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Original Article

A Comparison of Peer Relations Between Preschool Children Who Stutter and Their Fluent Peers

Okul Öncesi Dönemdeki Kekemeliği Olan ve Olmayan Çocukların Akran İlişkilerinin Karşılaştırılması

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ABSTRACT

Objective: This study aimed to compare the peer relations of preschool children who stutter and their fluent peers.

Materials and Methods: The sample comprised 90 children between 5 and 6 years of age, with (n = 45) and without (n = 45) stuttering, and their class teachers. The Child Behavior scale, the Peer Victimization Scale, and the Child Information Form were used as data collection tools. The data were analyzed using the Mann–Whitney *U*-test and the chi-square test in the SPSS package program.

Results: The results revealed significant differences between the children who stutter and their fluent peers in terms of the "asocial with peers," "excluded by peers," "anxious-fearful behaviors," "withdrawn behaviors," and "hyperactive-distractible" subscales of the Child Behavior Scale ($P < .05$). The children who stutter received significantly higher scores from all of these subscales, compared to their fluent peers. No significant difference was observed between the groups in terms of the subscales in the Child Behavior Scale including "aggressive with peers" and "prosocial with peers" ($P > .05$). In addition, the children who stutter received significantly higher "peer victimization" scores from the Peer Victimization Scale than their fluent peers ($P < .05$). Finally, there were significantly more children who experienced difficulty in adapting to school in the stuttering group ($P < .05$).

Conclusion: Preschool children who stutter differ significantly from their fluent peers in terms of some subscales of peer relations. The findings highlight the need for cooperation between professionals such as speech and language therapists, educators, school counselors, psychologists, and psychiatrists, taking into account the peer relations of children who stutter.

Keywords: Stuttering, peer relations, peer victimization, bullying

ÖZ

Amaç: Bu çalışmanın amacı okul öncesi dönemde kekemeliği olan ve olmayan çocukların akran ilişkilerinin karşılaştırılmasıdır.

Gereç ve Yöntem: Araştırmanın çalışma grubu, 5-6 yaş aralığındaki kekemeliği olan (n = 45) ve olmayan (n = 45) toplam 90 çocuk ve çocukların sınıf öğretmenlerinden oluşmaktadır. Çalışmada veri toplama aracı olarak Çocuk Davranış Ölçeği, Akranların Şiddetine Maruz Kalma Ölçeği ve Çocuk Bilgi Formu kullanılmıştır. Elde edilen veriler SPSS paket programı kullanılarak Mann Whitney-U ve Ki-Kare Testi ile analiz edilmiştir.

Bulgular: Kekemeliği olan ve olmayan grupların Çocuk Davranış Ölçeği'nin alt boyutlarından "asosyal davranış gösterme", "akranlarınca dışlanma", "korkulu-kaygılı davranış gösterme", "çekingen davranış gösterme" ve "aşırı hareketlilik" puanları bakımından anlamlı düzeyde farklılaştığı saptanmıştır ($P < ,05$). Kekemeliği olan gruptaki çocuklar tüm bu alt boyutlardan kekemeliği olmayan gruptaki çocuklardan daha yüksek puanlar almışlardır. Kekemeliği olan ve olmayan gruplar arasında Çocuk Davranış Ölçeği'nin "yardımı amaçlayan sosyal davranış gösterme" ve "saldırgan davranış gösterme" alt boyutları bakımından anlamlı düzeyde bir farklılık olmadığı saptanmıştır ($P > ,05$). Bunun yanında kekemeliği olan grup ile kekemeliği olmayan grubun Akranların Şiddetine Maruz Kalma Ölçeği'nden elde edilen "akran şiddetine maruz kalma" puanları bakımından anlamlı düzeyde farklılaştığı bulunmuştur ($P < ,05$). Kekemeliği olan grubun "akran şiddetine maruz kalma" puanları kekemeliği olmayan gruptan daha yüksektir ($P < ,05$). Son olarak, okula uyum sorunları ile kekemeliği olan grupta daha fazla karşılaşıldığı saptanmıştır ($P < ,05$).

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Sonuç: Okul öncesi dönemde kekemeliği olan çocuklar akran ilişkilerinin bazı alt boyutları bakımından kekemeliği olmayan akranlarından anlamlı düzeyde farklılaşmaktadırlar. Elde edilen bulgular; dil ve konuşma terapistleri, eğitimciler, psikolojik danışmanlar, psikologlar, psikiyatristler vb. uzmanların kekemeliği olan çocukların akran ilişkilerini göz önünde bulundurarak iş birliği içerisinde olmalarının gerekliliğini ortaya koymaktadır.

Anahtar Kelimeler: Kekemelik, akran ilişkileri, akran şiddetine maruz kalma, zorbalık

Introduction

Stuttering is defined as extraordinarily frequent and/or prolonged interruption in speech fluency. These interruptions usually involve (a) repetition of sounds, syllables, or words, (b) prolongation of sounds, and (c) blocks in articulation or airflow.[1] These speech characteristics of stuttering are often accompanied by secondary behaviors such as facial grimaces, eye blinking, or hand tapping. In addition, individuals who stutter exhibit linguistic avoidance behaviors such as sound or word avoidances or substitutions, circumlocution, or situational avoidance behaviors involving avoidance of certain speech environments.[2]

Although several theories have been proposed to account for the causes of stuttering, they have not been fully identified yet.[1] Recent research on stuttering emphasized the need to consider multiple factors while studying this phenomenon. Despite several theories to account for the causes of stuttering, stuttering needs to be examined in a multidimensional manner based on interactions between the cognitive, physical, linguistic, emotional and social aspects.[3-5] Although its underlying causes are not exactly known, stuttering has certain consequences for an individual's social development, including peer relations, and its onset is usually between ages of 2 and 5.[6,7] In general, a great majority of stuttering cases emerge during the early stages of speech and language development; that is, in the preschool period.[8, 9]

As an important component of social development, peer relations play a critical role during the preschool period. If a child experiences stuttering during the preschool period, this may have an impact on his/her peer relations. Under certain circumstances such as the school environment, children who stutter (CWS) may encounter neutral or positive attitudes from their peers. Sometimes, however, the stuttering may elicit negative attitudes from peers.10 For instance, CWS may be teased by their peers because of their speech.11 Previous research has examined the peer relations of CWS by comparing them with their fluent peers,11-13 or by investigating peer attitudes toward CWS.[10]

Aiming to investigate the attitudes of preschool children toward their peers who stutter, Langevin et al.[10] examined whether certain features of stuttering patterns triggered negative peer responses. Children aged 3-4 years were videotaped and analyzed while they engaged in free play. Peer attitudes toward stuttered syllables were evaluated as positive, negative, or neutral. It was found that 71.4-100% of peer attitudes toward stuttered syllables were positive or neutral, whereas negative peer attitudes were observed toward 3 participants who stuttered. Among these negative attitudes were reactions of confusion, interruption, teasing, walking away, or ignoring. The CWS were also observed to experience difficulties leading peers in play, participating in pretend play, and resolving conflicts. Their findings suggest that even if peer attitudes toward stuttering are positive or neutral, stuttering may elicit negative peer responses and result in social interaction difficulties.

Stuttering in children may constitute a significant risk factor for bullying and victimization.[11,14] Blood and Blood[12] showed that the CWS had a higher risk of experiencing bullying than those who did not stutter. More specifically, 61% of the CWS were at risk of experiencing bullying, while this proportion was only 22% in the children who did not stutter. In parallel with these findings, anxiety levels were higher in the CWS than in children who did not stutter. This study also found a significant positive correlation between the levels of vulnerability to bullying and the anxiety levels in the CWS.

CWS experience the problem of being bullied. Imitation, name-calling and teasing by peers are among the most frequent types of bullying encountered by the CWS. Besides, the CWS find it more upsetting to be teased because of their speech than their other attributes such as hair, weight, etc.[11] Besides, CWS are less likely to be given the leader's role among peers, and more likely to be nominated to "bullied" or "help-seeking" roles.[13]

To the best of the authors' knowledge, there is no study examining the peer relations of preschool CWS within the Turkish context. In order to fill this gap in the literature, this study aimed to compare peer relations of CWS between 5 and 6 years old and their fluent peers by using the Ladd–Profilet Child Behavior Scale, the Peer Victimization Scale, and the Child Information Form. The research questions were the following: (1) Is there a significant difference between the groups in terms of scores in the "prosocial with peers," "asocial with peers," "excluded by peers," "anxious-fearful behaviors," "withdrawn behaviors," "hyperactive-distractible," "aggressive with peers," and "peer victimization" subscales? (2) Is there a significant difference between the groups in terms of difficulty in adapting to school?

Materials and Methods

Prior to the study, permissions were obtained for the use of the scales. The ethical permission was granted by the Ethics Committee of Anadolu University. Informed consents were obtained from the parents and teachers of the children who participated in the study. Upon consent from the parents, the data were collected by contacting each child's teacher and requesting him/her to fill out the scales and the information form. A descriptive survey model of quantitative research methods was used in order to examine comparatively the peer relations of stuttering and fluent children.

Participants

The sample of this study consisted of 45 children aged 5-6 years who stuttered, 45 fluent children, and the class teachers of these children. The stuttering group included children

Table 1. Demographics of the Stuttering and Fluent Groups

	Gender		Age	
Groups	**Male**	**Female**	**5 y**	**6 y**
Stuttering group (n = 45)	37	8	34	11
Fluent group (n = 45)	37	8	34	11
Total (n = 90)	74	16	68	22

Abbreviations: n, number of participants; y, years.

who were diagnosed with stuttering by a speech and language therapist at Anadolu University Research Centre for Speech and Language Disorders. Prior to the study, the speech and language therapist calculated the stuttering frequency for each child in the stuttering group, during the assessment session. Those with a stuttering frequency above 3% were considered as CWS and included in the study. Stuttering frequency in speech was calculated by obtaining the number of stuttered syllables in a speech sample consisting of minimum of 400 syllables, then dividing the number of stuttered syllables by the total number of syllables, and converting the result into a percentage. The children in the stuttering group did not have any additional speech or language disorders other than the stuttering. Initially, 51 children were considered for the stuttering group; however, upon further evaluation, 4 of these children were found to have an articulation disorder in addition to stuttering, and 2 children had a stuttering frequency below 3%. Therefore, these 6 children were excluded from the study.

The fluent group comprised children who were chosen through convenient sampling among children attending preschools in Eskişehir. The stuttering and fluent groups were matched in terms of age and gender. The families and teachers of the children in the fluent group reported that they did not have any speech or language impairment. These children were then evaluated by a speech and language therapist. The demographic details of the groups are presented in Table 1.

Data Collection Tools

Child Information Form: The teachers participating in the study filled out the Child Information Form. The form requested information about the child's date of birth, age, and gender. In addition, the form included the following question: "Did the child experience any difficulties (i.e., crying, clinging to mother, reluctance to take part in classroom activities, etc.) during the process of adaptation to school?" The teacher was requested to answer "yes" or "no" to this question.

Ladd–Profilet Child Behavior Scale: The child behavior scale was developed by Ladd and Profilet. The scale constitutes 44 items. Its validity and reliability values were identified. This scale was developed in order to evaluate the preschool children's relationships with their peers. The scale contains 6 subscales: aggressive with peers, prosocial with peers, 3 types of withdrawn behaviors (asocial with peers, excluded by peers, anxious-fearful) and hyperactive-distractible. The scale does not provide an aggregate score due to the structure of the subscales. Each subscale is evaluated individually.[15] The scale was adapted to Turkish by Gülay, who included a sample of 746 preschool children aged 5-6 years who were living in Istanbul and their teachers (n = 35).[16,17] The author reported that the Cronbach Alpha (CA) reliability coefficient was high ($\alpha = .85$).[16,17]

Peer Victimization Scale: The peer victimization scale was developed by Ladd and Kochenderfer-Ladd. Its validity and reliability values were identified. The scale aims to reveal peer aggression experienced by preschool children. The scale includes 4 items in total, 1 for each of the 4 types of peer aggression (physical, direct, indirect, and general).[18] Similar to the previous scale, the peer victimization scale was adapted to Turkish by Gülay, who reported that the CA coefficient was high ($\alpha = .96$).[16,17]

Statistical Analysis

The demographic information of the children included in the sample was provided through frequency and percentage distributions. The Kolmogorov–Smirnov and Shapiro–Wilk tests were used to determine whether the scores were distributed normally. Since these tests revealed that the data were not distributed normally, non-parametric tests were used to perform inferential statistics.

The Mann–Whitney *U*-test was used to estimate whether the CWS and their fluent peers differed in terms of their scores from the subscales of the Ladd–Profilet Child Behavior Scale and from the Peer Victimization Scale. A chi-square test was performed to test whether stuttering was associated with difficulty in adapting to school. The IBM Statistical Package for the Social Sciences (IBM SPSS Corp., Armonk, NY, USA) 21 program was used to perform statistical analyses.

Results

The Mann–Whitney *U*-test was used to compare the peer relations of the stuttering and fluent groups, in terms of the scores received from the subscales of the Ladd–Profilet Child Behavior Scale and the Peer Victimization Scale. The results of these tests are given in Table 2.

The analyses of the scores from the Ladd–Profilet Child Behavior Scale revealed significant differences between the stuttering and fluent groups, in terms of the "asocial with peers," "excluded by peers," "anxious-fearful," and "hyperactive-distractible" subscales. Specifically, the CWS had significantly higher scores from the "asocial with peers" subscale compared to their fluent peers ($U = 502.500$, $z = -4.178$, $P < .05$). Similarly, the CWS received significantly higher scores from the "excluded by peers" subscale than their fluent peers ($U = 507.000$, $z = -4.297$, $P < .05$). Likewise, the CWS obtained significantly higher scores from the "anxious-fearful" subscale compared to their fluent peers ($U = 308.000$, $z = -5.706$, $P < .05$). Also, the CWS had significantly higher scores from the "hyperactive-distractible" subscale than their fluent peers ($U = 613.500$, $z = -3.266$, $P < .05$). Furthermore, when compared in terms of the scores of "withdrawn behaviors," which is the sum of the scores from the "asocial with peers", "excluded by peers" and "anxious-fearful" subscales, the CWS also had significantly higher scores from this subscale than their fluent peers ($U = 286.500$, $z = -5.868$, $P < .05$). However, no

Table 2. Results of the Mann–Whitney *U*-tests Comparing Scale Scores Between the Stuttering and Fluent Groups

	Groups	n	Mean Rank	Sum of Ranks	*U*	*z*	*P*
Prosocial with peers	Stuttering	45	45.78	2060.00	1000.000	–0.101	.919
	Fluent	45	45.22	2035.00			
Asocial with peers	Stuttering	45	56.83	2557.50	502.500	–4.178	<.001*
	Fluent	45	34.17	1537.50			
Excluded by peers	Stuttering	45	56.73	2553.00	507.000	–4.297	<.001*
	Fluent	45	34.27	1542.00			
Anxious-fearful behaviors	Stuttering	45	61.16	2752.00	308.000	–5.706	<.001*
	Fluent	45	29.84	1343.00			
Withdrawn behaviors	Stuttering	45	61.63	2773.50	286.500	–5.868	<.001*
	Fluent	45	29.37	1321.50			
Hyperactive-distractible	Stuttering	45	54.37	2446.50	613.500	–3.266	.001*
	Fluent	45	36.63	1648.50			
Aggressive with peers	Stuttering	45	44.00	1980.00	945.000	–0.565	.572
	Fluent	45	47.00	2115.00			
Peer victimization	Stuttering	45	57.17	2572.50	487.500	–4.829	<.001*
	Fluent	45	33.83	1522.50			

Abbreviations: n, number of participants; *U*, Mann–Whitney *U*-test; *z*, *Z* value; *P*, significance level.
*According to the results of Mann–Whitney *U*-test ($P < .05$).

significant differences were found between the stuttering and fluent groups in terms of the "prosocial with peers" subscale ($U = 1000.000$, $z = -0.101$, $P > .05$) and "aggressive with peers" subscale ($U = 945.000$, $z = -0.565$, $P > .05$).

The groups also differed in terms of their scores from the peer victimization scale. The CWS had significantly higher scores from the "peer victimization" subscale compared to their fluent peers ($U = 487.500$, $z = -4.829$, $P < .05$).

A chi-square test was used to analyze whether the grouping variable (stuttering vs. fluent) was related to "difficulty in adapting to school," as reported in the child information form. The result of this test is presented in Table 3. The chi-square test revealed a significant association between stuttering and difficulty in adapting to school ($\chi^2 = 36.296$; $P < .05$). There were 32 (71.1%) children who were reported to experience difficulty in adapting to school in the stuttering group, and only 4 (8.9%) children in the fluent group.

Discussion

The first finding of the present study was that the CWS received significantly higher scores from the "asocial with peers" subscale. Stuttering in children may cause certain difficulties in expressing themselves, potentially leading them to prefer being alone, distancing themselves from their peers, and avoiding peer activities.[15] In line with this finding, Langevin et al.[10] indicate that CWS experience social difficulties. These difficulties may manifest themselves as difficulty in participating and leading peers in play and resolving conflicts with peers.

In comparison to their fluent peers, the CWS received significantly higher scores from the "excluded by peers" subscale. Stuttering in children may cause them to be viewed negatively, being stigmatized, and socially excluded by others.[19] Using a sociometric scale, Davis et al.[13] conducted a study with 16 CWS and their classmates. They found that the CWS were more frequently rejected and excluded by their fluent peers. This result supports the findings of the current study. Moreover, the higher scores obtained by the CWS from the "excluded by peers" subscale also overlaps with the higher scores they received from the "asocial with peers" subscale. That is, asocial behaviors exhibited by CWS and their exclusion by peers may be related to one another and may have a negative impact on their interactions with peers. As they are excluded, they may avoid peer activities and exhibit asocial behaviors.

The current study also revealed that the CWS received significantly higher scores from the "anxious-fearful" subscale.

Table 3. Results of the Chi-square Test Analyzing the Relationship Between Stuttering and Difficulty in Adapting to School.

	Difficulty in Adapting to School		Total	χ^2	*df*	*P*
Groups	**Yes**	**No**				
Stuttering group	32	13	45			
Within-group (%)	71.1	28.9	100.0			
Fluent group	4	41	45	36.296	1	<.001*
Within-group (%)	8.9	91.1	100.0			
Total	36	54	90			
Overall (%)	40.0	60.0	100.0			

χ^2, Pearson's chi-square; *df*, degrees of freedom; *P*, significance level.
Abbreviations: *According to the results of the chi-square test ($P < .05$).

CWS may exhibit anxious and fearful behaviors by thinking that they would stutter while talking, they would not be able to explain themselves or others would not understand them. Previous research reported correlation between the level of anxiety and stuttering. For instance, Blood and Blood[12] reported that CWS had higher levels of anxiety than their fluent peers. Comparing children and adolescents with and without stuttering, Giorgetti et al.[20] found that CWS received significantly higher scores in terms of fear, nervousness/tension, guilt, anxiety, perfectionism, and worry. Aydın-Uysal and Özdemir[21] also reported that CWS between the ages of 3 and 7 experienced a higher level of fear than their typically developing peers. In another study, it was found that stuttering in adolescents was associated with higher levels of trait and state anxiety.[22] Kraaimat et al.[23] also obtained similar results from their study on adults who stuttered and those who did not. This study too reported that individuals who stuttered had a higher level of emotional tension and discomfort in social situations than individuals who did not stutter. Moreover, about half of the participants who stuttered exhibited a severe form of social anxiety disorder.

The current study also found that the CWS received significantly higher scores from the "withdrawn behaviors" category. The "withdrawn behaviors" scores were calculated by summing the scores obtained from the "asocial with peers," "excluded by peers," and "anxious-fearful" subscales.[17] The CWS received higher scores than their fluent peers from the 3 subdimensions that constitute withdrawn behaviors. The finding that the CWS had higher scores of "withdrawn behaviors" than their fluent peers suggests that all these findings are consistent with one another. On the other hand, anxiety in CWS may also bring about fear and avoidance of social relationships. Similarly, CWS were mostly characterized by their parents as shy, closed, introverted, quiet, and depressed.[20] In contrast, Choi et al.[24] did not find a significant difference between 3-year-old and-6-year-old CWS and their fluent peers in terms of behavioral inhibition. However, when they analyzed extreme cases in their sample, they found that there were more children with a high behavioral inhibition score in the stuttering group than in the control group. In addition, Langevin et al.[25] investigated the perceptions of the parents of 77 preschool CWS. According to 89% of the parents, stuttering led their children to experience negative states such as inhibition, reduced verbal output, and avoidance. Based on previous research and the findings of the current study, it can be expected that because of their dysfluency, CWS will exhibit more withdrawn or inhibited behaviors, especially while talking to strangers and playing with unfamiliar friends.

Another finding of the present study was that there were significantly more children who experienced difficulty in adapting to school in the stuttering group than in the fluent group. This finding is consistent with the other finding of the study that the CWS exhibited more withdrawn behaviors than their fluent peers. It can be inferred that exhibiting withdrawn behaviors may discourage participation in peer activities, which, in turn, might make it difficult to adapt to school.

In comparison to their fluent peers, the CWS received significantly higher scores from the "hyperactive-distractible" subscale. This finding is supported by the results of Dohaner and Richels,[26] who asked the parents of CWS whether they observed symptoms of attention deficit hyperactivity disorder (ADHD) in their children. In that study, of the surveyed parents of 36 children aged 3-17 years who stuttered, 58% reported that they suspected their children might have ADHD. Consistent findings were also reported by a study investigating ADHD symptoms in 185 preschool CWS and who had undergone stuttering therapy.[27] The researchers found elevated ADHD symptoms in half of the CWS. Furthermore, the stuttering group required 25% more clinical intervention time to attain successful fluency outcomes. However, different findings were reported by another study with a sample of 150 children (3-7 years).[21] The CWS and the fluent children did not differ in terms of hyperactivity/impulsivity scores. Notwithstanding these inconsistencies across studies, the current findings should be taken into consideration when speech and language therapists and teachers plan and implement intervention. To illustrate, short-term activities may be more suitable than long-term and desk-bound activities for hyperactive CWS.

The present study did not yield any significant difference between the CWS and their fluent peers in terms of the "aggressive with peers" subscale. In other words, the CWS did not differ from their fluent peers in terms of aggressive behaviors such as hitting, name-calling, teasing, etc. On the contrary, the CWS were reported to be victimized by their peers, more than their fluent peers, as evidenced by the "peer victimization" scores. This finding might show that rather than resorting to bullying, CWS may be the victims, because of their verbal difficulties. Stuttering may be viewed as a risk factor which may increase the likelihood of being subject to physical, verbal, or psychological bullying and victimization. A previous study reported a higher ratio of the CWS (61%) at risk for experiencing bullying than their fluent peers (22%),12 while another one including adolescents who stuttered reported that these individuals were at a higher risk (43%) than their fluent peers (11%) for experiencing bullying.[28] Despite these findings, 59% of CWS aged between 7 and 15 were bullied due to their stuttering.11 However, the parents and teachers were not aware of this situation, as reported by 50% of the individuals who stuttered and faced bullying at school.[14] These findings imply that significant peer victimization did not affect or lead to aggressive behaviors toward fluent peers by CWS. The findings also underline the need to raise awareness of bullying against individuals who stutter, and to identify strategies to prevent and intervene in bullying against these individuals by fostering cooperation between speech and language therapists and teachers.

Finally, no statistically significant difference was found between the CWS and their fluent peers in terms of the "prosocial with peers" subscale. In other words, when rated in terms of social behaviors that tend to be empathic, kind, cooperative, self-sacrificing, and helpful toward peers.[15] This finding contrasts with the results of the study,[29] which was conducted with a total of 70 adolescents with and without stuttering. They found that the group with chronic stuttering experienced more difficulty in peer relations and exhibited less prosocial behaviors. This

discrepancy between the findings of the studies suggests that the level of prosocial behaviors exhibited in the adolescence and the preschool periods may differ. The lack of a significant difference in terms of this subscale in the present study may be linked to the abundance of activities in preschool institutions that develop social behaviors aimed at helping peers. The objectives and outcomes targeting the behaviors of sharing, waiting one's turn, using kind words, and being helpful have an important place in the preschool education program.[30] Moreover, the "prosocial with peers" subscale includes subcomponents such as helping, cooperating, empathizing, listening to their peers, showing interest in moral issues, and engaging in altruistic behavior.[15] It may be speculated that speech may not be required to exhibit these behaviors and stuttering may not prevent a child from showing them.

Study limitations

The study was limited to children between the ages of 5 and 6, who were attending preschools located in Eskişehir, and their teachers. Additionally, the findings of the study were limited, with the features measured by the relevant data collection tools and the teachers' perceptions of the children's peer relations.

Conclusion

The findings highlight the need for speech and language therapists to consider the social consequences of stuttering (exclusion etc.) while planning and implementing therapy programs. Cooperation among professionals such as speech and language therapists, teachers, school counselors, and psychologists is crucial when offering therapy for CWS having difficulty in peer relations or experiencing negative peer attitudes. If this cooperation is realized, it may contribute to awareness in the school settings concerning CWS who experience bullying, and also to the implementation of prevention and intervention programs against bullying. A holistic therapeutic approach can thus be formulated, which may have a positive impact on these children's relationships with peers, as well as on their fluency.

Ethics Committee Approval: Ethics committee approval was received for this study from the Ethics Committee of Anadolu University (Date: December 3, 2015; Code number: 68215917-050.99-662; Protocol number: 21393).

Informed Consent: Written consent was obtained from the participants' families and teachers.

Author Contributions: Concept – Ş.K.A., R.S.Ö.; Design – Ş.K.A., R.S.Ö.; Supervision – R.S.Ö.; Resources – Ş.K.A., R.S.Ö.; Materials – Ş.K.Ö.; Data Collection and/or Processing – Ş.K.Ö.; Analysis and/or Interpretation – Ş.K.A., R.S.Ö.; Literature Search – Ş.K.Ö.; Writing Manuscript – Ş.K.A., R.S.Ö.; Critical Review – R.S.Ö.

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Hasta Onamı: Yazılı hasta onamı bu çalışmaya katılan katılımcıların aile ve öğretmenlerinden alınmıştır.

Hakem Değerlendirmesi: Dış bağımsız.

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