



Survey of Private Speech-Language Rehabilitation Institutions in Korea

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Purpose: This unique study aims to comprehensively understand the status and actual conditions of private speech-language rehabilitation institutions. It will provide foundational data for accreditation evaluations and operational standards, ultimately contributing to the job satisfaction of speech-language pathologists (SLPs) and improving service quality.

Methods: The survey items consisted of 10 questions on the general characteristics of the operators and 18 questions related to the operation of the institutions. The questions related to operation included size, characteristics of the clients, services provided and their costs, voucher services, and operational status. The survey was conducted and analyzed using Google Forms, targeting 89 operators of private speech-language therapy institutions nationwide.

Results: The operators, who were mostly first-class certified, held a master's degree or higher and had over 10 years of experience in speech therapy. The institutions typically had 2 to 5 SLPs, an area of 99 to 165 square meters, an average revenue of 30 to 50 million KRW, a total of 51 to 100 clients, and an average of 101 to 103 speech therapy sessions per month. The clients were mostly children with language development disorders and pre-school-aged children. The services provided were in the sequence of speech therapy, play therapy, and art therapy.

Conclusions: Establishing operational standards and conducting accreditation evaluations are necessary to provide high-quality service and improve the operational capabilities of private speech-language rehabilitation institutions. Additionally, regular surveys should be undertaken to identify and analyze changes.

Keywords: Survey, Private language rehabilitation institutions, Operational status, Rehabilitation services provided, Cost of speech therapy per session



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INTRODUCTION

In 2012, the speech-language pathologist certification was transitioned from a private to a national qualification. Since then, a national exam has been conducted every December, and in 2023, 710 individuals passed the first-class certification [1], and 1,167 individuals passed the second-class accreditation [2]. As of 2024, the number of speech-language pathologists (SLPs) is approximately 15,000 [3].

According to the 2016 nationwide survey conducted by The Korean Association of Speech-Language Pathologists (KSLP), 54% of certified SLPs were employed in private speech-language rehabilitation institutions, followed by 17% in social welfare facilities, 12% in hospitals, and 11% in educational and childcare institutions [4]. The 2022 survey on the status of speech-language pathologists also showed that 53.4% were employed

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in private speech-language rehabilitation institutions, followed by 20.4% in hospitals, 15.8% in social welfare facilities, and 7% in educational and childcare institutions [5]. Studies by Kwon [6], Kim et al. [7], Lee [8], and Chang et al. [9] also showed that the proportion of SLPs working in private speech-language rehabilitation institutions was the highest. This contrasts with the 2022 ASHA survey, where 50.3% of members worked in educational facilities and 41.9% in healthcare facilities, with only 2.5% of SLPs working in AUD or SLP offices [10].

Unlike in the United States, many SLPs in Korea work in private speech-language rehabilitation institutions. Despite this, domestic research chiefly focuses on job roles [11], competencies [12], stress [13], job postings [7,9], voucher service providers [14], and the status of SLPs [3,5]. There is a lack of research on the status of speech-language therapy institutions. Research on speech-language therapy institutions mainly focuses on voucher service providers [14,15], and there is almost no research on the status of private speech-language rehabilitation institutions where most SLPs work, except for studies on the perception of qualification requirements for institution directors [16].

Examining the operational environment of private speech-language rehabilitation institutions, which occupy a large percentage of jobs in Korea, will help improve the working conditions of SLPs and foster competitive speech-language rehabilitation institutions. Furthermore, it will enhance the quality and professionalism of speech therapy services.

Therefore, this study aims to provide foundational data for accreditation evaluations and operational standards, and to utilize it in policy proposals for speech-language pathologists by investigating the operators, scale, client characteristics, rehabilitation services and their costs, voucher services, and operational status of private speech-language rehabilitation institutions.

METHODS

Development of a survey questionnaire

This survey consists of two parts: 10 general questions and 18 questions related to the operation of private speech-language rehabilitation institutions (including total number of clients, number of clients receiving speech therapy, types of speech-language disorders, age groups, average number of sessions per month, average number of speech therapy sessions, areas of therapy, cost per speech therapy session, cost of other ther-

Table 1. Questionnaire contents

Contents	Items
Basic questions (10 questions)	Local branch Sex Age Certificate type Education Career Number of SLPs in the institution Number of other clinicians in the office Administrative personnel Role in the institution
Key questions (18 questions)	
Clients (6 questions)	Number of total clients Number of total speech therapy clients most & second most common client's type most & second most common client's age group
Operations (12 questions)	Number of total sessions per month (average) Number of speech therapy sessions per month (average) Areas of therapy Cost for speech therapy per session Cost for other therapies per session Voucher type Type of evaluation & assessment Cost for evaluation & assessment related to speech therapy Cost for evaluation & assessment related to other services Total area Tax type Business type Average month sales Operation period (year)

apies, types of vouchers provided, evaluations, cost of speech-language assessment, cost of psychological assessment, total area, tax type, and type of institution operation). The validity of the survey items was reviewed by three first-class SLPs who have been operating private speech-language rehabilitation institutions for over 10 years. A content validity survey was conducted using a 5-point Likert scale. Each item in the survey was adopted if it scored 4 points or higher. The final survey was completed after modifications and improvements following the first preliminary test (Table 1).

Participants

The study was conducted from March 20 to April 19, 2024, using a Google survey targeting operators of private speech-lan-

guage rehabilitation institutions nationwide. A total of 89 participants responded. Table 2 shows the general information of the study subjects.

Statistics

This study conducted a descriptive statistical analysis using SPSS (version 27.0) on the costs, number of sessions, therapy and assessment areas, vouchers, facility area, tax type, and operational type related to the clients and operations of private speech-language rehabilitation institutions. Chi-square tests and asymptotic tests were used to analyze the regional differences in cost per session for speech therapy, voucher type and number of speech therapy clients. All independent and dependent variables were composed of nominal scales, and the significance level was verified at 0.05.

RESULTS

General characteristics of private speech-language rehabilitation institution operators

As shown in Figure 1, out of 89 respondents, 78 (87.6%) were institution directors, and 11 (12.4%) were managers. The Incheon-Gyeonggi branch had the highest representation at 25.8%, followed by the Seoul branch and the Busan-Ulsan-Gyeongnam branch at 19.1% and the Gwangju-Honam branch and the Daegu-Gyeongbuk branch at 10.1%.

Most respondents were female (87.6%), and 64% held a first-class certification, which was more than those with a second-class certification. The most common age group was the 30s (38.2%), followed by the 40s and 50s, with the 20s and 60s each accounting for 3.4%. In terms of education, none had an associate degree, 56.2% had a master's degree, and 19.1% each had completed a doctoral program or had a bachelor's degree, making 77.7% of the operators and managers of private speech-language rehabilitation institutions holding a master's degree or higher. The experience of SLPs was mostly between 15 to 20 years (31.5%), followed by 10 to 15 years (29.2%) and 5 to 10 years (21.3%). 60.7% did not have dedicated administrative staff, compared to 39.3% who did. The number of SLPs was mostly between 2 to 5, with 20.2% having only one, making up 80.9% with five or fewer. The number of therapists excluding SLPs was also mostly between 2 to 5 (44.9%), with 30.3% having only one, making up 75.2% with five or fewer.

Institution size

Indicators to measure an institution's size include total area

Table 2. Demographic information of participants (N=89)

Variables	N (%)
Branch	
Gangwon	3 (3.4)
Gwangju-Honam	9 (10.1)
Daegu-Gyeongbuk	9 (10.1)
Daejeon-Chungcheong	8 (9.0)
Busan-Ulsan-Gyeongnam	17 (19.1)
Seoul	17 (19.1)
Incheon-Gyeonggi	23 (25.8)
Jeju	3 (3.4)
Sex	
Male	11 (12.4)
Female	78 (87.6)
Age (yr)	
Less than 30	3 (3.4)
30-39	34 (38.2)
40-49	25 (28.1)
50-59	24 (27.0)
More than 60	3 (3.4)
SLP certification type	
First-class national certificate	57 (64.0)
Second-degree national certificate	32 (36.0)
Education	
University	17 (19.1)
Master candidate	2 (2.2)
Master degree	50 (56.2)
Doctoral candidate	17 (19.1)
Doctoral degree	3 (3.4)
Career as speech-language pathologists (yr)	
1-4	5 (5.6)
5-9	19 (21.3)
10-14	26 (29.2)
15-19	28 (31.5)
More than 20	11 (12.4)
Number of SLPs in the institution	
1	18 (20.2)
2-5	54 (60.2)
6-10	13 (14.6)
11-15	3 (3.4)
More than 16	1 (1.1)
Number of other therapists, excluding SLPs in the institution	
1	27 (30.3)
2-5	40 (44.9)
6-10	15 (16.9)
11-15	5 (5.6)
More than 16	2 (2.2)
Administrative personnel in the institution	
Yes	35 (39.3)
No	54 (60.7)
Role in the institution	
CEO	78 (87.6)
Manager	11 (12.4)

(exclusive area), number of clients, and average monthly revenue. Table 3 shows the total area of the institution, Table 4 shows the average income, and Table 5 shows the total number of users.

The total exclusive area of private speech-language rehabilitation institutions was most commonly between 99 and 165 square meters, with 40 institutions (44.9%). This was followed by 19 institutions (21.3%) with an area between 165 and 330 square meters, 9 institutions (10.1%) with an area between 66 and 99 square meters, 4 institutions (4.5%) with an area of 330 square meters or more, and 3 institutions (3.4%) with an area of less than 33 square meters.

The average monthly revenue was most commonly be-

Table 3. Total area

Total area	N (%)
Less than 33 m ²	3 (3.4)
33-66 m ²	9 (10.1)
66-99 m ²	14 (15.7)
99-165 m ²	40 (44.9)
165-330 m ²	19 (21.3)
More than 330 m ²	4 (4.5)
Total	89 (100)

Table 4. Average month sales

Average month sales	N (%)
Less than 5,000,000 won	12 (13.5)
5,000,000-10,000,000 won	16 (18.0)
10,000,000-20,000,000 won	22 (24.7)
20,000,000-30,000,000 won	14 (15.7)
30,000,000-50,000,000 won	24 (27.0)
More than 50,000,000 won	1 (1.1)
Total	89 (100)

Table 5. Total client number

Total client number	N (%)
Less than 10 persons	2 (2.2)
10-30 persons	25 (28.1)
31-50 persons	8 (9.0)
51-100 persons	30 (33.7)
101-150 persons	13 (14.6)
151-200 persons	6 (6.7)
More than 200 persons	5 (5.6)
Total	89 (100)

tween 30 and 50 million KRW, with 24 institutions (27.0%). This was followed by 22 institutions (24.7%) with a revenue between 10 and 20 million KRW, 16 institutions (18.0%) with a revenue between 5 and 10 million KRW, 14 institutions (15.7%) with a revenue between 20 and 30 million KRW, 12 institutions (13.5%) with a revenue of less than 5 million KRW, and 1 institution (1.1%) with a revenue of more than 50 million KRW.

Figure 1 shows the total number of subjects and the total number of subjects receiving speech therapy. The total number of subjects using the institutions was highest at 33.7% (30 institutions) for 51-100 people, followed by 28.1% (25 institutions) for 10-30 people, and 9.0% (8 institutions) for 31-50 people. The number of subjects receiving speech therapy was highest at 31.5% (28 institutions) for 10-30 people, followed by 29.2% (26 institutions) for 51-100 people, and 21.3% (19 institutions) for 31-50 people.

To examine the number of speech therapy clients by branch, the Chi-square test results showed no significant difference in the number of clients by region of the private speech rehabilitation institutions ($\chi^2 = 40.64, p = 0.53$) (Figure 2).

The average number of monthly sessions in private speech-language rehabilitation institutions was most commonly between 101 and 300 hours, with 31 institutions (34.8%). This was followed by 21 institutions (23.6%) with 301 to 700 hours and 17 institutions (19.1%) with 100 hours or less. Similarly, the average number of speech therapy sessions per month was most commonly between 101 and 300 hours, with 40 institutions (44.9%). This was followed by 23 institutions (25.8%) with 100 hours or less, and 17 institutions (19.1%) with 301 to 700 hours (Figure 3).

Clients receiving speech therapy

Language development disorders were the most prevalent

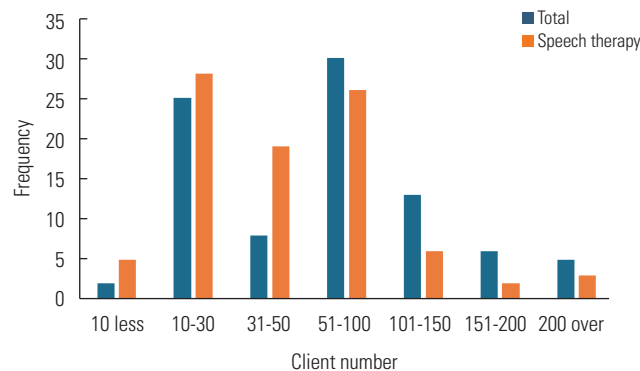


Figure 1. Total number of subjects and speech therapy subjects.

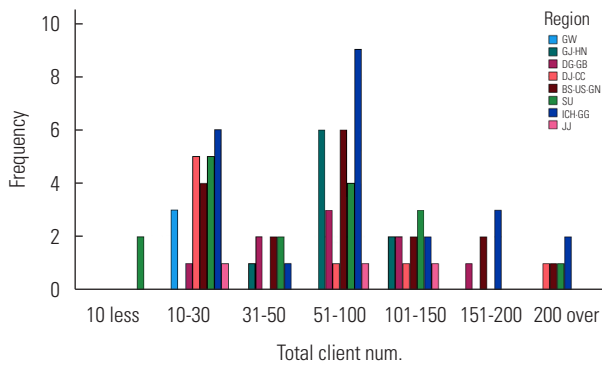


Figure 2. Number of speech therapy subjects across the regions. GW, Gangwon; GJ·HN, Gwangju·Honam; DG·GB, Daegu·Gyeongbuk; DJ·CC, Chungcheong; BS·US·GN, Busan·Ulsan·Gyeongnam; SU, Seoul; ICH·GG, Incheon·Gyeonggi; JJ, Jeju.

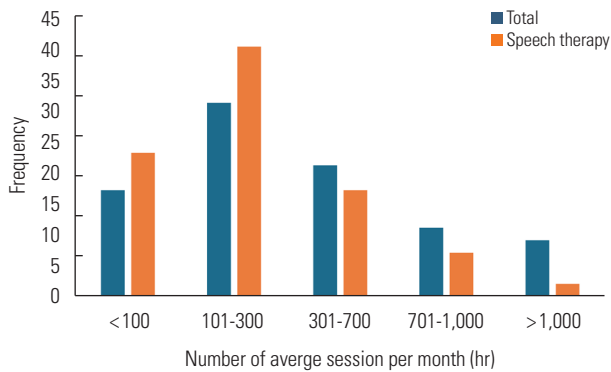


Figure 3. Average session number of total and speech therapy.

among the individuals seeking services at speech-language rehabilitation centers, accounting for 96.6% of cases across 86 out of 89 institutions. The second most common disorders were articulation and phonological disorders, observed in 83 institutions (93.3%).

Among individuals with language disorders, the most common age group was preschool (ages 3-7), accounting for 68.5% (61 institutions), followed by school-aged children at 23.6% (21 institutions). The second most prevalent age group consisted of school-aged children, with 56.2% (50 institutions), while preschool-aged children constituted 29.2% (26 institutions) (Table 6).

Treatment services in the private practice

In private speech-language rehabilitation centers, the most provided therapy service is speech therapy (88 centers, 98.9%), followed by play therapy (50 centers, 56.2%), art therapy (49 centers, 55.1%), cognitive therapy (48 centers, 53.9%), group therapy (45 centers, 50.6%), sensory integration therapy

Table 6. Demographic information of subjects receiving speech therapy

Variables	N (%)
Most frequently treated disorder type	
Language developmental disorders	86 (96.6)
Articulating and phonological disorders	2 (2.2)
Fluency disorders	1 (1.1)
Second frequently treated disorder type	
Articulating and phonological disorders	83 (93.3)
Language developmental disorders	3 (3.4)
Fluency disorders	3 (3.4)
Most frequently Ages	
Preschool (3-7 yr old)	61 (68.5)
School-aged	21 (23.6)
Infant and toddlers	7 (7.9)
Second frequently Ages	
School-aged	50 (56.2)
Preschool (3-7 yr old)	26 (29.2)
Infant and toddlers	10 (11.2)
Total	89 (100)

(37 centers, 41.6%), and music therapy (11 centers, 12.4%). Some centers offer other services, such as drama therapy, behavior therapy, applied behavior analysis, psychomotor therapy, family play, adult counseling, relationship therapy, physical therapy, occupational therapy, exercise rehabilitation, and special physical education (Figure 4).

In the evaluations conducted by private speech-language rehabilitation institutions, language assessments were the most common, performed by 87 institutions (97.8%). This was followed by emotional assessments by 59 institutions (66.3%), intelligence assessments by 45 institutions (50.6%), and sensory-motor development assessments by 37 institutions (41.6%). Other assessments included comprehensive cognitive assessments, personality assessments, and vocational aptitude assessments (Figure 5).

The cost per session for speech therapy was highest in 22 institutions (24.7%) at 45,000 to 50,000 KRW, followed by 18 institutions (20.2%) at 50,000 to 55,000 KRW, 16 institutions (18.0%) at 55,000 to 60,000 KRW, 14 institutions (15.7%) at 40,000 to 45,000 KRW, 11 institutions (12.4%) at over 65,000 KRW, 7 institutions (7.9%) at 60,000 to 65,000 KRW, and 1 institution (1.1%) at under 40,000 KRW (Table 6).

The cost for treatments other than speech therapy was highest in 22 institutions (24.7%) at 50,000 to 55,000 KRW, followed by 17 institutions (19.1%) each at 45,000 to 50,000 KRW

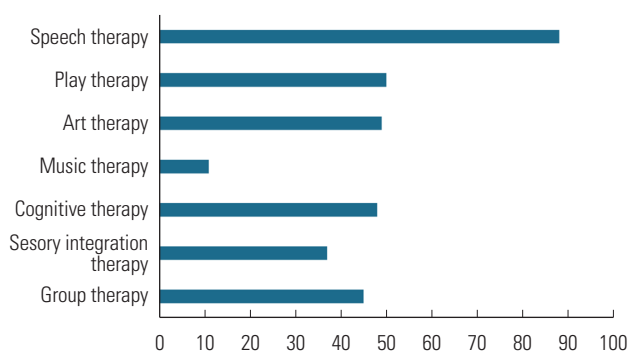


Figure 4. Areas of treatment provided.

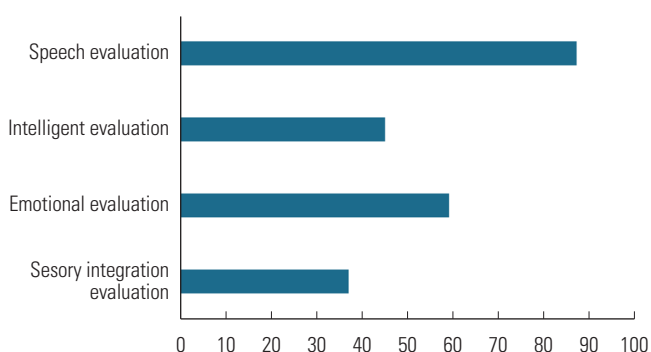


Figure 5. Areas of evaluation provided.

and 55,000 to 60,000 KRW, 14 institutions (15.7%) at over 65,000 KRW, 11 institutions (12.4%) at 60,000 to 65,000 KRW, 6 institutions (6.7%) at 40,000 to 45,000 KRW, and 2 institutions (2.2%) at under 40,000 KRW (Table 7).

The cost of language assessments was most frequently between 50,000 and 100,000 KRW at 42 institutions (47.2%), followed by 110,000 to 150,000 KRW at 19 institutions (21.3%), less than 50,000 KRW at 16 institutions (18.0%), 160,000 to 200,000 KRW at 7 institutions (7.9%), and over 210,000 KRW at 5 institutions (5.6%) (Table 6).

For other assessments besides language assessments, the cost was most frequently between 50,000 and 100,000 KRW at 30 institutions (33.7%), followed by 110,000 to 150,000 KRW at 17 institutions (19.1%), 210,000 to 300,000 KRW at 13 institutions (14.6%), less than 50,000 KRW at 10 institutions (11.2%), 160,000 to 200,000 KRW at 9 institutions (10.1%), 310,000 to 400,000 KRW at 7 institutions (7.9%), and over 410,000 KRW at 3 institutions (3.4%) (Table 6).

To examine the cost per session of speech therapy by branch, the Chi-square test results showed that the cost of treatment according to the region of the private speech rehabilitation institution was significantly different ($\chi^2=85.29$,

Table 7. Cost of treatment & evaluation service

Variables	N (%)
Unit cost per speech therapy session (won)	
Less than 40,000	1 (1.1)
40,000-45,000	14 (15.7)
45,000-50,000	22 (24.7)
50,000-55,000	18 (20.2)
55,000-60,000	16 (18.0)
60,000-65,000	7 (7.9)
More than 65,000	11 (12.4)
Unit cost per other therapy session (won)	
Less than 40,000	2 (2.2)
40,000-45,000	6 (6.7)
45,000-50,000	17 (19.1)
50,000-55,000	22 (24.7)
55,000-60,000	17 (19.1)
60,000-65,000	11 (12.4)
Less than 65,000	14 (15.7)
Speech evaluation cost (won)	
Less than 50,000	16 (18.0)
50,000-100,000	42 (47.2)
110,000-150,000	19 (21.3)
160,000-200,000	7 (7.9)
More than 210,000	5 (5.6)
Other evaluation cost (won)	
Less than 50,000	10 (11.2)
50,000-100,000	30 (33.7)
110,000-150,000	17 (19.1)
160,000-200,000	9 (10.1)
210,000-300,000	13 (14.6)
310,000-400,000	7 (7.9)
Less than 410,000	3 (3.4)
Total	89 (100)

$p < 0.001$) (Figure 6).

Voucher type

Voucher services conducted by private speech-language rehabilitation institutions are as follows: Educational Support Office Therapy Support Services with 69 institutions, Developmental Rehabilitation Services with 63 institutions, Child and Adolescent Psychological Support Services with 58 institutions, Dyslexia Student Support Services with 23 institutions, Language Development Support Services with 21 insti-

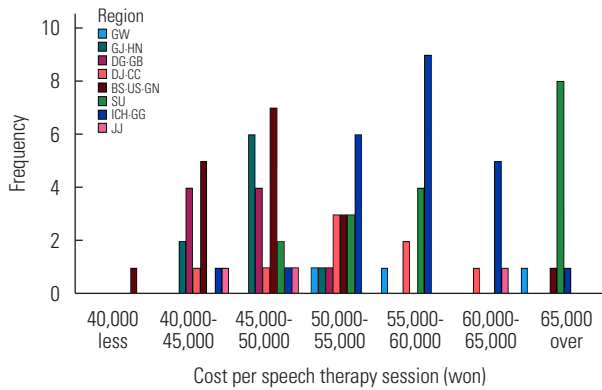


Figure 6. Cost of speech therapy across the regions. GW, Gangwon; GJ·HN, Gwangju·Honam; DG·GB, Daegu·Gyeongbuk; DJ·CC, Chungcheong; BS·US·GN, Busan·Ulsan·Gyeongnam; SU, Seoul; ICH·GG, Incheon·Gyeonggi; JJ, Jeju.

tutions, Youth Psychological Support Services with 8 institutions, Adult Language and Cognitive Integrated Intervention Services with 6 institutions, After-School Activity Services with 6 institutions, Daytime Activity Services with 2 institutions, and AAC Intervention Services with 1 institution. Other services include Our Family Integrated Psychological Support Services, Developmental Disability Parent Psychological Counseling Services, Borderline Student Learning Support Services, Dream Start Support Services, Wee Start Support Services, Multicultural Family Language Support Services, Customized Exercise Services for the Disabled, and Severe Disability Support Services (Figure 7).

To examine the voucher type by region, a chi-square test was conducted, and the results showed that there were significant differences by region in the Child and Adolescent Psychological Support Service ($\chi^2 = 16.35, p < 0.05$), Education Support Office Treatment Support Service ($\chi^2 = 19.86, p < 0.05$), and Dyslexia Student Support Service ($\chi^2 = 16.17, p < 0.05$).

Business registration

The tax types of private speech-language rehabilitation institutions were mostly tax-exempt businesses, with 61 institutions (68.5%). General taxable businesses accounted for 16 institutions (18.0%) and simplified taxable businesses for 12 institutions (13.5%).

In terms of operation types, individual businesses were the most common, with 82 institutions (92.1%), followed by corporate businesses with 6 institutions (6.7%), and university-affiliated institutions with 1 institution (1.1%).

Regarding the duration of operation, 32 institutions (36.0%)

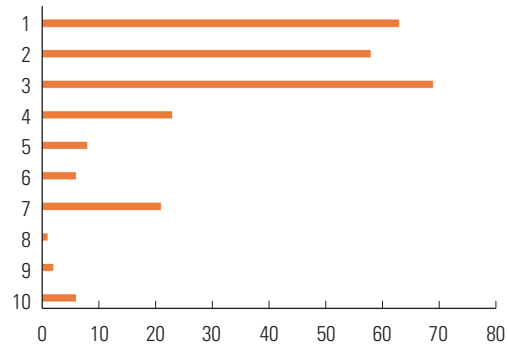


Figure 7. Type of vouchers provided by private practice (1=Developmental Rehabilitation Service, 2=Child and Adolescent Psychological Support Service, 3=Education Support Office Treatment Support Service, 4=Dyslexia Student Support Service, 5=Youth Psychological Support Service, 6=Adult Language Cognitive Integrated Intervention Service, 7=Language Development Support Service, 8=AAC Intervention Service, 9=Weekly Activity Service, 10=After-School Activities Services).

Table 8. Demographic information of business registration

Variables	N (%)
Tax type	
Tax-free	61 (68.5)
Simplified taxation	12 (13.5)
General taxation	16 (18.0)
Operation Type	
Individual business	82 (92.1)
Corporate business	6 (6.7)
University-affiliated institution	1 (1.1)
Operation period	
Less than 1 year	9 (10.1)
1-5 year	32 (36.0)
5-10 year	27 (30.3)
10-15 year	8 (9.0)
15-20 year	7 (7.9)
More than 20 year	6 (6.7)
Total	89 (100)

had been operating for less than 1 to 5 years, 27 institutions (30.3%) for 5 to 10 years, 9 institutions (10.1%) for less than 1 year, 8 institutions (9.0%) for 10 to 15 years, 7 institutions (7.9%) for 15 to 20 years, and 6 institutions (6.7%) for more than 20 years (Table 8).

DISCUSSION

This study targets heads and managers of private speech rehabilitation institutions. It covers general operator informa-

tion, number of children treated, type of language disorder, average sessions, treatment and evaluation areas and unit price, voucher type, operating area, taxation, and operation type. By investigating sales, among several factors, we identified the current status of private language rehabilitation institutions in Korea. The discussion and conclusion based on the analysis results are as follows.

First, looking at the clinical experience of 89 institutions operating private language rehabilitation institutions, 15 to 19 years ranked the highest at 31.5% in 28 institutions, 10 to 14 years at 29.2% in 26 institutions, and 5 to 9 years at 29.2% in 26 institutions. Nineteen institutions or 21.3% followed this. This is similar to the study by Kim et al. [16], which showed that the qualifications for private practice considered by speech rehabilitation therapists were the highest at 50.3%, and the study by Park [17] with 50.3% of respondents having 7 to 10 years of experience. The results were consistent.

Regarding educational background, master's degrees were the most common at 50 institutions (56.2%), and master's degrees or higher were held at 70 institutions (78.7%). As for the level of national certification, 57 institutions were at Level 1, accounting for 64.0%. The age of respondents running institutions at 34 organizations (38.2%) is between 30 and 39 years old, 25 organizations (28.1%) between 40 and 49 years old, and 24 organizations (27.0%) between 50 and 59 years old. Only 3.4% were under the age of 30. It also met the conditions mentioned in the study by Kim et al., which are having a master's degree or higher (Level 1), and being in their 30s or older [16].

Second, the exclusive area of 99-165 m² was the most common at 40 institutions (44.9%), followed by 165-330 m² at 19 institutions (21.3%) and 66-99 m² at 14 institutions (15.7%). The number of institutions with an exclusive area of 99 m² or more was 70.7%, and there were 3 institutions with an area of less than 33 m². If the exclusive area is less than 33 m², excluding the waiting space, the individual treatment rooms are 1 to 2 single treatment rooms.

The average monthly sales was less than 30-50 million KRW at 24 organizations (17.0), followed by 10-20 million KRW at 22 organizations (24.7%), 5-10 million KRW at 16 organizations (18.0%), and 20-30 million KRW at 24 organizations (17.0). There were 14 organizations (15.7%) worth 10 million won, 1 institution worth more than 50 million won, and 12 institutions (13.5%) worth less than 5 million won.

The total number of subjects was the largest at 30 institutions (33.7%) with 51 to 100 people, followed by 25 institutions

(28.1%) with 10 to 30 people, and 13 (14.6%) with 101 to 150 people. There were 24 cases with more than 100 subjects, or 26.9% of the total, and two institutions (2.2%) with fewer than 10 subjects.

Among all subjects, the most significant number of speech therapy subjects was 10 to 30 people at 28 institutions (31.5%), followed by 51 to 100 people at 26 institutions (29.2%), and 31 to 50 people at 19 institutions (21.3%). The number of speech therapy subjects was 100 or more in 11 institutions, accounting for 12.3% of the total, and 3 of these institutions reported more than 200 people. Five institutions had less than 10 speech therapy subjects, accounting for 5.6%. There appeared to be no significant difference in the number of speech therapy subjects according to branch ($p=0.53$).

The number of speech therapists was 2 to 5 in 54 institutions (60.2%), and 1 in 18 institutions (20.2%). Excluding speech therapists, the largest number of therapists was 2 to 5 at 40 institutions (44.9%), and there was also 1 at 27 institutions (30.3%). More institutions were without dedicated administrative personnel at 54 (60.7%).

The average number of total sessions and speech therapy sessions per month ranged from 101 to 300 hours, with the largest tally at 31 institutions (34.8%) and 40 institutions (44.9%), respectively.

As for the type of taxation, tax-exempt businesses accounted for 68.5% (61 organizations), and for the kind of operation, individual businesses accounted for the majority at 92.1% (82 organizations). As for the period of operation, 36.0% (32 institutions) had 1 to 5 years, 30.3% (27 institutions) 5 to 10 years, and 6 institutions (6.7%) 20 years or more.

Third, the most common type of disability among those visiting language rehabilitation institutions was language development disorder, overwhelmingly at 96.6% (86 institutions), and the second was articulation disorder at 93.3% (83 institutions). This is consistent with the research results of Lee and Choi [3] and Lee and Lee [5]. Among those receiving speech therapy, the largest age group was preschool children at 68.5%, and the second largest was school-aged children at 56.2%.

The treatment areas provided are speech therapy at 98.9%, play therapy at 56.2%, art therapy at 55.1%, cognitive therapy at 53.9%, group therapy at 50.6%, sensory integration therapy at 41.6%, and music therapy at 12.4%. This was similar to the number of users of developmental rehabilitation service vouchers in that order: speech therapy, art therapy, cognitive therapy, and play therapy [14,18]. The evaluation by the pro-

vider was in the following order: language test at 97.8%, intelligence test at 50.6%, and sensorimotor test at 41.6%.

The unit cost of speech therapy per session was 45,000 to less than 50,000 won at 24.7% (22 institutions), followed by 50,000 to less than 55,000 won at 20.2% (18 institutions), 55,000 to less than 60,000 won at 18.0% (16 institutions), and 40,000 to less than 40,000 won. Less than 45,000 won was 15.7% (14 institutions), more than 65,000 won was 12.4% (11 institutions), and 60,000 to less than 65,000 won was 7.9% (7 institutions). The unit cost of treatment other than speech therapy was 50,000 to 55,000 won (24.7%), 55,000 to 60,000 won and 45,000 to 50,000 won (19.1%), more than 65,000 won (15.7%), 60,000 to 65,000 won (12.4%), and 40,000 won to 45,000 won (6.7%). This was consistent with the results of Lee and Choi [3], which showed that 40,000 to 50,000 won was the most common at 39.2%. Depending on the branch, there was a significant difference in the unit cost of speech therapy ($p < 0.001$).

The cost of a language test was less than 150,000 won (86.5%), and the cost of language evaluation was low at 64% for tests in areas other than language. Low treatment and evaluation costs lead to poor service quality. The low treatment cost is closely related to the therapist's job satisfaction, turnover rate, and quality of service, so appropriate improvement is needed.

Fourth, the voucher services provided by private language rehabilitation institutions include the Office of Education treatment support services (77.5%), developmental rehabilitation services (70.8%), child and adolescent psychological support services (65.2%), dyslexia student support services (25.8%), language development services, support services (23.6%), youth psychological support services (9.0%), adult language and cognitive integrated intervention services (6.7%), after-school activity services (6.7%), daytime activity services (2.2%), and AAC intervention services (1.1%). Of the 89 institutions, 14 (15.7%) did not provide any vouchers.

This study looked at the general characteristics, size, services provided, unit price, and operating type of private language rehabilitation institutions. Private language rehabilitation institutions are where the majority of language rehabilitation workers belong and work. The Korean Language Rehabilitation Association, an incorporated association, is improving the working conditions and environment of private language rehabilitation institutions through the "Good Speech Therapy Room" selection project starting in 2023.

Certification evaluation and improvement of working con-

ditions of private speech rehabilitation institutions are directly related to the quality of service, job environment, and satisfaction of speech therapists working there. This study is significant in identifying the current status of private language rehabilitation institutions for the first time. Based on the results of this study, it is expected that the primary data related to private language rehabilitation institutions can be used as basic data for future language rehabilitation-related policies or improvements. Although this study is meaningful, there are some limitations. Because the analysis was based on the responses of 89 organizations that participated in the survey, caution is needed in generalizing and interpreting the research results. In future research, we suggest conducting regular status surveys to identify and analyze changes in private language rehabilitation institutions.

REFERENCES

1. Korea Health Personnel Licensing Examination Institute. Results of item analysis of the 12th Level 1 Language Rehabilitation Professional National Examination in 2023. <https://www.kuksi-won.or.kr/>.
2. Korea Health Personnel Licensing Examination Institute. Results of item analysis of the 12th Level 2 Language Rehabilitation Professional National Examination in 2023. <https://www.kuksi-won.or.kr/>.
3. Lee EK, Chol SH. Job conditions and practice of private office-based speech-language pathologists in Korea: a cross-sectional survey. *Clinical Archives of Communication Disorders*. 2024;9(1): 1-9.
4. The Korean Association of Speech-Language Pathologists. A complete survey of nationally qualified speech rehabilitation workers in 2016. <https://www.kslp.org/>.
5. Lee MS, Lee EK. A study on the working condition of speech-language pathologists in Korea. *Clinical Archives of Communication Disorders*. 2022;7(1):43-49.
6. Kwon DH. The history of speech pathology in Korea. *The Korean Language and Literature*. 2010;1(10):1-10.
7. Kim HJ, Chang SA, Kim HH, Hwang BM, Choi SH, Park HR, et al. Analysis of speech-language pathologist job postings from 2013 to 2017. *Journal of Speech-Language and Hearing Disorders*. 2018;27(4):167-180.
8. Lee SH. Footsteps and prospects of speech-language pathology and audiology in Korea. *Journal of Communication Sciences & Disorders*. 1999;4(1):5-15.
9. Chang SA, Kim HJ, Choi SH, Hwang BM, Park HJ, Park HR, et al. Job searching and postings for speech-language pathologists in Korea. *Journal of Communication Sciences & Disorders*. 2018;23(2):506-518.
10. American Speech-Language-Hearing Association. 2022 Member

and Affiliate Profile.

11. Kim YT, Kim JO, Jeon HS, Choi HJ, Kim MJ, Kim TW, et al. Job analysis of Korean speech-language pathologist using delphi study. *Journal of Speech-Language and Hearing Disorders*. 2014; 23(3):147-161.
12. Kim SH, Kim WS. A study of the voucher service competency of speech-language pathologists: focused on the ministry of health and welfare. *Journal of Speech-Language and Hearing Disorders*. 2017;26(1):101-111.
13. Park H, Lee MS, Park CH. Job stress factors and turnover of registered voucher language pathologists. *Journal of Speech-Language and Hearing Disorders*. 2013;22(4):227-250.
14. Kim JH, Cho YK, Park JY, Lee EJ. Present status and improvement direction of developmental rehabilitation services based on service and personnel of service providing centers. *The Journal of Developmental Disabilities*. 2014;18(1):1-23.
15. Kim DI, Park JY, Lee JY, Kim MH. The current use of the developmental rehabilitation service providers by children with disabilities. *The Journal of Special Education: Theory and Practice*. 2022; 23(2):177-193.
16. Kim SY, Hwang HJ, Kim JH, Kim SJ. Speech-language pathologists' perception on the qualification criteria and management style of CEOs at newly established speech therapy centers. *Journal of Speech-Language and Hearing Disorders*. 2023;32(2):111-124.
17. Park CH. Investigating perceptions of speech-language therapy in a collaborative team approach to communication disorders. *The Korean Society of Education for Hearing-Language Impairments*. 2020;11(2):21-40.
18. Kim DI, Park JY, Lee JY, Kim MH. The current use of the developmental rehabilitation service providers by children with disabilities. *The Journal of Special Education: Theory and Practice*. 2022; 23(2):177-193.