
An attitudes toward health education questionnaire was developed to determine and compare the attitudes of superintendents, school board presidents, and principals. The sample population consisted of superintendents, school board presidents, and principals in a stratified random sample of 80 school districts. The school districts were stratified according to enrollment size. A total of 258 subjects were mailed questionnaires and a 77% (199) return of mailed questionnaires was obtained. The data collected from returned questionnaires was analyzed using a two-way ANOVA, unequal cell frequency, and a one-way ANOVA, unequal cell frequency, to determine statistical significance at the p≤.05 level. A Scheffe' post-hoc test was used to locate mean scores where a significant difference was revealed from the one-way ANOVA. This statistical analysis of the data revealed a significant difference between the attitudes of principals and school board presidents toward health education. There was no significant difference between the attitudes of superintendents and principals or superintendents and school board presidents. The attitudes of
superintendents, principals, and school board presidents do not vary according to school district size. It was concluded that principals have a significantly more positive attitude toward health education than do school board presidents.
Candidate: Janice Lee Thornberg

We recommend acceptance of this thesis in partial fulfillment of this candidate's requirements for the degree:

Master of Science in Health Education

The candidate has completed her oral report.

[Signatures]

Thesis Committee Member

Date

[Signatures]

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Date

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Thesis Committee Member

Date

This thesis is approved for the School of Health, Physical Education and Recreation.

[Signature]

Dean, School of Health, Physical Education and Recreation

Date
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CHAPTER I
INTRODUCTION

Need for the Study

American educators from Benjamin Franklin to the present have mentioned some aspect of the importance of health education in their writings (Spokane, 1975). It would be difficult to find a written document containing the justification of public schools that did not mention health education (Kreuter & Green, 1978). It would seem then, that health education has long been thought of as a priority in educational program development.

There seems to be, however, a large discrepancy in attitude between the general population of educators and those involved in health education. As economic issues increase in severity, school boards and administrators regard new programs with ever increasing negativism. In the meantime, public awareness of health issues and the value of health education is increasing. In a study of school district policies toward school health (Lasch, 1976), it was found that most schools do not have written policies, curriculum guides or coordinators for their health programs.

The intent of this study was to determine the attitudes of school district administrators toward health education in Wisconsin. A secondary purpose of this study was to compare
these attitudes among different sized school districts as well as the variations of attitude among superintendents, principals, and school board presidents.

Statement of the Problem

The problem was to determine and compare the attitudes of superintendents, presidents of school boards, and principals toward health education in their schools in Wisconsin. The school districts were stratified according to enrollments (see Definition of Terms, p. 5).

Purpose

The purpose of this study was to determine present attitudes of school district representatives, especially those concerned with hiring of staff and program development, toward health education. It is believed that with an improvement in this knowledge, those people in Wisconsin who wish to promote health education will better understand how this can be done.

Hypotheses

For the purpose of this study there were twelve null hypotheses tested. The hypotheses have been formulated to read:

(1) Attitude score for principals are not significantly greater than those of school superintendents.

(2) Attitude score values for school superintendents
are not significantly greater than those of school board presidents.

(3) Attitude score values for principals are not significantly greater than those for school board presidents.

(4) Attitude score values of group A school districts' superintendents are not significantly greater than those for group B school districts' superintendents.

(5) Attitude score values of group B school districts' superintendents are not significantly greater than those for group C school districts' superintendents.

(6) Attitude score values of group A school districts' superintendents are not significantly greater than those for group C school districts' superintendents.

(7) Attitude score values of group A school districts' school board presidents are not significantly greater than those for group B school districts' school board presidents.

(8) Attitude score values of group B school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(9) Attitude score values of group A school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(10) Attitude score values of group A school dis-
districts' principals are not significantly greater than those of group B school districts' principals.

(11) Attitude score values of group B school districts' principals are not significantly greater than those of group C school districts' principals.

(12) Attitude score values of group A school districts' principals are not significantly greater than those of group C school districts' principals.

**Assumption**

The following assumption concerning the study was made:

The subjects responded accurately regarding their feelings toward health education.

**Delimitations**

The study involved the following delimitations:

(1) The jury used for the questionnaire development consisted of persons who had an interest in health education and who possessed a broad perspective of education. These persons included a superintendent, a principal, a school board member and doctor, a college health education instructor, and a curriculum advisor for health education for the State of Wisconsin (see Appendix A).

(2) The subjects were chosen randomly from public school districts in the State of Wisconsin only.
Limitation

The study had the following limitation:

The possibility of interaction between respondents could not be controlled.

Definition of Terms

The following terms have been defined to clarify their use in this study:

(1) **Attitude**: An attitude is "the sum total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic" (Thurstone & Clave, 1929, p. 6).

(2) **Attitude score value**: The sum total points scored by the individual from the survey items. Higher values reflect a more positive attitude toward health education.

(3) **Group A school districts**: A school district whose enrollment was greater than 10,000 students during the 1977-1978 school year according to the Basic Facts about Wisconsin's Elementary and Secondary Schools: 1977-78 School Year (Department of Public Instruction, 1978).

(4) **Group B school districts**: A school district whose enrollment was between 1,500 and 10,000 students during the 1977-1978 school year according to the Basic Facts about Wisconsin's Elementary and Secondary Schools: 1977-78 School Year (Department of Public Instruction, 1978).

(5) **Group C school districts**: A school district
whose enrollment was less than 1,500 students during the 1977-1978 school year according to the Basic Facts about Wisconsin's Elementary and Secondary Schools: 1977-78 School Year (Department of Public Instruction, 1978).

(6) **Health education**: "A process with intellectual, psychological, and social dimensions relating to activities which increase the abilities of people to make informal decisions affecting their personal, family, and community well-being. This process, based on scientific principles, facilitates learning and behavior change in both health personnel and consumers, including children and youth" (Schaller, 1977).

(7) **School board president**: The person elected to the school board and a participating school board member who has been designated presiding school board president during the 1978-1979 school year.

(8) **School district superintendent**: The person titled superintendent of a school district during the 1978-1979 school year.

(9) **School principal**: The person designated and titled high school principal for the 1978-1979 school year.
CHAPTER II
REVIEW OF RELATED LITERATURE

For the purpose of clarity, this review has been divided into sections concerning the following: studies of the status of health education in the nation; the status of health education in the State of Wisconsin; studies of the attitudes of school superintendents; studies of the attitudes of school board presidents; studies of the attitudes of school principals; and a summary.

Studies of Health Education in the Nation

There have been many studies concerning the present condition of health education programs in the nation's schools. In one such study (Castile & Jerrick, 1976), it was found that many states do not have clear objectives for health education. It was also found that local schools have much freedom concerning program development or the possibility of any program existing at all. These findings suggest the great latitude and variance present today among schools as to the incidence and emphasis placed on health education.

Otto, Julien, and Tether (1971) stated that in a study completed by the combined efforts of the National Education Association, the American Medical Association,
the United States Office of Education, the United States Public Health Service, and the National Congress of Parents and Teachers attention was focused on health education in the schools of the United States. All these organizations united in recommending the following:

1. Health education is a birthright of every child and is essential to his development and well-being.
2. The best time to begin health education is in the habit forming years of childhood.
3. The best place for health education is in the schools (Otto, Julian, & Tether, 1971, p. 7).

A study called the School Health Education Study concluded in 1961-1962 and was reported in 1964. It included three phases: the first of which was the assessment of the current status of school health education in a stratified random sample of 135 large, medium, and small school districts throughout the country. In summary (Sliepcevich, 1964):

It is evident that health instructional programs in the United States are in need of critical review ... There certainly are a majority of situations where health instruction is virtually non-existant, or where prevailing practices can be legitimately challenged. What passes for a program of health instruction in far too many instances is dubious (p. 12).

The School Health Education Study also revealed that school administrators neglected to give health education equal
academic recognition with English, mathematics, and science (Sliepcevich, 1964).

Some studies have been patterned after the National School Health Education Study but have been conducted on state levels. One such study in Oregon (Schlaadt & Phelps, 1967) was done to determine the status of health education in that state. It was found that in the majority of Oregon senior high schools health education was most often integrated with another subject and least often offered as a separate course.

In a status study of health instruction in Tennessee, it was found that there were many varieties of health classes in terms of required minutes per period, periods per week, and semesters per year (Huntsinger, 1971). Also in this study, it was found that health teachers were most often physical education teachers and it was evident that health content was not planned or sequential.

The Status of Health Education in Wisconsin

No studies could be found that identify the specific status of health education in Wisconsin. The most relevant information was contained in a Department of Public Instruction publication, Education Wisconsin: A Progress Report from the Wisconsin Department of Public Instruction (1978). It stated that:
Under legislation first passed and then revised in 1972, the Department was directed to assist public schools in developing comprehensive health education programs. To meet this mandate, the Department has promoted the establishment of kindergarten through 12th grade instruction designed to influence in a positive way the student's health knowledge, attitudes, and actions.

Over these intervening years, specific objectives that have been set are being met. They include the development of curriculum guides, inservice training for teachers, expanded teacher training programs in colleges, consultant services to school districts, use of state and local health agency resources in the schools and the establishment of minimum health instruction criteria for school districts under the 13 standards (p. 4).

The thirteen standards alluded to are state laws enforced by threat of suspended state financial support. The standard concerning health education states (Department of Public Instruction, 1978):

Health instruction shall be provided in accordance with a written comprehensive health education curriculum which includes curricular areas defined in ss. 115.35 and 116.01(2) of the Wisconsin Statutes. A professional staff member shall be designated as coordinator of health education. Health education in grades K-6 shall be under the supervision of a Department certified health teacher. In grades 7-12 health education shall be conducted by or under the supervision of a Department certified health teacher and shall include one structured course in health taught by a Department certified health teacher (p. 56).
In another publication by the Department of Public Instruction, *Toward Excellence in Education*, the Department emphasizes the importance of health education by stating that (1974):

School health education has the potential to be one of the most vital, practical, exciting and rewarding instructional experiences in the total educational program. Its substance dwells close to the purpose of life itself and the very core of human relationships. School health education should consist of planned learning experiences designed to assist students in gaining knowledge and developing positive attitudes and social health (p. 31).

In 1973, the State Superintendent set up a task force to establish criteria for health education. This task force cited the following criteria to be considered when planning a comprehensive school health education curriculum (Department of Public Instruction, 1974):

The program should:

1. be aimed at the prevention of individual physical, emotional, and social health problems;

2. be one that provides a healthful school environment, which reinforces what is being taught in the classroom;

3. include instruction in the major areas of physical health, social health, mental health, environmental health and community health, and education for survival;
4. be developed through cooperative planning by educators, students, parents, and other advisory committee members;

5. be designed to promote and develop positive attitudes and practices toward the solution of public health problems;

6. be based upon current and scientifically accurate health information;

7. bridge the gap between health information and health practices;

8. be coordinated on a multi-disciplinary basis with related subjects;

9. focus on the positive aspects of optimal health, and not be totally centered on the study of health problems; and

10. facilitate the exploration and use of innovative and creative instructional methods, which involve students in the achievement of established objectives (p. 32).

It is the author's opinion and experience that the Department of Public Instruction has not rigidly enforced its thirteen standards and this accounts for great variance in the school health programs across the state.

Studies of the Attitudes of School Superintendents

Few studies could be found that attempted to identify the attitudes of school superintendents toward health education. In one study of the attitudes of four groups of educators (Giaquinta, 1978), superintendents were more likely to be negative toward the inclusion of a sex
education course than elementary principals. In this same study, the researchers decided that risk was a factor in influencing the responses. The superintendents had more to risk in terms of vulnerability to public opinion.

On less controversial health topics, the superintendents seem to be much more positive. In one study (O'Farrell & Kendrick, 1976), the sixty-seven superintendents thought that a nutrition education program would be very good for the schools in Florida.

Studies of the Attitudes of School Board Presidents

While more studies have been conducted to determine the attitudes of superintendents or principals, school board members in one study thought that they were not qualified to discuss program or curriculum (American School Board Journal, 1974). In this same study, it was concluded that the board members were reverting back to the basics and away from what was called or considered extraneous spending. Many board members believe that health education is a recognized part of the content of physical education, home economics, and science (Castile & Jerrick, 1976). Board members tend to entrust this curriculum problem to the administrators and do not concentrate on program development. Instead, board members are more concerned with the larger problems of overall education and costs (American School Board Journal, 1974).
School principals, closer to the actual situation and to students, tend to be more positive toward health education. In a study concerning drug abuse education (Rosner, 1975), principals were very favorable toward drug education as an integral part of health education. Rosner (1975) stated that principals favored drug education to begin at the earliest possible level and an increase of this type of education was needed.

Adams (1974) stated that the secondary principals thought more inservices for the teachers of health education was a good idea. Principals, like superintendents in Florida, favored a nutrition education program for their schools (O'Farrell & Kendrick, 1976). Principals were much more likely to favor sex education than superintendents in another study (Giaquinta, 1975). Reed (1973) stated that principals see sex education as an integral part of high school curriculum and a qualified teacher as essential.

Mayshark (1967), in the study of school health program administration, maintained that the school principal had power in promoting the entire program of school health, and Brieve (1972) stated that the principal is and must be an instructional leader.
Only one study could be identified which assessed the attitudes of school principals toward health education in general. This study (Lidelle, 1978) found that there was not a relationship between the attitudes of the principals and the quality of the school health program.

**Summary**

Although health education has been promoted for many years, very few schools have adequate programs (Castile & Jerrick, 1976; Herster, 1977; Lasch, 1976; Sliepcevich, 1964). The State of Wisconsin Department of Public Instruction has published specific guidelines for health education curriculum and instruction. Superintendents, school board members, and principals vary greatly in their concern over health education. There were no studies identified which compared the attitudes of superintendents, principals, and school board members. It seems that principals tend to be more favorable toward health education while superintendents have more to risk in the controversy of some health education topics. School board members are more concerned with monetary concepts than specific curriculum. Overall, there appears to be a great need for the improvement and delineation of school health programs.
CHAPTER III

METHODS

The purpose of this study was to determine and compare the attitudes of school district administrators toward health education in their schools in Wisconsin.

A randomized questionnaire survey was conducted during the 1978-1979 school year and was limited to the selected public school districts in Wisconsin.

Subject Selection

The school districts were selected from the Wisconsin Department of Public Instruction's Basic Facts about Wisconsin's Elementary and Secondary Schools: 1977-1978 School Year (1978). There were 436 school districts in Wisconsin. Fifty-one of the districts were eliminated because they did not have a high school and the study concerned the attitudes of high school principals.

Of the remaining 385 districts, enrollments varied from 101,192 students to 59 students in 1978. It was decided to stratify the sample by district size into three groups. The first twelve districts ranked highest in enrollment included enrollments of greater than 10,000 students and were labeled group A. All of these districts had more than one high school and were assumed to have greater resources
than smaller districts. The second group ranked 13 through 145 and had enrollments ranging from 9,822 to 1,503. There were 129 districts in this group and most had one high school. These districts were considered to have fewer resources than those of group A and were labeled group B. The third group of school districts ranked from 146 to 436 in enrollment size. They had from 1,488 to 59 students and were considered to have fewer resources than group A or B. There were 244 school districts in this group labeled C.

Approximately twenty percent of the school districts in each group were randomly selected by using a table of random numbers to serve as the surveyed sample (see Table 1).

| Table 1 |
| Distribution of Stratified Sample |

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Rank</th>
<th>Enrollment</th>
<th>S</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12</td>
<td>1-12</td>
<td>101,192-10,003</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>B</td>
<td>129</td>
<td>13-145</td>
<td>9,822-1,503</td>
<td>27</td>
<td>20.9</td>
</tr>
<tr>
<td>C</td>
<td>244</td>
<td>146-436</td>
<td>1,488-59</td>
<td>50</td>
<td>20.5</td>
</tr>
</tbody>
</table>

Each district was sent at least three letters containing questionnaires; one to the superintendent, one to the school board president, and one to the high school principal. Addresses were obtained from the public records of
the Department of Public Instruction in Madison, Wisconsin, or the Wisconsin Public School Directory, 1978-79 (Department of Public Instruction, 1979). In the case of a school district with more than one principal, the researcher decided that every principal in the district would be sent a questionnaire and a mean score for principals in that district would be used.

Development of the Questionnaire

The purpose of this study was to determine the attitudes of school district administrators. A mailed questionnaire was decided upon as the best method that would accomplish this goal. The initial questionnaire items were constructed based on the following concepts:

1. Health education is generally needed.
2. Health education is considered of value for students.
3. Health education is not solely the responsibility of parents.
4. Health education is important in the early grades as well as the later grades.
5. Health education is as important as other subjects.
6. The community should be involved in the planning of health education programs.
7. Value education is an important part of health education.
8. Coordinators are needed for health education.
Many of the ideas for these concepts were taken from School Health Education Study, A Summary Report, E. M. Sliepcevich, 1964.

The questionnaire items were developed under the following guidelines from Wang (1932):

1. The statements must all measure the same variable.
2. Statements must be susceptible to more than one response.
3. Statements must be as brief as possible.
4. Each statement should contain only one complete thought.
5. Statements must be clear cut, direct and avoid ambiguity.
6. The statements should be worded in the vocabulary of the subjects.

Forty-four items were written in the initial draft. Ideas for some of the items came from Silence and Remmers questionnaire on "Attitudes Toward Any School Subject" (Shaw and Wright, 1967, p. 294). Other ideas were entirely the responsibility of the researcher. A Likert type scale using summed scores was chosen for this study. The items in the questionnaire were both positively and negatively worded.

The questionnaire and a cover letter explaining the study were sent to a jury of five experts (see Appendix A-1). Each jury member was asked to rate each item on a scale of one to ten (ten being excellent and one being very poor).
based on the concepts and guidelines presented and their own interpretations. The jury members were also asked to re-word items as they deemed necessary. As a result of the jury of experts' findings, four items were eliminated and twenty-two were re-worded.

A pilot study, using members of the study population not in the sample, was run after the evaluated questionnaire items were returned from the jury and the random sample had been selected. In this pilot study, five principals, five superintendents, and five school board presidents were sampled using the forty-item questionnaire. An analysis of correlation coefficient was used to measure internal consistency by correlating each response to an item to the total score. This allowed selection of the questionnaire items with the highest correlation. The correlations of the items ranged from .92 to .998. The item with the lowest correlation was eliminated and four others were omitted due to repetition. The final questionnaire contained thirty-five items, twenty positively stated and fifteen negatively worded statements.

A Spearman-Brown split-half reliability test was computed on the final returned questionnaires. A score of .91323 was achieved and the questionnaire was considered quite reliable.
Procedure

The questionnaires were mailed with a cover letter explaining the study. One week was allowed for their return. A second letter and questionnaire were sent to those respondents who had failed to return their questionnaires. A total of three weeks was allowed for the return of the questionnaires.

Statistical Analysis of the Data

A one tailed, two-way analysis of variance with unequal cell frequency was used to analyze the attitude scores. If a significant difference was found at the .05 level, a one-way analysis of variance was computed. A Scheffe' post hoc test was then run to identify the mean scores where the significant differences occurred.

Although some (Petrie, 1969; Brunbach, 1969) would argue against treating these Likert scores as interval data, Anderson (1961) stated that parametric tests can be used for attitude scores. The analysis of variance technique has been shown to be quite robust and violation of assumptions cause little kiting of the alpha error.
CHAPTER IV
RESULTS AND DISCUSSION

Introduction

This study investigated the attitudes of school district superintendents, principals, and school board presidents toward health education in their schools. The raw data was collected from a mailed questionnaire. This chapter will present the data collected and the statistical analysis of that data.

Subjects

A twenty percent random sample of school districts in Wisconsin was used for this study. There were eighty school districts chosen to participate which, under the design of this study, dictated the mailing of 258 questionnaires. The distribution of position of subjects and school district size is shown in Table 2. The Table also indicates the percent rate of returns of the mailed questionnaires. A 77% rate of return was obtained on the total sample (199 returns from a 258 sample size).

Results

The raw data collected in this study consisted of the summated scores of a questionnaire using a Likert-type scale. A two-way analysis of variance with unequal cell
Table 2
Distribution of Subjects in School District Sizes and Percent Rate of Returned Questionnaires

<table>
<thead>
<tr>
<th>District Size</th>
<th>Position</th>
<th>Sample</th>
<th>Returns</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Board Presidents</td>
<td>3</td>
<td>2</td>
<td>66.6</td>
</tr>
<tr>
<td>A</td>
<td>Superintendents</td>
<td>3</td>
<td>2</td>
<td>66.6</td>
</tr>
<tr>
<td>A</td>
<td>Principals</td>
<td>19</td>
<td>10</td>
<td>52.6</td>
</tr>
<tr>
<td>B</td>
<td>Board Presidents</td>
<td>27</td>
<td>21</td>
<td>77.7</td>
</tr>
<tr>
<td>B</td>
<td>Superintendents</td>
<td>27</td>
<td>23</td>
<td>85.2</td>
</tr>
<tr>
<td>B</td>
<td>Principals</td>
<td>29</td>
<td>27</td>
<td>93.1</td>
</tr>
<tr>
<td>C</td>
<td>Board Presidents</td>
<td>50</td>
<td>37</td>
<td>74</td>
</tr>
<tr>
<td>C</td>
<td>Superintendents</td>
<td>50</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>C</td>
<td>Principals</td>
<td>50</td>
<td>34</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>258</td>
<td>199</td>
<td>77</td>
</tr>
</tbody>
</table>
frequency was used to analyze the data. A one-way analysis of variance and a Scheffe' test were used as post-hoc analysis. The level of significance at which to reject the null hypotheses was set at the .05 level. The critical value of $F$ needed was computed to be 3.05.

Table 3 displays the cell frequency of returned questionnaires by position of subject and size of school district. The size of school district is represented by vertical columns and the position of the subjects is represented by horizontal rows. As has been shown, 199 subjects completed the questionnaire. However, the cell size for principals in both columns A and B does not reflect the number of returned questionnaires but rather the number of school districts responding. Some of those districts had more than one principal so a mean score for principals for that district was used for this study. The raw scores for each of these groups were used for statistical analysis.

<table>
<thead>
<tr>
<th>Position</th>
<th>District Size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Board President</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Superintendent</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Principal</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Totals</td>
<td>7</td>
<td>69</td>
</tr>
</tbody>
</table>
Table 4 depicts the cell means for the health education attitude scores for principals, superintendents, and school board presidents in each size of school district.

**Table 4**

Cell Means of Attitude toward Health Education of Subjects by District Size and Position

<table>
<thead>
<tr>
<th>Position</th>
<th>District Size</th>
<th>Total Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Board President</td>
<td>147.5</td>
<td>131.2</td>
</tr>
<tr>
<td>Superintendent</td>
<td>134.5</td>
<td>136.8</td>
</tr>
<tr>
<td>Principal</td>
<td>139.0</td>
<td>141.2</td>
</tr>
</tbody>
</table>

Table 5 depicts the results of the two-way analysis of variance, school district size by position of subject. To be significant at the .05 level, a critical value of 3.05 was needed. The F-value for columns (school district sizes) was .1371 and was found to be not significant. The F-value for rows (position of subject) was 4.2493 and was found to be significant at the .05 level of significance.

A one-way analysis of variance was conducted on the mean cell scores for all principals, all superintendents, and all school board presidents.
Table 5
Summary of Two-way Analysis of Variance for Attitude Survey toward Health Education

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>d.f.</th>
<th>Mean Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Sizes</td>
<td>76.5</td>
<td>2</td>
<td>38.25</td>
<td>.1371</td>
</tr>
<tr>
<td>Subjects Positions</td>
<td>2370.5</td>
<td>2</td>
<td>1185.25</td>
<td>*4.2493</td>
</tr>
<tr>
<td>Interaction Term</td>
<td>432.00</td>
<td>4</td>
<td>108.0</td>
<td>.3872</td>
</tr>
<tr>
<td>Within Cells</td>
<td>50485.5</td>
<td>181</td>
<td>278.9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53264</td>
<td>189</td>
<td>282.3</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .05

Table 6 displays the summary of the one-way analysis on the mean scores. A significant difference was determined. A 3.05 critical value was needed for there to be a significant difference. A 4.346 P-value was computed in this analysis.
Table 6

Summary of One-way Analysis of Variance for Attitude Survey toward Health Education

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>d.f.</th>
<th>Mean Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Positions</td>
<td>2370.5</td>
<td>2</td>
<td>1185.25</td>
<td>*4.346</td>
</tr>
<tr>
<td>Within Cells</td>
<td>50993.5</td>
<td>187</td>
<td>272.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53364</td>
<td>189</td>
<td>282.3</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05

A post-hoc Scheffe' test was performed to determine the significance of difference between the sets of mean scores. Table 7 depicts the results of the Scheffe' test. A critical value of 2 x 3.05 was needed to show a significant difference at the .05 level of significance. There was no significant difference between the mean scores of school board presidents and superintendents or superintendents and principals. There was a significant difference between the mean scores of school board presidents and principals.
Based on the analysis of data, the following hypotheses were accepted:

(1) Attitude score values for principals are not significantly greater than those of school superintendents.

(2) Attitude score values for school superintendents are not significantly greater than those of school board presidents.

And, the following null hypothesis was rejected:

(3) Attitude score values for principals are not significantly greater than those for school board presidents.

There was no significant difference between the school district sizes and the positions of the subjects as described in the two-way analysis of variance mentioned.
earlier. As a result, the following null hypotheses were accepted:

(4) Attitude score values of group A school districts' superintendents are not significantly greater than those for group B school districts' superintendents.

(5) Attitude score values of group B school districts' superintendents are not significantly greater than those of group C school districts' superintendents.

(6) Attitude score values of group A school districts' superintendents are not significantly greater than those for group C school districts' superintendents.

(7) Attitude score values of group A school districts' school board presidents are not significantly greater than those for group B school districts' school board presidents.

(8) Attitude score values of group B school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(9) Attitude score values of group A school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(10) Attitude score values of group A school districts' principals are not significantly greater than
those of group B school districts' principals.

(11) Attitude score values of group B school districts' principals are not significantly greater than those of group C school districts' principals.

(12) Attitude score values of group A school districts' principals are not significantly greater than those of group C school districts' principals.

Summary

A two-way analysis of variance was conducted to determine a possible significant difference between the score values of the various school district sizes and the positions the subjects held. The school district sizes were found not to be significant. The types of positions the subjects held were found to be significant at the .05 level.

A one-way analysis of variance was used to determine the significant difference between the positions the subjects held ignoring the sizes of the school districts. This test was found to be significant at the .05 level. A post-hoc Scheffe' test was computed to determine between which means the significance occurred. There was not a significant difference between the school board presidents and the superintendents nor was there a significant difference between the mean scores of the superintendents and
principals. A significant difference was found between the school board presidents and the principals at the .05 level.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to compare the attitudes of superintendents, principals, and school board presidents toward health education in their schools. A mailed questionnaire survey was conducted to determine these attitudes. Twelve null hypotheses were posed in investigating the problem.

Eighty school districts in Wisconsin, an approximate twenty percent random sample, were chosen to participate in this study. The Survey of Attitudes toward Health Education was mailed to the principals, superintendents, and the school board presidents of those districts. A total of 258 questionnaires were mailed.

The Attitudes toward Health Education questionnaire was developed by the researcher using a Likert-type scaling and summated score values. The original questionnaire items were sent to a jury of experts (see Appendix A-1) for validation. A pilot study was conducted to test the individual questionnaire items for internal consistency and a Guttman Split-half Reliability Test was computed.

A 77 percent return rate (199 questionnaires) was achieved. The raw data used for the statistical analysis
was taken from the summations of the returned questionnaires.

Statistical analysis was performed by the Academic Computer Service Department at the University of Wisconsin-La Crosse, La Crosse, Wisconsin, with the consultation of Dr. John Castek, a professor at the University of Wisconsin-La Crosse. Three statistical tests were utilized: a two-way analysis of variance with unequal cell frequencies; a one-way analysis of variance with unequal cell frequencies; and a post-hoc Scheffe' test to identify specific significant mean scores differences when significant differences were noted on the one-way analysis of variance. The level of significance for accepting or rejecting the null hypotheses was .05.

**Findings**

Findings, based upon the analysis of data, are presented as they pertain to the twelve null hypotheses:

(1) Attitude score values for principals are not significantly greater than those of school superintendents.

(2) Attitude score values for school superintendents are not significantly greater than those of school board presidents.

(3) Attitude score values for principals are significantly greater than those for school board presidents.
(4) Attitude score values of group A school districts' superintendents are not significantly greater than those for group B school districts' superintendents.

(5) Attitude score values of group B school districts' superintendents are not significantly greater than those for group C school districts' superintendents.

(6) Attitude score values of group A school districts' superintendents are not significantly greater than those for group C school districts' superintendents.

(7) Attitude score values of group A school districts' school board presidents are not significantly greater than those for group B school districts' school board presidents.

(8) Attitude score values of group B school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(9) Attitude score values of group A school districts' school board presidents are not significantly greater than those of group C school districts' school board presidents.

(10) Attitude score values of group A school districts' principals are not significantly greater than those of group B school districts' principals.

(11) Attitude score values of group B school districts' principals are not significantly greater than those
of group C school districts' principals.

(12) Attitude score values of group A school districts' principals are not significantly greater than those of group C school districts' principals.

Conclusions

Based upon the results of the research, the following conclusions were drawn:

1. Attitudes of principals, superintendents, and school board presidents toward health education do not vary according to district size.

2. Principals, on the whole, have a significantly more positive attitude toward health education than do school board presidents in Wisconsin.

Recommendations

This study researched the attitudes of principals, superintendents, and school board presidents toward health education in Wisconsin. The most significant aspect and the most personally gratifying for the researcher, was to find the overall attitudes of the subjects, based upon the score values from the questionnaires, were generally positive.

Based upon the research completed in this study, the following recommendations are offered:

1. A similar study should be conducted to determine the attitudes of elementary teachers toward health
education. These attitudes could be compared to the attitudes of principals, superintendents, and school board presidents as in this study.

2. A research study should be conducted in the State of Wisconsin to compare the attitudes of principals to the status of the health instruction programs in their schools.

3. A research project, including an inservice program for school board members, principals, or superintendents on the value of health education, could be conducted and the instrument in this study could be utilized to measure attitudes before and after the inservice program.

In conclusion, it was the purpose of this study to identify people who could be targeted for the promotion of health education. These groups included superintendents, school board presidents, and principals of varying school district sizes. It is hoped that the results of this study will help those who want to promote positive attitudes toward health education in Wisconsin's public schools.
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APPENDICIES
APPENDIX A-1

QUESTIONNAIRE JURY MEMBERS

Chet Bradley, Ph.D.
Health Education Consultant
Department of Public Instruction
126 Langdon
Madison, WI  53702

James Teonnie, M.S.
Health Education Instructor
Williams Center
UW-Whitewater
Whitewater, WI  53190

James Fricke, Ph.D.
Superintendent
Stoughton Public Schools
P. O. Box 189
Stoughton, WI  53589

Charles Martin, M.S.
Principal
Stoughton High School
P. O. Box 189
Stoughton, WI  53589

Charles H. Miller, III, M.D.
Physician, Gundersen Clinic
and School Board Member
1836 South Ave.
La Crosse, WI  54601
Dear Jury Member:

I am a graduate student at UW-La Crosse pursuing a master's degree in health education. I have chosen as my thesis topic to survey the attitudes of school district administrators toward health education in Wisconsin. Using the term administrators, I am including superintendents, high school principals, and school board presidents.

I have selected you as a possible jury member to validate the questionnaire I have developed. I am asking each member of this jury to:

1. Rate each questionnaire item from 1 to 10 (one being poor and ten being very good) using the objectives and guidelines I have included as well as their own criteria.
2. Supply some comments if needed about the individual questionnaire items.

I would expect this to take not more than twenty to thirty minutes of your valuable time.

I have included a brief copy of my study proposal, the lists of guidelines and a copy of the questionnaire.

After the jury of experts has returned this material, the questionnaire items will be pilot-tested. The final questionnaire will be composed of those items which receive the highest scores on a statistical test. It is hoped that the final questionnaire will include only about twenty-five items. You will notice that some items seem to be redundant. These items will be weeded out during the pilot study.

If you feel that you do not have the time or interest, please return these materials using the envelope provided. I will need to select a new jury member immediately.

If you feel that you can take the time, please return the reviewed items within ten days.

In either case, thank you very much for your cooperation.

Sincerely,

Jan Thornberg

Enclosures
I am a graduate student at UW-La Crosse. I am now working on my master's thesis so that I may graduate and resume teaching in September. My thesis concerns an attitude survey of school board presidents, superintendents, and high school principals toward health education.

Of the 435 school districts in Wisconsin, eighty were selected randomly. Your district was one of those selected in a manner similar to a drawing out of a hat. Your name was obtained from the public records filed in the Wisconsin Department of Public Instruction. In samples such as this, it is important the questionnaire be returned by every selected respondent. Otherwise, the study would fail.

Please follow the directions at the top of the questionnaire and return it, in the envelope provided, by June 14. Your name will not be used and please do not write it on the questionnaire. Your responses will be grouped with many others according to district size.

The questionnaire is designed to be as short as possible so as to inconvenience you as little as possible. It should take only a few minutes of your time.

Thank you for your cooperation.

Sincerely,

Jan Thornberg
Last week you were sent a letter and a questionnaire concerning attitudes toward health education. This survey concerns the attitudes specifically of school board presidents, superintendents, and high school principals. As I intend to graduate this summer and return to teaching, I must finish this study this month, I have not received your questionnaire responses.

I have provided a second copy of the questionnaire and a return stamped envelope. This questionnaire is designed to be short so as to take as little of your time as possible. Please follow the directions at the top of the questionnaire and return it in the envelope provided by June 22.

It may be that you did not respond because you were concerned about anonymity. Although names were obtained from the public records of the Department of Public Instruction, names are not used in this study. The responses are grouped with many others according to school district size.

If you choose not to respond, please state so on the questionnaire and return it in the envelope provided.

Thank you for your cooperation.

Sincerely,

[Signature]

Jan Thornberg
APPENDIX C
Directions. Circle the letters that reflect how you feel about health education in your schools. SA = strongly agree, A = agree, NO = no opinion, D = disagree, SD = strongly disagree.

For the purpose of classification, the following definitions of terms frequently used in this survey have been included:

Health education is providing or utilizing experiences which favorably influence knowledge, attitude, and behavior as related to individual, family, and community health.

Value education is providing experiences which allow students to identify and express their own beliefs. It does not mean that teachers or other staff members impose their beliefs in any way. Value education gives an opportunity for students to practice decision making.

1. Health education should be included within the total curriculum of every school.
   SA A NO D SD

2. The time devoted to health education in schools could be more profitably spent in the study of other subjects.
   SA A NO D SD

3. There is a great deal of useful information that can be taught in health education.
   SA A NO D SD

4. Health education should be a structured part of education beginning in early elementary school and continuing through 12th grade.
   SA A NO D SD

5. A curriculum coordinator for health education is not needed for your school district.
   SA A NO D SD

6. Health education classes provide little which would be of value outside of class.
   SA A NO D SD

7. Health education is taught at home and is not a necessary part of your school curriculum.
   SA A NO D SD

8. Health education is one of the important subjects in the school curriculum.
   SA A NO D SD

9. Health education has too many controversial topics to be taught in your schools.
   SA A NO D SD

10. Health education is an attempt to take away control from parents.
    SA A NO D SD
11. Few definite beneficial results come from participation in health education programs.

12. The value of health education is over-estimated by many people.

13. Sex education, including family living and contraception, are a necessary part of health education.

14. Compulsory health education courses at the secondary level should be enforced in all schools.

15. Skills learned in a health education class add something of value to a person's life.

16. A curriculum guide, outlining scope and sequence for health education K-12 in your schools, should be available to you and your staff.

17. Health education courses do not influence the health habits of students anyway so they are, therefore, of little use.

18. It is important to have separate health education courses taught by teachers certified in health education.

19. The community should be involved in the planning of curriculum for health education.

20. The information obtained by students in health education can be valuable to them after they finish school.

21. It is important to you to voice your concern publicly about the importance of health education.

22. Value education, rather than just facts is an important part of health education.

23. Health education is not given a high enough priority.

24. There is not enough value in health education to justify the time and money consumed.

25. You should be willing to participate in committees concerning health education.

26. Health education has no lasting influence upon the beliefs and behaviors of the students.
27. You should encourage the development of health education in your schools.

28. Health education should be included in every school because of the contributions it can make toward positive social, emotional, and physical well-being.

29. If for any reason subjects have to be dropped from the school program, health education should be one of the subjects dropped.

30. Health education provides situations for developing desirable personality traits.

31. Public education should stick to the basics (i.e., reading, writing, and arithmetic) and health education is an unnecessary frill.

32. Most health education should occur in related classes such as science, physical education or home economics rather than specific and separate health courses.

33. Health education is as important as courses such as physical education, home economics, and industrial arts.

34. There is little value in health education as far as physical well-being is concerned.

35. It is necessary to spend school funds to provide inservice for teachers in the area of health education.