5.1 INTRODUCTION

This chapter provides a short summary of the results of this study and an integrated discussion of the results. The clinical implications of the results are followed by a critical evaluation of the study. Finally, recommendations for further research are made.

5.2 SUMMARY OF RESULTS AND INTEGRATION OF RESULTS

The purpose of this study was to describe the attitudes of teachers towards students with LNFS using an Alpha Talker9 and communication board. The data was obtained through the TAS, which was completed by the teachers after watching a video recording of students using the devices.

The importance of determining teachers’ attitudes has been highlighted in the literature, which emphasised the role teachers play in student-teacher interaction, student learning and the successful implementation of AAC within the classroom context. In addition, teachers’ attitudes towards AAC devices may also influence whether AAC devices are utilised in the classroom. It is important to understand teachers’ attitudes, as their negative attitudes may result in the lack of use of AAC devices within the classroom.

In South Africa, as in other developing countries, the principles of affordability and acceptability, amongst others, are central concerns when implementing services. Understanding teachers’ attitudes would make possible the implementation of services
in a way that is sensitive to teachers, as teachers play a vital role in the implementation of AAC in the classroom.

The result of the current study revealed that the majority of the teachers had a positive perception of students with LNFS using either AAC devices. Teachers had positive attitudes in terms of their expectations for these students as well as these students’ communication interactional ability and interaction skills within the classroom setting. While teachers had positive attitudes about their ability to teach these students, they perceived a need for training. The need for training, particularly of the communication partners of AAC users, has been highlighted in the literature (Baker, 1993; Berhramann, 1995; Tanchat & Swayer, 1998).

Teachers’ positive attitudes have promising implications for the successful implication of AAC within these schools. However, there is an apparent mismatch between teachers’ attitudes and the reality of what occurs in the special education context. Alant and Emmett (1995) found in their study that the majority of teachers at schools for the mentally disabled spend a fair amount of time on free play while most teachers spend little or no time on teaching literacy skills. Their findings reflect a teaching context that is more oriented towards free play with little exposure to actual skills training.

It is clear that the general exposure of these students to activities, which could enhance independence, could be improved on by spending more time on such activities and by improving the quality and effectiveness of teaching. Hence, more professional and in-service support is required to facilitate teaching effectiveness (Alant, 1999). This in turn could contribute to greater adaptation of the curricula to suit the needs of students. It is postulated that the suggested mismatch between teachers’ attitudes and the reality of the teaching situation may be attributed to teachers being sensitive to the social desirability of having positive attitudes towards the disabled. This highlights the difficulty with measuring attitudes, since we must rely on inferences, it being impossible to measure attitudes directly (Henerson, Morris & Cubbun, 1987).
An unexpected finding of this study was that teachers' attitudes towards the AAC devices did not vary significantly, although there was a tendency to perceive the Alpha Talker S more positively. This finding was in contrast to research trends, which revealed more positive attitudes toward high technology devices (Gorenflo & Gorenflo, 1991). This may be attributed to teachers in this study having no prior exposure to AAC and, therefore, viewing both technologies as similar, that is, as a means of communication. Perhaps they perceived the mere introduction of an AAC device as a means of improving students' communication abilities (Mendes & Rato, 1996). Another explanation may be that high technology devices are perceived as uneconomical, in terms of the cost of purchasing the device as well as the sustainability of the device. Finally, teachers may be technophobic, due to limited exposure to technology and, therefore, did not necessarily view high technology more positively (Baker, 1993).

5.3 CRITICAL EVALUATION

- This study is an initial study of its kind in South Africa, as it describes the attitudes of teachers toward students with LNFS using AAC devices. It provides insight into teachers' perceptions of their own abilities, their expectations of these students and their communication and classroom interactional abilities, and finally their own perceptions toward the devices. The understanding of teachers' attitudes provides a basis from which to initiate service delivery. In addition, teachers' attitudes could be compared to the reality of the teaching context in schools for children with mental disabilities, as revealed by Alant and Emmett (1995). A mismatch between teachers' attitudes and the reality of the teaching context was suggested. It is postulated that this mismatch may be a reflection of the teachers' sensitivity to the social desirability of positive attitudes, particularly with the current political climate, which stresses positive attitudes towards the disabled. In addition, the difficulty of assessing attitudes is also apparent in this mismatch.

- Despite the constraints of measuring attitudes, the TAS provides a scale that enables one to ascertain teachers' attitudes. The TAS was based on theory and is,
therefore, considered valid in construction. However, the internal consistency of the TAS was not investigated. Finally, the TAS was easy to score as all the scales were filled out correctly.

- Teachers’ attitudes were obtained after they had watched a video recording of the students. The video recording specifically focused on the device and the back of the student. This angle enabled one to ensure that the physical appearance of the device did not influence teachers’ attitudes.

- A methodological constraint of the study is that it was conducted at registered special schools in a certain region. Generalisations of these findings cannot, therefore, be made. However, the study provides research on one of the poorest areas in South Africa, which was historically under served.

5.4. CLINICAL IMPLICATIONS

- The most important finding of this study is that teachers have positive attitudes towards AAC. This positive attitude, as well as the fact that the majority of teachers have been exposed to students with LNFS, indicates that perhaps the implementation of AAC within this context will be considered positively by the teachers.

- While teachers revealed positive attitudes towards AAC, the need for training in AAC was identified. Furthermore, training is essential as teachers play a vital role in implementing and sustaining this service as there are no additional therapists to support them.

- Teacher training is vital, as these teachers had no previous exposure to AAC. Training would provide teachers with knowledge and reduce their anxiety when dealing with these students, thereby increasing their sense of self-efficacy (Mendes & Rato, 1996).
The suggested mismatch, between teachers' attitudes and the reality as reflected in the teaching environment, reveals that perhaps teachers need to be re-educated in order to be critical of the quality of teaching they provide (Guma, 1992) and the skills required effectively to teach these students (Alant, 1999). Training can result in teachers better understanding the abilities of their students and can perhaps raise teachers' expectations of these students (Mendes & Rato, 1996).

When implementing services, the principles of acceptability and appropriate technology are important. The finding of no statistically significant difference in teachers' attitudes toward the devices but a positive tendency toward the Alpha Talker® needs to be considered when implementing services.

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

The recommendations for future research are:

- Further development of the TAS in terms of determining the internal consistency of the measuring instrument utilising factor analysis.
- Training to determine whether teachers' perceptions of their own abilities become more critical, as the results of the current study suggests that teachers' attitudes contrasted with the reality of their teaching contexts. Teachers, for example, believed that they could teach students using AAC devices literacy skills even though, Alant & Emmett (1995) found, this activity was not stressed in their daily classroom activities. Perhaps if teachers were exposed to teaching sessions with these students, they would become more sensitive towards the skills required to teach these students.

- Research to delineate whether the type of VOCA used influences attitudes. Preferences in terms of natural and synthetic voices can be investigated. This is particularly relevant as most synthetic speech used in VOCA have a speech output with an accent that is foreign to South Africans. This foreign accent may influence intelligibility of the VOCA.
• A replication of this study on a more comprehensive scale to facilitate generalisation of results. Due to the presence of the carry-over effect, for Section A, it is recommended that future replicate studies have a constant time interval between the presentation of videos.

5.6 SUMMARY

This chapter summarised the results and discussion of the survey. This was followed by a critical evaluation of the study and its clinical implications. Finally, recommendations for future research were provided.