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Teacher Perspectives on Supporting Students With Stuttering in Schools and Preschools
Wsparcie ucznia z jąkaniem w szkole i przedszkolu w opinii nauczycieli

ABSTRACT

RESEARCH OBJECTIVE: The purpose of the research presented in this article was to explore the opinions of kindergarten and elementary school teachers on supporting students with stuttering in their functioning within educational institutions.

THE RESEARCH PROBLEM AND METHODS: This study aimed to evaluate teachers' knowledge about stuttering and their approaches to supporting students with this condition. A diagnostic survey was conducted using a structured questionnaire, gathering responses from 155 kindergarten and elementary school teachers. The survey focused on assessing their general understanding of stuttering in children.

THE PROCESS OF ARGUMENTATION: The argumentation process involves identifying the problem, presenting the survey results, drawing generalized conclusions from the findings, and extrapolating these conclusions to provide actionable recommendations for teachers working with students who stutter.

RESEARCH RESULTS: The study results indicate that the level of knowledge among preschool and elementary school teachers about stuttering and methods to support affected students is insufficient. Teachers expressed a need for additional training, which highlights the necessity of systematic educational efforts in this area.

CONCLUSIONS, RECOMMENDATIONS, AND APPLICABLE VALUE OF RESEARCH: A critical first step to increasing teachers' awareness of stuttering is incorporating evidence-based content into the Integrated Learning Platform. Promoting current, research-backed knowledge through training sessions and mentoring programs would also prove highly beneficial. Practical applications

of this research include implementing teacher training programs at both local and national levels and creating initiatives such as InterACT to reduce stigma and exclusion. These measures would better prepare educators to support students with stuttering, contributing positively to their emotional and social development.

→ **KEYWORDS**   STUTTERING, SCHOOL, KINDERGARTEN, TEACHERS, SUPPORT

STRESZCZENIE:

CEL NAUKOWY: Celem badań przedstawionych w artykule było zbadanie opinii nauczycieli przedszkoli i szkół podstawowych w kwestii wspierania ucznia z jąkaniem w jego funkcjonowaniu w placówkach edukacyjnych.

PROBLEM I METODY BADAWCZE: Główny problem przeprowadzonych badań dotyczył pytania na temat tego, jaki jest poziom wiedzy na temat jąkania i wsparcia ucznia z jąkaniem wśród badanych nauczycieli. W celu uzyskania odpowiedzi na związane z tym tematem pytania posłużono się metodą sondażu diagnostycznego z wykorzystaniem techniki kwestionariusza ankiety. W badaniu wzięło udział 155 nauczycieli przedszkoli i szkół podstawowych. Zadane im pytania dotyczyły ogólnego poziomu wiedzy na temat jąkania u dzieci.

PROCES WYWODU: Proces wywodu polega na rozpoznaniu problematyki, przedstawieniu wyników badań ankietowych i wyciągnięciu uogólnionych wniosków z ankiet i dokonaniu ich ekstrapolacji, aby przedstawić rekomendacje dla nauczycieli zajmujących się dziećmi z jąkaniem się.

WYNIKI ANALIZY NAUKOWEJ: Wyniki badań jednoznacznie pokazują, że poziom wiedzy nauczycieli przedszkoli i szkół podstawowych na temat jąkania oraz metod ich wspierania jest niewystarczający. Nauczyciele wykazali potrzebę dalszego dokształcania się, co wskazuje na konieczność systematycznych działań edukacyjnych w tym zakresie.

WNIOSKI, REKOMENDACJE I APLIKACYJNE ZNACZENIE WPŁYWU BADAŃ: Pierwszym krokiem do zwiększenia świadomości nauczycieli o jąkaniu mogłoby być zamieszczenie odpowiednich treści w ramach praktyki opartej na dowodach (EBP) w Zintegrowanej Platformie Edukacyjnej. Propagowanie aktualnej wiedzy na temat jąkania przez szkolenia tematyczne i programy mentoringowe również wspierałoby powyższy cel. Wyniki niniejszych badań mogą być wykorzystane do implementacji programów doszkalających dla nauczycieli na poziomie lokalnym i krajowym oraz programów przeciwdziałających stygmatyzacji uczniów z jąkaniem (np. InterACT), co przyczyniłoby się do pozytywnego wpłynięcia na ich rozwój emocjonalny i społeczny.

→ **SŁOWA KLUCZOWE:** JĄKANIE, SZKOŁA, PRZEDSZKOLE, NAUCZYCIELE, WSPARCIE

The Nature of Stuttering According to Literature

Stuttering has long been recognized as one of the least understood communication disorders (Sommers & Caruso, 1995). The need for a holistic perspective presents a significant challenge for specialists studying stuttering from a theoretical standpoint and for therapists addressing it in practice. The first symptoms of stuttering typically emerge between the ages of 2 and 4, and manifest as the repetition of syllables, sounds, or entire words, sound prolongation, or speech blocks. These symptoms often develop gradually, although sudden onset is associated with an increased risk of more severe difficulties (Yairi & Ambrose, 2005).

Over time, perceptions of stuttering have evolved markedly. In the 1980s, it was suggested that "stuttering is a collision between thoughts" (Hamre, 1984, p. 238). This led to the hypothesis that stuttering results from overly rapid thinking coupled with slow movements of the articulatory organs. Other theories attempted to frame stuttering within psychological and emotional contexts, such as crises in the mother-child relationship (Wyatt, 1969). Building on the earlier discoveries of Broca and Wernicke, scholars also defined stuttering as a difficulty arising from uncoordinated functions of the brain's motor or speech centers (Klingbeil, 1939).

In the initial and less established phase of stuttering, the proportion of boys and girls affected is roughly equal. However, by the time children reach school age, this shifts dramatically, with three boys stuttering for every one girl. As children grow older, this ratio increases to as much as 5:1 or even 6:1 (Bloodstein & Bernstein Ratner, 2007). Across the general population, stuttering affects around 1% of individuals, though when accounting for people who have experienced stuttering symptoms at some point in their lives, the figure rises to 5%. This statistic highlights a relatively large group of children whose stuttering resolves spontaneously (Bloodstein & Bernstein Ratner, 2007).

Why, then, do some children stutter while others do not? Although the answer remains elusive, specialists agree that stuttering stems from a combination of factors. Physiological influences, for instance, include genetic predispositions that increase a child's likelihood of stuttering. However, it is important to note that what is inherited is not stuttering itself, but the susceptibility to it. Additionally, differences in the structure and functioning of the left hemisphere of the brain – specifically in areas responsible for sensorimotor integration critical for fluent speech – are significant in adolescents and adults who stutter. Linguistic factors also play a role, with disruptions in speech development, such as delayed speech onset or age-inappropriate language skills, contributing to the phenomenon. Stuttering is more likely to occur in long, complex sentences than in shorter, simpler utterances (Kelman & Nicholas, 2013).

Psychological factors may also contribute to stuttering, with certain personality traits or temperamental tendencies being more likely to co-occur with the disorder (Błachnio, 2013). These include a heightened tendency toward activity, weaker attention retention, difficulties shifting focus between tasks, reduced ability to manage strong nervousness

or excitement, greater impulsivity, and a predisposition toward introversion and sensitivity (Millard et al., 2008).

Environmental factors often center around parental anxiety. Although conclusive evidence is lacking, research suggests that parents of children who stutter frequently display elevated levels of worry and emotional tension, which can be sensed by the child and may exacerbate their stuttering symptoms (Kowalczyk, 2020). Furthermore, a family communication style characterized by hurried conversations or frequent interruptions during conversations can perpetuate stuttering (Chęciek, 2007; Kamińska, 2007).

Methodological Framework and Study Group Characteristics

The objective of this study was to explore teachers' perspectives on the experiences of students with stuttering in the school environment and to assess their understanding of the students' potential support needs. The research sought to address the following questions:

1. What is the respondents' knowledge regarding the possible causes of stuttering in school and preschool children?
2. How frequently do the surveyed teachers encounter a student with stuttering in their professional practice?
3. What observable signs of stuttering do respondents notice in their students?
4. What school-related difficulties directly attributable to stuttering do respondents believe affect these students?
5. In the respondents' view, how do students with stuttering function compared to their classmates?
6. Which behaviors do respondents identify as supportive or unsupportive toward students with stuttering?
7. How do the surveyed teachers evaluate their own knowledge about stuttering in school- and preschool-aged children, and do they express a desire to improve it?

To answer these questions, the study employed a diagnostic survey method using a structured questionnaire. Respondents completed 18 questions, which included closed-ended, semi-open, and open-ended formats. Data collection occurred over several months, from March to June 2024, utilizing both electronic platforms – via online thematic forums (137 survey questionnaires) – and paper-based distribution at schools in Bochnia, Tarnow, Nowy Sącz, and Limanowa (18 survey questionnaires).

Respondent Demographics

The study group predominantly comprised women, who accounted for 97% of participants, while men constituted 3%. Regarding professional seniority, the largest segment (57%) consisted of teachers with 11–20 years of experience. Teachers with 6–10

years of experience formed the second-largest group (33%), followed by those with up to 5 years of experience (8%). The smallest segment (2%) included teachers with over 20 years of professional seniority.

Respondents were geographically distributed across several provinces: Małopolska (51%), Podkarpackie (17%), Kujawsko-Pomorskie (14%), Mazowieckie (8%), Świętokrzyskie (5%), and Śląskie (5%). Participants were employed at various types of educational institutions: public elementary schools (31%), public kindergartens (22%), non-public elementary schools (21%), non-public kindergartens (11%), private elementary schools (8%), and private kindergartens (7%).

Analysis of Research Results

1. The first question presented to respondents was: *In your opinion, what are the primary causes of stuttering in school and preschool children?*

The analysis of responses reveals a clear pattern in the perceived causes of stuttering. Genetic predisposition emerged as the most commonly cited factor, selected by 26% of respondents, who referred to inherited traits that may predispose a child to stuttering. Emotional causes ranked second, with 18% of participants pointing to traumatic or highly stressful experiences in a child's life as significant contributors. Behavioral influences, such as a child mimicking the speech patterns of a stuttering family member, were noted by 16% of respondents. Physical factors, such as breathing difficulties, accounted for 15% of responses. Meanwhile, 12% of teachers emphasized the role of psychological traits, including temperament or personality characteristics, as contributing to stuttering. Less commonly mentioned were linguistic factors, such as disharmonious speech development, identified by 8% of respondents, and family dynamics, which only 5% of participants associated with stuttering.

2. Respondents were next asked: *How often have you encountered a student with stuttering in the classes you have taught?*

The majority of respondents indicated infrequent encounters with students who stutter, with 62% selecting this option. Meanwhile, 21% reported frequent contact, and 17% noted very rare interactions. Notably, none of the respondents selected the option "never," which suggests that most teachers have at least some experience working with students who stutter.

3. The subsequent question focused on teachers' observations of stuttering symptoms: *What visible or audible symptoms of stuttering have you noticed in your students?*

Among the respondents, 36% identified the repetition of sounds, syllables, or words as the most common symptom, and another 24% pointed to heightened nervousness in students. Voice prolongation, such as dragging out sounds, was mentioned by 16%,

while blocking, or an inability to initiate speech, was reported by 15% of respondents. Less frequently mentioned symptoms included avoiding eye contact (4%), excessive physical movement during speech (3%), and involuntary co-movements, such as head or shoulder jerks, observed in 2% of students.

4. Respondents were asked: *In your opinion, what school difficulties directly caused by stuttering can be identified in a preschool or school-aged child?*

The most frequently cited difficulty was a reluctance among students to volunteer for oral responses (33%). This was closely followed by reports of negative peer interactions, with 26% of respondents reporting that students with stuttering often experience poor treatment from classmates. Another notable observation, selected by 19% of respondents, was that students who stutter sometimes pretend not to know the answer to avoid speaking aloud. Additional responses included difficulties with written assignments (10%), poorer academic performance due to lower levels of cognitive processes such as memory, attention, or thinking (8%), and difficulties in solving math problems (4%).

5. The next question asked respondents: *Have you observed any differences in how a student with stuttering is treated by their classmates?*

A significant majority (70%) reported no noticeable differences in the treatment of students with stuttering. However, 29% observed that such students were treated worse by their peers, while 1% reported instances of better treatment from classmates.

6. The survey further inquired whether respondents had ever intervened on behalf of a student with stuttering in cases of aggression, ridicule, or bullying, including both physical and psychological harm. A majority of 57% stated they had never needed to take such action, while 43% confirmed having done so at some point.

7. The final question sought respondents' opinions on how teachers can support students with stuttering in school or kindergarten: *In your opinion, what actions should a teacher take to support a student with stuttering in school or kindergarten?*

Respondents' answers varied. The most common response, chosen by a quarter of the participants (25%) was to avoid commenting on the student's stuttering in front of the entire class. Another 20% suggested following the instructions of a speech therapist, while an equal 20% advocated for finishing the student's sentences when they struggle. Nine percent recommended recognizing the student's strengths in front of the class, and another 9% supported the idea of finishing sentences only when the student is visibly struggling significantly.

Less common responses included referring the student to a speech therapist because the teacher felt unable to help directly (5%), isolating the student during oral responses (5%), patiently waiting for the student to complete their statements (4%), and incorporating music-based activities as a strategy for working with students who stutter (3%).

8. Respondents were asked the following question: *What behaviors or actions on the part of the teacher do you think are not supportive of a student with stuttering in school or kindergarten?*

A detailed analysis of the responses shows a strong consensus among respondents that the most detrimental behavior would be unexpectedly putting a student on the spot to speak without prior notice (41%). Ranked second was a teacher's lack of reaction when a student with stuttering is teased or mocked by peers (17%), followed by asking the student to repeat what they had said (11%). Other behaviors cited as unsupportive included openly discussing the student's stuttering in their presence (10%), talking about the student's stuttering with other children in the classroom while the student is present (9%), being overly lenient toward the student (8%), and making loud, mocking comments about the student's stuttering (4%).

9. The next question asked: *In your opinion, is it important to build the proper self-esteem of a student with stuttering?*

The responses demonstrate that most teachers view this as a critical issue, with 63% answering "yes" and 26% responding "rather yes." However, 8% of respondents indicated that maintaining the student's self-esteem is "rather unimportant," while 3% considered it "definitely unimportant."

10. Another question posed to respondents was: *In your opinion, what feelings, emotions, and behaviors may accompany a student with stuttering in school or kindergarten?*

The most frequently reported emotions were shame (27%), a sense of inferiority (18%), and anger (16%). Other notable responses included a sense of powerlessness (10%), fear of speaking (9%), loneliness (6%), and isolation (5%). Less common responses identified stress (3%) and conflict-provoking behaviors (2%).

11. To assess their knowledge, teachers were asked: *How would you rate your knowledge about stuttering in preschool and school-aged children?*

Most teachers (63%) rated their knowledge as "average," while 28% felt it was "rather good." Only a small proportion, 5%, believed their knowledge to be "definitely good," whereas 2% each categorized it as "rather poor" or "definitely poor."

12. The next question inquired: *Do you feel the need to improve your knowledge about working with students who stutter, for example, through training, webinars, or lectures?*

A strong desire to improve their knowledge was expressed by 12% of respondents, while 50% answered "rather yes." Meanwhile, 21% responded of teachers responded "rather no," and 17% selected "definitely not."

13. The final question asked: *Where do you obtain your knowledge about stuttering in preschool and school-aged children?*

The Internet was identified by 84% as the predominant source of information about stuttering. A much smaller percentage, only 7% reported gaining knowledge from discussions with specialists, 5% cited television programs, and a mere 4% relied on specialized literature.

Summary and Conclusions

Analyzing the survey data offers a general, simplified – yet insightful – overview of the knowledge and perceptions that some teachers hold about stuttering. Despite its limitations, the data provides valuable indicators, allowing us to draw several key conclusions. These are presented below as answers to the research questions that framed this study.

1. What is the respondents' knowledge regarding the possible causes of stuttering in school and preschool children?

Teachers' knowledge of the etiology of stuttering can be assessed as insufficient. While it is encouraging that the most frequently selected answer correctly identified genetic factors, other popular responses revealed misconceptions. Many respondents incorrectly suggested that stuttering could be acquired through imitation of a close individual, or that it arises as a response to severe stress. While stress is acknowledged in the literature as a triggering factor, it is never cited as a direct cause of stuttering. A small proportion of respondents correctly identified linguistic, psychological, or environmental factors in the development of stuttering, but these answers were relatively rare.

2. How frequently do the surveyed teachers encounter a student with stuttering in their professional practice?

The majority of respondents reported that they rarely encounter students who stutter. However, this response raises questions about their ability to recognize stuttering, especially its more subtle symptoms. It is plausible that gaps in knowledge or observational skills may cause them to underestimate the prevalence of stuttering among their students.

3. What observable signs of stuttering do respondents notice in their students?

Respondents most frequently reported noticing repetition of sounds, syllables, or words as key symptoms, followed by signs of nervousness during speech and the elongation of sounds. While these are important indicators, the overall ability of respondents to identify visible symptoms remains average at best, which is insufficient given the challenges faced by students who stutter.

4. What school-related difficulties directly attributable to stuttering do respondents believe affect these students?

Respondents' understanding of the school difficulties directly linked to stuttering also appears to be concerningly limited. Although many respondents correctly identified common issues, such as reluctance to participate in oral activities or difficulty forming social connections, a notable proportion cited difficulties unrelated to stuttering, such as diminished cognitive abilities, general learning problems, or trouble solving mathematical tasks. These misconceptions are troubling and underscore the need for greater awareness and education on this topic.

5. In the respondents' view, how do students with stuttering function compared to their classmates?

The majority of respondents expressed the belief that students with stuttering are treated equally by their peers. However, paradoxically, more than half of the respondents also admitted to having intervened in defense of a student with stuttering who was being bullied. This apparent contradiction suggests that teachers may not fully recognize the complexities of peer interactions involving students who stutter.

6. Which behaviors do respondents identify as supportive or unsupportive toward students with stuttering?

An interesting paradox emerged in the analysis of respondents' answers: some identified the same behavior – such as asking a student who stutters to repeat an answer – as both supportive and unsupportive. While many of the behaviors mentioned by respondents align with recommendations from professional literature, others appear to be tenuously connected to the actual needs of a stuttering student, particularly in a school setting – for instance, incorporating music into lessons or discussing the issue of stuttering in the child's presence.

7. How do the surveyed teachers evaluate their own knowledge about stuttering in school- and preschool-aged children, and do they express a desire to improve it?

Most respondents rated their knowledge as "average," yet many acknowledged the need for further education on the subject, which is an encouraging sign. However, optimism is tempered by the finding that 84% of respondents rely on the Internet – rather than professional literature – as their primary source of information about stuttering.

The results of this study reveal clear gaps in teachers' knowledge about stuttering. These gaps may partly stem from limited exposure to students who stutter, but they also appear to reflect the persistence of outdated beliefs or misinformation about stuttering. While the Internet is a convenient source of knowledge and it is unsurprising that over 80% of the surveyed teachers turn to the Internet, much of the information available online – particularly on such a sensitive issue as stuttering – is not moderated by experts or regularly updated, which can perpetuate harmful myths and inaccuracies.

Given these challenges, it is crucial to ensure that teachers have access to reliable sources of knowledge about stuttering, such as scientifically grounded educational websites like www.logolab.edu.pl, current scholarly articles, popular science publications, and regular training sessions led exclusively by accredited specialists. Furthermore, the curriculum for future teachers should include more comprehensive content related to communication difficulties among students – not limited solely to stuttering.

Anti-discrimination programs, such as InterACT, aimed at preschool-aged children, could also play a valuable role in promoting awareness and understanding of stuttering. Additionally, a mentorship program in which experienced specialists or educators provide guidance and support to less experienced teachers could prove to be an effective strategy. Although these initiatives represent long-term strategies whose results will not be immediate, they hold the potential to gradually shift teachers' attitudes and improve their approaches toward students with stuttering. This is especially important given that teachers often serve as primary role models for their students, and their attitudes carry significant weight. Teachers, therefore, hold the potential to drive meaningful and lasting improvements in how students who stutter are supported within Polish educational institutions.

A pivotal first step toward increasing societal awareness and implementing the proposed changes could involve introducing educational materials on stuttering to the Integrated Educational Platform. These materials should be based exclusively on scientific evidence and present key information on stuttering in a concise, accessible manner.

To maximize their utility, these resources could be offered in two formats:

1. A basic version, accessible to all students and anyone interested in the topic, providing general insights into stuttering.
2. An expanded version, reserved for teachers, which would include teaching strategies and practical advice to avoid common mistakes when working with students who stutter.

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