INTRODUCTION

- Narrative comprehension requires higher order cognitive processes, it resembles everyday social experiences, and may be an important precursor for later reading comprehension (Grasser, Singer, & Trabasso, 1994; Lynch et al., 2008; Morrow, 1985).
- Specifically, preschoolers’ narrative comprehension predicts later reading achievement and these skills generalize across various narrative types, i.e., television, picture books, and oral discourse (Kendersie, Bohm-Gritter, White, & van den Broek, 2008; Parsi, 2003).
- Narrative comprehension is most successful when people understand various causal connections that form a network linking pieces of narrative information (Taparo, van den Broek, & Quintana, 2002).
- Causal connections are inferences about causal relations among events, time and places of actions, ideas, emotions, etc. (Grasser et al., 1994).
- There are several causal connection types that vary in complexity: enabling, physical, motivational, and psychological (Grasser et al., 1994).
- Previous research support basic language skills (expressive vocabulary and achievement and these skills generalize across various narrative types, i.e., television, picture books, and oral discourse (Grasser et al., 1994).

METHOD & PROCEDURE

- Participants: 13 children (8 boys and 7 girls) between 37- and 61-month-old (M = 48.53, SD = 9.28) were recruited from Head Start programs. All participants were African-American.
- Tasks & Procedures: The current pilot study examines the relation between causal connections and basic language skills for children from low-income households.
- The development of the understanding of causal connections in children from low-income households should be examined because children from low-income households begin their formal education at a risk for future academic achievement (O’Connor, McIntosh, & Dodd, 2009).
- Understanding the development of causal connections in preschool children, could help with the construction of literacy interventions for children from low-income households.

RESULTS

Two multivariate repeat-measures analyses of variance were conducted to compare the number of causal connections across time periods.

- In the first analyses used, time and complexity type were within subjects factors and chronological age was the covariate. There was no main effects or interactions.
- In the second analyses, time and distance type were within subjects factors and chronological age was the covariate. There was a significant main effect of distance type, Wilks’ Lambda = .30, F(1, 12) = 27.46, p < .01, such that children used more local connections (M = 7.30, SD = .42) than global connections (M = 2.94, SD = .28).

Figure 2: Mean number of local and global connections across time

Table 1: Descriptive statistics for causal connection type (complexity)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td>Time 1 Enabling</td>
<td>6.20</td>
<td>4.75</td>
<td>6.71</td>
<td>4.14</td>
<td>7.69</td>
<td>5.34</td>
<td>5.79</td>
<td>5.18</td>
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<tr>
<td>Time 2 Physical</td>
<td>4.00</td>
<td>3.25</td>
<td>3.47</td>
<td>2.10</td>
<td>4.23</td>
<td>2.09</td>
<td>3.21</td>
<td>2.58</td>
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<td>Time 3 Motivational</td>
<td>0.07</td>
<td>0.27</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.22</td>
<td>0.44</td>
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<tr>
<td>Time 4 Psychological</td>
<td>0.29</td>
<td>0.47</td>
<td>0.57</td>
<td>1.13</td>
<td>0.56</td>
<td>0.53</td>
<td>0.66</td>
<td>0.66</td>
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<tr>
<td>Total</td>
<td>10.73</td>
<td>7.73</td>
<td>9.80</td>
<td>6.56</td>
<td>11.43</td>
<td>7.41</td>
<td>8.03</td>
<td>7.70</td>
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Table 2: Descriptive statistics for causal connection type (distance)

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</thead>
<tbody>
<tr>
<td>Time 1 Local</td>
<td>7.50</td>
<td>5.97</td>
<td>7.47</td>
<td>5.07</td>
<td>8.14</td>
<td>5.50</td>
<td>6.27</td>
<td>5.47</td>
</tr>
<tr>
<td>Time 2 Global</td>
<td>2.93</td>
<td>2.20</td>
<td>2.33</td>
<td>1.84</td>
<td>3.29</td>
<td>2.16</td>
<td>2.67</td>
<td>2.38</td>
</tr>
</tbody>
</table>

REFERENCES

Grasser, A., Singer, M., & Trabasso, T. (1994). Causal connections by children from low-income households. To date, few studies have described the understanding of narrative causal connections by children from low-income households.