

**This item is the archived peer-reviewed author-version of:**

Secondary school teachers' beliefs, attitudes, and reactions to stuttering

**Reference:**

Adriaensens Stefanie, Struyf Elke.- Secondary school teachers' beliefs, attitudes, and reactions to stuttering  
Language speech and hearing services in schools / American Speech, Language, Hearing Association - ISSN 0161-1461 -  
47:2(2016), p. 135-147

Full text (Publishers DOI): [http://dx.doi.org/doi:10.1044/2016\\_LSHSS-15-0019](http://dx.doi.org/doi:10.1044/2016_LSHSS-15-0019)

To cite this reference: <http://hdl.handle.net/10067/1346100151162165141>

Secondary school teachers' beliefs, attitudes and reactions to stuttering.

Stefanie Adriaensens and Elke Struyf

University of Antwerp

Corresponding author: Faculty of Social Sciences, Department of Training and Education

Sciences, Gratiekapelstraat 10, 2000 Antwerp, Belgium. +32 3 265 46 35.

stefanie.adriaensens@uantwerpen.be

### Abstract

**Purpose:** The study identifies teachers' beliefs about and attitudes toward stuttering and explores to what extent these beliefs and attitudes prompt specific teachers' reactions to the stuttering of a student.

**Method:** Participants were teachers in secondary education in Flanders (Belgium), currently teaching an adolescent who stutters. They were the student's class teacher or instructed a course in which communication is important. Ten semi-structured interviews were conducted and analyzed thematically.

**Results:** Teachers believed that (1) when peers do not react to the stuttering, the lesson is not disrupted by it and the student who stutters participates in the lesson, stuttering is not necessarily a problem; (2) when paying attention to it, stuttering can become a problem; (3) they try to react as little as possible to the stuttering, and (4) they seldomly talk about the stuttering.

**Conclusion:** Although teachers reported they feel confident in how to deal with stuttering and although it is possible that students who stutter do not feel the need to talk about their stuttering, teachers could consult the student on this matter. This way they acknowledge the stuttering and likely encourage the student to approach them when they feel the need.

*Keywords:* Stuttering, adolescents, education

## 1. Introduction

Considering a 5% lifetime incidence of stuttering and a prevalence of 1% in the school population (Bloodstein & Ratner, 2008), it is likely that teachers will encounter a student who stutters in their classroom.

Taking into account the physical and emotional changes adolescents go through and the additional stress due to stuttering, it can be expected that the experiences of secondary school students who stutter are affected (Crichton-Smith, 2002; Daniels, Gabel, & Hughes, 2012; Hayhow, Cray, & Enderby, 2002; Hearne, Packman, Onslow, & Quine, 2008). Because teachers are key figures in students' daily life, a supportive and understanding relationship with the teacher could act as a protective function for such students with a heightened risk of experiencing social, emotional, and mental health problems (Murray & Pianta, 2007). Teachers' support and a safe classroom environment are important for students' well being (Suldo et al., 2009).

It has been shown, however, that teachers do not always feel competent to support the needs of their students. Although they are likely to be concerned about their students, teachers often report feelings of frustration and helplessness (Rothi, Leavey, & Best, 2008). They are concerned that they will not notice in time those students who need extra support and indicate that their teacher training does not prepare them sufficiently to support students with special educational needs (Marshall, Stojanovik, & Ralph, 2002; Struyf, Adriaensens, & Verschueren, 2013). Regarding stuttering, teachers themselves and speech-language pathologists (SLPs) have indicated that the knowledge and training of teachers in stuttering is negligible and insufficient (Crichton-Smith, Wright, & Stackhouse, 2003; Jenkins, 2010).

### 1.1. Teachers' Beliefs, Attitudes and Reactions Toward a Student Who Stutters

Past research has shown that teachers can hold stereotypical and negative beliefs about and attitudes toward people who stutter, similar to other groups of people, such as parents and employers. PWS are generally described as frustrated, anxious, shy, nervous, quiet, and introverted and their stuttering is often believed to have a psychological or emotional cause (e.g. Abdalla & St Louis, 2012; Abdalla & St Louis, 2014; Boey, 2008; Boyle, Blood, & Blood, 2009; Heite, 2000; Lass et al., 1992). More recent studies are starting to show more accurate knowledge and positive attitudes toward stuttering by teachers (Irani, Abdalla, & Gabel, 2012; Irani & Gabel, 2008; Pachigar, Stansfield, & Goldbart, 2011; Plexico, Plumb, & Beacham, 2013). However, it is possible that cultural differences between the western, eastern and middle-eastern countries that have been studied could explain this evolution. Also the use of different techniques and methods to investigate teachers' beliefs and attitudes, such as semantic differential scales, questionnaires or vignettes, could account for the different findings.

Regarding teachers' behavior, most qualitative studies considered the point of view of PWS. For example, Hearne et al. (2008) interviewed adolescents and adults who stutter, who reported that their stuttering is or was largely ignored by teachers. Moreover, when looking back at their school experiences, some adults reported teachers' lack of understanding, negative reactions to their stuttering, disbelief or distrust in the presence of a stuttering problem, and teachers pressuring them into public speaking. On the other hand, others also remembered some teachers understanding them and treating them normally. Special treatment was viewed both positively and negatively; teachers tend to be more sensitive, but special treatment also separates students who stutter from the rest of the class (Crichton-Smith, 2002; Klompas & Ross, 2004).

Abdalla and St. Louis (2012) and Heite (2000) considered the point of view of teachers and analyzed specific reactions of teachers to stuttering using a questionnaire. Both studies used a comparable measurement, presenting participating teachers the option to accept or reject different possible behaviors toward stuttering in their classroom. In both studies, teachers did not choose to excuse a student who stuttered from class discussions and oral tasks. However, in these studies other possible reactions of teachers toward stuttering were more equivocal; for example, when teachers were asked if they would suggest that the student should slow down, think before he or she speaks, or take a deep breath, or if they would finish the words of the student who stutters, or talk with the student about the stuttering.

Heite (2000) found a connection between teachers' attitudes regarding stuttering and their reaction to talking about the stuttering of the student. In this report, teachers with negative attitudes toward stuttering mostly agreed that they would talk with the student about his or her stuttering, while teachers with more positive attitudes were less likely to agree with the statement. The latter were more likely to talk with the class about stuttering, than with the student who stutters. Teachers with a more positive attitude toward stuttering unanimously rejected suggesting that the student should take a deep breath. Surprisingly, except for the study of Heite (2000), little research has described how teachers' attitudes toward PWS influence their behavior.

## **1.2. Aim of the Study**

The results of the above-mentioned studies indicate mixed beliefs, attitudes and reactions of teachers toward stuttering. Hughes, Gabel, Irani, and Schlagheck (2010) emphasized, in this regard, that qualitative research related to attitudes toward PWS is rare but essential to capture the complexity of the nature and meaning of fluent speakers' attitudes toward PWS. Moreover, the studies regarding teachers' reactions to stuttering described on

the one hand more general school experiences as perceived by PWS, using qualitative measures (Crichton-Smith, 2002; Hearne et al., 2008; Klompas & Ross, 2004). On the other hand, they described specific teacher behaviour as perceived by the teachers themselves, using quantitative measures (Abdalla & St. Louis, 2012; Heite, 2000). An in-depth qualitative study considering teachers' point of view is indispensable to study why and how teachers react to the stuttering of a student. The research question driving this study is: How do teachers' beliefs about and attitudes toward stuttering prompt teachers' specific reactions toward the stuttering of a student?

## **2. Method**

### **2.1. Participants**

The participants in the study were teachers of mainstream secondary education in Flanders (Belgium), currently teaching an adolescent who stutters. They were a head class teacher or a teacher instructing a course in which communication is important (e.g., a language course, such as Dutch or English). Seventeen candidates<sup>1</sup> were contacted and 10 interviews conducted. Four teachers did not reply to the invitation and three teachers declined the invitation because of a lack of time or familiarity with the student. The 10 interviewees taught in different schools. The corresponding students who stutter varied in degree of (self-reported) stuttering severity (Likert scale adopted from Klompas & Ross, 2004). Table 1 provides details of the participating teachers and their students who stutter. Names have been changed to maintain confidentiality.

INSERT TABLE 1 ABOUT HERE

### **2.2. Data Collection**

Data were collected using semi-structured interviews. Such interviews are very suitable in terms of exploring the experiences of teachers with stuttering in their classroom in depth, since this method allows participants to elaborate on how they interpret their social world. Respondents often recognize researchers' attempts to measure stereotypes when attitudes are explored with questionnaires. This can elicit social desirable answers. Through interviews, these attitudes and their behavioral consequences can be explored more indirectly (Hughes et al., 2010).

The researchers designed a semi-structured interview, which allows participants to speak freely but at the same time gives control to the interviewer in making the interview proceed in a more focused and effective way. The interview schedule was divided into four sections (see Cohen, Manion, & Morrison, 2011; Mortelmans, 2007). Table 2 gives a description of the sections of the interview and offers example questions.

INSERT TABLE 2 ABOUT HERE

The interviews took place in April and May of 2014, near the end of the school year. Because the first author stutters, a master student in professional communication, trained to do interviews, conducted the interviews. Prior to the interviews with the teachers, the interviewer and the first author read through the interview schedule and practiced the procedure. The average duration of the interviews with the teachers was one hour. Participants were informed about the aim of the interview, namely to explore their knowledge and beliefs about stuttering and the relationship with the student who stutters in their classroom. The interviewees gave their consent to being video-recorded.

### **2.3. Data Analysis**

After a verbatim transcription of the interviews, the transcripts were analysed thematically (Braun & Clarke, 2006; Hughes, Gabel, & Daniels, 2015), using a qualitative

analytic method for identifying and exploring themes across a data set. Nvivo v.10.1.2 was used to support this process. In a first phase of the analysis, the first author became familiar with the data through repeated reading of the transcripts, to gain an impression of the data as a whole. First impressions and ideas for coding were noted. During the second phase, initial codes were generated and these codes remained close to the raw data. In the third phase, the different codes were sorted into meaningful themes. The interpretative analysis of the data occurred through looking for relationships between codes and between themes. During the fourth phase, the themes were reviewed, checked against the data and refined. Verbatim quotes from the interviews were used to illustrate the findings. For a detailed description of the process of our thematic analysis we refer to Braun and Clarke (2006).

Both authors are educational researchers experienced in studying the guidance of students with special needs. The first author, who did the most of the analytical work, has a degree in clinical psychology. Several procedures were used to promote the trustworthiness of the data and the results (see Cohen et al., 2011; Creswell, 2009; Mortelmans, 2007). Firstly, peer debriefing or sceptical peer review was conducted regularly between the first and second authors. Moreover, a team of colleagues reviewed the interpretation of the data and expressed alternative ideas. Secondly a member check was conducted; conclusions derived from the interviews were presented to the participants. They were invited to comment on the credibility of the findings. The participants agreed with the summary of the findings. Finally, the completeness and accuracy of the documents (e.g. interview transcripts, observational notes and coding schemes) was ensured through the use of the qualitative data analysis software package Nvivo. This allows the primary documents to be retrieved from the authors to assess whether the interpretations are supported.

### 3. Results

The results are described in two major sections: teachers' beliefs about and attitudes to stuttering (3.1.) and their reactions to stuttering in the classroom (3.2.). Each section is further divided into major themes and sub-themes.

#### 3.1. Beliefs about and Attitudes to Stuttering

Throughout the interviews, participants expressed different beliefs about and attitudes to stuttering and people who stutter, which were organised into three major themes. Firstly, we elaborate on teachers' statements about how knowledgeable they perceive themselves to be in the area of stuttering (3.1.1.). Secondly, we report their descriptions of stuttering and its influences (3.1.2.) and, finally, we clarify the teachers' evaluation process of the stuttering disorder, in terms of consequences for the student who stutters and others (3.1.3.).

##### 3.1.1. Teachers stated that they are not very knowledgeable about stuttering.

Most participants said that they did not know much about stuttering in general. Three participants noted that the subject was somewhat covered during their studies. Some participants mentioned that they looked for information online or found out more about stuttering through a movie (e.g. *The King's Speech*) or a television programme (e.g. a documentary about the 'stutter pub'). Information regarding the specific situation of the student who stutters, such as the history of their disorder and the tools they use to cope with their stuttering, was sometimes available during the class council or from the student's SLP and two participants mentioned talking to the parents of the student. Only two participants remembered other students who stuttered, while five participants knew somebody who stutters outside their classroom. Finally, one participant wondered if he had had a minor stuttering problem during college. Quotes to illustrate these findings are shown in Table 3.

INSERT TABLE 3 ABOUT HERE

**3.1.2. Stuttering is defined in terms of primary stuttering behaviour and emotional influences.** As shown in Table 4, when defining stuttering, participants mostly specified observable stuttering behaviors, such as repeating sounds or stumbling over or faltering on words, or described stuttering in terms of disrupted speech. Only one participant mentioned a neurological cause, linking stuttering to the brain, while one other participant described stuttering in technical terms, referring to the respiratory process. Also, all participants commented on the significance of emotional influences on stuttering. The most obvious emotions that increase stuttering referred to by the teachers were nervousness and feelings of stress, while feeling self-confident and comfortable decrease stuttering. Seven participants also underlined the role of social factors in strengthening or reducing these emotions; for example, unknown situations, a class with a history of bullying, or the start of an academic year with new classmates and new teachers, in contrast to a classroom atmosphere in which students feel comfortable.

INSERT TABLE 4 ABOUT HERE

**3.1.3. A stuttering problem is evaluated in terms of consequences for others and the student who stutters.** Possible consequences of the stuttering for classmates, the teaching and the students that stutter themselves emerged during the interviews. The different consequences have a different impact on the teachers' evaluation of the severity of the stuttering 'problem'. The subthemes summarize the perception of the majority of the participants. Table 5 gives an overview.

INSERT TABLE 5 ABOUT HERE

***'Stuttering could elicit reactions from peers'***. Participants emphasized that they were impressed because, in general, classmates do not react to the stuttering. This indicates that the teachers expect stuttering to elicit reactions from others. Nine teachers discussed possible reactions, such as laughing, making remarks, feeling uncomfortable or embarrassed, being bored or distracted or trying to help the student.

***'Stuttering could hinder the teaching'***. As well as the possibility that stuttering triggers both behavioral and emotional reactions from listeners, different participants also commented on the possible disrupting effects of stuttering on a communication situation. Five participants remarked that the stuttering of a student could possibly slow down the lesson and, depending on the content or aim of the lesson, this could be troublesome, or that the stuttering could make it harder for peers to understand an oral exercise or presentation made by the student who stutters.

***'PWS who perceive their stuttering as a problem are introverted'***. Most participants were convinced that their student did not have a problem with his or her stuttering if he or she did not hold back during classes. Subsequently, the teachers did not perceive the stuttering of their student to be a problem. Only when students who stutter would not participate much in class or would not ask questions would teachers consider the stuttering as a problem. Those students would be perceived as shy, introverted, or quiet as a consequence of their stuttering.

***'Stuttering could cause emotional burden'***. Six participants mentioned the possibility of negative consequences for the student who stutters in terms of suffering or emotional burden, for example, worrying about how severe their stutter will be and, therefore, also being distressed when preparing a task, having to put up with the daily struggle, fearing a relapse, or feeling frustrated and misunderstood.

***'Stuttering could have consequences for the development of communicative skills and future possibilities. Nevertheless, future career choices are not necessarily ruled out'***.

Three participants accentuated possible effects of stuttering on communicative competences, in terms of language skills, telling a joke, or debating. Moreover, two of these participants expressed limitations for future job opportunities, such as becoming a doctor or a teacher. A different participant also expected extra difficulties for people who stutter, in comparison to their non-stuttering colleagues in a job that requires giving presentations.

Nevertheless, most participants suggested that a good assessment of the student's strengths and weaknesses is often advised when choosing future studies. Five participants stressed that character and determination are important characteristics they often see in the students in question. In other words, they did not want to rule out future career choices for their student who stutters.

*'The stuttering does not have to be a problem'*. Nine participants referred to the stuttering in terms of a possible 'problem'. In addition to the degree of participation during class, to evaluate the severity of the problem participants primarily looked at whether or not classmates reacted to the stuttering and whether or not the stuttering disrupted the lesson. Other possible consequences, when mentioned, often did not weigh heavily on this evaluation process. As a result, only two participants evaluated the stuttering of their student as a problem.

*'Focussing on stuttering creates a problem'*. Participants expressed the idea that if, in their opinion, the student does not seem to be less outgoing because of his or her stuttering, if the lesson is not disturbed, or if peers do not react negatively to the stuttering, they do not need to pay extra attention to the disorder. This would only emphasize or increase the problem. Even the two teachers who labelled the stuttering as a problem underlined that there was no need to focus or elaborate on it if the student did not ask for help. According to the teachers, focussing on a problem could lead to labelling and setting someone apart from the group, which could result in pity and, therefore, less open-mindedness, or could be

demotivating for the student to cope with the problem. Three participants emphasized that a student is more than his or her disorder.

### **3.2. Reactions to Stuttering**

Four major themes regarding the reactions of teachers toward the stuttering of their students emerged, namely the teachers' level of confidence in coping with the stuttering (3.2.1.), their actual reactions (3.2.2.), the use of specific measures (3.2.3.) and the issue of openness about stuttering (3.2.4.). The results are summarized in Table 6.

INSERT TABLE 6 ABOUT HERE

#### **3.2.1. Teachers often feel confident in coping with the stuttering of a student.**

Although two participants felt insecure in helping their student who stutters, because of the before-mentioned lack of knowledge on stuttering, the majority of teachers said that they did not doubt their reactions toward the stuttering of their student, because they did not perceive it as a problem or they felt confident they knew enough to deal with a specific situation. One teacher felt that it was good to know little about stuttering, so he could approach his student with an unbiased mind.

#### **3.2.2. Teachers' reactions to a stuttering moment.**

*'Try to react as little as possible'*. All participants pointed out that they did not react much to the stuttering or tried to act 'normally'. Four participants stressed that they did not react much because the stuttering was not severe or happened unexpectedly, while two other participants mentioned it was because they were insecure about how to best react to the stuttering of the student. Moreover, despite concerns related to the student's stuttering mentioned by four other participants, they tried not to show these feelings.

*'Try to ease the student's stress'*. Participants generally expressed that they wanted to help the student who stutters. The majority of the participants believed that in order to help they needed to reduce students' stress levels. In other words, the belief that stress or nervousness causes or increases stuttering was very important in guiding participants' behaviour. Examples of approaches used by the teachers to ease the students' stress, or at least to avoid putting extra pressure on them, are: advising them to calm down, avoiding eye contact, smiling, giving enough time to answer, and not unexpectedly choosing the students to answer a question. Participants were mostly unsure whether or not to finish the words of the student when he or she stutters, because they were worried that the student would feel pressured or that finishing the words of the student who stutters would emphasize the stuttering. Three participants explained that they felt the need or urge to finish the words, because of their enthusiastic nature, or because in other conversations this is a normal reaction. However, they tried to inhibit this reaction. Only one teacher was certain about finishing the words of his student that stutters, as this assured him that this student would not have to deal with an embarrassing situation.

**3.2.3. Special measures are seldom asked for or used.** Five participants mentioned that specific helpful measures related to the stuttering of the student were officially captured on paper in a student's file or otherwise based on a mutual oral agreement between the teacher and the student. The specific measures refer to the agreement that the student would indicate if he or she does not want to do an exercise or otherwise would raise his or her hand when he or she does want to answer. Three teachers specified that special measures were not necessary, because there was no problem or because it was not necessary to pay extra attention to the stuttering disorder. One teacher pointed out that the parents of the student

specifically asked that the teacher would not pay special attention or give extra care to the stuttering student.

Whether with or without officially noted special measures, the majority of participants emphasized that their student did not ask for special treatment or mentioned that their student did not make use of the possibility to avoid an exercise. One participant noted that the student probably did not ask for special treatment to avoid comments made by other students.

### **3.2.4. Teachers' openness about stuttering is limited.**

*Teachers see involvement and openness as important factors of a teacher-student relationship.* All participants indicated that, in general, having a relationship of trust, feeling comfortable with each other, and expressing openness are important in their relationship with their student. They also underlined the importance of personal contact with their students and being there for them when they need help.

*Stuttering is not often talked about..* Although openness in general was strongly emphasized, it is noteworthy that discussing or talking about stuttering does not typically occur. In line with before-mentioned conclusions, the participants argued that the stuttering did not need to be emphasized or exaggerated by talking about it. Participants also indicated that the student, or the class, did not express a need to talk about the stuttering or to be asked about it, although one participant pointed out that perhaps it is not so easy for students to approach the teacher to talk about their problem. Finally, two participants commented that it was not their task to talk about stuttering to the class, because they were not the head class teacher. It seems that the different reasons reported by the teachers are not related to the stuttering severity of the students.

*Advantages of talking with the student who stutters.* Three teachers mentioned that they had approached the student regarding his or her stuttering, mostly in response to a

specific situation, or in anticipation of a speaking exercise. Two of them did this on more than one occasion. Two participants indicated that they talked very briefly about stuttering in the class, in response to a presentation about stuttering or a question from a classmate.

When teachers discussed stuttering with their student, they perceived different advantages. One participant mentioned that she approached the student in order to feel more confident in coping with the stuttering of the student. Also, it was stated that openness about stuttering benefitted the relationship with the student. Other benefits of talking about stuttering that emerged from the data were encouraging participation when necessary and encouraging the student's initiative to talk about their stuttering. Finally, in response to speaking exercises, talking about stuttering offered possibilities to give constructive feedback, to agree about the evaluation of an exercise and to make exercises optimally challenging for the stuttering student.

#### **4. Discussion**

The current study focused on teachers' experiences of having a student who stutters in their classroom. Most studies describing school life experiences of people who stutter have focused on the experiences of PWS (Crichton-Smith, 2002; Daniels et al., 2012; Hayhow et al., 2002; Hearne et al., 2008; Klompas & Ross, 2004), whilst studies that took into account the teachers' perspective primarily used quantitative methods (Abdalla & St Louis, 2012; Heite, 2000). In contrast, our study reports teachers' beliefs about and attitudes to stuttering and the way these beliefs and attitudes guide their reactions to the stuttering using qualitative data, collected through interviews.

##### **4.1 Main findings**

The main findings that emerged from this in-depth data can be summarized as follows: teachers believed that (1) when peers do not react to the stuttering, the lesson is not disrupted by the stuttering and the student who stutters participates in the lesson, stuttering does not have to be a problem; (2) when paying (too much) attention to the stuttering – like talking about it in class – stuttering can become a problem; (3) in their reactions to the stuttering, they tried to act normally or reacted as little as possible and (4) they seldomly discuss or talk about the stuttering, although they mentioned that openness about stuttering could be beneficial.

#### **4.1.1. Teachers' Beliefs and Attitudes on Stuttering**

Overall, participants stated that they did not know much about stuttering, which could explain the uncertain or cautious use of language when describing stuttering. Teachers described stuttering in terms of observable stuttering behaviors and emotional influences. Consistent with quantitative studies on teachers' attitudes to stuttering (Abdalla & St Louis, 2012; Heite, 2000), teachers stressed the aggravating impact of nervousness and stress and, consequently, the importance of a classroom environment in which the student who stutters feels comfortable. The neurological factor, or genetic causal component as supported in the literature (Gordon, 2002; Yairi & Ambrose, 2013), was barely mentioned by the teachers in our study. The emphasis on feeling nervous and stressed is consistent with the view that people make inferences about PWS based on their own feelings of nervousness during normal speech disfluency (MacKinnon, Hall, & MacIntyre, 2007).

*'The stuttering does not have to be a problem'*. How do teachers come to conclude whether or not the stuttering of their student is problematic? Firstly, they consider reactions of classmates toward the stuttering. According to the teachers, possible listener reactions to stuttering are feelings of being uncomfortable or embarrassment, feelings that were also

observed in a study by Guntupalli, Everhart, Kalinowski, Nanjundeswaran, and Saltuklaroglu (2007). But mostly they expected classmates to laugh or make remarks, when in fact no teacher observed these kinds of reactions. Although different studies have mentioned that children and adolescents who stutter are more likely to be bullied, or are less likely to be popular (Davis, Howell, & Cooke, 2002; Erickson & Block, 2013), other studies have concluded that the stuttering was rather accepted by friends and classmates (Blood, Blood, Tellis, & Gabel, 2003; Hearne et al., 2008).

Participants also commented on the possible disrupting effect of the stuttering on the lesson's momentum and took into account the degree of classroom participation of the student when evaluating the severity of the stuttering disorder. Previous studies exploring attitudes toward PWS often described these attitudes in terms of personality traits, such as PWS being shy, anxious, and withdrawn (Boey, 2008). However, in accordance with the study of Hughes et al. (2010), in our study the characteristics of shyness, being withdrawn or anxious in answering in class were seen as a consequence of severe stuttering. In fact, most participants concluded that their student did not have a problem with his or her stuttering because he or she was not shy during classes.

Other possible consequences, such as emotional burden, lower perceived communicative skills, and fewer future possibilities were not so important in the perception of the stuttering as problematic. It seems that teachers mostly take consequences in the classroom into account when evaluating the impact of stuttering, in contrast to consequences that primarily concern the student.

*'Focussing on stuttering creates a problem'*. When teachers did not perceive a problem, they subsequently did not want to create a problem by paying attention to, or emphasizing, the stuttering. In other words, if the student seemed to be outgoing, despite his

or her stuttering, if the lesson was not disturbed, or if peers did not react negatively to the stuttering, teachers did not want to pay needless attention to the disorder, because in their opinion this would only create a problem or amplify the problem. It is possible that this attitude is a consequence of the current trend in educational settings to emphasize students' strengths instead of focussing on weaknesses and a reaction to the excessive labelling of students (Banks et al., 2007; Doveston & Keenaghan, 2006). The results suggest that teachers possibly just want to show that they do not perceive the stuttering of the student as a problem. Nevertheless, a student who stutters could perceive this decreased teacher's attention as a lack of awareness or involvement (Hearne et al., 2008).

#### **4.1.2. Reactions to Stuttering**

Although teachers differed in the degree of confidence they had to address the stuttering, all participants expressed the intention to support the student who stutters. Or, as pointed out by Rustin, Cook and Spence (1995, as cited by Klompas & Ross, 2004), the majority of teachers are understanding individuals who want to help their students who stutter.

*'Try to react as little as possible'*. Hughes (2008) pointed out that fluent speakers want to help PWS by preventing them from experiencing emotional distress or feelings of nervousness. In our study, also, teachers primarily focus on minimizing feelings of distress. Often, this meant that teachers try to react as little as possible to the stuttering. This is possibly because of the regularly heard advice for listeners to act normally or be respectful toward PWS (Hughes, 2008) or in line with the belief that the stuttering does not need to be emphasized. Teachers mentioned other approaches to ease the student's stress, such as advising them to take their time, not making too much eye contact and giving enough time to

answer. The reaction that participants were most unsure about was whether or not to finish the words of the student when he or she stutters. Different participants stated it is a natural reaction to finish words during a conversation, which is also acknowledged by participants in the study of Hughes (2008). Nevertheless, consistent with the findings of Heite (2000), most participants eventually refrained from finishing the words or sentences for their student who stuttered, because they were worried that the student would feel pressured or that this would emphasize the stuttering.

In line with not paying too much attention to the stuttering, special measures - like the arrangement that the student could indicate if he or she does not want to do an exercise, for example - were seldomly used. Mostly, teachers stated that students did not ask for special treatment. Accordingly the above-mentioned trend that nowadays the labelling of students or deficit thinking is discouraged, it appears that teachers do not question this lack of request for extra support. This is consistent with the results of the studies of Abdalla and St Louis (2012) and Heite (2000), in which most teachers did not choose to excuse students who stutter from class discussions and oral tasks. It is possible that students do not ask for special measures because they want to avoid comments, as one teacher remarked. Indeed, adolescence is characterized by increased self-consciousness, resulting in adolescents trying to diminish negative attention induced by special treatment (Santrock, 2011). Therefore, in general, students with special educational needs often do not ask for extra support or special measures.

***'Stuttering is not often talked about'***. Participants were not keen on discussing the stuttering with the student who stutters or with the class. Participants especially stressed that the stuttering did not need to be emphasized or exaggerated by talking about it. This finding is in contrast to the quantitative study of Heite (2000) where the majority of the teachers indicated they would talk about stuttering with the class or the student. It is possible that

teachers, when asked hypothetically, often assume they would talk openly about stuttering. The participants in the current study indeed expressed that openness is an important characteristic that they pursued in the relationship with their students. However, when they encounter a student who stutters in their classroom it appears that teachers, regardless the stuttering severity, do not want to mention the stuttering if the student is extroverted and talkative. Or, as the participants in the current study stated, when the student (or the class) does not express a need to talk about the stuttering or explicitly ask for it, there is no need to talk about it. Maybe teachers are not confident to start a conversation about the stuttering. Or, as observed by Blood, Blood, Tellis, and Gabel (2001) and Hearne et al. (2008), adolescents are not necessarily likely to talk about their stuttering, and especially when they feel that their teachers ignore the stuttering, they do not approach them (Hearne et al., 2008).

Discussing the stuttering could however offer important information about which reactions a student prefers and could benefit the relationship between the student and their teacher. If applied, we assume that openness about stuttering can create opportunities for teaching behaviour related to autonomy-supportive teaching and structuring measures, as outlined in self-determination theory (SDT, Deci & Ryan, 2000). For example, asking students how they would like to approach an upcoming speaking activity or stimulating students to answer questions when they did not raise their hand (after checking this with the student), can create possibilities to increase their participation in the classroom. This would address the issue that PWS sometimes adopt coping behaviors that limit their classroom participation or various routines to hide their stuttering in the classroom (Daniels et al., 2012). Openness about stuttering also creates opportunities when dealing with speaking exercises, for example creating an optimal challenge and communicating clear agreements before the exercises, expressing encouragement during the exercise and giving constructive feedback

after it. These kinds of structuring measures, as referred to in the SDT, could increase the experience of efficacy or feelings of competency while completing a speech related task.

#### **4.2. Implications for Educational Settings and Clinical Practice**

The results of the study are particularly interesting in light of implications for educational settings and for clinical practice. As underlined in other studies (eg. Hearne et al., 2008; Klompas & Ross, 2004) there is a need for increasing awareness and knowledge about stuttering among teachers. Teachers do not need to be experts in the area of stuttering, but they do need some basic information to better understand the complexity of stuttering and its possible implications for the student who stutters. More insight regarding the neurological cause of stuttering, which explains the primary stuttering behaviour, the secondary emotional processes and accompanying coping and avoiding behaviours (cf. the iceberg metaphor; Sheehan, 1970) will likely help to better adjust their reactions to the stuttering of a student. Increased knowledge could weaken the belief that PWS who suffer from their stuttering are noticeably and evidently shy and introverted or, conversely, that PWS who are talkative, extroverted and social do not experience an emotional burden. In addition to information about the process of stuttering, teachers may benefit from tips on how to react to the stuttering of a student. As underlined by Ota and Nagasawa (2004), teachers should give a positive message about the student's stuttering, namely, that it is okay to stutter. Tips should promote behavior that facilitates positive interactions and acceptance of the stuttering, such as maintaining eye contact with the individual who stutters, giving him or her extra time, and not finishing words or sentences for the student.

Increased knowledge will not only be beneficial for the student but will also reduce teachers' doubts or uncertainty about their reactions to students who stutter. Most importantly, teachers who feel more confident about how to cope with a student who stutters and who

better understand the process of stuttering, are probably more likely to approach the student to talk about the stuttering. Being open about stuttering not only offers teachers the best information about which reactions a specific student prefers but possibly makes it easier for students themselves to approach the teacher when experiencing difficulties. As emphasized by Starkweather and Givens-Ackerman (1997), those who understand stuttering are easier to talk to. Increased knowledge and openness about stuttering, therefore, not only increases understanding about stuttering but also builds up a positive and supportive relationship (Corcoran & Stewart, 1995, as cited by Hayhow & Stewart, 2006).

Openness about stuttering creates different opportunities, both in and outside the classroom. Our findings showed the possibilities related to openness about stuttering to provide autonomy and competency for students who stutter when these are challenged because of their stuttering. In addition to these opportunities in the classroom, openness also creates chances for cooperation with caregivers outside the classroom, such as SLPs, psychologists and student counsellors. In accordance with Abdalla and St Louis (2012), interactions with specialists in the field were barely referred to in our study. Firstly, when students want to have treatment for their stuttering, a teacher could support this decision. Or, as Hearne et al. (2008) emphasized, teachers' lack of awareness and knowledge about stuttering could make it even more unlikely for students to access treatment. Secondly, when students are in treatment for their stuttering, the caregiver could be an educator or facilitator in order to help teachers cope more effectively with the student who stutters. But what is more, teachers could also play an important role in the treatment of the student; for example, they could follow up agreements between the SLP and the student to do speech related exercises during class.

#### **4.3. Limitations and Future Studies**

Some limitations apply that were inherent in the research design and analysis of the study. Firstly, although qualitative research through interviews offered a method to study the attitudes and reactions of teachers in more depth, as well as the relationship with their student who stutters, it also limits generalizations to the wider population of teachers. For example, the majority of the discussed students followed a general track in mainstream secondary school. Future research could study whether teachers' beliefs or reactions vary across different tracks or type of education (mainstream or special schools). Subsequently, because of the workload that corresponds with qualitative research, the study was limited to ten interviews. Different subthemes, for example, the student-teacher relationship, could be elaborated in more detail. Nevertheless, regarding the main conclusions, we achieved saturation of data in that no new material arose.

Secondly, future studies could take into account students' and teachers' perceptions to study the effects of teachers' attitudes and reactions on students' experiences more directly. Subsequently, interviews could be combined with classroom observations. These observations could reveal whether teachers treat or approach students who stutter differently compared to students who do not stutter. Moreover, by taking into account both teachers' and students' perspectives and adding classroom observations, future studies could explore in more detail the student-teacher relationship and whether basic needs of students who stutter are actually met.

## **5. Conclusion**

Our results emphasize that although teachers in secondary education may often feel confident in how to deal with stuttering, their reactions to stuttering could be based on assumptions about the stuttering of their student. Primarily, they seem to assume that talking about stuttering will amplify or create a problem. It is possible that students who stutter do not feel

the need to talk about their stuttering. However, taking into account the tendency of adolescents to hide their stuttering (Blood et al., 2003; Hearne et al., 2008) and the fact that surface severity of stuttered speech does not necessarily indicate how much the student is struggling with the disorder (Beilby, 2014), it might be difficult for teachers to fully understand the stuttering. Therefore, it may not be so much a question of whether or not to acknowledge the stuttering but rather how to approach the student. Most importantly, the message has to be positive and accepting. As some participants in our study showed, this is often just a matter of taking a few minutes to check the student's preferences or feelings. This way the student will likely feel acknowledged and be encouraged to approach their teacher when they feel the need.

## References

- Abdalla, F. A., & St Louis, K. O. (2012). Arab school teachers' knowledge, beliefs and reactions regarding stuttering. *Journal of Fluency Disorders, 37*, 54-69.
- Abdalla, F., & St Louis, K. O. (2014). Modifying Attitudes of Arab School Teachers Toward Stuttering. *Language, Speech & Hearing Services in Schools, 45*, 14-25.
- Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., LePage, P., & McDonald, M. . (2007). Teaching diverse learners. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing Teachers for a Changing World* (pp. 232-274). San Francisco, CA: Jossey-Bass.
- Beilby, J. (2014). Psychosocial impact of living with a stuttering disorder: knowing is not enough. *Seminars in Speech and Language, 35*, 132-143.
- Blood, G. W., Blood, I. M., Tellis, G. M., & Gabel, R. M. (2001). Communication apprehension and self-perceived communication competence in adolescents who stutter. *Journal of Fluency Disorders, 26*, 161-178.
- Blood, G. W., Blood, I. M., Tellis, G. M., & Gabel, R. M. (2003). A preliminary study of self-esteem, stigma, and disclosure in adolescents who stutter. *Journal of Fluency Disorders, 28*, 143-159.
- Bloodstein, O., & Ratner, N. B. (2008). *A handbook on stuttering* (6th ed.). Clifton Park, NY: Thomson/Delmar Learning.
- Boey, R. (2008). *Stuttering. An epidemiological and phenomenological study. Effects of a social-cognitive behaviour therapy*. PhD dissertation, University of Antwerp, Antwerp.
- Boyle, M. P., Blood, G. W., & Blood, I. M. (2009). Effects of perceived causality on perceptions of persons who stutter. *Journal of Fluency Disorders, 34*, 201-218.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7 ed.). London: Routledge.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3th ed.). Thousand Oaks, CA: SAGE Publications.
- Crichton-Smith, I. (2002). Communicating in the real world: accounts from people who stammer. *Journal of Fluency Disorders, 27*, 333-352.
- Crichton-Smith, I., Wright, J., & Stackhouse, J. (2003). Attitudes of speech and language therapists towards stammering: 1985 and 2000. *International Journal of Language and Communication Disorders, 38*, 213-234.
- Daniels, D. E., Gabel, R. M., & Hughes, S. (2012). Recounting the K-12 school experiences of adults who stutter: A qualitative analysis. *Journal of Fluency Disorders, 37*, 71-82.
- Davis, S., Howell, P., & Cooke, F. (2002). Sociodynamic relationships between children who stutter and their non-stuttering classmates. *Journal of Child Psychology and Psychiatry, 43*, 939-947.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Doveston, M., & Keenaghan, M. (2006). Growing Talent for Inclusion: using an appreciative inquiry approach into investigating classroom dynamics. *Journal of Research in Special Educational Needs, 6*, 153-165.
- Erickson, S., & Block, S. (2013). The social and communication impact of stuttering on adolescents and their families. *Journal of Fluency Disorders, 38*, 311-324.
- Gordon, N. (2002). Stuttering: incidence and causes. *Developmental Medicine and Child Neurology, 44*, 278-281.

- Guntupalli, V. K., Everhart, D. E., Kalinowski, J., Nanjundeswaran, C., & Saltuklaroglu, T. (2007). Emotional and physiological responses of fluent listeners while watching the speech of adults who stutter. *International Journal of Language & Communication Disorders, 42*, 113-129.
- Hayhow, R., Cray, A. M., & Enderby, P. (2002). Stammering and therapy views of people who stammer. *Journal of Fluency Disorders, 27*, 1-17.
- Hayhow, R., & Stewart, T. (2006). Introduction to qualitative research and its application to stuttering. *International Journal of Language and Communication Disorders, 41*, 475-493.
- Hearne, A., Packman, A., Onslow, M., & Quine, S. (2008). Stuttering and its treatment in adolescence: The perceptions of people who stutter. *Journal of Fluency Disorders, 33*, 81-98.
- Heite, L.B. (2000). *Icelandic teachers' attitudes towards stuttering and classroom decision making*. Paper presented at the International Stuttering Awareness Day (ISAD) Online Conference (2000 October) Retrieved 20 November 2014 from <http://www.mnsu.edu/comdis/ISAD3/papers/heite/heite3.html>.
- Hughes, C.D., Gabel, R. M., & Daniels, D. E. (2015). Discussing stuttering with parents: A preliminary study of the experiences of adolescents who stutter. *Speech, Language and Hearing, 18*, 44-54.
- Hughes, S. (2008). *Exploring attitudes toward people who stutter: A mixed model approach*. Unpublished dissertation. Bowling Green, OH: Bowling Green State University.
- Hughes, S., Gabel, R. M., Irani, F., & Schlagheck, A. (2010). University students' explanations for their descriptions of people who stutter: An exploratory mixed model study. *Journal of Fluency Disorders, 35*, 280-298.

- Irani, F., Abdalla, F. , & Gabel, R. (2012). Arab and American teachers' attitudes toward people who stutter: A comparative study. *Contemporary Issues In Communication Science And Disorders*, 39, 12-20.
- Irani, F., & Gabel, R. (2008). Schoolteachers' attitudes towards people who stutter: Results of a mail survey. *Canadian Journal of Speech-Language Pathology and Audiology*, 32, 129-134.
- Jenkins, H. (2010). Attitudes of teachers towards dysfluency training and resources. *International Journal of Speech-Language Pathology*, 12, 253-258.
- Klompas, M., & Ross, E. (2004). Life experiences of people who stutter, and the perceived impact of stuttering on quality of life: personal accounts of South African individuals. *Journal of Fluency Disorders*, 29, 275-305.
- Lass, N. J., Ruscello, D. M., Schmitt, J. F., Pannbacker, M. D., Orlando, M. B., Dean, K. A., . . . Bradshaw, K. H. (1992). Teachers' perceptions of stutterers. *Language, Speech, and Hearing Services in Schools*, 23, 78-81.
- MacKinnon, S. P., Hall, S., & MacIntyre, P. D. (2007). Origins of the stuttering stereotype: Stereotype formation through anchoring-adjustment. *Journal of Fluency Disorders*, 32, 297-309.
- Marshall, J., Stojanovik, V., & Ralph, S. (2002). 'I never even gave it a second thought': PGCE students' attitudes towards the inclusion of children with speech and language impairments. *International Journal of Language and Communication Disorders*, 37, 475-489.
- Mortelmans, D. (2007). *Handboek kwalitatieve onderzoeksmethoden*. Leuven / Den Haag: Acco.
- Murray, C., & Pianta, R.C. (2007). The importance of teacher-student relationships for adolescents with high incidence disabilities. *Theory into Practice*, 46, 105-112.

- Ota, M., & Nagasawa, T. (2004). Survey of the adolescent experience of adults who stutter: Implications for enhancing the positive self-evaluation of young children who stutter. *Japanese Journal of Special Education, 41*, 465-474.
- Pachigar, V., Stansfield, J., & Goldbart, J. (2011). Beliefs and attitudes of primary school teachers in Mumbai, India towards children who stutter. *International Journal of Disability Development and Education, 58*, 287-302.
- Plexico, L.W., Plumb, A.M., & Beacham, J. (2013). Teacher knowledge and perceptions of stuttering and bullying in school - age children. *Perspectives on Fluency and Fluency Disorders, 23*, 39-53.
- Rothi, D. M., Leavey, G., & Best, R. (2008). On the front-line: Teachers as active observers of pupils' mental health. *Teaching and Teacher Education, 24*, 1217-1231.
- Santrock, J. (2011). *Adolescence (13th ed.)* New York: McGraw-Hill.
- Sheehan, J. (1970). *Stuttering research and therapy*. New York: Harper & Row.
- Starkweather, C.W., & Givens-Ackerman, J. (1997). *Stuttering*. Austin, Texas: Pro-Ed.
- Struyf, E., Adriaensens, S., & Verschueren, K. (2013). *Geïntegreerde zorg op school, een inspiratieboek voor de praktijk*. Leuven: Acco.
- Suldo, S. M., Friedrich, A. A., White, T., Farmer, J., Minch, D., & Michalowski, J. (2009). Teacher support and adolescents' subjective well-being: A mixed-methods investigation. *School Psychology Review, 38*, 67-85.
- Yairi, E., & Ambrose, N. G. (2013). Epidemiology of stuttering: 21st century advances. *Journal of Fluency Disorders, 38*, 66-87.

<sup>1</sup> The schools of 27 adolescents currently engaged in a longitudinal study were contacted, through which cooperation of teachers was requested. Specifically, the schools were requested to invite two teachers, namely the class teacher and a teacher instructing a course in which communication is important (e.g. a language course such as Dutch or English). One school did not cooperate; they did not specify the reason. From the list of 52 candidates for the interviews, teachers were randomly selected.

Table 1

*Participant details*

	Teacher					Student			Grade	Track <sup>4</sup>	
	Sex <sup>1</sup>	Age <sup>2</sup>	Teaching experience <sup>2</sup>	Course (Hours a week)	Head class teacher	Sex <sup>1</sup>	Age <sup>2</sup>	Stuttering severity <sup>3</sup>			
1	Ada	F	28	1	Mathematics (5)	Y	F	16	4	4th	GT
2	Ben	M	40	19	Dutch (4)	N	F	15	3	3th	GT
3	Cait	F	25	3	Dutch (4)	N	F	16	4	5th	GT
4	Don	M	48	25	Electricity (4)	Y	M	16	2	5th	TT
5	Eva	F	27	6	Practicum hair care (4)	Y	M	18	3	6th	VT
6	Fay	F	27	5	Latin (5)	Y	M	14	5	3th	GT
7	Gus	M	46	24	French (5)	Y	M	15	2	3th	GT
8	Hal	M	47	25	Dutch (4)	N	F	17	3	6th	GT
9	Ivo	M	36	13	Mathematics (8)	Y	F	17	3	5th	GT
10	Joy	F	27	5	Dutch (4)	N	F	17	3	6th	GT

<sup>1</sup>F=Female, M=Male;<sup>2</sup>in years;<sup>3</sup>1=manageable, 2=mild, 3=varies from mild to moderate, 4=moderate, 5=varies from moderate to severe, 6=severe<sup>4</sup>GT=general track, TT=technical track, VT=vocational track

Table 2

*The sections in the interview*

	Description	Example questions
Introduction questions	They start the conversation and are usually not so difficult to answer, because of their generality	How would you describe stuttering?
Transition questions	They question personal experiences with the subject and guide the interview towards the core of the study	How did you react when you were confronted with the stuttering of X for the first time?
Key questions	They question the essence of the subject and often require probing questions	Describe a situation in which you, in hindsight, would have reacted differently? What would you do differently? Why? How would you describe your relationship with X?
Concluding questions	They offer insight into the weight of the broad themes and close the interview	Which aspect of your relationship with X do you value the most?