A Comparison of Personality Adjustment Scores of Rural and Urban Children in Ninth Grade

A. Elizabeth Beal

Iowa State College

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A COMPARISON OF PERSONALITY ADJUSTMENT SCORES OF RURAL AND URBAN CHILDREN IN NINTH GRADE

A. ELIZABETH BEAL

Problem

A large number of studies of differences between urban and rural groups have been made. Many have studied the intelligence and achievement of town and rural pupils. (1) However, relatively few have used modern standardized tests of personality and social attitudes. (2)

Teachers have often been conscious of the fact that many rural pupils seem more retiring, shy, and ill-at-ease, especially during their early days in the new school. Others have said that they noticed no such differences, or that with all the 4-H work, better transportation and schools, and frequent contacts with town conditions, for rural people, differences such as formerly occurred had entirely disappeared. Others said that such differences, while possibly present, would not be such as to be discriminated by an ordinary standardized test.

Therefore, the present investigation was undertaken: (1) for the purpose of comparing quantitatively the personal discomforts and maladjustment felt by town and rural children; and (2) to ascertain whether standardized tests of personality now available indicated any differences.

Several tests were studied, and the Bell Adjustment Inventory, which gives separate scores on Home, Health, Social and Emotional Adjustment, as well as a total score, was chosen as being most suitable. Ninth grade children seem to understand the test and to be interested in it. Its reliability is reported as .93. (3)

Procedure

The procedure followed in the investigation was to give the test to ninth grade, or first year high school, students. Seven schools in six towns, located in five different counties in northwestern Iowa, were chosen. The present paper reports data on two towns. None of the schools happens to be a consolidated school. No communities with a population of less than 2500 were chosen, as it was felt that in such communities no clear-cut distinction could
be drawn between urban and rural children, i.e., the village children might be so largely rural in background that real differences might not be discernible. A few school superintendents in cities which seemed especially interesting for comparison were unable to cooperate in the project, and it was finally decided to use only schools in cities having a population of 2500 to 10,000, with the exception of two junior high schools in Sioux City. Schools having a fairly large number of rural children attending were preferred.

All children registered in the ninth grade in each school, present on the day chosen, were given the test as a group. In Sioux City, only, a different procedure was followed by bringing together, in each school, as many as possible of the rural children registered in the ninth grade, and a random sample of urban children attending the same school in the same classes, in a proportion similar to that usually found in other communities studied (between two and four times as many urban as rural children).

Bell (3) has shown that intelligence apparently bears no relation to personality adjustment, correlation between the sets of scores being very close to zero (—.10 ± .05 between social adjustment scores and intelligence, and —.06 ± .05 between total adjustment and intelligence). It seems that scholarship also bears practically no relation to it, the correlation being equally low, though positive. Consequently, no effort was made to secure groups equal in either intelligence or grade average.

Correlations reported by Bell (3) between ratings on the Sims Socio-Economic Scale, which has a reported reliability of .95, and his total scores were + .09 ± .07, indicating little or no relationship between the socio-economic status of the home and degree of personality adjustment. Consequently, no attempt was made to restrict comparisons between rural and town children to those from homes of similar status on the scale.

Bell (3) submits data to prove that scores slightly decrease (improve) with age. However, because college students' scores are lower than high school students' scores may not be a matter of improvement with age, but one of selection. It seems very doubtful whether the slight differences in age of ninth grade students would greatly influence the results. However, it was found that the average age, as reported in round numbers in the blank, was, for country girls, 13.33 years, and for town girls, 14.54 years; while that of country boys was 13.94 and town boys, 14.69. Or, country children studied were about one year younger than town children. The influence of this factor of age will later be investigated, so we
may know whether in such comparisons the individuals need to be paired, age for age. However, the highest (poorest) scores were not made by the youngest individuals.

Accompanying each test sheet was a mimeographed information sheet, requesting name, date of birth (as a check on the age reported on the printed blank), ages of brothers, ages of sisters, number of years lived in the country, number of years lived in a town, number of years of attendance at rural, town, or consolidated schools, father's occupation, and a record of any special difficulties felt in adjusting to the school when entering it for the first time.

A brief explanation of the test was given orally before each testing. This explanation mostly consisted of an amplification of directions for taking the test, and definition of a few terms commonly misunderstood. A few sentences explained that the tests were needed in a study of personality, what was meant by adjustment, and requested a frank opinion even on personal questions. No mention of a comparative survey of town and country was made, in order to avoid artificialities in answering.

In Sac City, where a short introductory talk on personality was requested, this was given, and here a point was made that students could mark their papers "confidential" if they did not care to have their principal see them. Not many papers were so marked, and the matter was not brought up in the other schools.

After scoring, using the unweighted system, the boys' and girls' papers were divided into the three groups — town, country, and a mixed group for those who had moved from one to the other. If the move had been made so long ago that the student had attended town school as much as seven of the eight years preceding, he was considered a town child. Those who lived in the country, but had attended urban schools all their lives, were still considered country children, though they may well be compared separately in the final report, should enough cases be collected.

**Results**

Examination of the data for these 132 cases reveals that there is a difference in mean total score in favor of town boys over rural boys of 10.47 points, and of town girls over country girls of 1.76 points, or for both boys and girls combined, of 4.75 points (Table V). This is despite the fact that for the Sac City girls (Table I), the difference in score was 6.44 points in favor of the country girls (the only group of scores where differences favored the country.
**Table I — Bell Adjustment Inventory Total Scores, Sac City 9th Grade, 1939**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>S.E.</th>
<th>S.D.</th>
<th>S.E.</th>
<th>Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town girls</td>
<td>27</td>
<td>48.77</td>
<td>±3.47</td>
<td>18.06</td>
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<tr>
<td>Country girls</td>
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<td>±5.37</td>
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<td>6.39</td>
<td>6.44</td>
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<tr>
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<td>Country boys and girls</td>
<td>19</td>
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<td>±3.75</td>
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<td>6.39</td>
<td>4.09</td>
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<td>Relocated boys and girls</td>
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<td>46.14</td>
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**Table II — Bell Adjustment Inventory Total Scores, Sioux City, 9th Grade, 1939**

<table>
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<th></th>
<th>N</th>
<th>Mean</th>
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<th>S.D.</th>
<th>S.E.</th>
<th>Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
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<td>Town girls</td>
<td>26</td>
<td>35.11</td>
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<td>3</td>
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<td>±7.33</td>
<td>12.69</td>
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<td>±6.58</td>
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<td>±3.33</td>
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**Table III — Bell Adjustment Inventory Social Scores, Sac City, 9th Grade, 1939**

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<th>N</th>
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<th>S.D.</th>
<th>S.E.</th>
<th>Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
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<tbody>
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<td>Town girls</td>
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<td>15.51</td>
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<td>2.52</td>
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<td>1.07</td>
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<td>±2.26</td>
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<td>Relocated girls</td>
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<td>All girls</td>
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<td>1.50</td>
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<td>4.69</td>
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<tr>
<td>All boys</td>
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<td>13.91</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Town boys and girls</td>
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<td>14.68</td>
<td>±1.06</td>
<td>6.83</td>
<td>1.71</td>
<td>2.90</td>
<td>1.70</td>
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<tr>
<td>Country boys and girls</td>
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<td>±1.33</td>
<td>5.82</td>
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<tr>
<td>Relocated boys and girls</td>
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<td>13.21</td>
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<tr>
<td>Total group</td>
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Table IV — Bell Adjustment Inventory Social Scores, Sioux City 9th Grade, 1939

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<th>Group</th>
<th>N</th>
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<th>S.E.</th>
<th>S.D.</th>
<th>S.E. Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
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<td>Town girls</td>
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<td>±1.16</td>
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<td>All girls</td>
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<td>12.64</td>
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<td>11.66</td>
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<td>5.66</td>
<td>2.14</td>
<td>- 6.34</td>
<td>2.96</td>
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<td>Country boys</td>
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<td>18.00</td>
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<td>All boys</td>
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<td>14.44</td>
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<td>1.45</td>
<td>- 5.08</td>
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<tr>
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<td>±1.13</td>
<td>3.94</td>
<td>1.45</td>
<td>- 5.08</td>
<td>3.51</td>
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Table V — Bell Adjustment Inventory Total Scores of 9th Grade Pupils in Sac City and Sioux City, 1939

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<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.E.</th>
<th>S.D.</th>
<th>S.E. Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
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<td>Town girls</td>
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<td>±1.43</td>
<td>4.91</td>
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<td>Relocated girls</td>
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<td>All girls</td>
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<td>42.72</td>
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<td>.73</td>
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<td>All boys</td>
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<td>38.62</td>
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<td>38.86</td>
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<td>17.61</td>
<td>2.66</td>
<td>- 4.75</td>
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<td>Country boys and girls</td>
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<td>43.61</td>
<td>±1.81</td>
<td>10.07</td>
<td>3.33</td>
<td>- 2.14</td>
<td>.73</td>
</tr>
<tr>
<td>Relocated boys and girls</td>
<td>19</td>
<td>46.47</td>
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Table VI — Bell Adjustment Inventory Social Scores of 9th Grade Pupils in Sac City and Sioux City, 1939

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<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.E.</th>
<th>S.D.</th>
<th>S.E. Diff.</th>
<th>Diff.</th>
<th>Critical Ratio</th>
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</thead>
<tbody>
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<td>13.83</td>
<td>± .86</td>
<td>6.24</td>
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<td>- 3.42</td>
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<tr>
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<td>17.25</td>
<td>±1.86</td>
<td>6.54</td>
<td>2.04</td>
<td>- 3.42</td>
<td>1.68</td>
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<tr>
<td>Relocated girls</td>
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<td>11.86</td>
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<td>All girls</td>
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<td>15.27</td>
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<td>Town boys</td>
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<td>12.34</td>
<td>±1.31</td>
<td>7.06</td>
<td>1.67</td>
<td>- 5.13</td>
<td>3.07</td>
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<tr>
<td>Country boys</td>
<td>19</td>
<td>17.47</td>
<td>±1.04</td>
<td>4.53</td>
<td>1.67</td>
<td>- 5.13</td>
<td>3.07</td>
</tr>
<tr>
<td>Relocated boys</td>
<td>5</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>All boys</td>
<td>53</td>
<td>14.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town boys and girls</td>
<td>82</td>
<td>13.34</td>
<td>±0.704</td>
<td>6.38</td>
<td>1.21</td>
<td>- 4.04</td>
<td>3.33</td>
</tr>
<tr>
<td>Country boys and girls</td>
<td>31</td>
<td>17.38</td>
<td>±0.99</td>
<td>5.55</td>
<td>1.21</td>
<td>- 4.04</td>
<td>3.33</td>
</tr>
<tr>
<td>Relocated boys and girls</td>
<td>19</td>
<td>13.94</td>
<td></td>
<td></td>
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<tr>
<td>Total group</td>
<td>132</td>
<td>15.13</td>
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<td></td>
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</table>
pupils). Statistically, none of these differences in total score is to be considered completely reliable, though the difference between the boys approaches significance, the chances being 99.4 out of a hundred that there are real differences present. The differences between town and country children were found to be greater in the large city (Table II) than in the small community (Table I), being 14.09 points in favor of Sioux City children over country children attending those schools, and this difference is statistically significant, since it is 3.88 times its standard error.

Large differences in adjustment to health, to home, or emotional adjustment between rural and urban groups had hardly been expected, and the social scores were studied separately. Here (Table VI) we find differences in mean scores in favor of town children of 3.42 points for girls, and 5.13 points for boys. Similar differences occur in each town (Table III-IV) being greater in the larger community. Item analysis of the questions in which a greater percentage of country children made more maladjusted answers than did town children seems to indicate that the difficulties felt arise more frequently in such situations as reciting in class, speaking in public, or conversing with people, although on almost any of the social questions, country children showed a much higher percentage of maladjusted answers.

**Conclusions**

1. Data from 132 children attending ninth grade in northwestern Iowa public schools indicate that country children make more answers showing maladjustment than town children to questions which have been found reliable (3) in differentiating between well adjusted and poorly adjusted students.

2. Differences between town and country boys in total scores on the Bell test show greater maladjustment among country boys to a degree which approaches statistical significance.

3. Scores on social adjustment indicate reliable differences in the line of better adjustment of town children, especially town boys. Statistically, there is probably not over one chance in a thousand of there being no such difference between rural and town children on this social score.

It is to be remembered that these scores are not ratings of the personality of the child in the sense that we may interpret these data to mean that country children have any less attractive personalities than town children. They may only be said to indicate that country children, entering new schools and new groups, and encountering new conditions, seem to be faced with greater problems of adjustment. Particularly do they seem to be conscious of these problems in the field of social relationships.
BIBLIOGRAPHY


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