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청소년 말더듬 중재 프로그램 콘텐츠 개발을 위한 설문 연구

Survey for the Development of the Contents of the Adolescent Stuttering Treatment Program

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Purpose: Adolescent stuttering has different characteristics from that of a child who stutters and that of an adult who stutters. A treatment technique according to the characteristics of these adolescents' stuttering is required. This study aims to investigate the current status and perception of adolescent stuttering treatment and the necessity of factors related to adolescent stuttering treatment for SLP. **Methods:** A questionnaire on adolescent stuttering treatment was conducted for 162 SLPs (42 males, 120 females). The number and percentage of responses for each question was presented, and Chi-square analysis was performed to find out the differences according to gender and qualification levels. The importance was answered on a 7-point scale, and the average for each question was presented. **Results:** The SLPs answered that their adolescent stuttering treatment experience was 44.44% and that there were many male SLPs and first-level SLPs. SLPs said that the adolescent stuttering interventions approached differently compared to adult stuttering interventions were 87.04%, and SLPs with experience in adolescent stuttering interventions responded at a higher rate. The results of the importance of the adolescent stuttering treatment factor were as follows: mind treatment, parent treatment, teacher treatment, intrinsic, and extrinsic treatment factor. Overall, the importance was rated high. **Conclusions:** This study confirmed the necessity of adolescent stuttering intervention. Based on the results of this study, it is expected that the development of an intervention program suitable for the characteristics of adolescent stuttering will continue.

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Keywords : Adolescents stuttering treatment, mind treatment, parent treatment, teacher treatment

목적: 청소년 말더듬의 특성은 아동이나 성인과는 다르다. 따라서 청소년의 특성에 맞는 중재 프로그램의 개발이 절실히 필요하다. 본 연구는 국내 언어치료사들의 청소년 말더듬 중재의 현황과 인식, 청소년 말더듬 중재 프로그램에 포함될 요소들의 중요도를 알아보고자 하였다. **방법:** 연구대상은 국내 언어재활사 162명(남 42명, 여 120명)을 대상으로 하여 청소년 말더듬 중재에 관한 설문을 실시하였다. 각 문항의 응답수와 백분율을 제시하였고, 성별, 자격급수에 따라 청소년 말더듬 중재 경험의 차이와 청소년 말더듬 중재 경험 유무에 따른 청소년 말더듬 중재의 필요성 인식의 차이를 알아보기 위하여 카이제곱분석을 실시하였다. 청소년 말더듬 치료 요소들의 중요도는 7점 척도로 응답하게 하였고, 대상자들의 평정결과의 평균을 제시하였다. **결과:** 국내 언어치료사의 청소년 말더듬 치료 경험이 있는 경우는 44.44%였고, 남자 언어치료사들의 청소년 말더듬 중재 경험 비율이 여자 언어치료사의 경우보다 높게 나타났고, 1급 언어재활사들의 청소년 말더듬 중재 경험 비율이 2급 언어재활사의 경우보다 높게 나타났다. 87.04%의 언어치료사는 청소년 말더듬 중재가 성인 말더듬 중재와 다르게 접근해야 한다고 응답하였고, 특히, 청소년 말더듬 중재 경험이 있는 언어치료사들이 중재 경험이 없는 언어치료사들보다 동의하는 응답 비율이 더 높게 나타났다. 청소년 말더듬 중재 요소의 중요도에 대한 설문 결과는 마음 중재 요소, 부모 중재 요소, 교사 중재 요소, 내면적 특성 중재 요소, 외현적 특성 중재 요소의 순으로 나타났고, 전반적으로 중요도가 높게 평정되었다. **결론:** 본 연구를 통해 국내 언어치료사들의 청소년 말더듬 치료 현황을 보았고, 청소년 말더듬 중재 프로그램 개발의 필요성을 확인하였다. 또한 청소년 말더듬 중재 요소들 중 특히 중요도가 높게 나타난 내용들을 중심으로 청소년 말더듬의 특성에 맞는 중재 프로그램의 개발이 이어지기를 기대한다.

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검색어 : 청소년 말더듬 중재, 마음 중재, 부모 중재, 교사 중재

Ⅰ. Introduction

It is important to speak fluently in modern society. In the adolescent period of teenagers, in particular, speech fluency such as self-assertion, presentation, and conversation is more important for maintaining academic or peer relationships. In the adolescent period, a complex maturation of physical, neurological, and social development remarkably occurs. Many factors influence the fluent speaker to maintain fluency. Stuttering begins with repetition or prolongation, which progresses to severe blockage, struggle, or avoidance. A child who stutters has little or no awareness of his own speech initially, so no negative emotions or negative self-images are formed until he progresses into adolescence and stuttering becomes more complex and internalized (Guitar, 1998; Shin et al., 2020). Therefore, involuntary stuttering in adolescence can lead to anxiety, frustration, and hostility compared to childhood and adulthood, and it becomes impossible for him to express his own opinion more in a communication situation (Manning, 2013). A type of stuttering begins with repetition in the early stages, followed by prolongation or blockage as the stuttering deepens. Commonly, the main type of adolescent stuttering is blockage (Guitar, 1998); therefore, it is necessary to grasp the extrinsic characteristics of stuttering and the emotional and cognitive characteristics caused by stuttering in order to understand the essential characteristics of adolescents who stutter and to treat them accordingly.

On-site SLP (speech language pathologist) are burdened with the treatment of fluency disorders among the areas of communication disorders, and the reason was perceived as a lack of applicable treatment programs and a lack of experience in cases compared to other communication disorders. Also, applying stuttering treatment to actual subjects is difficult, and the lack of tools to be used in treatment activities creates a high demand for the development of treatment programs for fluency disorders (Chang et al., 2011). Although there are few studies on the effect of the stuttering treatment program published in Korea, the contents and information of the treatment program are mostly provided in text, making them difficult to apply to clinical practice (Kwon et al., 2012), and they are done mainly for children and adults, so there are limitations in applying them to adolescent who stutter (Chang et al., 2019).

The adolescent who stutter has different characteristics from that of a child whose stuttering period is relatively short after stuttering occurrence and whose language environment has a significant effect and that of an adult whose stuttering is advanced and fixed (Shin et al., 2019a, 2019b). This adolescent who stutters is also in the last step where stuttering can be treated before it becomes chronic when it enters adulthood. Adolescents with higher severity and anxiety of stuttering are predicted to have a more negative consequent experience of stuttering. In a study of adolescent stuttering, peer adolescents and teachers or parents lack awareness of stuttering, and they consider that stuttering itself is not sufficient reason to receive treatment. The stuttering adolescents perceive their own communication skills to be lower than the average, their communication apprehension is higher, and the adolescents who stutter are more likely to be teased or bullied than their fluent peers. Also, they say they do not want to talk to others about stuttering. In addition, the stuttering adolescent's family is reported to have difficulty managing high levels of emotional tension, family conflict, and children's frustration. Proper evaluation and treatment for the adolescent who stutter will prevent them from progressing to adults who stutter. However, the existing stuttering evaluation tools and treatment are mainly divided into children and adults. It is general to consider middle school students and older students as one group (adults) and evaluate or treat them (Riley, 2009; Sim et al., 2010). However, middle and high school students who are adolescents have a school environment, culture, and sensitivity to peer responses different from that of adults, and they are in the period of various psychological changes in the process of their self-identity being established, so the treatment activities and materials should be composed of contents that consider the interests and cultures of adolescents.

While the application of fluency enhancement techniques is also effective for children and adults, it can be difficult for adolescents to treat or participate due to lack of awareness of the motivation and necessity of stuttering treatment, negative prediction of the effectiveness of treatment, and lack of continuous practice time for new speaking techniques because of a burden on academic time. In addition to fluency enhancement techniques and stuttering modification approaches for stuttering, various treatment techniques have been introduced, but many difficulties have been reported in practice (Chang et al., 2019, Shin et al., 2019b). For example, even if the technique of slow speech is highly effective, it can be confusing how much speed needs to be adjusted, or whether all syllables, the beginning of a clause, or the utterances after breathing should be slowed down.

An adolescent who stutters can harbor shame, fear, and anger beyond simple stuttering and anxiety about listeners. It is a normal sentiment for those who have stuttered for several years and have been agitated, rejected, teased and harassed by listeners (Shin et al., 2019a). Recently, studies on social anxiety and social anxiety treatment of stuttering adolescents have been published (Gunn et al., 2019; Nnanani et al., 2019; Mulcahy et al., 2009). Therefore, activities that help them express their feelings about speech, stuttering, and control emotions are needed. Organizing target-oriented treatment activities with emphasis on their own initiatives and responsibilities of adolescent who stutter will increase treatment participation and treatment effectiveness.

Therefore, SLPs should not only improve the speech fluency of adolescents who stutter, but also understand the adolescents' self-identity, attitudes toward stuttering, and variability in emotions, providing balanced treatment that is not biased. In addition, adolescents have a great deal of time to interact with their peers at school, so teachers' perceptions of stuttering and information on fluency enhancement can affect adolescent stuttering. Therefore, adolescent stuttering treatment should take a comprehensive approach, considering not only extrinsic and intrinsic symptoms, but also various developmental and environmental characteristics from a life-cycle perspective.

As a result, this study aims to investigate the current status and perception of adolescent stuttering treatment and the necessity of factors related to adolescent stuttering treatment for SLP. It likewise intends to prepare a clinical basis for the development of a fluency enhancement program and an emotional cognitive support program considering the characteristics of adolescents.

II. Methods

1. Subject

The subjects of this study are 162 speech language pathologists (SLP) working in a private agency in Seoul, Gyeonggi, Daegu, Gyeongbuk, Busan, Gyeongnam, and Jeonnam. The gender of the subjects is 42 males (25.93%) and 120 females (74.07%), 66 of which are in their 20s (40.74%), 63 in their 30s (38.89%), 248 in their 40s (14.81%), and 9 in their 50s (5.56%). The number of SLP qualifications is 78 (48.15%) for the first level qualification and 84 (51.85%) for the second level qualification. Their treatment experience is 27 (16.67%) in less than 3 years, 42 (25.93%) in 3~5 years, 54 (33.33%) in 5~10 years, and 39 (24.075) over 10 years. Among respondents, 126 (77.78%) have stuttering treatment experience. The number of stuttering treatment cases is 54 (33.33%) in 1~3 cases, 30 (18.52%) in 4~6 cases, 12 (7.41%) in 7~10 cases, and 30 (18.52%) in 11 or more cases.

2. Research Tool

The questionnaire of this study is composed of questions about the current status and necessity of adolescent stuttering treatment and elements of adolescent stuttering treatment as a basic study for the development of adolescent stuttering treatment program contents.

In order to understand the status and necessity of developing an adolescent stuttering treatment program, questions are formed about the experiences of adolescent stuttering treatment, the difference between adolescent stuttering treatment and adult stuttering treatment approaches, why adolescent stuttering treatment is needed, and the abilities required of a pathologist who will administer the adolescent stuttering treatment.

In order to investigate the factors that should be included in the adolescent stuttering treatment, a total of 42 questions are created, including 7 mind treatments, 10 intrinsic treatments, 13 extrinsic treatments, 6 parent treatments, and 6 teacher treatments.

3. Data Collection

In order to collect data, an online survey (Google Docs) was conducted from December 2019 to January 2020.

4. Result Analysis

SPSS 20.0 program is used to analyze the collected data. Questions on the current status of adolescent stuttering treatment and questions on the need for adolescent stuttering treatment are presented after finding the number and percentage of respondents. Chi square analysis is conducted to determine whether there is a difference in the experience of stuttering treatment and adolescent stuttering treatment according to the gender and qualification level of the SLP. In addition, Chi square analysis is conducted to see if there is a difference in the perception of the need for adolescent stuttering treatment depending on the experience of adolescent stuttering

treatment. The importance of the adolescent stuttering treatment factor responding on a 7-point scale presents the average of the response scores for each item.

Ⅲ. Results

1. Current Status of Adolescent Stuttering Treatment for SLP

For the questions about the experience of adolescent stuttering treatment, 72 respondents (44.44%) answer that they have treatment experience, and 90 respondents (55.56%) answer that they have no treatment experience. Among those who have had experience with adolescent stuttering treatment, 27.78% answered that they are treated 1 to 3 times, which is the highest, 11.11% answer that they are treated more than 11 times, and 5.56% answer that they are treated 4 to 6 times. In the case where they answer that they have no experience in adolescent stuttering treatment, most (93%) answer that adolescent stuttering is not requested when asked why.

It is examined whether there is a difference between a stuttering treatment experience and an adolescent stuttering treatment experience according to the gender of an SLP (male: 92.9%, female: 72.5%, $p<.001$). It is found that there is a difference in adolescent stuttering treatment experience according to the gender of an SLP (male: 71.4%, female: 35.0%, $p<.001$).

표 1. 언어치료사의 성별에 따른 말더듬 치료 및 청소년 말더듬 치료 경험
Table 1. Stuttering treatment experience and an adolescent stuttering treatment experience according to the gender of an SLP

	Stuttering treatment experience (%)		Adolescent stuttering treatment experience (%)	
	Yes	No	Yes	No
Male	39 (92.9)	3 (7.1)	30 (71.4)	12 (28.6)
Female	87 (72.5)	33 (27.5)	42 (35.0)	78 (65.0)
χ^2	57.533***		60.677***	

***$p<.001$

It is investigated whether there is a difference between the experience of stuttering treatment and the experience of adolescent stuttering treatment according to the qualification level of an SLP (Qualification level 1: 92.3%, Qualification level 2: 64.3%, $p<.001$). There is a difference in the experience of stuttering among adolescents according to the level of qualifications of an SLP (Qualification level 1: 65.4%, Qualification level 2: 25.0%, $p<.001$).

표 2. 언어치료사의 자격 급수에 따른 말더듬 치료 및 청소년 말더듬 치료 경험
Table 2. Stuttering treatment experience and an adolescent stuttering treatment experience according to the qualification level of an SLP

	Stuttering treatment experience (%)		Adolescent stuttering treatment experience (%)	
	Yes	No	Yes	No
Qualification level 1	72 (92.3)	6 (5.7)	51 (65.4)	27 (14.2)
Qualification level 2	54 (64.3)	30 (35.7)	21 (25.0)	63 (75.0)
χ^2	61.238***		64.070***	

***$p<.001$

2. Perception of SLP on Adolescent Stuttering Treatment

For the questions on whether adolescent stuttering treatment should be approached differently compared to adult stuttering treatment, 141 (87.04%) respondents answer yes, but only 21 (12.96%) respondents say otherwise.

Of the 72 SLPs with adolescent stuttering treatment, 69 (95.8%) answer that adolescent stuttering treatment should be approached differently compared to adult stuttering treatment. Of the 90 SLPs with no adolescent stuttering treatment, 72 (80%) answered so.

There was a statistically significant difference in the idea that the treatment of adolescent stuttering should be different from that of adult stuttering depending on the experience of adolescent stuttering. It was found that SLPs with experience of adolescent stuttering treatment agreed at a higher rate that adolescent stuttering treatment should be different from adult stuttering treatment than SLPs with no experience.

표 3. 청소년 말더듬 치료 경험 유무에 따른 청소년 말더듬 중재 필요성 인식
Table 3. Awareness of the need for different interventions of adolescent stuttering according to the experience of adolescent stuttering treatment

		Adolescent stuttering treatment should be approached differently from adult stuttering treatment		χ^2
		Agree	Disagree	
Stuttering treatment experience (%)	Yes	69 (95.8)	3 (4.2)	58.017***
	No	72 (80.0)	18 (20.0)	

***$p<.001$

For the reason why adolescent stuttering treatment should be different from adult stuttering treatment, “because the proportion of negative emotions is large” registers 68.09%, “because they are sensitive to the reaction of friends” takes up 65.96%, and “because the

intrinsic characteristics of the adolescents are different from adults" occupies 59.57%. In addition, there are responses such as "because of lack of motivation to cure," "because it is difficult to induce utterance," and "because the adolescent has insufficient time."

표 4. 청소년 말더듬 치료가 성인 말더듬 치료와 달라야 하는 이유

Table 4. The reasons why adolescent stuttering treatment should be different from adult stuttering treatment

Items	*N* (%)
Because the proportion of negative emotions is large	96 (68.09)
Because they are sensitive to the reaction of friends	93 (65.96)
Because the intrinsic characteristics of the adolescents are different from adults'	84 (59.57)
Because of lack of motivation to cure	39 (27.66)
Because it is difficult to induce utterance	21 (14.89)
Because the adolescent has insufficient time	15 (10.64)
Because the dysfluency characteristics of the adolescents are different from adults	12 (8.51)

For the question about whether the adolescent stuttering treatment program is needed, 100% of respondents answer that it is needed. For the reasons, 66.67% say "because it is difficult to deal with psychological characteristics" and "because it is difficult to induce active participation in treatment activities," with both responses being in the highest rate. The response of around 10% is as follows: "because it is difficult to motivate," "because the language is different from that of a child or adult," "because it is difficult to share empathy," "because treatment activities are not diverse," "because it is difficult to induce utterance," and "because it is difficult to apply treatment techniques."

표 5. 청소년 말더듬 중재 프로그램이 필요한 이유

Table 5. Reasons to develop an adolescent stuttering therapy program

Items	*N* (%)
Because it is difficult to deal with psychological characteristics	108 (66.67)
Because it is difficult to induce active participation in treatment activities	108 (66.67)
Because it is difficult to motivate	51 (31.48)
Because the language is different from that of a child or adult	45 (27.78)
Because it is difficult to share empathy	39 (24.07)
Because treatment activities are not diverse	39 (24.07)
Because it is difficult to induce utterance	21 (12.96)
Because it is difficult to apply treatment techniques	15 (9.26)

For the question about the types of treatment required for the adolescent stuttering treatment program, the "adolescent's cognitive and emotional search and treatment program" is the highest with 77.78%, the "fluency enhancement program" is 35.19%, the "counseling program for parents of adolescents who stutter" is 29.63 %, "stuttering modification program" is 27.78%, and "counseling program for teacher of adolescent who stutter" is 20.37%.

표 6. 청소년 말더듬 중재 프로그램에 필요한 중재의 유형

Table 6. The types of treatment required for the adolescent stuttering treatment program

Items	*N* (%)
Adolescent's cognitive and emotional search and treatment program	126 (77.78)
Fluency enhancement program	57 (35.19)
Counseling program for parents of adolescents who stutter	48 (29.63)
Stuttering modification program	45 (27.78)
Counseling program for teachers of adolescents who stutter	33 (20.37)

For the abilities that a pathologist must have to perform adolescent stuttering treatment, 74.07% is for "skills to deal with negative emotions such as anxiety and fear," 68.52% for "adolescent counseling techniques," and 51.85% for "listening and communication skills" and "clinical beliefs about counseling and treatment techniques," respectively. Furthermore, 48.15% is for "fluency enhancement program implementation ability," and 37.04% for "parent counseling ability" and "the ability to conduct stuttering correction procedures," respectively. In addition, there are responses such as "evidence-based treatment decision ability," "the ability to provide teacher information and request cooperation," "the ability to access teams," and "the ability to conduct group therapy."

표 7. 청소년 말더듬 중재를 실시하기 위하여 치료사가 갖춰야 할 능력

Table 7. Statistics of the language ability of normal children

Items	*N* (%)
Skills to deal with negative emotions such as anxiety and fear	120 (74.07)
Adolescent counseling techniques	111 (68.52)
Listening and communication skills	84 (51.85)
Clinical beliefs about counseling and treatment techniques	84 (51.85)
Fluency enhancement program implementation ability	78 (48.15)
The ability to conduct stuttering correction procedures	60 (37.04)
Parent counseling ability	60 (37.04)
Evidence-based treatment decision ability	57 (35.19)
The ability to provide teacher information and request cooperation	36 (22.22)
The ability to access teams	18 (11.11)
The ability to conduct group therapy	12 (7.41)

3. Importance of Adolescent Stuttering Treatment Factors

Based on the prior research on adolescent stuttering treatment, the responses to the importance of the extracted elements are as follows. The average response is given on a 7-point scale. The importance scales for mental treatment elements are 6.15 to 6.69, indicating that all elements are important for adolescent stuttering treatment. In particular, listening and empathy are rated as significantly important elements.

표 8. 청소년 말더듬 치료의 마음 중재 요소의 중요도

Table 8. The importance scales for mind treatment elements in adolescent stuttering treatment

Mind treatment elements in adolescent stuttering treatment	Importance (mean)
1. Understanding and providing the subject's thoughts and actions	6.67
2. Listening and empathizing	6.69
3. Verbal and nonverbal positive responses	6.48
4. Clarification and expression of the subject's emotions	6.48
5. Expressing one's thoughts about speech and stuttering	6.15
6. Accepting and organizing the subject's feelings	6.19
7. Starting treatment with motivation	6.19
Mean of importance	6.40

The importance scales for intrinsic treatment elements are 5.35 to 6.43. The high importance scale element is negative emotion reduction for stuttering (6.43), positive self-concept formation for speech (6.37), and anxiety reduction due to stuttering (6.35), and the lowest importance scale element is stuttering disclosure (4.70).

표 9. 청소년 말더듬 치료의 내면적 특성 중재 요소의 중요도

Table 9. The importance scales for intrinsic treatment elements in adolescent stuttering treatment

Intrinsic elements in adolescent stuttering treatment	Importance (mean)
8. Exploring negative emotions for stuttering	5.96
9. Negative emotion reduction for stuttering	6.43
10. Exploring word fear and situation fear	6.11
11. Reduced stutter avoidance behavior	6.06
12. Coping with peer teasing	6.08
13. Reduced anxiety caused by stuttering	6.35
14. Improving self-checking ability for negative emotions or cognition	6.19
15. Rational thinking increase about speech and stuttering	6.15
16. Positive self-concept formation for speech	6.37
17. Stuttering disclosure	4.70
Mean of importance	6.04

The result of importance evaluation for extrinsic treatment elements is 5.35 to 6.37, gentle onset technique 6.37, practice applied to various listeners and environments 6.35, self-checking ability to maintain fluency 6.31, speed control technique 6.26, with cancellation, pull-out, and preparatory set 6.24 evaluated as the most important elements. The elements rated as low importance are intentional stuttering (5.35), DAF technique (5.52), proprioception (5.76), and online treatment (5.76).

표 10. 청소년 말더듬 치료의 외현적 특성 중재 요소의 중요도

Table 10. The importance scales for extrinsic treatment elements in adolescent stuttering treatment

Extrinsic treatment elements in adolescent stuttering treatment	Importance (mean)
18. Exploring core behaviors	5.91
19. Exploring escape behaviors	5.96
20. Speech rate regulation technique	6.26
21. Gentle onset technique	6.37
22. Light contact technique	6.07
23. Proprioception	5.76
24. DAF technique	5.52
25. Cancellation, pull-out, and preparatory set	6.24
26. Intentional stuttering	5.35
27. Hierarchy of communication situation	6.20
28. Practice applied to various listeners and environments	6.35
29. Self-checking ability to maintain fluency	6.31
30. Online treatment for maintain fluency	5.76
Mean of importance	6.00

The importance scales for parent treatment elements are 6.20 to 6.59. Treatment element with high importance is to explain positive communication methods between parents and children (6.59), and the question with low importance is to listen to the grievance as parents of stuttering children (6.20).

표 11. 청소년 말더듬 치료의 부모 중재 요소의 중요도

Table 11. The importance scales for parent treatment elements in adolescent stuttering treatment

Parent treatment elements in adolescent stuttering treatment	Importance (mean)
31. Providing parents with information about the causes and characteristics of stuttering	6.24
32. Providing parents with information about stuttering treatment	6.35
33. Identifying the factors that interfere with fluency in family communication	6.48
34. Explaining the role of the family in increasing fluency	6.41
35. Explaining positive parents-children communication methods	6.59
36. Listening to the grievance as parents of stuttering children	6.20
Mean of importance	6.01

The importance scales for teacher treatment elements are 5.91 to 6.26. The treatment element with high importance is how to cope with stuttering in class activities (6.26), and the question with low importance is to give other students a positive perception of stuttering (5.91).

표 12. 청소년 말더듬 치료의 교사 중재 요소의 중요도

Table 12. The importance scales for teacher treatment elements in adolescent stuttering treatment

Teacher treatment elements in adolescent stuttering treatment	Importance (mean)
37. Providing teacher with information about the causes and characteristics of stuttering	6.22
38. Providing teacher with information about stuttering treatment	6.07
39. Explaining the role of the teacher in increasing fluency	6.24
40. Giving other students a positive perception of stuttering	5.91
41. Preventing from teasing of other students	6.07
42. How to cope with stuttering in class activities	6.26
Mean of importance	6.13

Ⅳ. Discussion and Conclusion

This study conducted a questionnaire survey on the current status of domestic adolescent stuttering treatment, recognition of speech language pathologists, and importance of adolescent stuttering treatment program elements for the purpose of developing the contents of the adolescent stuttering treatment program.

First, only 44.44% of respondents said that they had experience with domestic adolescent stuttering treatment. 77.78% of the speech therapists who answered the questionnaire had experience with stuttering treatment, while 44.44% of them said that their adolescent stuttering treatment experience was not high. 93% of the respondents said that the reason why they had no adolescent stuttering treatment experience was because adolescent stuttering treatment was not requested. For the question about the number of cases of adolescent stuttering treatment, 27.78% had 1 to 3 cases, 5.56% had 4 to 6 cases, 7.41% had 7 to 10 cases, and 18.52% had more than 11 cases. According to a study by Chang et al. (2011), domestic speech therapists were burdened with treatment of fluency disorders among speech disorder types, and there was a lack of applicable treatment programs. In addition, it was similar to what was reported as lack of case experience, and in the area of fluency disorders, adolescent stuttering treatment showed such characteristics more.

There was a difference in the adolescent stuttering treatment experience according to the gender and qualifications of speech therapists. Male therapists rather than females and speech therapists, who were qualified as first-level speech language pathologists instead of second-level, had more experience in adolescent stuttering. It was found that the adolescent stuttering treatment was assigned to a specific speech therapist rather than it being evenly assigned. The rate of a male speech therapist's stuttering treatment experience (92.9%) was higher than that of female speech therapist's (72.5%), and the rate of a male speech therapist's adolescent stuttering treatment experience (71.4%) was higher than that of a female speech therapist's (35.0%). The gender element can be considered in relation to the reason why the gender rate of the stuttering subjects is high in males. Compared to other disorders such as speech development and articulation disorders, the age distribution of subjects varied from adolescents to adults, so it could be assumed that they were assigned to male speech therapists more than female ones.

For the speech language pathologist qualification level, the rate of stuttering treatment experience of the first-level speech language pathologist (92.3%) was higher than that of the second-level speech language pathologist (65.4%), and the rate of adolescent stuttering treatment experience of the first-level speech language pathologist (65.4%) was higher than that of the second-level speech language pathologist (25.0%). According to a previous study by Chang et al. (2011), adolescent stuttering treatment was more likely to be assigned to the first-level speech language pathologist with more experience as the treatment of fluency disorders was burdensome and difficult for the second-level speech language pathologist with less experience.

The speech language pathologist's perception of adolescent stuttering treatment indicated that 87.04% of respondents said they should approach the case differently compared to an adult stuttering treatment, and for the necessity of the adolescent stuttering treatment program, 95.8% of them answered that it was needed. For the question that an adolescent stuttering treatment should be approached differently compared to that of an adult stuttering treatment, pathologists with adolescent stuttering treatment experience responded positively higher than those with no experience. For the differentiation of adolescent stuttering treatment, the majority of speech therapists responded positively.

Particularly, the therapists with actual experience of adolescent stuttering treatment responded that it was more necessary to distinguish adolescent stuttering treatment from that of adults. Many domestic books and studies about fluency disorders suggested the evaluation and diagnosis of adolescent and adult stuttering by the same approach, but in reality, adolescents and adults required different approaches because the characteristics of the subjects were different, and experts in the field recognized the need.

The following responses were given to the reasons for the need for an adolescent stuttering treatment program: because it is difficult to deal with the psychological characteristics of adolescents (66.67%), because it is difficult to induce active participation in treatment activities (66.67%), and because it is difficult to give motivation (31.48%). Through this study, the necessity of a treatment program considering the psychological and environmental characteristics of the stuttering youth age group was confirmed.

Specifically, when asked about the importance among the elements of the adolescent stuttering treatment program, the mental treatment element received the highest rate (6.40), followed by the parent treatment element (6.38), teacher treatment element (6.13), intrinsic treatment element (6.04), and extrinsic treatment element (6.00). As before, the need for a mental treatment element in the case of adolescent stuttering was emphasized from the psychological point-of-view, and in adult stuttering treatment, the importance of parent treatment or teacher treatment, which was relatively less emphasized, was higher (Gunn et al., 2019; Mulcahy et al., 2009; Nnanani et al.. 2019). In addition, it was found that the importance of intrinsic and extrinsic treatments, corresponding to the existing stuttering treatment, was still important. In the categories measured with relatively low importance, the stuttering disclosure (4.70), the intentional stuttering application (5.35), and the maintenance program through online treatment (5.76) were found to be low. It was confirmed that stuttering disclosure and intentional stuttering were techniques that were frequently used for the treatment of internal characteristics in adult stuttering, but it was difficult to apply to adolescent stuttering treatment due to higher psychological resistance. In addition, online treatment or remote treatment was frequently seen in foreign studies, but it could be seen that it still needed a process for verification in the field of speech therapy in Korea.

This study investigated the current status and perception of adolescent stuttering treatment among Korean speech therapists and the importance of its program elements. Based on the results of this study, it can be said that a treatment program that meets the characteristics of domestic adolescent stuttering and meets the needs of the field should be developed and widely used for adolescent stuttering treatment.

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부록 1. 청소년 말더듬 중재에 관한 설문 문항
Appendix 1. The questionnaire of adolescent stuttering treatment

Ⅰ. 일반적인 정보	
1. 성별	① 남 ② 여
2. 연령	① 20대 ② 30대 ③ 40대 ④ 50대
3. 치료 경력	① 3년 미만 ② 3~4년 ③ 5~9년 ④ 10~14년 ⑤ 15년 이상
4. 자격증 급수	① 1급 언어재활사 ② 2급 언어재활사
5. 말더듬 치료 경험	① 유 ② 무
5-1) 말더듬 치료 경험 사례 수	① 1~3명 ② 4~6명 ③ 7~10명 ④ 11명 이상
Ⅱ. 청소년 말더듬 중재 프로그램의 필요성	
1. 청소년(13~18세) 말더듬 중재 경험	① 유 ② 무
1-1) 청소년 말더듬 치료 경험 사례 수	① 1~3명 ② 4~6명 ③ 7~10명 ④ 11명 이상
1-2) 경험이 없었던 이유	① 청소년 말더듬이 의뢰되지 않아서 ② 청소년 말더듬 중재가 부담이 되어서 기타 _____
2. 청소년 말더듬 중재는 성인과 다르게 접근해야 한다.	① 예 ② 아니오
2-1) '예'라고 생각하는 이유(중복체크가능)	① 청소년은 발화 유도가 어려워서 ② 치료 동기가 부족해서 ③ 청소년은 시간이 부족해서 ④ 친구들의 반응에 민감해서 ⑤ 부정적 정서의 비중이 커서 ⑥ 청소년의 비유창성 특성이 성인과 달라서 ⑦ 청소년의 내면적 특성이 성인과 달라서 기타 _____
2-2) '아니오'라고 생각하는 이유(중복체크가능)	① 말더듬의 핵심행동이 성인과 유사하므로 ② 부정적인 정서가 성인과 유사하므로 ③ 말하기 환경(읽기, 독백, 대화 등)이 유사하므로 ④ 외현적 증상에 대한 치료 기법이 유사하므로 ⑤ 내면적 증상에 대한 치료 기법이 유사하므로 기타 _____
3. 청소년 말더듬 중재 프로그램이 필요하다.	① 예 ② 아니오
3-1) 청소년 말더듬 중재 프로그램이 필요하다면 그 이유(중복체크가능)	① 동기 유발이 어려워서 ② 공감대 형성이 어려워서 ③ 발화를 유도하기 어려워서 ④ 치료 활동이 다양하지 못해서 ⑤ 치료 활동에 적극적 참여를 유도하기 어려워서 ⑥ 치료 기법 적용이 어려워서 ⑦ 아동이나 성인과는 언어 사용이 달라서 ⑧ 심리적인 특성을 다루기 어려워서 기타 _____
3-2) 필요한 프로그램(중복체크가능)	① 말더듬 수정 기법 적용 프로그램 ② 유창성 증진 기법 적용 프로그램 ③ 청소년의 인지·정서 탐색 및 중재 프로그램 ④ 청소년 말더듬 부모 상담 프로그램 ⑤ 청소년 말더듬 교사 상담 프로그램 기타 _____
3-3) 청소년 말더듬 중재 프로그램이 필요하지 않은 이유(중복체크가능)	① 대상자가 많지 않아서 ② 성인과 크게 차이를 느끼지 못해서 기타 _____

4. 청소년 말더듬 치료사가 갖춰야 할 능력(중복체크가능)

① 근거 기반으로 치료를 결정하는 능력
② 상담 및 치료 기법에 대한 임상적 신념
③ 유창성 증진 프로그램 실시 능력
④ 말더듬 수정 절차 실시 능력
⑤ 불안, 공포 등 부정적 정서 중재 기술
⑥ 경청 및 의사소통 기술
⑦ 부모 상담 능력
⑧ 청소년 상담 기술
⑨ 교사 정보 제공 및 협력 요청 능력
⑩ 팀 접근 능력
⑪ 그룹 치료 실시 능력
기타 _____

Ⅲ. 청소년 말더듬 중재 관련된 요인의 중요도

구분	번호	문 항	중요도 매우 낮음 ← 중간 → 매우 높음						
마음 중재	1	대상자의 생각과 행동을 이해하고 공감한다.	1	2	3	4	5	6	7
	2	대상자의 이야기에 집중하며 경청한다.	1	2	3	4	5	6	7
	3	대상자의 이야기에 언어적, 비언어적으로 긍정적인 반응을 한다.	1	2	3	4	5	6	7
	4	대상자의 정서를 명료화해주고, 편안하게 표현하게 한다.	1	2	3	4	5	6	7
	5	말과 말더듬에 대하여 자신의 생각을 표현하게 한다.	1	2	3	4	5	6	7
	6	대상자의 말과 말더듬에 대한 감정 표현을 수용하고 정리해 준다.	1	2	3	4	5	6	7
	7	동기 유발을 통해 치료를 시작한다.	1	2	3	4	5	6	7
내면적 중재	8	말과 말더듬에 대한 부정적인 정서를 탐색한다.	1	2	3	4	5	6	7
	9	말과 말더듬에 대한 부정적인 정서를 감소시킨다.	1	2	3	4	5	6	7
	10	단어 공포 및 상황 공포를 탐색한다.	1	2	3	4	5	6	7
	11	말더듬 회피행동을 감소시킨다.	1	2	3	4	5	6	7
	12	또래 및 주변 사람의 놀림에 대처하게 한다.	1	2	3	4	5	6	7
	13	말더듬으로 인한 불안을 감소시킨다.	1	2	3	4	5	6	7
	14	부정적인 정서나 인지에 대한 자기점검 능력을 증진시킨다.	1	2	3	4	5	6	7
	15	말과 말더듬에 대한 설명을 통해 합리적 사고를 증가시킨다.	1	2	3	4	5	6	7
	16	말에 대한 긍정적 자아개념을 형성해준다.	1	2	3	4	5	6	7
	17	자신의 말더듬을 공개하게 한다.	1	2	3	4	5	6	7
외현적 중재	18	자신의 말더듬 핵심행동에 직면하고 탐색하게 한다.	1	2	3	4	5	6	7
	19	도피 행동을 확인하고 탐색하게 한다.	1	2	3	4	5	6	7
	20	속도조절 기법을 적용한다.	1	2	3	4	5	6	7
	21	부드러운 시작 기법을 적용한다.	1	2	3	4	5	6	7
	22	가벼운 조음접촉 기법을 적용한다.	1	2	3	4	5	6	7
	23	고유수용감각 향상 기법을 적용한다.	1	2	3	4	5	6	7
	24	DAF 기법을 적용한다.	1	2	3	4	5	6	7
	25	취소, 빠져나오기, 예비책 기법을 적용한다.	1	2	3	4	5	6	7
	26	의도적 말더듬을 적용한다.	1	2	3	4	5	6	7
	27	대상자의 의사소통 상황을 쉬운 상황에서 어려운 상황으로 위계화 한다.	1	2	3	4	5	6	7
	28	연습한 기법을 다양한 청자와 다양한 환경에 적용한다.	1	2	3	4	5	6	7
	29	유창성 유지에 대한 자기점검 능력을 증진시킨다.	1	2	3	4	5	6	7
	30	온라인 중재를 통한 유지프로그램을 실시한다.	1	2	3	4	5	6	7
부모 중재	31	부모에게 말더듬의 원인 및 특성에 대한 정보를 제공한다.	1	2	3	4	5	6	7
	32	부모에게 말더듬 치료 과정에 대한 정보를 제공한다.	1	2	3	4	5	6	7
	33	가족구성원들의 유창성 방해 요인을 확인한다.	1	2	3	4	5	6	7
	34	유창성 증진을 위한 가족들의 역할을 설명한다.	1	2	3	4	5	6	7
	35	부모-자녀의 긍정적인 의사소통 방법을 설명한다.	1	2	3	4	5	6	7
	36	자녀의 말더듬에 대하여 부모로써 고충이나 궁금한 것을 표현하게 한다.	1	2	3	4	5	6	7
교사 중재	37	교사에게 말더듬의 원인 및 특성에 대한 정보를 제공한다.	1	2	3	4	5	6	7
	38	말더듬 치료 과정에 대한 정보를 제공한다.	1	2	3	4	5	6	7
	39	유창성 증진을 위한 교사의 역할을 설명한다.	1	2	3	4	5	6	7
	40	다른 학생들이 말더듬에 대하여 긍정적인 인식을 갖게 한다.	1	2	3	4	5	6	7
	41	다른 학생들이 대상자의 말더듬을 놀리거나 모방하지 않게 한다.	1	2	3	4	5	6	7
	42	수업 및 학급 활동에서 대상자의 말더듬에 적절하게 대처하는 방법을 설명한다.	1	2	3	4	5	6	7