Page, J. L. (1981) *Comparisons of translucency ratings of manual signs representing nomination, action, and attribution by preschool, school age, and adult subjects*. Unpublished doctoral dissertation, Purdue University, West Lafayette. Macalyne Fristoe (Advisor): 104 pages of text, 133 references, 10 appendices, 37 tables, and 4 figures.

Manual communication has been effective in facilitating communication with many nonspeaking handicapped individuals for whom oral language training has not been successful (Fristoe & Lloyd, 1977). One factor which may account for the success of manual communication is its iconicity, or the extent to which a sign is defined by, resembles, or suggests its referent. With iconic signs, naive subjects are either able to guess the meaning of the sign (transparency) or to determine a relationship between a sign's formation and its referent (translucency).

Recent research has indicated that signs included in initial teaching lexicons are more iconic than signs from American Sign Language (ASL) in general. Additional research has shown that iconic signs are learned more easily than noniconic signs. This suggests that iconicity should be considered in the selection of signs for early sign training lexicons.

Although the importance of iconicity is widely recognized, perception of iconicity is thought to be dependent upon the person's age and experience. To date, only one study (Griffith, 1979) has compared child and adult perception of iconicity for signs from ASL. Although Griffith found no significant differences between translucency ratings for 7-year-olds and adults, her youngest subjects were functioning at a much higher level than many of the handicapped individuals beginning sign training programs. The signs that she studied were from a single semantic class, nomination.

The current study was designed to investigate developmental differences in perception of translucency across a wider age range and across additional semantic classes and to investigate the effects of different sized interval rating scales on adult ratings of translucency. Four groups of 30 subjects each (15 male and 15 female) participated in the study: a group of 4-year-old children, a group of 7-year-old children, and two groups of college-age adults. Following an instruction period, subjects rated the translucency of 45 ASL signs (15 representing action, 15 attribution, and 15 nomination) selected from lists normally included in early sign training lexicons. Both child groups and one adult group used a 3-point rating scale; the second adult group used a 5-point scale.

Results of a chi square analysis indicate that both child groups gave more signs the highest translucency rating than adults did. Possible reasons for this are discussed. Ratings of half of the signs show significant intergroup differences. The rating patterns on the dissimilar signs are explored and implications considered. Several additional statistical measures provide evidence for intergroup similarity. Following extensive discussion of the results, it is concluded that it may be appropriate to use adult ratings to select iconic signs for children's sign training.

Analysis of simple main effects for sign class at each age group and corresponding Newman-Keuls probes indicate that subjects in each group rated action signs highest, nomination second highest, and attribution signs lowest. Explanations and implications of this finding are considered.

Several statistical measures indicate a high degree of similarity between relative ratings provided by adults using 3- and 5-point scales. It is concluded that the size of the rating scale does not significantly alter either the ratings of a sign relative to the other signs or its absolute rating relative to the size of the scale.

All of the results are discussed relative to a developmental view of the perception of iconicity. Implications for selection of signs for sign training programs are also considered. Finally, areas for future research are suggested.