A STUDY OF THE CHANGES IN SELECTED SOCIAL TRAITS EXHIBITED BY THE CAMPERS IN SUNSHINE CAMP OF AUSTIN, TEXAS, IN THE SUMMER OF 1944

APPROVED:

[Signatures of Major Professor, Minor Professor, Director of the Department of Physical Education, and Dean of the Graduate Division]
A STUDY OF THE CHANGES IN SELECTED SOCIAL TRAITS EXHIBITED BY THE CAMPERS IN SUNSHINE CAMP OF AUSTIN, TEXAS, IN THE SUMMER OF 1944

THESIS

Presented to the Graduate Council of the North Texas State Teachers College in Partial Fulfillment of the Requirements For the Degree of

MASTER OF SCIENCE

By

131939
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Powell, Texas

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CHAPTER I

INTRODUCTION TO THE STUDY

The home and the school as educational agencies attempt to educate the whole individual. Therefore, they are interested in the social development of the child. The camp is considered an important educational agency in our modern society. As such, camps are interested in developing social traits on the part of the campers. The Sunshine Camp of Austin, Texas, had as one of its goals the development of desirable social traits.

Statement of Problem

This study was undertaken to determine the change in respect to selected social traits which were exhibited by the campers in Sunshine Camp of Austin, Texas, in the summer of 1944.

Purpose of the Study

The purpose of the study was to evaluate some of the achievements of the camp in furthering the social development of the campers as a means of directing future procedures used in the camp.
Limitations

The study was limited to fifteen selected social traits and to the forty-one children enrolled at Sunshine Camp during the summer of 1944.

A Survey of Previous Studies

A survey of previous studies in the field of camping showed that few had dealt with the social traits of the campers. The few studies made of the social traits have dealt with the social attitudes and habits. The cases presented dealt with different behavior difficulties.

Dimock and Hendry's study, Camping and Character, was a camp experiment in character education. The purpose of their study was to "utilize current principles and procedures of education, psychology, mental hygiene, and sociology in the achievement of 'character' outcomes in the lives of campers. The camp drew upon educational and social science for the enrichment of its outcomes."

The purpose of Lloyd Burgess Sharpp's study, Education and the Summer Camp, was to determine a workable and efficient program for summer camps. The basis for the

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1Redley S. Dimock and Charles E. Hendry, Camping and Character, p. 13.

2L. Burgess Sharpp, Education and the Summer Camp.
presentation of his materials was the selecting, assembling, and sending of the children to the camp. The field study dealt with the problem of program and activities.

Sources of Data

There were two sources of data for the study. One was the documentary sources, which included books and periodicals dealing with psychology, sociology, education, physical education, doctor's dissertations, and reports on camps.

The other was human sources which consisted of (1) experts in the field of psychology, physical education, education, camping, economics, and medicine; (2) the campers; and (3) the experiences of the writer as director of the Sunshine Camp of Austin, Texas.

Definition of Term

In this study a social trait is conceived as a quality manifested in behavior by the individual in his association with other individuals.
CHAPTER II

DESCRIPTION OF SUNSHINE CAMP

The Sunshine Camp of Austin, Texas, was established in 1929 under the proposed plans of the Travis County Tuberculosis Association and the Young Men's Business League, the latter of which will be referred to as the Y. M. B. L. hereafter.

It had long been the plans of the Travis County Tuberculosis Association to establish a camp for needy children and arrested tubercular children. The Y. M. B. L. was invited to help carry on the camping experience. Both organizations were interested in the development of good health and wholesome attitudes.

Plans were set up with the help of two doctors who were known as the camp doctors. The Boy Scouts' cabin in Zilker Park was obtained as the location for the camp. Children were selected to go to camp.

Funds for the camp had been raised by both organizations. Any person who made a contribution to the camp fund for the Y. M. B. L. was considered a patron of the camp.
As time passed, both organizations were interested in building a permanent camp. The City of Austin favored the idea of its being established in Zilker Park. In 1932, the Travis County Tuberculosis Association furnished the materials for the building, and the Works Progress Administration furnished the labor in order for the cabin to be built. The Tuberculosis Association owned this cabin until March 2, 1943, at which time this organization deeded it to the Austin City Recreation Department with the idea that the Y. M. C. A. would still carry on the Sunshine Camp activities.

The location of Zilker Park was an advantage to both organizations, because, since it was one and one-fourth miles from Congress Avenue, bus service was available.

Zilker Park was first a tract of land owned by the Zilker Estate, and the land was sold to the City of Austin for its enjoyment. The park has natural springs which form a swimming pool. Besides the pool, there are baseball diamonds, swings, seesaws, sand boxes, wading pools, tables for picnics, pavilion for pool and for dancing, rock gardens, fish ponds, and scenic drives for the public.

Sunshine Camp is located in the center of the park and has its own facilities, such as seesaws, swings, sand boxes, horse shoes, volleyball court, flag pole, croquet court,
rings, and places for quiet games. The interior facilities, such as showers, fans, tables, chairs, cots, beds, stoves, refrigerators, dishes, cooking utensils, dresser, linens, clothing for campers, washing equipment, and library books were used by each member of the camp.

The objectives for the Sunshine Camp, which were educational, social, and physical in nature, were set up as follows, designed to develop in the campers:

1. An interest in seeking higher standards of health.
2. An interest in better citizenship.
3. An appreciation of camping.
4. A knowledge of recreation and the joy of it.
5. An attitude that desirable social traits develop one's personality and enrich one's life.

The personnel of the camp was of great importance to the Y. M. E. L. In 1944, the sponsoring organization selected well-trained administrative members. The manager of the camp was a college graduate with a master's degree; the camp director was a college graduate who had had camping experiences; the counselors were college graduates with camping experiences; the assistant was a high school student; the cooks were well-trained specialists with health certificates.

The Y. M. E. L. also selected the campers. This responsibility was delegated to specific members of the
organization. Parents made application to various Y. M. B. L. members or principals of the public schools of Austin to have their children enrolled in Sunshine Camp. An application blank was given to each parent to be filled out and filed with the organization. A sample of the application blank is included in this thesis in the Appendix. Additional information concerning each applicant was obtained by administrative members of the camp. On the basis of the information concerning the applicants, those children were selected who, due to home, financial, and health conditions, would profit most from the contributions that Sunshine Camp had to offer. Each child selected was required to have a health examination by one of the camp doctors. If the results of the examination indicated that his health condition was such that he would benefit by participating in the activities of the camp and that he was free from infectious diseases, he was officially enrolled in the camp.

Forty-one campers were enrolled in Sunshine Camp in the summer of 1944. Of this group, twenty-three were boys and eighteen were girls. The age range of each group was from six years to thirteen years. The mean age was nine years.

The camping period of Sunshine Camp lasted for six weeks, from June 7, 1944, to July 16, 1944. As a means of carrying out the purpose of the Sunshine Camp to contribute
to the health, social and emotional development, and the happiness of the campers and thereby to enrich their lives.

The following typical daily program was used:

7:00 a. m. - 7:10 a. m. -- Taps and flag raising
7:10 a. m. - 7:30 a. m. -- Make up bed rolls
7:30 a. m. - 8:00 a. m. -- Breakfast
8:00 a. m. - 8:30 a. m. -- Brush teeth and pick up personal things

8:30 a. m. - 10:00 a. m. -- Hike to Boy Scout cabin and return to camp. Nature study on way.

10:00 a. m. - 10:15 a. m. -- Read mail
10:15 a. m. - 11:30 a. m. -- Arts and crafts
11:30 a. m. - 12:00 a. m. -- Clean up and be ready for lunch

12:00 a. m. - 12:30 p. m. -- Lunch
12:30 p. m. - 1:00 p. m. -- Free time
1:00 p. m. - 3:00 p. m. -- Rest
3:00 p. m. - 3:30 p. m. -- Library
3:30 p. m. - 5:00 p. m. -- Swimming
5:00 p. m. - 5:45 p. m. -- Games
5:45 p. m. - 6:00 p. m. -- Preparing for dinner
6:00 p. m. - 6:30 p. m. -- Dinner
6:30 p. m. - 7:00 p. m. -- Free time
7:00 p. m. - 8:00 p. m. -- Dramatics
8:00 p. m.-8:45 p. m. -- Reading etc.
8:45 p. m.-9:00 p. m. -- Get ready for bed
9:00 p. m. -- Lights out
CHAPTER III

PROCEDURE

The crucial test of any camp lies in its ability to equip its campers with the desire and the method which enable them to achieve the best values from social contacts and thus to enrich their lives.

The educational ideal of Sunshine Camp assumed that effective social living involves sensitiveness and loyalty to the higher social values. The task of stimulating motives and purposes which center in these high values was of great significance in camp.

Merl E. Bonney, an authority in psychology, chose ten qualities in the development of a scale for measuring capacity in children to win friends. These qualities were:

1. Physical health and vigor.
2. Conformity and group identifications.
3. Emotional stability and control.
4. Arousing admiration.
5. Social aggressiveness.
6. Adaptability and tolerance.
7. Dependability.
8. Dependence on others for assistance and emotional
support.

9. Being a source of new experience to others.

10. Social service motivation and an attitude of good will toward others.³

On the basis of these qualities and on the basis of the social needs of the group of campers at Sunshine Camp, fifteen social traits were selected for this study. A list of the traits and a description of them follow:

1. **Cheerfulness.** -- A cheerful camper tends to be happy, pleasant, and full of good spirits.

2. **Calmness.** -- A camper possessing the trait of calmness tends to be self-possessed, unruffled, moderate in reaction, and emotionally stable.

3. **Companionableness.** -- A camper displaying companionableness is aggressive in seeking association with the other campers and in forming friendships.

4. **Caution.** -- The camper displaying cautiousness tends to be aware of possibilities of mishaps to himself and to others and tends to take constructive action to avoid their occurrence.

5. **Carefulness.** -- A careful camper tends to be responsible and particular in performing his duties.

6. **Courage.** -- A courageous camper possesses a desirable

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³Earl E. Bonney, "Sex Differences in Social Success and Personality Traits," *Child Development*, XV (March, 1944), 63-79.
degree of self-confidence, self-reliance, and unflinching spirit in facing new and challenging experiences.

7. **Capability.** -- A capable camper tends to have necessary ability and skills for satisfactory accomplishments in the situations he faces.

8. **Concentration.** -- A camper who shows the ability to concentrate tends to be attentive and to center his efforts on a given undertaking.

9. **Charity.** -- A charitable camper tends to be tolerant in feeling, opinion, and action and to express good will to others.

10. **Cooperation.** -- A cooperative camper tends to unite his efforts with others in working toward the attainment of group goals.

11. **Courtesy.** -- A courteous camper tends to be polite and well-mannered.

12. **Considerateness.** -- A considerate camper tends to be thoughtful, kind, and understanding, showing a regard and respect for the other campers and counselors.

13. **Consistency.** -- A consistent camper tends to express a desirable degree of harmony in behavior and reactions.

14. **Confidence.** -- A confident camper tends to be self-reliant, optimistic, and hopeful, and to possess a feeling
of faith in others and of security as a member of a social group.

15. *Self-control.* -- A camper tends to have the ability to discipline and direct his acts and emotions.

The research technique used to secure the data for this study was that of observation. The campers were observed and their social behavior was scored twice as follows: (1) an initial observation was conducted during the first week of camp, and (2) a final observation was conducted during the last week of camp. In order to secure the data, the campers were observed four periods during the camp day; namely, during vigorous activities, meal times, quiet activities, and rest periods.

A scale for evaluating the presence of the social traits was constructed. The scale was divided into five categories according to the frequency in which the camper expressed the trait, and a gradated numerical value was given to each category. The scale is presented below:

**Scale for Judging Presence of Social Traits**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seldom | Occasionally | Fairly | Frequently | Persistently
Each camper was scored in numerical terms according to his placement on the scale. The scores obtained during four periods of the day were combined for each camper into a gross score.

The highest possible score for each camper was twenty. In treating the data, the gross score of each trait for the four periods was used.

The data for the forty-one campers in regard to each social trait were treated with the following statistical procedure:

1. The mean of the gross scores of the forty-one campers for each social trait obtained on the initial observation, and again on the final observation, was computed. The formula used was $\bar{X} = \frac{\sum X}{N}$.

2. The social traits were placed in rank order according to their means.

3. The standard deviation of the gross scores of the initial observation and of the final observation was computed for each social trait. The formula used was as follows:

$$ s = \sqrt{\frac{\sum X^2}{N} - \bar{X}^2}. $$

4. The coefficient of variability of the scores of each of the fifteen traits on the initial observation and the final observation was computed. The formula used
was $\text{V} = 100 \times \frac{\text{O}}{\text{M}}$.

5. The difference in the mean of the gross scores obtained in the initial observation and in the final observation for each social trait was computed.

6. The reliability of the measures was determined by the following statistical procedures:

a. The standard error of the mean of the initial observation and of the final observation was computed for each social trait. The formula used was $\text{S}^{\text{M}} = \frac{\text{S}}{\sqrt{\text{N}}}$.

b. The standard error of the difference between the means of the initial observation and of the final observation was computed. The formula used was $\text{S}^{\text{D}} = \sqrt{\text{S}^{2}_{1} + \text{S}^{2}_{2}}$.

c. The significance of the difference between the means was computed. The formula used was $\frac{\text{D}}{\text{S}^{\text{D}}}$.

In Chapter IV the findings are given and interpreted.
CHAPTER IV

FINDINGS

The findings of the study are discussed in terms of the averages, namely the mean scores obtained in scoring the presence of each of the fifteen selected social traits as manifested by the forty-one campers at Sunshine Camp in the initial observation and in the final observation.

Table 1 presents the mean scores of the fifteen social traits studied in the campers in the initial and in the final observation. The social traits are arranged in rank order according to the size of the mean which indicated the degree of the presence of the trait.

Table 1 indicates that during the initial observation the social trait of concentration ranks first. Concentration is a characteristic of children absorbed in new, adventuresome, and interesting experiences. Since to most of the children Sunshine Camp was their first camping experience, it is not surprising to see the trait of concentration occupying this rank.

The trait of cheerfulness ranks fourteenth. The initial observation was taken during the first week of camp,
### TABLE 1

**RANK ORDER OF THE SOCIAL TRAITS ACCORDING TO THE MEAN**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Initial Observation</th>
<th>Final Observation</th>
<th>Rank</th>
<th>Social Traits</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concentration</td>
<td>12.37</td>
<td>1</td>
<td>Caution</td>
<td>16.95</td>
</tr>
<tr>
<td>2</td>
<td>Self-control</td>
<td>13.15</td>
<td>2</td>
<td>Capability</td>
<td>16.83</td>
</tr>
<tr>
<td>3</td>
<td>Cooperation</td>
<td>12.78</td>
<td>3</td>
<td>Concentration</td>
<td>16.73</td>
</tr>
<tr>
<td>4</td>
<td>Charity</td>
<td>12.78</td>
<td>4</td>
<td>Courage</td>
<td>16.54</td>
</tr>
<tr>
<td>5</td>
<td>Capability</td>
<td>12.41</td>
<td>5</td>
<td>Companionableness</td>
<td>16.42</td>
</tr>
<tr>
<td>6</td>
<td>Carefulness</td>
<td>12.22</td>
<td>6</td>
<td>Carefulness</td>
<td>16.41</td>
</tr>
<tr>
<td>7</td>
<td>Consistency</td>
<td>11.85</td>
<td>7</td>
<td>Cheerfulness</td>
<td>16.37</td>
</tr>
<tr>
<td>8</td>
<td>Caution</td>
<td>11.66</td>
<td>8</td>
<td>Charity</td>
<td>16.34</td>
</tr>
<tr>
<td>9</td>
<td>Courtesy</td>
<td>11.51</td>
<td>9</td>
<td>Calmness</td>
<td>16.34</td>
</tr>
<tr>
<td>10</td>
<td>Confidence</td>
<td>11.49</td>
<td>10</td>
<td>Self-control</td>
<td>16.32</td>
</tr>
<tr>
<td>11</td>
<td>Courage</td>
<td>11.49</td>
<td>11</td>
<td>Cooperation</td>
<td>16.32</td>
</tr>
<tr>
<td>12</td>
<td>Companionableness</td>
<td>10.93</td>
<td>12</td>
<td>Consistency</td>
<td>16.15</td>
</tr>
<tr>
<td>13</td>
<td>Calmness</td>
<td>10.93</td>
<td>13</td>
<td>Courtesy</td>
<td>15.76</td>
</tr>
<tr>
<td>14</td>
<td>Cheerfulness</td>
<td>10.54</td>
<td>14</td>
<td>Consideration</td>
<td>14.95</td>
</tr>
<tr>
<td>15</td>
<td>Consideration</td>
<td>10.22</td>
<td>15</td>
<td>Confidence</td>
<td>14.61</td>
</tr>
</tbody>
</table>
at which time some of the campers were experiencing typical homesickness. This may have been a contributing factor to the low rank of this trait.

The results of the final observation disclose that there is a shift in the rank of some of the social traits. This is not to be interpreted that there is a decrease in the presence of those traits which take a lower rank in the final observation than that held by them in the initial observation. A glance at the table reveals that there is an increase in the mean of all traits between the initial observation and the final observation. The shift in rank is to be interpreted to mean that, relatively speaking, some traits increased more than others and this increase gave them different ranks in relation to other traits.

The social trait of caution ranks first in the final observation. A safety education program during the six-weeks' camp session in which skills and cautionary practices were emphasized may have contributed to the increase in the degree to which the campers were manifesting this trait near the close of camp.

Courage moves from rank eleven in the initial observation to rank four in the final observation. Camp life involving motor activities and new experiences out-of-doors calls for children to overcome some common fears, such as fear of the dark, animals, and water. The rise in the rank
of the trait of courage may be indicative of the children's successful experience of overcoming their fears.

It is significant to note that there is a small range, namely 3.15, in the mean scores of the fifteen traits scored in the initial observation. The range in the mean scores decreased to 2.34 in the final observation.

The coefficient of variation for the scores in the initial observation and again in the final observation was computed for each of the fifteen social traits in order (1) to compare the variability of the camping group in regard to the fifteen social traits as indicated by the results obtained in the initial observation and again in the final observation, and (2) to compare the variability of the group in regard to each given trait at the beginning of the camp experience and at the close of the camp experience. The findings are presented in Table 2.

The campers in the initial observation show the greatest variability in the social traits of consideration, courtesy, calmness, and confidence. The campers show the least variability in the initial observation in the social traits of concentration, control, cheerfulness, and charity. In the final observation, the campers show the greatest variability in the social traits of consideration, confidence, and carefulness. They show the least variability in concentration, courage, cooperation, and charity.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Social Traits</th>
<th>Coefficient of Variation</th>
<th>Rank</th>
<th>Social Traits</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consideration</td>
<td>3.60</td>
<td>1</td>
<td>Consideration</td>
<td>2.95</td>
</tr>
<tr>
<td>2</td>
<td>Courtesy</td>
<td>3.42</td>
<td>2</td>
<td>Confidence</td>
<td>2.95</td>
</tr>
<tr>
<td>3</td>
<td>Calmness</td>
<td>3.36</td>
<td>3</td>
<td>Carefulness</td>
<td>2.76</td>
</tr>
<tr>
<td>4</td>
<td>Confidence</td>
<td>3.29</td>
<td>4</td>
<td>Consistency</td>
<td>2.08</td>
</tr>
<tr>
<td>5</td>
<td>Caution</td>
<td>2.98</td>
<td>5</td>
<td>Courtesy</td>
<td>2.07</td>
</tr>
<tr>
<td>6</td>
<td>Consistency</td>
<td>2.87</td>
<td>6</td>
<td>Self-control</td>
<td>1.81</td>
</tr>
<tr>
<td>7</td>
<td>Courage</td>
<td>2.59</td>
<td>7</td>
<td>Calmness</td>
<td>1.52</td>
</tr>
<tr>
<td>8</td>
<td>Cooperation</td>
<td>2.56</td>
<td>8</td>
<td>Caution</td>
<td>1.52</td>
</tr>
<tr>
<td>9</td>
<td>Carefulness</td>
<td>2.55</td>
<td>9</td>
<td>Charity</td>
<td>1.41</td>
</tr>
<tr>
<td>10</td>
<td>Companionableness</td>
<td>2.52</td>
<td>10</td>
<td>Companionableness</td>
<td>1.41</td>
</tr>
<tr>
<td>11</td>
<td>Capability</td>
<td>2.20</td>
<td>11</td>
<td>Cooperation</td>
<td>1.30</td>
</tr>
<tr>
<td>12</td>
<td>Charity</td>
<td>1.86</td>
<td>12</td>
<td>Capability</td>
<td>1.24</td>
</tr>
<tr>
<td>13</td>
<td>Self-control</td>
<td>1.53</td>
<td>13</td>
<td>Courage</td>
<td>1.09</td>
</tr>
<tr>
<td>14</td>
<td>Concentration</td>
<td>1.45</td>
<td>14</td>
<td>Concentration</td>
<td>1.01</td>
</tr>
<tr>
<td>15</td>
<td>Cheerfulness</td>
<td>1.80</td>
<td>15</td>
<td>Cheerfulness</td>
<td>1.60</td>
</tr>
</tbody>
</table>
The campers show a decreased evidence in variability in each of the fifteen social traits in the results of the final observation with the exception of the social traits of carefulness and self-control. This is indicative of a teaching-learning achievement in the social traits during the camping experiences. A comparison of the variability for each trait can be seen by comparing the results of the two observations in Table 2.

It was desired to determine the reliability of the mean scores for each of the fifteen selected social traits; that is, to determine how much the mean scores for the social traits of the forty-one campers diverge from the "true" mean if the entire group of possible campers represented by these boys and girls could have been measured. According to Garrett: "The reliability of a mean depends first upon our having drawn a representative sample from the larger group or population which we are studying."  

As shown in Chapter II, the method of selecting the campers was conducive to obtaining a random sampling.

The standard deviation also is an indication of the reliability of the mean. This measure shows the variability of the scores around the mean. The standard deviations of

the fifteen social traits in the initial observation and in the final observation are shown in Table 3. If the standard deviation is small, it indicates a greater reliability of the mean. In general, the standard deviation for the individual traits is small enough to indicate that the unmeasured cases of the entire camping population represented by the forty-one campers would tend to fall close to the means obtained in this study. In the initial observation, the social trait of concentration has the smallest standard deviation, and the social trait of consideration has the highest. The range of the standard deviation of the fifteen social traits is 1.74. In the final observation, there is an increase in the range of the standard deviations. The difference of the highest standard deviation of 4.56 for the social trait of carefulness and of the lowest standard deviation of 1.69 for the social trait of concentration is 2.87.

A second statistical procedure to test the reliability of the mean was a computation of the standard error of the means. The results are presented in Table 3. The standard error of the means when small indicates a greater reliability of the mean. In general, the standard error is small for each of the fifteen social traits of the initial and of the final observations. For example, the
<table>
<thead>
<tr>
<th>Social Traits</th>
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<th>Final Observation</th>
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<td>1.98</td>
</tr>
<tr>
<td>Consideration</td>
<td>10.22</td>
<td>3.68</td>
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</table>
chances are about sixty-eight in one hundred that the mean score of 10.54 for the social trait of cheerfulness does not diverge from the "true" mean by more than plus or minus .25. In other words, the "true" mean for this lies between 10.29 and 10.79.

An important finding in the treatment of the data in this study was the difference in the mean scores for each of the social traits obtained in the initial observation and in the final observation. Table 4 presents these differences. All of the traits show an increase in the mean scores in the final observation from those obtained in the initial observation. The trait of cheerfulness which ranks next to the lowest in the initial observation shows the greatest increase with a difference of 5.83 in its mean scores on the initial and on the final observations. The social trait of confidence which ranks tenth in the initial observation shows the smallest increase with a difference of 3.12 in the mean scores. The social traits of companionableness, calmness, courage, and consideration show important gains. The range in the increase of the mean scores for the fifteen social traits is the least gain.

It was desired to find the reliability of the difference between the mean of the scores for each of the fifteen social traits obtained in the initial observation and the
<table>
<thead>
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<th>Social Traits</th>
<th>Difference Between Mean Scores, Initial and Final Observations</th>
<th>Standard Error of the Difference Between Means</th>
<th>$\frac{D}{\sigma D}$</th>
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<td>Confidence</td>
<td>3.12</td>
<td>.90</td>
<td>3.47</td>
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</table>
mean of the scores obtained in the final observation. The standard error of the difference of the two means was computed to determine this reliability. The results are presented in Table 4. The smaller the standard error of the difference between the means, the more reliable is the difference. A study of Table 4 discloses that the difference between the means for each of the fifteen social traits is relatively small. The findings are to be interpreted that in sixty-eight chances out of one hundred the "true" difference between the two means for the entire class of children represented by this group of forty-one campers would deviate from the difference obtained in this study a plus or a minus one standard error of the difference between the means. For example, the "true" difference between the means for the trait cheerfulness lies between 5.83 plus .27 and 5.83 minus .27, that is, between 6.10 and 5.56. The findings show that there is a desirable degree of reliability of the difference between the means obtained in this study.

It was desired to determine if the difference between the mean obtained in the initial observation and that obtained in the final observation in the study for each of the social traits was significant. The statistical procedure of dividing the real difference between the two means by the standard error of the difference between the
two means was used to obtain this information. The results are presented in Table 4.

Garrett states:

It is customary to take a $D$ of 3 as indicative of a significant difference (virtual certainty) since there is only about 1 chance in 1000 that a difference of $\sqrt[3]{2}$ will arise when the true difference is zero. . . . A $\frac{D}{\sqrt{3}}$ greater than 3.0 may be taken as indicating just so much additional security.5

Hence, the difference in the means was definitely significant. This significance indicates that in the future, provided that the environment, conditions, and emphases are the same in Sunshine Camp, there is a strong probability that there will be an increase in the presence of the fifteen social traits in future boys and girls attending the camp of the class that is represented by the forty-one campers in this study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The study was undertaken to determine the change in respect to selected social traits which were exhibited by the campers in Sunshine Camp of Austin, Texas, in the summer of 1944. The purpose of the study was to evaluate some of the achievement of the camp in furthering the social development of the campers as a means of directing future procedures used in the camp.

The forty-one campers furnished the data for the study which was obtained by the technique of observation. Fifteen social traits were selected to be observed in the campers. The campers were observed and their social behaviors were recorded during the first week and again during the last week of camp at four periods of the camp day: rest periods, quiet activities, meal times, and vigorous activities. A scale for evaluating the presence of the social traits was constructed with numerical values to indicate the presence of the social traits exhibited by the campers.
The data for the forty-one campers in regard to the fifteen social traits obtained in the initial observation and in the final observation were treated statistically to obtain the following measures:

1. The mean.
2. The ranking of the social traits according to the mean.
3. The standard deviation.
4. The difference between the mean scores of the initial observation and of the final observation.
5. The coefficient of variability.
6. The standard error of the mean.
7. The standard error of the difference between the means of the initial and final observations.
8. The significance of the difference between the means.

Conclusions

From the findings of the study the following conclusions were drawn:

1. The campers showed a positive change in the fifteen social traits selected in this study.
2. A desirable degree of reliability of the findings for this group was obtained.
3. In all cases the change in the social trait was a significant one.
4. The social traits that were prominent in the study as indicated by the mean scores in the final observation and in the amount of change from the initial observation were those of cheerfulness, companionableness, calmness, caution, courage, carefulness, and capability.

5. The Sunshine Camp offered opportunity for the development of social traits on the part of the forty-one campers during the summer of 1944.

**Recommendations for Future Studies**

Recommendations for future studies are:

1. A similar study of changes in social traits in campers enrolled in other camps.

2. A study of changes in physical traits in the campers in Sunshine Camp.
APPENDIX
APPENDIX

AUSTIN SUNSHINE CAMP APPLICATION

Age__________  Hgt.__________  Wgt.__________

Name________________________  School__________  Grade_______

Address_________________________________  Phone__________

NAME OF PARENTS OR GUARDIAN______________________________

Father living?____  Condition of health________________________
If dead, cause of death_______________________________________

Mother living?____  Condition of health________________________
If dead, cause of death_______________________________________

Has there ever been tuberculosis in the family?________________

Number of children living at home______  Ages__________________
Other dependents in home__________________

Father's income________________________  Mother's income________
Other income of family____________________

Do you own or rent your home?________  Rent or payments,______

Parents' Consent: I would like for my child to go to the Sunshine Camp, and if________ is chosen, I will consent for________ to go.

________________________________________
SIGNATURE OF PARENT OR GUARDIAN

________________________________________
APPLICANT DO NOT WRITE BELOW THIS LINE

Height__________  Wgt.__________  Underwgt.__________  lbs.____

Weighed by________________________  Title________________

32
Remarks: ____________________________________________

____________________________________________________

____________________________________________________

______________________________________________________ Worker

PHYSICAL EXAMINATION

General appearance
Teeth
Eyes, nose, throat
Heart
Abdomen
Deformities

Chest
Skin

Remarks: ____________________________________________

____________________________________________________

____________________________________________________

Dr. ________________________________________________
## A SCALE FOR MEASURING SOCIAL VALUES

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<th>Quiet</th>
<th>Vigorous</th>
<th>Rest</th>
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