REPORTED LEVELS OF CONFIDENCE IN WORKING WITH PEOPLE WHO STUTTER: THE VIEWS OF SPEECH AND LANGUAGE THERAPY STUDENTS

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INTRODUCTION AND LITERATURE REVIEW

Presented by Aoife Stack, Speech and Language Therapist, at the European Symposium on Fluency Disorders 2010, Antwerp.
BACKGROUND TO STUDY

- Lack of confidence among speech and language therapists (SLTs) has been documented (e.g. Yaruss & Quesal, 2002)

- Minimal coursework and insufficient clinical opportunities for SLT students with clients who stutter (Starkweather, 1995 cited in Kelly et al., 1997)

- Current study investigated levels of confidence in working with people who stutter (PWS) as reported by SLTs in training
RESEARCH AIMS & BRIEF METHODOLOGY

- To investigate whether a relationship exists between knowledge, clinical skills and the reported levels of confidence in working with people who stutter from the perspective of SLT students.
- Factors pertaining to academic and clinical education, which facilitated and served as barriers to confidence in working with PWS, were also addressed.
- Data was collected using questionnaires.
- Three universities were involved in this study.
- Research questions:
  - Is there a relationship between reported levels of knowledge and confidence of SLT students in working with PWS?
  - Is there a relationship between reported levels of clinical skills and confidence of SLT students in working with PWS?
ACADEMIC AND CLINICAL EDUCATION

- Lectures are only as efficient as other methods of teaching as a means of imparting knowledge; active discussion more effective (McKeachie, 1994 cited in Horgan, 2003)

- Case studies promote teamwork (Beaty, 2003)

- Awareness that SLT students engaged in limited reading and research into topics other than that undertaken for examination preparation led to the introduction of a hybrid PBL curriculum in colleges in Ireland (Leahy & Walshe, 2004)

- Student-centred learning (Baxter & Gray, 2001)
ACADEMIC AND CLINICAL EDUCATION

- Clinical placement is argued to be the most important element of education programmes (Sanford, Stratford, & Solomon, 1993 cited in Morris, 2007)

- Goal of clinical education is “to develop relevant knowledge and skills, together with an ability to integrate and apply these…in the clinical setting” (RCSLT, 1996: 233)

- The types of clinical education modes and experiences that are most important in the achievement of competence are not known, but a combination of pre-clinical preparation, direct client contact and other modes of learning (e.g. case-based learning) is needed (McAllister, 2005)
Development of confidence viewed as a stepping stone in becoming a competent professional, while academic theory and clinical practice are key, interacting elements of competence (Stansfield, 2004)

Adequacy of academic instruction and clinical experiences during professional preparation viewed as an important factor that bears on confidence (Shapiro, 1999)
CONFIDENCE IN WORKING WITH PWS

- Limited coursework and clinical experience in this area (Kelly et al., 1997; Yaruss & Quesal, 2002).
- Comparable findings noted in studies investigating confidence of SLTs with other specialised populations (e.g. Schwartz & Drager, 2008; Moseley, Mashie, Brandt, & Fleming, 1994; Hammer, Detweiler, Detweiler, & Qualls, 2004)

- **Academic Education:** Findings of Kelly et al. (1997) indicated that coursework in stammering is often minimal, emphasising theory rather than clinical practice.

- **Clinical Education:** According to Sommers and Caruso (1995), “the limited clinical training of speech-language pathologists appears to have resulted in a lack of confidence in the management of [clients] with fluency disorders” (p. 26).
METHODOLOGY

Presented by Aoife Stack, Speech and Language Therapist, at the European Symposium on Fluency Disorders 2010, Antwerp.
To investigate whether a relationship exists between three variables, that is, between levels of knowledge, clinical skills and confidence of SLT students in working with PWS.

A correlational, within-subjects design was adopted.
Figure 3: The Quantitative Research Process (Burns, 2000)
RESEARCH PARTICIPANTS

- Seventy speech and language therapists in training in their final year of study
- Purposive sampling used in participant selection to ensure most productive sample selected to address research questions (Glogowska & Campbell, 2000)
- Inclusionary/exclusionary criteria
- Contact process undertaken was as follows:
- Ethical considerations:
  - Ethical approval was sought from and subsequently granted by the Research Advisory Group (RAG) at the National University of Ireland, Galway
  - Issues of confidentiality and anonymity
  - All paper records obtained during research process were stored securely
DATA COLLECTION & ANALYSIS

- Self-completed questionnaires; personally distributed
- The questionnaire consisted of three sections.
  - Closed-ended questions were used to ensure comparability of responses and to facilitate analysis (Burns, 2000).
  - Open-ended questions were also included to allow respondents more flexibility so that more information could be obtained (Burns, 2000) and to verify the validity of the information being collected (Leedy & Ormrod, 2005).
- Pilot study conducted to determine whether the questionnaire served its purpose.
- Data obtained from closed-ended questions were analysed quantitatively, while qualitative analysis was undertaken to analyse open-ended questions.
VALIDITY AND RELIABILITY

The following efforts were made to strengthen the validity of the questionnaire:

- A review of the relevant literature was conducted to investigate studies previously undertaken. According to Hicks (2004), a thematic review of the literature provides a degree of validity to the questionnaire.

- Questionnaires administered in other studies (e.g. Brisk et al., 1997; Kelly et al., 1997) were reviewed to inform the development of questions for the proposed study.

- A pilot trial was conducted before the final version of the questionnaire was drafted. Two of these students were required to complete the questionnaire again two days later, to determine intra-rater reliability.
RESULTS

Presented by Aoife Stack, Speech and Language Therapist, at the European Symposium on Fluency Disorders 2010, Antwerp.
What learning methods do students find most useful?

- Lectures, case-based formats, resources, problem-based learning (PBL), and the ‘lived’ experience.
ACADEMIC EDUCATION

How is coursework on stuttering divided in university?

a) Theory versus Clinical Application

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a) Child versus Adult

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How do students rate their knowledge in assessing, diagnosing and treating PWS across all age groups?

Knowledge of child assessment, diagnosis and treatment:
What clinical experience do students have with individuals who stutter?
Clinical Education

How do students rate their clinical skills in assessing, diagnosing and treating PWS across all age groups?

- Clinical Skills in Adolescent Assessment, Diagnosis and Treatment
REPORTED LEVELS OF CONFIDENCE

How do students rate their confidence in assessing, diagnosing and treating PWS across all age groups?

Confidence in Clinical Areas Across Age Groups

- Assessment
- Diagnosis
- Treatment

Age Group:
- Child
- Adolescent
- Adult

Percentage:
- 45
- 40
- 35
- 30
- 25
- 20
- 15
- 10
- 5
- 0
REPORTED LEVELS OF CONFIDENCE

- How do students rate their confidence in working with PWS compared to working with other client groups?

[Confidence Across Client Groups diagram]
REPORTED LEVELS OF CONFIDENCE

How do students rate their confidence in stammering across different areas of clinical practice?

- Knowledge of Ax methods:
  - Three percent of students reported this to be an area of least confidence, while one third ranked this as an area of most confidence.

- Knowledge of diagnostic methods:
  - Almost 16% of participants rated this as an area of least confidence, while 19.3% reported this as an area of most confidence.

- Knowledge of Tx methods:
  - Fourteen percent ranked this as an area of most confidence, while one third rated it as an area of most confidence.

- Clinical experience:
  - Almost 65% of students reported this as an area of least confidence.
Is there a relationship between levels of knowledge and confidence in students in assessing, diagnosing and treating PWS across all age groups?
- Positive relationships were found between students’ knowledge and confidence in working with all age groups of clients who stutter across areas of assessment, diagnosis and treatment.

Is there a relationship between clinical skill levels and levels of confidence in students in assessing, diagnosing and treating PWS across all age groups?
- Similarly, positive relationships were found between students’ clinical skills and confidence in working with clients of all ages who stutter across all clinical areas.
FACILITATORS OF AND BARRIERS TO CONFIDENCE

Academic Preparation

a) Facilitating factors

b) Barriers
FACILITATORS OF AND BARRIERS TO CONFIDENCE

Clinical Preparation

a) Facilitating factors

b) Barriers
ADDITIONAL COMMENTS FROM STUDENTS

- Direct clinical experience is essential (53%)

- “I need experience in working with a client under supervision before I can be confident”

- “The gap between fluency theory and practice can only be bridged by actual clinical experience. I feel prepared academically, but I need a lot more practical experience to increase my confidence levels”
DISCUSSION & CONCLUSIONS

Presented by Aoife Stack, Speech and Language Therapist, at the European Symposium on Fluency Disorders 2010, Antwerp.
The current findings indicate a need for additional academic preparation in stammering at university level.

How can academic preparation be enhanced? Most students reported the ‘lived experience’ to be the most useful learning method, while 30% rated lectures as least useful.

Using a combination of learning methods may be most effective in increasing students’ knowledge and confidence in stuttering.

A greater emphasis on coursework relating to paediatric assessment, diagnosis and treatment may be required.

A theory to practice gap emerged as a barrier to confidence. A greater emphasis on application of theory to clinical practice is required.

The factors identified by students as facilitators of confidence may provide guidance as to how to improve methods for educating SLT students in stuttering and thus enhance confidence in this area.
Students’ Clinical Preparation

- Over 90% of students did not have experience in assessing, diagnosing or treating clients who stutter across all age groups.
- Qualitative results revealed that limited or no direct clinical experience with this client group was the main barrier to students’ confidence.
- Students who reported clinical experience in a certain area (e.g. Child assessment) also reported greater levels of confidence in this area compared to students without clinical experience.
STUDENTS’ CONFIDENCE IN WORKING WITH PWS

- Efforts to facilitate increased confidence in students in working with PWS is necessary.
- Respondents reported the treatment of PWS as the area in which they feel least confident.
- More specifically, students felt least confident in diagnosing children who stutter, in providing treatment to adolescent clients, and in assessing adults who stutter.
- The majority of respondents (50.9%) reported most confidence with ‘child speech impairments’, while ‘stuttering’ was associated with least confidence (57.9%).
- Clinical experience with PWS was the area in which students reported least confidence (64.9%).
- These results suggest there is a relationship between knowledge and confidence in working with PWS, and between clinical skills and confidence.
LIMITATIONS OF THE STUDY

- The number of participants was relatively low. However, due to the nature of this study it was not possible to include a larger sample size.

- The questionnaire, although based on several examples from the literature, was not validated.

- At the time of administration of the questionnaires, many students had yet to complete their final clinical placement. Therefore, several students may have gained experience in working with clients who stutter during this placement and, consequently, the results may have been different.
CONCLUDING REMARKS

- There is a relationship between knowledge and confidence in working with PWS.

- There is also a relationship between clinical skills and confidence in working with PWS.

- Over half of participants reported no clinical experience with clients who stutter.

- Students feel less confident in working with PWS compared to other client groups.
IMPLICATIONS FOR FUTURE RESEARCH

- Additional academic and clinical preparation warranted.
- Modification of courses to include additional coursework on stuttering and greater emphasis on clinical preparation may be necessary.
- Increased emphasis on the clinical application of theoretical knowledge is necessary within university curricula.
- Increased opportunities to complete case studies is needed.
- Further information on the effectiveness of teaching and learning methods may be beneficial to inform teaching practices in speech and language therapy.
“What a therapist offers a stutterer is much like the teaching a parent offers a child - part of it will be lost, and part may have great impact, but you cannot foresee which part will be which”

(Sheehan, 1983: 4)
Any questions?
BIBLIOGRAPHY


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