NEW FINDINGS ON READ NATURALLY LIVE

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Research, Development and Engagement to Improve Education
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New Findings on Read Naturally Live

The following analyses were conducted on extant data from Read Naturally Live. Tables 1-3 provide summary statistics for the Fall to Winter and Fall to Spring intervals for Grade 2 students.

Specifically, Table 1 displays the percentage of students with minimum dosage, which was defined as reading at least 12 stories between Fall and Winter, and 24 stories between Fall and Spring. In the Fall to Winter interval 37% of the students in Grade 2 met the minimum dosage, and 42% met the minimum dosage in the Fall to Spring interval.

Table 1. Percentage of Students with Minimum Dosage

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total N</th>
<th>Percentage with more than 12 stories (Fall to Winter)</th>
<th>Percentage with more than 24 stories (Fall to Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>281</td>
<td>37.4%</td>
<td>42.0%</td>
</tr>
</tbody>
</table>

As shown in Table 2, Grade 2 students had average weekly improvement (AWI) at 1.57 for Fall to Winter and 1.40 for Fall to Spring.

Table 2. Average Weekly Improvement (AWI)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total N</th>
<th>Average AWI (Fall to Winter)</th>
<th>Average AWI (Fall to Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>281</td>
<td>1.57</td>
<td>1.40</td>
</tr>
</tbody>
</table>

For the analyses in Table 3 only students in Grade 2 who took the spring test within 30 days of reading their last story were included. A total of 224 students met these criteria and were included in the analyses. Grade 2 students were first separated into four groups by number of stories read (0-11, 12-23, 24-35, and 36 or more) during the Fall to Spring interval. Using a one-sample t-test, the mean Fall to Spring AWI for each group was then compared to 1.15, the typical Fall to Spring growth for a Grade 2 student in the Hasbrouck-Tindal table, to determine whether the Fall to Spring AWI for a group is significantly different than typical growth. Additionally, a one-way ANOVA was conducted to determine if the mean AWIs for each group are equal to each other or differed significantly.

Table 3 displays the mean (M), standard deviation (SD), minimum (Min), and maximum (Max) AWI for Grade 2 students by Fall to Spring number of stories read group. The number of students in each group (n) is also presented. The mean AWI ranged from 1.29 to 1.63 across the four groups with a minimum AWI of 0.00 and maximum AWI of 3.00. The one-sample t-tests show that students in the 0-11 and 12-23 stories read groups have an average AWI statistically similar to the typical 1.15 growth, as indicated by p-values > 0.05. Students in the 24-35 and 36 or more stories read groups, however, have an average AWI significantly higher than the typical 1.15 growth. Additionally, the ANOVA showed that the average AWIs for the groups are statistically significantly different, \( F(3, 220) = 7.04, p < .001 \). Thus, Grade 2 students who read at least 24
stories during the Fall to Spring interval showed more growth than typical Grade 2 students while those who read less than 24 stories grew at the typical rate for Grade 2 students.

Table 3. *Descriptive Statistics for AWI by Group and Results of One-Sample T-Tests (Grade 2 only)*

<table>
<thead>
<tr>
<th>Number of Stories Read</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-11</td>
<td>1.29</td>
<td>0.49</td>
<td>0.50</td>
<td>2.50</td>
<td>31</td>
<td>1.64</td>
<td>0.11</td>
</tr>
<tr>
<td>12-23</td>
<td>1.25</td>
<td>0.57</td>
<td>0.00</td>
<td>3.00</td>
<td>77</td>
<td>1.54</td>
<td>0.13</td>
</tr>
<tr>
<td>24-35</td>
<td>1.43</td>
<td>0.45</td>
<td>0.30</td>
<td>2.70</td>
<td>52</td>
<td>4.40</td>
<td>0.00*</td>
</tr>
<tr>
<td>36 or more</td>
<td>1.63</td>
<td>0.50</td>
<td>0.60</td>
<td>2.60</td>
<td>64</td>
<td>7.67</td>
<td>0.00*</td>
</tr>
</tbody>
</table>

*Results statistically significant.

In conclusion, the results presented above, particularly in Table 3, provide evidence for the effectiveness of Read Naturally. Students who read 24 or more stories from Fall to Spring had significantly more growth than students who read less than 24 stories. In addition, students who read more than 24 stories from Fall to Spring displayed more growth than is typical of Grade 2 students. Students who read less than 24 stories from Fall to Spring displayed growth typical of Grade 2 students.