

CHAPTER 1

INTRODUCTION

1.1 Introduction

A study performed by Alant (1999) found that 39% of all children attending special schools for students with severe mental disabilities in and around Pretoria were classified by their teachers as having little or no functional speech (LNFS). This figure is more than ten times higher than the prevalence figures for some developed countries (e.g. Burd, Hammes, Bornhoeft, & Fisher, 1988). It may be even higher if the fact that many children with severe mental disabilities in South Africa do not attend special schools (Schneider, Claassens, Kimmie, Morgan, Naicker, Roberts, & McLaren, 1999) is taken into account.

It is heartening to note that the present government of South Africa regards communication an important factor to take into account in their objective of integrating disabled people into society. One of the objectives of the White Paper on Integrated National Disability Strategy (1997) is to 'develop strategies that will provide people with communication difficulties with equal opportunities for access to information, as well as public and private services' (p35). Augmentative and alternative communication (AAC) certainly assists people with LNFS to access information and services, and research aimed at enhancing accountable service delivery to individuals with LNFS in South Africa is clearly warranted.

Picture Communication Symbols (PCS) (Johnson, 1981, 1985, 1992) is a set of aided, static communication symbols and is regarded as relatively iconic compared to other aided symbol sets and systems (Mirenda & Locke, 1989; Mizuko, 1987). Iconicity has been established as an important factor in symbol learning (Fuller, 1987; Fuller, 1997; Lloyd & Fuller, 1990; Lloyd, Loeding & Doherty, 1985; Luftig, 1983; Luftig, Page & Lloyd, 1983; Mizuko, 1987). However, since iconicity is defined as the degree to which an individual *perceives* visual similarity between a symbol and its referent (Blischak, Lloyd & Fuller, 1997), it is dependent to an extent on the viewer and it cannot be taken for granted that results obtained from studying one group of people can be generalised to another. Yet the iconicity of PCS has never before been investigated in the context of any of South Africa's many cultures. There is a need for culture-specific iconicity information in this country to enhance AAC intervention for individuals with LNFS.

KwaZulu-Natal (kwaZulu meaning 'place of the Zulus') is the province in South Africa with the second highest disability prevalence rate (6,7%) (Schneider et al., 1999). Furthermore, the

1996 census showed that 22,9% of South Africans speak isiZulu as their mother tongue (Burger, 2000, Official languages, para. 3), making it one of the largest linguistic groupings in the country. It stands to reason that a study involving them would make the results gleaned applicable to a large percentage of the population. An investigation into how Zulu-speaking children relate to PCS symbols could yield valuable information on how to modify the content, appearance or use of PCS symbols to facilitate symbol learning and use.

1.2 Outline of chapters

Chapter One serves as a brief statement of the problem that is addressed by this study. An outline of each chapter and an explanation of key terms and abbreviations used throughout the study are offered.

In *Chapter Two* a theoretical context for the study is provided. The delicate association between culture and the iconicity of pictures is discussed. Previous research regarding iconicity, and specifically cross-cultural research, is discussed. The testing of iconicity in the context of a commercially available communication overlay is described and methodological issues are considered.

The research methodology is presented in *Chapter Three*. The aims and design of the study are considered, and the preparatory phases are outlined in detail. The main study is discussed with reference to the participants, the data collecting procedure and the data analysis procedures.

Chapter Four contains the results in accordance with the aims of the research. The relative iconicity of symbols is indicated, followed by an analysis of errors and an investigation into factors that could have influenced results.

In *Chapter Five* an overview of the results is presented and the clinical implications of the findings are discussed. The study is critically evaluated to highlight strengths and limitations, and finally recommendations for further research are made.

1.3 Definition of terms

1.3.1 Communication overlay

In a general sense this term refers to letters, words, pictures or other graphic symbols that have been arranged on paper or some other material according to predetermined categories or topics (Quist & Lloyd, 1997) to serve as an assistive communication device. In this study a single overlay was selected from a range of commercially available communication overlays designed by Goossens', Crain and Elder (1996). These overlays are designed around a variety

of activities and aimed at reducing time spent by clinicians in preparing overlays. Copyright allows single agencies to photocopy overlays from the resource books (Goossens' et al., 1996).

1.3.2 Culture

“A set of behaviours, institutions, beliefs, technologies and values invented and passed on by a group of individuals to sustain what they believe to be a high quality of life and to negotiate their environments” (Taylor & Clarke, 1994, p. 103).

1.3.3 Distinctiveness

A term that has been coined for use in the present study. Distinctiveness aims at describing how well-defined or specific the evoked meanings are that a symbol triggers in the mind of a viewer. Two points are identified: distinct, where a symbol evokes only one particular meaning; and indistinct, where a symbol evokes either multiple meanings or none in the mind of a viewer.

1.3.4 Iconicity

A general term referring to the visual relationship between a symbol and its referent (Blischak et al., 1997). Transparency, a dimension of iconicity, describes symbols for which a viewer can readily see the relationship between symbol and referent, in the absence of the referent. Another dimension of iconicity is translucency, which refers to the degree to which a viewer perceives a relationship between symbol and referent in the presence of both. The absence of iconicity is called opaqueness. Evidently iconicity is a relative concept and therefore the terms ‘more iconic’ and ‘less iconic’ will be used throughout the text to describe symbols, according to arbitrarily selected cut-off points.

1.3.5 Iconicity values

The number of participants that responded correctly to an item is counted and represents that symbol's guessability or iconicity (Doherty, Daniloff & Lloyd, 1985).

1.3.6 Learnability

The ease with which a symbol can be learned by AAC users. A symbol is considered learned if the user can consistently pair the symbol and its label and can use the symbol appropriately.

1.3.7 Rural

The KwaZulu-Natal Department of Education and Culture does not employ a formal definition of this term. Informally 'rural' is defined as not living near a town or city (P. Müller, personal communication, July 9, 2001).

1.3.8 Symbol

In the broadest sense a symbol is anything that represents another concept or object (Blischak, et al., 1997). In the present study this term will mostly be used to refer to graphic communication symbols.

1.4 Abbreviations

AAC Alternative and Augmentative Communication

PCS Picture Communication Symbols

LNFS Little or no functional speech

R Researcher

RA Research assistant

p Participant

1.5 Summary

This chapter provides a motivation for the study by highlighting the need for information on the use of PCS in different cultural contexts. A brief outline of each chapter is presented. Definitions of terms and abbreviations used throughout the study are given.