5. Test of significance on the correlation between extent of implementation of after-school activities on functional life skills/physical coordination and the parents' level of satisfaction in supporting their child's special needs

Variables under inference	correlative rho	Comp. rho	Strength of correlation	of p-value	Decision	Results
Life skills training & Parents' level of satisfaction		0.518	Moderate	0.000	Reject Ho	Significant
Physical exercises & Parents' level of satisfaction		0.237	Weak	0.127	Accept Ho	Not significant
Music and dance, and parents' level of satisfaction		0.166	Weak	0.288	Accept Ho	Not significant
YOGA/gymnastics & Parents' level of satisfaction		0.124	Weak	0.429	Accept Ho	Not significant

*Significant at $p < 0.05$ (two-tailed)

The correlation analysis examining the relationship between functional life skills/physical coordination program components and parental satisfaction reveals distinct statistical patterns. Life skills training demonstrates a computed rho value indicating moderate positive correlation strength with parental satisfaction, accompanied by a p-value below the alpha threshold, leading to null hypothesis rejection. Physical exercises, music and dance, and yoga/gymnastics components all exhibit weak correlation coefficients with parental satisfaction levels. The p-values for these three components substantially exceed the significance threshold, resulting in null hypothesis acceptance and determination of non-significant relationships. The statistical evidence indicates that only one of four functional skill components demonstrates a meaningful association with overall parental satisfaction ratings.

These findings imply that life skills training serves as the primary driver of parental satisfaction within the functional life skills and physical coordination domain, establishing it as a critical program element for meeting family expectations. The significant moderate correlation indicates that improvements in life skills programming directly correspond to enhanced parental satisfaction, highlighting the fundamental importance parents place on practical daily living competencies for their children with special needs. Conversely, the non-significant relationships observed for physical exercises, music and dance, and yoga/gymnastics suggest these activities may be viewed as supplementary rather than essential components by parents. The weak correlations and high p-values indicate that variations in these physical coordination activities do not substantially influence overall parental satisfaction, suggesting that parents may prioritize functional independence over recreational physical activities when evaluating program effectiveness for their children's developmental needs.

Table 6. Test of significance on the correlation between extent of implementation of established activities on creative skills and social development and the parents' level of satisfaction in supporting their child's special needs

Variables under inference	correlative	Comp. rho	Strength of correlation	p-value	Decision	Results
Social skills & Parents' level of satisfaction		0.730	Strong	0.000	Reject Ho	Significant
Arts and crafts & Parents' level of satisfaction		0.162	Weak	0.300	Accept Ho	Not significant
Art therapy & Parents' level of satisfaction		0.371	Moderate	0.014	Reject Ho	Significant

*Significant at $p < 0.05$ (two-tailed)

Furthermore, the correlation analysis examining creative skills and social development components disclose contrasting statistical relationships with parental satisfaction. Social skills demonstrate the strongest computed rho value, indicating a strong positive correlation with parental satisfaction, supported by a p-value significantly below the alpha level, warranting null hypothesis rejection. Art therapy exhibits a moderate correlation coefficient with parental satisfaction, accompanied by a p-value that falls below the significance threshold, also resulting in null hypothesis rejection. Arts and crafts present a weak correlation strength with parental satisfaction, characterized by a p-value substantially exceeding the alpha criterion, leading to null hypothesis acceptance and non-significant classification. These statistical outcomes reveal that two of three creative and social development components establish meaningful correlative relationships with overall parental satisfaction levels.

These findings entail that social skills programming represents the most influential factor affecting parental satisfaction within the creative and social development domain, with the strong correlation coefficient indicating that enhanced social skill implementation directly translates to substantially higher parental satisfaction ratings. The significant moderate correlation between art therapy and parental satisfaction suggests that parents recognize the therapeutic value of structured creative interventions for addressing their children's emotional and developmental needs. The non-significant relationship between arts and crafts activities and parental satisfaction, despite weak positive correlation tendencies, indicates that parents may view these activities as less critical for their children's developmental progress compared to targeted social and therapeutic interventions. Overall, these results emphasize that parents prioritize evidence-based social skill development and therapeutic creative approaches over general craft activities when evaluating program effectiveness for children with special needs.

Table 7. Test of significance on the correlation between extent of implementation of after-school activities on academic engagement/ cognitive skills or development and the parents' level of satisfaction in supporting their child's special needs

Variables under inference	correlative	Comp. rho	Strength of correlation	p-value	Decision	Results
Reading and the Parents' level of satisfaction		0.636	Strong	0.000	Reject Ho	Significant
Science and the Parents' level of satisfaction		0.521	Moderate	0.000	Reject Ho	Significant
Coding and the Parents' level of satisfaction		0.428	Moderate	0.004	Reject Ho	Significant

*Significant at $p < 0.05$ (two-tailed)

The results universally pointed out significant statistical relationships with parental satisfaction. Reading activities exhibit the strongest computed rho value, indicating a strong positive correlation with parental satisfaction, supported by a p-value substantially below the alpha threshold, resulting in null hypothesis rejection. Science programming demonstrates a moderate correlation coefficient with parental satisfaction, accompanied by a p-value significantly below the significance criterion, also warranting null hypothesis rejection. Coding instruction presents a moderate correlation strength with parental satisfaction, characterized by a p-value well below the alpha level, leading to null hypothesis rejection. Remarkably, all three academic components achieve statistical significance, establishing meaningful correlative relationships with overall parental satisfaction despite varying implementation effectiveness ratings reported in previous analyses.

These findings indicate a paradoxical relationship where all academic components demonstrate significant positive correlations with parental satisfaction despite previously documented implementation challenges, particularly in science and coding domains. The strong correlation between reading and parental satisfaction aligns with expected outcomes, as literacy

development represents a fundamental educational priority that parents recognize as essential for their children's academic progress. The significant moderate correlations for both science and coding activities, despite their poor implementation ratings, suggest that parents highly value these academic offerings regardless of current delivery effectiveness, indicating strong parental expectations for comprehensive cognitive development programming. This statistical pattern implies that parents appreciate the program's ambitious academic scope and recognize the potential benefits of STEM education for children with special needs, even when implementation falls short of expectations, highlighting the importance of improving rather than eliminating these valued academic components.

5. Conclusion

Based on the findings, the study reveals high Parental Satisfaction driven primarily by strong Social Skills and Life Skills implementation. While the ASP's Impact is positive, the fulfillment of academic Expectations is incomplete due to weak implementation in Science and Coding, necessitating targeted program restructuring to fully support children with special needs.

5.1 Recommendation and Future Studies

In reference to parental satisfaction and implementation gaps, the ASP requires specific, targeted enhancements to improve its overall impact and fully meet parental expectations. The program must prioritize restructuring in two key areas: academically and physically. For academic enrichment, the curriculum for Science and Coding should be redesigned to focus on developmentally appropriate, adaptive instruction, addressing the poor implementation ratings despite high parental valuation of these subjects. Physically, the program should immediately enhance instructor training and comprehensively redesign the poorly rated Yoga/Gymnastics component to ensure it provides meaningful developmental benefits for children with special needs.

On the other hand, future research must conduct longitudinal studies to measure the actual child impact of ASP activities on adaptive behavior and academic growth, moving beyond parental perceptions. Further qualitative research should investigate organizational barriers, like instructor training and resource allocation, that hinder effective implementation of STEM-related activities.

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References

- [1] Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian journal of psychological medicine*, 43(1), 86-88.
- [2] Arai, T., & Goto, A. (2023). Parents' needs and satisfaction levels for parenting support schemes provided by local government: secondary analysis of cross-sectional survey data. *Journal of Primary Care & Community Health*, 14, 21501319231199978.
- [3] Baoga, I. W., MEEM, D. R. V., & Gundayac, D. A. (2022). Reforming Students' Perceptions on Inclusive Education (IE) Through DepEd Order 72 s. 2009. *Reforming Students? Perceptions on Inclusive Education (IE) Through DepEd Order 72 s. 2009*, 101(1), 9-9.
- [4] Caldwell, H. A., Miller, M. B., Tweedie, C., Zahavich, J. B., Cockett, E., & Rehman, L. (2022). The effect of an after-school physical activity program on children's cognitive, social, and emotional health during the COVID-19 pandemic in Nova Scotia. *International Journal of Environmental Research and Public Health*, 19(4), 2401.
- [5] Daly, N. J., Parsons, M., Blondino, C., Clifford, J. S., & Prom-Wormley, E. (2021). Association between caregiver depression and child after-school program participation. *Journal of family social work*, 24(3), 245-260.
- [6] Dauenhauer, B., Kulinna, P., Marttinen, R., & Stellino, M. B. (2022). Before-and after-school physical activity: Programs and best practices. *Journal of Physical Education, Recreation & Dance*, 93(5), 20-26.
- [7] Delany, D. E., & Cheung, C. S. (2020). Transactions between adolescents' after school activities and divergent thinking. *Psychology of Aesthetics, Creativity, and the Arts*, 14(4), 462.
- [8] Dix, L. F. (2021). *A Correlational Study of the Influence of an Afterschool Program on Reading Achievement* (Doctoral dissertation, University of West Georgia).
- [9] Frazier, S. L., Rusch, D., Cox, S., Stout, T. J., Helseth, S. A., Dirks, M. A., ... & Bhaumik, R. (2021). After-school programs and children's mental health: Organizational social context, program quality, and children's social behavior. *Journal of Clinical Child & Adolescent Psychology*, 50(2), 215-228.

- [10] Grigoriu, M. C., Tescaşiu, B., Constantin, C. P., Ţurcanu, C., & Tecău, A. S. (2024). Extended Learning through After-School Programs: Supporting Disadvantaged Students and Promoting Social Sustainability. *Sustainability*, 16(17), 7828.
- [11] He, J., Yu, H., Jiang, M., & Szumilewicz, A. (2023). Physical activity programs in Shanxi Province schools in China: effects of in-school and after-school delivery on students' motivational and social outcomes. *Sustainability*, 15(10), 8080.
- [12] Jimenez, R. S., & Cabaluna, A. Y. (2021). Magna Carta Act of Persons with Disability: An Investigation of Employment Accommodation of Industry & Its Relationship. *interaction*, 5(7).
- [13] Karlsudd, P. (2020). Looking for special education in the Swedish after-school leisure program construction and testing of an analysis model. *Education Sciences*, 10(12), 359.
- [14] Kennewell, E., Curtis, R. G., Maher, C., Luddy, S., & Virgara, R. (2022). The relationships between school children's wellbeing, socio-economic disadvantage and after-school activities: a cross-sectional study. *BMC pediatrics*, 22(1), 297.
- [15] Kreski, N. T., Riehm, K. E., Cerdá, M., Chen, Q., Hasin, D. S., Martins, S. S., ... & Keyes, K. M. (2023). Parenting practices and adolescent internalizing symptoms in the United States, 1991–2019. *Journal of Adolescent Health*, 72(2), 189–196.
- [16] Lax, Y., Brown, S. N., Silver, M., & Brown, N. M. (2021). Associations between participation in after-school activities, attention-deficit/hyperactivity disorder severity, and school functioning. *Journal of Developmental & Behavioral Pediatrics*, 42(4), 257–263.
- [17] Li, X., & Wu, H. (2025). Parental satisfaction with after-school child care services in urban public elementary schools in China: an evaluation of service effectiveness. *Early Child Development and Care*, 1–23.
- [18] Milton, A. C., Stewart, E., Ospina-Pinillos, L., Davenport, T., & Hickie, I. B. (2021). Participatory design of an activities-based collective mentoring program in after-school care settings: connect, promote, and protect program. *JMIR Pediatrics and Parenting*, 4(2), e22822.
- [19] Ndlovu, M., & Simba, P. (2021). Quality elements of after-school programmes: A case study of two programmes in the Western Cape province of South Africa. *South African Journal of Education*, 41(3).
- [20] Olive, C., McCullick, B. A., Tomporowski, P., Gaudreault, K. L., & Simonton, K. (2020). Effects of an after-school program focused on physical activity and social-emotional learning. *Journal of Youth Development*, 15(6), 292–305.
- [21] Orr, K., Wright, F. V., Grassmann, V., McPherson, A. C., Faulkner, G. E., & Arbour-Nicitopoulos, K. P. (2021). Children and youth with impairments in social skills and cognition in out-of-school time inclusive physical activity programs: A scoping review. *International journal of developmental disabilities*, 67(2), 79–93.
- [22] Pan, S., Liu, Z., Han, Y., Zhang, D., Zhao, X., Li, J., & Wang, K. (2024). Using the Pearson's correlation coefficient as the sole metric to measure the accuracy of quantitative trait prediction: is it sufficient?. *Frontiers in Plant Science*, 15, 1480463.
- [23] Philp, K. D., & Gill, M. G. (2020). Reframing after-school programs as developing youth interest, identity, and social capital. *Policy Insights from the Behavioral and Brain Sciences*, 7(1), 19–26.
- [24] Ramer, J. D., Santiago-Rodriguez, M. E., Rusch, D. B., Mehta, T. G., Cua, G. E., Frazier, S. L., ... & Bustamante, E. E. (2024). Engagement in sedentary and physically active after-school programs among African American children with ADHD and Disruptive Behavior Disorders. *Journal of Sport Rehabilitation*, 34(1), 4–13.
- [25] Saadu, U. T. (2023). Impact of after-school sports programs on the mental health of primary school pupils. *ASEAN Journal of Community and Special Needs Education*, 2(2), 81–90.
- [26] Veldman, S. L., Jones, R. A., Stanley, R. M., Cliff, D. P., Vella, S. A., Howard, S. J., ... & Okely, A. D. (2020). Promoting physical activity and executive functions among children: A cluster randomized controlled trial of an after-school program in Australia. *Journal of Physical Activity and Health*, 17(10), 940–946.
- [27] Violon, J., & Violon, M. (2024). Analyzing the Impact of RA 10533 on Implementing K-12 Curriculum. *Research Ethics: Journal of Multidisciplinary Research*, 2(3).