

CHAPTER 1

INTRODUCTION

Most children develop spatial concepts by looking at their environment and moving through their surroundings (Long & Hill, 2000). Children who are blind are unable to visually learn about their environment and are often delayed in the motor skills necessary to explore their environment (Adelson & Fraiberg, 1974; Jan, Sykanda, & Groenveld, 1990; Palazesi, 1986). Despite these delays, children who are blind are able to develop and use cognitive maps of spatial relationships though not necessary following the same pattern as children with typical sight (see literature review).

First, key terms are defined and the impact of blindness on cognitive mapping is discussed. Next, a historical perspective on cognitive mapping in children with visual impairments is provided. Then, methods of measuring cognitive mapping are presented, and the importance of studying cognitive mapping abilities in children is discussed. Finally, research questions are presented.

Definitions and Impact of Blindness on Cognitive Mapping

*Definitions*

*Cognitive mapping* – a psychological process in which one “acquires, codes, stores, recalls, and decodes information about the relative locations and attributes of phenomena in his everyday, spatial environment” (Downs & Stea, 1973, p. 9).