

ATTITUDES OF SCHOOL PERSONNEL REGARDING COLLABORATIVE  
ACTIVITIES OF THE SCHOOL NURSE

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A THESIS

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## CHAPTER I

### INTRODUCTION

Since the introduction of nurses into the school setting in 1902, school nursing has gone through several stages in an attempt to develop and define the role. In the most recent stage, the trend has been to describe the role of the school nurse as being that of an instigator and resource person in a collaborative effort to promote health and to resolve health problems in the schools.

Perhaps the most significant milestones in the development of this collaborative trend have been a societal redefinition of school health problems, the increasing utilization of health educators in the schools, and the recent advocacy of the school nurse practitioner. Thus, the developing role of the school nurse now encompasses many collaborative activities which have been alluded to in nursing research and in statements from various professional organizations regarding school nursing activities. If nursing is to effectively promote this developing role, then it must not only offer guidelines on educational preparation and competencies, but must

also clarify the collaborative functions which form the crux of the school nurse's currently defined activities.

This nursing investigation surveyed the perceptions of school nurses, teachers, and administrators with regard to the collaborative activities associated with the performance of various school nursing activities. The results of the study were used to describe the collaborative functions of the school nurse as perceived by these various groups of people.

#### Statement of Problem

The problem for this study was to investigate attitudes of school nurses, teachers, and school administrators toward the collaborative activities of the school nurse.

#### Statement of Purpose

The purposes of this study were to:

(1) ascertain those persons with whom the school nurse should collaborate concerning specified school nursing activities as identified by school nurses;

(2) ascertain those persons with whom the school nurse should collaborate concerning specified school nursing activities as identified by teachers;

(3) ascertain those persons with whom the school nurse should collaborate concerning specified school nursing activities as identified by school administrators;

(4) determine if a difference exists between school nurses and teachers in the identification of persons with whom the school nurse should collaborate in performing specified school nursing activities;

(5) determine if a difference exists between school nurses and school administrators in the identification of persons with whom the school nurse should collaborate in performing specified school nursing activities.

#### Theoretical Framework

Recent literature describes the promotion of health and the resolution of health problems in the schools as a collaborative effort involving many school personnel and persons in the community. The term "collaborative" denotes the meeting of two or more per-

sons for the purpose of obtaining joint input for planning or problem solving (Thomas, 1976). These processes of planning and problem solving require decision making and effective communication. Therefore, the theoretical framework for this study is based upon decision-making theory, communication theory, and role theory.

There are two fundamental premises in decision-making theory. First, in order for a person to make a decision, he must have alternatives from which to choose. Second, values must be assigned to the alternatives before the decision is made (Yura and Walsh, 1973). Input that will provide the decision maker with the alternatives and basis for assigning values to alternatives must be communicated to him. Therefore, decision-making theory is directly related to communication theory (Yura and Walsh, 1973).

In communication theory, Ackoff (1968) describes the purposes of communications as being either informational, motivational, educational, or a combination thereof. Ackoff (1968) describes informational communication as communication which changes the probability of that person's selecting a particular option. Communication which causes

a person to change his value estimation of a particular option is motivational communication. Communication that improves the outcome of a selected option is instructional communication. All of these purposes and/or types of communication can lend to rational, germane decision making (Ackoff, 1968).

However, to have any communication, three basic elements are necessary. There must be a sender, a receiver, and a message. For communication to be effective in meeting its purpose (i.e., to inform, to motivate, to educate), two conditions must be present in addition to the three basic elements. Communication theorists describe the first of these two conditions as assigning similar meanings to the symbols denoting the message by both the sender and receiver that the communication is part of each person's role (Igoe, 1977).

Role theory offers additional insight into this second communication condition. A person's role can be defined as a collection of functions, responsibilities, behavior patterns, and sentiments associated with an employment position or relation to an object or other person (Maleis, 1975). Maleis (1975) states that a

person's role is usually predetermined for him by the expectations of others.

The role of the school nurse has been described in the literature as being that of an instigator and resource person in a collaborative effort to promote health and to resolve health problems in the schools (Regan, 1976; Thomas, 1977; Igoe, 1977; Howell and Martin, 1978). However, the actual collaborative function of the school nurse will, in part, depend upon the expectations of those with whom she will collaborate and her own expectations. This study surveys the attitudes of school personnel regarding with whom the school nurse should collaborate in her attempt to carry out selected school nursing functions that have been described in the literature as requiring collaboration. The findings of this study were tabulated to find discrepancies in the expectations of the school personnel sampled regarding collaboration. Theory of role supplementation has been used to suggest ways of increasing collaborative communication.

### Background and Significance

In the United States, the duties and activities of the school nurse have traditionally reflected the health needs of our society (Cromwell, 1963; Harg, 1972; Bryan, 1973; Regan, 1976). More specifically, the evolution of theoretical based school nursing has paralleled our society's growth in its awareness of its health needs. Regan (1976) outlines the historical development of the school nurse role as having occurred in four periods of development. In the first period, from 1902 to 1924, the school nurse was primarily concerned with decreasing the spread of contagious diseases among school children, identifying and referring ill children to physicians, and carrying out treatments prescribed by physicians. During this period, the role of the nurse reflected the high incidence of contagious disease, the shortage of physicians, and the lack of lay knowledge regarding health care measures (Regan, 1976).

In the second period, from 1925 to 1949, school nurses began to focus on health education. It was also during this time that visual and auditory screening and providing first aid became standard duties of the school

nurse. The health education offered by these school nurses dealt primarily with hygiene, first aid, child care, and caring for persons with fever and contagious diseases. The emphasis on health education reflected the advances which the field of health science had made with regard to pharmacology and disease control. The emphasis on health education also reflected a national trend toward increasing the availability of public education and gearing the curriculum around John Dewey's theories of "education for life" (Hicks, Mowry, and Burke, 1970).

The third period of development was from 1950 to 1969. During this time, our nation was in a state of affluence and rapid technical advance. This was the time period of the "space age" and of complicated foreign affairs. With so many rapid advances in technology, the increased mobility of families, the rapid increase in working mothers, and the "hippie movement," Americans perceived various health problems. Some of these were identified as family problems, mental health problems, and drug abuse (Hicks, Mowry, and Burke, 1970). This perception was reflected in the schools as federal funding for health education became readily available.

Physical education teachers, coaches, and home economics teachers assumed a very active role in health education. School counselors and health education teachers began rapidly increasing in numbers. Henceforth, the school nurse would no longer be the school's sole health educator, and the role of school nursing once again needed to be redefined (Regan, 1976).

Professional organizations recommended that school nurses have a baccalaureate education with courses in health education, and function in a team approach to promote health, as well as continue to give emergency first aid (Regan, 1976). However, research investigations during that time period indicate that the majority of school nurses were diploma graduates and that school nurses, teachers, and school administrators perceived the primary functions of the school nurse to be those of giving first aid, maintaining health records, and performing visual and auditory screening (Fricke, 1964; Forbes, 1966).

The fourth period of development began in 1970 with the Denver School Nurse Practitioner Program (Hilmar and McAtee, 1973). The school nurse practitioner has been

described in very broad terms as a school nurse prepared on a post-baccalaureate level to assume

a more direct and responsible professional role in securing child health care in the school setting through cooperation with all health professionals, educators, and others within the health delivery system in the community. . . . .

. . . . .  
In this expanded role, school nurse practitioners can identify and assess the factors that may operate to produce learning disorders, psychoeducational problems, perceptively-cognitive difficulties, and behavior problems, as well as those causing physical disease (American Nurses Association and American School Health Association, 1973, pp. 594-595).

During the last few years, several attempts have been made to delineate the activities and educational preparation of the school nurse practitioner. These activities require the school nurse practitioner to have advanced skills in physical assessment, developmental screening, and counseling as well as additional course content in growth and development, mental health, family dynamics, health maintenance, and health education (American Nurses Association, American School Health Association, and the Department of School Nurses/National Education Association, 1978). The evolution of the

school nurse practitioner role reflects the growing trend toward utilization of nurses in expanded roles in order to provide more comprehensive and accessible health care to consumers.

The recent descriptions of the activities of the school nurse in the literature have become increasingly similar to those activities of the expanded role of the school nurse practitioner. These descriptions emphasize a desire for school nurses to collaborate with educators and other health providers (Texas Education Agency, 1975; American School Health Association, 1975; Thomas, 1976; Igoe, 1977; Howell and Martin, 1978; Wold and Dogg, 1978).

This study identified attitudes of school personnel regarding with whom the school nurse should collaborate in the performance of selected school nursing activities. The identification of those attitudes is important for several reasons. First, this information provides data for the identification of the performance of collaborative functions by the school nurse. Second, the data also yield possible discrepancies

among school personnel regarding their expectations of the collaborative functioning of the school nurse. And third, the data from this study provide a baseline for later measurement of attitude change of school personnel regarding the collaborative function of the school nurse.

### Hypotheses

The hypotheses for this study were stated as follows:

(1) No significant difference will be identified between the school nurses' and teachers' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities;

(2) No significant difference will be identified between the school nurses' and school administrators' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities;

(3) No significant difference will be identified between the teachers' and school administrators' identification of persons with whom the school nurse should

collaborate in performing specified school nursing activities.

### Definitions

For the purpose of this study the following terms have been identified:

(1) Registered Nurse. The graduate of a diploma, associate degree, or baccalaureate degree program in nursing who is licensed by a state to practice nursing.

(2) School Nurse. A registered nurse who is employed by a school board to provide first aid, health education and counseling, communicable disease control, screening for health problems, and to assist in providing a healthful school environment for a specific population of school-attending children.

(3) Teacher. A person with a bachelor's or higher degree, who is certified to teach and is hired by a school board to teach in a classroom and assume other faculty responsibilities as designated by the school board or school principal.

(4) School Administrator. A superintendent, principal, assistant principal, or dean of a school

whose primary responsibility is that of providing administrative management. Administrative management is concerned with "planning, organizing, establishing goals, and giving general guidance to the organization" (Morgan, 1973, p. 11).

(5) Collaborative Activity. The meeting of two or more persons for the purpose of obtaining joint input for planning or problem solving (Thomas, 1976).

(6) Attitude. A set of beliefs based upon past learning or experience which predisposes a person to think or feel a particular way toward a referent. A referent can be a category, class, or set of phenomena (Kerlinger, 1973).

(7) Role. A collection of functions, responsibilities, behavior patterns, and sentiments associated with an employment position or relation to an object or other person (Maleis, 1975).

#### Limitations

The following limitations for this study have been identified:

(1) The investigation of the attitudes of school nurses, teachers, and school administrators toward the collaborative activities of the school nurse were confined to one geographical area, and therefore generalization of the results to other areas is limited.

(2) The investigation did not study the motives for the attitudes of the school nurses, teachers, and school administrators toward the collaborative activities of the school nurse.

(3) The sample size of the population was relatively small because of the limitation of the investigation to one geographical area.

(4) The investigation was limited to only school nurses, teachers, and school administrators, and excludes the opinions of other resource persons in the schools.

(5) Previous and/or current collaborative activities of school nurses were not investigated.

(6) Previous and/or current collaborative activities of teachers and school administrators with school nurses were not investigated.

(7) The role of the school nurse in the collaborative relationship was not investigated.

(8) Educational preparation may have contributed to the attitudes of the school nurses, teachers, and school administrators toward the collaborative activities of the school nurse.

(9) Willingness to participate in the study by the school nurses, teachers, and school administrators may have had a positive or negative bias on the results of the study.

#### Assumptions

The assumptions for this study are as follows:

(1) Collaboration with other persons is an appropriate school nursing function in an effort to promote health and resolve health problems in the schools.

(2) Persons other than the school nurse are in a position to influence the promotion of health and the resolution of health problems in the schools.

(3) Mutual expectations of school personnel with regard to whom the school nurse should collaborate con-

cerning the promotion of health and the resolution of health problems in the school could facilitate the collaborative activities of the school nurse.

### Summary

This study surveyed the attitudes of school personnel identifying those persons with whom the school nurse should collaborate in the performance of selected school nursing activities. In Chapter I, the discussion of the theoretical framework and of the background and significance support the view that this investigation is both timely and relevant to the continuing development of the role of the school nurse.

Chapter II describes the collaborative functions of the school nurse that are depicted in the literature. Chapter II outlines the methodology used to obtain data for this study, and Chapter IV contains an analysis of the results of this study.

The identification by school personnel of those persons with whom the school nurse should collaborate helps to describe the role expectations that the school personnel hold for the school nurse. In Chapter V,

theory of role supplementation is recommended to be used by school nurses to change the school personnel's role expectations of the school nurse so that in effect, school nurses may define their own roles.

## CHAPTER II

### REVIEW OF LITERATURE

Recent literature describes the school nurse as a member of a collaborating team which has the responsibility of providing a school health program (Texas Education Agency, 1975; American School Health Association, 1975; Thomas, 1976; Igoe, 1977; Howell and Martin, 1978; Wold and Dogg, 1978). The primary aims of school health programs in the United States have been described as being threefold. First, the school health program strives to provide students with a safe and healthful environment. Second, the school health program strives to promote the health of the students so that they may function at their optimal level in the classroom. Third, the school health program aims to provide anticipatory guidance and health education to students so that they may learn to protect the health of themselves and of their families and communities (Simon, 1968; Lynch, 1977). It is the purpose of this chapter to

review recent literature that describes the collaboration of the school nurse with other health team members in their efforts to effect the primary aims of the school health program.

The person on the school health team with whom the school nurse says she most frequently collaborates, is the classroom teacher (Thomas, 1976). The teacher is also the person on the school health team whose collaboration with the nurse is most often described in the literature. Until recently, the assumption that the teacher was in a prime position to evaluate the health status of her students was commonly accepted. Many authors describe the teacher as being in a position such that she can easily compare the behaviors of similar age children and readily detect behaviors which would possibly indicate a health problem (Eisner and Oglesby, 1972; French, Connor, Blierman, Simonian, and Smith, 1968; Denson, Ullman, Jones, and Vandown, 1970). Eisner and Oglesby (1972) recommend that a nurse-teacher conference be held for each child at least once per year to "bring the teacher's health observations about each child to someone who can initiate further

action" (Eisner and Oglesby, 1972, p. 349). However, the value of scheduling such nurse-teacher conferences for obtaining the teachers' observations to detect health problems has been questioned (Chinn, 1973; Haag, 1974). Haag (1974) observed students in 54 elementary schools in central Texas with observable signs of health problems such as visual and hearing difficulties, communicable diseases, posture conditions, nutritional deficiencies, and skin infections that went unreported by the teachers.

Later, in a second study, Haag (1974) administered a survey to 186 prospective teachers to assess their knowledge of observable signs of children's health problems. Out of the forty-nine items on the survey, the mean for the group was seven, indicating a low level of knowledge regarding observable signs of health problems (Haag, 1974). In 1973, Chinn had similar results in a study where less than 20 percent of children identified by nursing physical exams as having health problems were also identified by their teachers as having health problems. This research supports the need to question

how reliable teacher observations are in the detection of health problems of school children before routinely advocating collaboration of the school nurse and teacher regarding every child to identify health problems. This does not imply that teachers should case to call to the attention of the school nurse those student behaviors which the teacher does recognize as possible indicators of health problems. Instead, this research indicates the need for school nurses to personally observe students for health problems and not to rely on observations communicated to her by teachers who are likely to be unprepared to identify health problems in the classroom (Chinn, 1974).

Another area for collaboration between the school nurse and teacher has been described in the literature as the modification of school programs to "facilitate pupil educability" (Allanson, 1978, p. 605). In this collaborative effort, the nurse works with a student's teacher in order to effectively plan an educational program that will enable the child to both meet his educational needs and to maintain his health care

regimen. The opportunity for this kind of nurse-teacher collaboration is expected to increase in frequency as more handicapped children are mainstreamed into regular classrooms (Allanson, 1978).

A collaborative relationship between school nurses and teachers in an effort to provide anticipatory guidance or health education to students was also described in the literature. Several authors advocate the use of the school nurse on curriculum planning committees (Berg, 1973; Texas Education Agency, 1975; American School Health Association, 1975; Blauvelt, 1977; Allanson, 1978). A survey conducted by Thomas in 1976 showed that only 37 percent of the 293 school nurses surveyed felt that they frequently participated as a member of the school health team in curriculum (Thomas, 1976). More commonly, authors advocate the use of the school nurse as resource for teachers when they are planning or implementing segments in the health education curriculum (Eisner and Oglesby, 1972; Texas Education Agency, 1975; American School Health Association, 1975; Thomas, 1976; Igoe, 1977; Harlin, 1977; Howell and Martin,

1978). There is a lack of research to evaluate the effectiveness of those collaborative endeavors.

Another person on the school health team with whom school nurses say they frequently collaborate with is the school administrator or principal (Thomas, 1976). Although Thomas' (1976) study indicates that 64 percent of the school nurses surveyed said that they frequently collaborated with the principal regarding "physical matters," the "physical matters" were not identified. The literature describes school nurse-school administrator collaboration as having four functions: (1) formulation of school health policies; (2) evaluation of school nurse performance; (3) delineation of the scope of school nurse activities; and (4) communication of findings of potential health hazards in the school setting (Texas Education Agency, 1975; Thomas, 1976; Harlin, 1977; Howell and Martin, 1978). There is a dearth of research to demonstrate the effectiveness of school nurse-school administrator collaboration. However, there is substantial evidence that traditionally school nurses and school administrators have differed in their perceptions

of the role of the school nurse and differed in their assignment of priorities to school nursing activities (Blauvelt, 1977).

Though the literature does not provide a consensus of who constitutes the school health team, physicians, school counselors, and parents are usually included in addition to the school nurse and teachers. Physicians are often proposed to be used as resource persons in planning the overall school health program (Lynch, 1977; Howell and Martin, 1978). School nurse-physician collaboration is most commonly depicted in the literature to be for the purpose of sharing health observations of individual children to aid in the identification of and/or management of health problems (Texas Education Agency, 1975; Lynch, 1977). It is interesting to note that in a study done by Chinn (1973), the written medical evaluations of students submitted by their physicians were found to be of no value in identifying health problems of the school children in the study.

School counselors are also commonly listed as members of the school health team (Simon, 1968; American

School Association, 1975; Thomas, 1976; Wold and Dogg, 1978). There is a lack of literature regarding the school nurse-school counselor collaborative relationship. Simon (1968) suggested that the collaboration between the school nurse and school counselor might be impaired by the different definitions as to what might be considered the underlying cause of some student behaviors. The author cites the example of a student fighting in class. The school nurse saw this behavior as a possible manifestation of an emotional problem, whereas the school counselor saw this behavior as an acting out behavior (Simon, 1968).

The last major group commonly identified as being on the health team are the student's parents (Simon, 1968; Eisner and Oglesby, 1972; Chinn, 1973; Pelizza, 1973; Texas Education Agency, 1975; Thomas, 1976; Harlin, 1977; Lynch, 1977). Eisner and Oglesby (1972) advocate collaboration between the school nurse and parent in order to detect unsuspected health defects. Other authors question the ability of the parents to contribute to the assessment of the child's health status primarily

because parents have been found to be untrained in health assessment (Simon, 1968; Chinn, 1973; Lynch, 1977). However, parents' conferences have been found to be appropriate settings for educating parents regarding the health needs of their children (Eisner and Oglesby, 1972; Texas Education Agency, 1975).

In summary, some of the collaborative relationships of the school nurse have been briefly described in the literature. However, the brevity of the descriptions indicates a need for further research in this area as it becomes more commonly recognized that the responsibility for the school program is almost always shared by many persons and includes the school nurse (Berg, 1973).

## CHAPTER III

### METHODOLOGY

#### Setting of the Study

This investigation was conducted in the public schools in eight small suburban or rural school districts located in the southwestern United States. Each of the districts sampled have fewer than 13,000 students but anticipate growth due to proposed industrial expansions within the area. Districts sampled represent a wide variety of ethnic backgrounds, lifestyles, and religious beliefs. The students in the largest public school district sampled in the study number approximately 12,500 and in the smallest of the public school districts sampled number approximately two thousand.

#### Population

Permission was obtained from the Research Advisory Committee and/or superintendent of each of the school districts sampled to administer a questionnaire to school nurses, teachers, and administrators employed

in the school district. The sample of school nurses, teachers, and administrators used in this study was limited to school nurses, teachers, and administrators currently employed in the particular school districts at the time of the study.

### Sample

The investigator sampled the population of school nurses, teachers, and school administrators by convenience sampling. A sample size of twenty subjects from each of the three groups was obtained. Ten elementary, four junior high, and four senior high schools were visited during March 1979. At each school, the questionnaire was administered to the school nurse, one or two teachers, and one school administrator. School district administration buildings were also visited to administer the questionnaire to additional school administrators and school nurses.

### Tool

The questionnaire, developed by the investigator, was used to survey the attitudes of school personnel

identifying with whom the school nurse should collaborate in the performance of selected school nursing activities (Appendix C). The first part of the questionnaire is a face sheet asking for demographic data to be utilized in describing the sample. The second part of the questionnaire asked the participant, "With whom should the school nurse collaborate in her/his attempt to . . .?" followed by a list of selected school nursing activities. The subjects were instructed to respond to the above question and each school nursing activity by checking on a nominal scale those persons listed that best expressed their opinions. The selected nursing activities were identified from the Guide for Administrators and School Nurses in the School Health Program, which lists the duties of the school nurse and is intended to be used as a guide by public school nurses in Texas (Texas Education Agency, 1975). All schools used for data collection in this study were sent this guide two years ago. The persons identified for the nominal scale are identified as being the five persons with whom school nurses say they most frequently collaborate (Thomas, 1976).

Both the source for the school nursing activities and the source for the persons listed on the nominal scale lend content validity to the research questionnaire.

A letter explaining the purpose of the study preceded the questionnaire (Appendix A). This letter explained that subjects would be asked to fill in a short questionnaire that would take about ten minutes to complete (Appendix A). The investigator also explained in the letter that the study was designed to identify opinions and that all information provided by the subject would be kept anonymous, confidential, and would be used only for the purposes of this study. Each subject was also advised, both verbally and in the letter, that the decision as to whether or not to participate in the study would have no influence upon his employment position. The opportunity to contribute opinions from which suggestions were to be made for actuating more effective collaboration between the school nurse and other persons was stated as a benefit of participation in the study. In the letter, subjects were also offered the opportunity to receive study results

when the study was completed. Attached to the explanatory letter was a consent form which the subject was asked to sign before answering the questionnaire (Appendix B).

To protect the participant's anonymity, the subject's name, school where employed, and other identifying information were not requested on the questionnaire. In addition, each consent form, after being signed, was immediately detached from the questionnaire, and all consent forms were kept separate from the questionnaires in the possession of the investigator. These measures were taken to decrease the possibility of someone's matching the handwriting on a questionnaire with the handwriting on a consent form and thus jeopardizing a subject's anonymity.

Another potential human risk to the subjects from participation in this study was emotional upset in response to reading the questionnaire which contains items that may be considered by some persons as being of a highly provocative and/or controversial nature. To minimize this potential risk, subjects were informed verbally and in writing, that they could without conse-

quence, withdraw their consent and participation in the study at any time while completing the questionnaire.

Before this questionnaire was administered to the sample, it was pilot-tested by three school nurses, three teachers, and three school administrators. These persons were individually approached by the investigator in a different school district in the area. They were asked to read the explanatory letter, sign the consent form, and complete the questionnaire. They were also asked to identify and comment on any item on the questionnaire that was unclear or ambiguous. The purpose for the pilot study was to identify any problems with the questionnaire that may have decreased its effectiveness and reliability in attaining the information. The pilot study did not indicate a need for revision of the questionnaire and therefore, no revisions were made.

## CHAPTER IV

### ANALYSIS OF DATA

This study was conducted to identify attitudes of school personnel regarding with whom the school nurse should collaborate in the performance of selected school nursing activities. For this purpose, questionnaires were administered to twenty school nurses, twenty teachers, and twenty school administrators. The data obtained from the completion of those questionnaires are presented and statistically described in this chapter.

#### Description of the Sample

The sample consisted of twenty school nurses, twenty teachers, and twenty school administrators who were employed during March 1979, by one of the eight public school districts included in this study. A demographic description of the subjects is provided in Tables 1, 2, 3, and 4.

Table 1 lists the age, sex, basic nursing education, educational preparation, years of nursing experience, level of school where employed, and whether employed in a supervisory or non-supervisory position for each of the subjects who were school nurses. The ages for the seventeen of twenty subjects who reported their ages ranged from 27 years to 63 years with the mean age being 45.7 years.

All of the school nurse subjects were female. The majority of these subjects (70 percent) listed their basic nursing education as being from a diploma program and indicated no other educational preparation that included the completion of an associate, baccalaureate, masters, or doctoral degree. Twenty-five percent reported their basic nursing preparation as being from a baccalaureate program with one of the five subjects reporting the additional completion of a master's degree. The remaining subject listed her basic nursing preparation as being from an associate degree program. She did not indicate that she had any additional educational preparation in terms of having completed a baccalaureate, masters, or doctoral degree.

Length of nursing experience for the nineteen of twenty subjects who reported their length of nursing experience ranged from 3 years to 30 years with the mean being 15.9 years. Sixteen of the subjects indicated that they were employed to work at least part of their time in an elementary level school. Ten reported working at least part of their time in a junior high level school and eight reported working at least part of their time in a senior high level school. Five of the nurses did not indicate whether they were employed in a supervisory or non-supervisory position. Eighty percent of the fifteen school nurses who responded to the item indicated that they were employed in a non-supervisory position. The remaining 20 percent, or three, of the nurses who responded to the item indicated that they were employed in a supervisory position.

TABLE 1

DEMOGRAPHIC DATA OF THE SAMPLE  
OF SCHOOL NURSES\*

Sub- ject	Age	Sex	Basic Nursing Education	Educational Preparation	Years of Nursing Experience	Level of School Where Employed	Supervisory Non-Supervisory Position
1	40	F	B.S.	B.S.	4	Senior High	Non-Supervisory
2	39	F	Diploma		18	Elementary	Non-Supervisory
3	53	F	B.S.	M.S./M.A.	30	Elementary, Junior High, Senior High	Supervisory
4	63	F	Diploma		14	Junior High, Senior High	
5	39	F	Diploma		10	Elementary, Junior High, Senior High	Non-Supervisory
6		F	Diploma		30	Elementary	Non-Supervisory
7	43	F	B.S.	B.S.	9	Elementary	Non-Supervisory
8		F	B.S.	B.S.	10	Elementary, Junior High	Non-Supervisory
9	35	F	Diploma		15	Senior High	Non-Supervisory
10	46	F	Diploma		18	Elementary, Junior High	Non-Supervisory
11	49	F	Diploma		10	Elementary	Non-Supervisory
12	27	F	B.S.	E.S.	3	Elementary	Non-Supervisory
13	48	F	Diploma			Elementary	
14	50	F	Diploma		30	Junior High,	
15	55	F	Diploma		9	Elementary	Supervisory
16		F	Diploma		30	Elementary	Non-Supervisory
17	59	F	Diploma		25	Elementary, Junior High	
18	51	F	Diploma		14	Elementary, Junior High, Senior High	
19	36	F	A.D.	A.D.	7	Elementary, Junior High, Senior High	Non-Supervisory
20	40	F	Diploma		17	Elementary, Junior High, Senior High	Supervisory

\*N 20.

Table 2 presents the age, sex, educational preparation, years of professional experience and level of school where employed supplied by each of the subjects who were teachers. The ages of the nineteen of twenty subjects who listed their ages ranged from 24 years to 56 years with the mean age being 32.7 years. Eighteen (90 percent) were female and two (10 percent) were male. All of these teacher subjects indicated completion of a baccalaureate degree and seven (35 percent) indicated additional completion of a master's degree. Years of professional experience ranged from 2 to 24 years with the mean being 8.2 years. Twelve (60 percent) indicated that they were employed in an elementary level school, two (10 percent) indicated employment in a junior high level school, and six (30 percent) indicated employment in a senior high level school.

TABLE 2

DEMOGRAPHIC DATA OF THE SAMPLE  
OF TEACHERS\*

Sub- ject	Age	Sex	Educational Preparation	Years of Professional Experience	Level of School Where Employed
1	39	F	B.S./B.A.	8	Elementary
2	34	F	B.S./B.A.	2	Elementary
3	29	F	B.S./B.A.	8	Elementary
4	27	F	M.S./M.A.	6	Elementary
5	27	F	M.S./M.A.	6	Elementary
6	24	M	M.S./M.A.	2	Senior High
7	34	F	B.S./B.A.	12	Elementary
8	29	F	B.S./B.A.	7	Senior High
9	56	F	B.S./B.A.	17	Elementary
10	52	F	M.S./M.A.	19	Elementary
11	30	F	B.S./B.A.	8	Junior High
12		F	B.S./B.A.	24	Senior High
13	34	F	M.S./M.A.	8.5	Elementary
14	25	F	B.S./B.A.	3	Elementary
15	26	F	B.S./B.A.	5	Elementary
16	25	F	B.S./B.A.	3	Junior High
17	38	F	M.S./M.A.	7	Elementary
18	32	M	B.S./B.A.	4	Senior High
19	34	F	M.S./M.A.	11	Senior High
20	26	F	B.S./B.A.	4	Senior High

\*N 20.

Table 3 lists the age, sex, educational preparation, years of professional practice, and level of school where employed for each of the subjects who were school administrators. The ages ranged from 32 years to 63 years and had a mean of 45.5 years. Seven-

teen of the school administrators (85 percent) were male and three (15 percent) were female. All had indicated having completed a master's degree program and three (15 percent) indicated that they had also received their doctorates. Years of professional experience ranged from 8 years to 40 years with the mean being 19.8 years. Seven (35 percent) listed that they were employed in an elementary level school, four (20 percent) listed that they were employed in a junior high level school, three (15 percent) listed that they were employed in a senior high level school, and six (30 percent) listed that they were employed in the district office overseeing all levels of schools.

TABLE 3

DEMOGRAPHIC DATA OF THE SAMPLE  
OF SCHOOL ADMINISTRATORS\*

Sub- ject	Age	Sex	Educational Preparation	Years of Professional Experience	Level of School Where Employed
1	43	M	M.S./M.A.	17	Elementary
2	32	F	M.S./M.A.	11	Junior High
3	63	M	Ph.D./Ed.D.	37	Elementary
4	42	F	M.S./M.A.	8	Senior High
5	54	M	M.S./M.A.	30	Senior High
6	46	M	Ph.D./Ed.D.	16	District Office
7	40	M	M.S./M.A.	15	Elementary
8	47	F	M.S./M.A.	14	Elementary
9	48	M	M.S./M.A.	22	Senior High
10	35	M	M.S./M.A.	10	Elementary
11	41	M	M.S./M.A.	14	Junior High
12	43	M	M.S./M.A.	21	Junior High
13	43	M	M.S./M.A.	18	District Office
14	50	M	M.S./M.A.	30	Elementary
15	49	M	M.S./M.A.	14	District Office
16	41	M	M.S./M.A.	19	District Office
17	39	M	M.S./M.A.	16	Junior High
18	48	M	M.S./M.A.	22	District Office
19	44	M	Ph.D./Ed.D.	23	District Office
20	63	M	M.S./M.A.	40	Elementary
*N		20.			

Table 4 depicts the number of school nurse subjects, teacher subjects, and school administrator subjects who responded on the questionnaire that they had had some formal course work in communication or group dynamics. The data on this table were analyzed with the chi square test for independence to show if a

difference existed among the three groups of subjects regarding the number of persons who had taken some formal course work in communication or group dynamics. At the 0.05 level of significance the differences between the groups of subjects were not found to be statistically significant. Descriptions of the formal course work listed by the subjects in each group is contained in Appendix F.

TABLE 4

FREQUENCY OF FORMAL COURSE WORK IN COMMUNICATION  
OR GROUP DYNAMICS AMONG SAMPLES OF SCHOOL  
NURSES, TEACHERS, AND SCHOOL  
ADMINISTRATORS\*

	School Nurses	Teachers	School Administrators	Total
Has had formal course work in communication or group dynamics	5	6	9	20
Has not had formal course work in communication or group dynamics	15	13	7	35
Did not indicate whether subject has had formal course work in communication or group dynamics	0	1	4	5

\*N 60.

Presentation and Analysis of Data

The responses of each group of subjects--the school nurses, the teachers, and the administrators--to the items on the second portion of the questionnaire were tabulated and compared to see if a difference existed with regard to the frequency of persons selected by each group of subjects for each of the activities. The tabulations indicate that differences exist among the groups of subjects in the frequency of selection of those persons with whom the school nurse should collaborate in each of the selected school nursing activities. The tabulations are presented in Appendix D.

To determine whether the differences in the tabulations were significant or probably due to chance, a chi square test for independence was used to analyze the tabulated data. At the 0.05 level of significance, the set of frequencies for a particular selection made by the school nurse subjects, teacher subjects, and school administrator subjects for an activity was found to be statistically significant (probably not due to chance, in other words) in ten instances. These instances are

listed as items on Table 5. For each of these items, Table 5 lists the frequency distribution, the chi square value, and the probability level. It is important to note that in regard to item content, six of the ten items have different frequencies among the groups of subjects which indicates that a difference in opinion existed among them as to whether the school nurse should collaborate with the school administrator on almost half (46 percent) of the total number of activities on the questionnaire. It is equally important to notice that on seven of the items the frequency distribution between two of the three groups of subjects differed by no more than two responses and in six of those seven items by no more than one response. Thus, on those seven items the frequency distribution for the remaining group of subjects had to significantly differ in number of responses in order for the differences of the three frequencies to be statistically significant.

More specifically, on the first and eighth items the frequencies of responses made by the school administrator subjects were significantly different from those

frequencies of responses made by the school nurse subjects and those made by the teacher subjects on those items. On the second, sixth, and tenth items, the frequencies of responses made by the school nurse subjects were significantly different from those frequencies of responses made by the school nurse subjects and those made by the teacher subjects. On the fourth and ninth items, the frequencies of responses made by the teacher subjects were significantly different from the frequencies of responses made by the school nurse subjects and the school administrator subjects.

To summarize, the data on Table 5 show two major statistical findings of this study. First, some difference in opinions as to whether the school nurse should collaborate with school administrators in the performance of nursing activities was reflected in the responses to six of the thirteen activities (46 percent) comprising the questionnaire. In addition, this difference in opinions accounts for six of the ten (60 percent) of the items found to reflect a statistically significant difference. This prevalence of differing opinions as to whether the school nurse should collaborate with school

administrators appears to be consistent with the literature that cites school nurses and school administrators as having traditionally differed in their perceptions of the role of the school nurse (Blauvelt, 1977). Second, the data indicate that each of the three groups of subjects--the school nurses, the teachers, and the school administrators--had expressed on the questionnaire at least two opinions that are significantly different from those opinions expressed by the other two groups of subjects.

TABLE 5  
 DIFFERENCES OF QUESTIONNAIRE RESPONSES MADE BY SAMPLES OF SCHOOL NURSES, TEACHERS, AND SCHOOL ADMINISTRATORS THAT ARE SIGNIFICANT AT THE 0.05 LEVEL ON THE CHI SQUARE TEST OF INDEPENDENCE\*

Item	Response	Frequency of Response by School Nurses	Frequency of Response by Teachers	Frequency of Response by School Administrators	Chi Square Value	Probability
1. The school nurse should collaborate with parents in her/his attempt to offer leadership in coordinating school and community health programs.	Yes	11	12	19	$\chi^2 = 9.05$	$P = 0.01$
	No	9	8	1		
2. The school nurse should collaborate with school administrators in her/his attempt to observe the environment at school and in community health programs.	Yes	8	14	15	$\chi^2 = 6.06$	$P = 0.048$
	No	12	6	5		
3. The school nurse should collaborate with school administrators in her/his attempt to locate symptoms indicating the need for referral for medical and/or other care.	Yes	0	5	12	$\chi^2 = 7.89$	$P < 0.001$
	No	20	15	8		
4. The school nurse should collaborate with physicians in her/his attempt to locate symptoms indicating the need for referral for medical and/or other care.	Yes	5	12	3	$\chi^2 = 11.15$	$P = 0.004$
	No	15	8	17		
5. The school nurse should collaborate with school administrators in her/his attempt to complete a health history on each child.	Yes	0	4	9	$\chi^2 = 11.98$	$P = 0.003$
	No	20	16	11		

TABLE 5 --Continued

Item	Response	Frequency of Response by School Nurses	Frequency of Response by Teachers	Frequency of Response by School Administrators	Chi Square Value	Probability																																									
6. The school nurse should collaborate with school counselors in her/his attempt to increase parent's understanding of the need for communicable disease control.	Yes	1	8	8	$\chi^2 = 8.04$	$P = 0.018$																																									
	No	19	12	12			7. The school nurse should collaborate with school administrators in her/his attempt to assure continued attention and follow-through of children with special problems.	Yes	4	9	13	$\chi^2 = 8.28$	$P = 0.016$	No	16	11	7	8. The school nurse should collaborate with school administrators in her/his attempt to interpret medical recommendations regarding care of children.	Yes	2	3	10	$\chi^2 = 10.13$	$P = 0.006$	No	18	17	10	9. The school nurse should collaborate with physicians in her/his attempt to interpret medical recommendations regarding care of children.	Yes	13	19	12	$\chi^2 = 7.33$	$P = 0.026$	No	7	1	8	10. The school nurse should collaborate with school administrators in her/his attempt to serve as a health consultant for curriculum planning.	Yes	16	8	9	$\chi^2 = 7.68$	$P = 0.022$	No
7. The school nurse should collaborate with school administrators in her/his attempt to assure continued attention and follow-through of children with special problems.	Yes	4	9	13	$\chi^2 = 8.28$	$P = 0.016$																																									
	No	16	11	7			8. The school nurse should collaborate with school administrators in her/his attempt to interpret medical recommendations regarding care of children.	Yes	2	3	10	$\chi^2 = 10.13$	$P = 0.006$	No	18	17	10	9. The school nurse should collaborate with physicians in her/his attempt to interpret medical recommendations regarding care of children.	Yes	13	19	12	$\chi^2 = 7.33$	$P = 0.026$	No	7	1	8	10. The school nurse should collaborate with school administrators in her/his attempt to serve as a health consultant for curriculum planning.	Yes	16	8	9	$\chi^2 = 7.68$	$P = 0.022$	No	4	12	11								
8. The school nurse should collaborate with school administrators in her/his attempt to interpret medical recommendations regarding care of children.	Yes	2	3	10	$\chi^2 = 10.13$	$P = 0.006$																																									
	No	18	17	10			9. The school nurse should collaborate with physicians in her/his attempt to interpret medical recommendations regarding care of children.	Yes	13	19	12	$\chi^2 = 7.33$	$P = 0.026$	No	7	1	8	10. The school nurse should collaborate with school administrators in her/his attempt to serve as a health consultant for curriculum planning.	Yes	16	8	9	$\chi^2 = 7.68$	$P = 0.022$	No	4	12	11																			
9. The school nurse should collaborate with physicians in her/his attempt to interpret medical recommendations regarding care of children.	Yes	13	19	12	$\chi^2 = 7.33$	$P = 0.026$																																									
	No	7	1	8			10. The school nurse should collaborate with school administrators in her/his attempt to serve as a health consultant for curriculum planning.	Yes	16	8	9	$\chi^2 = 7.68$	$P = 0.022$	No	4	12	11																														
10. The school nurse should collaborate with school administrators in her/his attempt to serve as a health consultant for curriculum planning.	Yes	16	8	9	$\chi^2 = 7.68$	$P = 0.022$																																									
	No	4	12	11																																											

\*N = 60.

The null hypothesis for this study which stated:

- 1) No significant difference will be identified between the school nurses' and teachers' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities was rejected;
- 2) No significant difference will be identified between the school nurses' and school administrators' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities was rejected; and 3) No significant difference will be identified between the teachers' and school administrators' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities was rejected.

One final analysis of tabulated data was made to determine if a significant difference existed in the identification of activities by the school nurses, teachers, and school administrators as activities which should not be done by school nurses. The tabulated results were widely scattered and when tested with a chi square test for independence the data showed no signifi-

cant differences between the opinions of the groups of subjects at the 0.05 level. The tabulations for this data are presented in Appendix E.

## CHAPTER V

### SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS

#### Summary

This study surveyed the attitudes of school personnel regarding with whom the school nurse should collaborate in her attempt to carry out selected school nursing activities that have been described in the literature as requiring collaboration. The school personnel who provided the data for this study consisted of a group of twenty school nurses, a group of twenty teachers, and a group of twenty school administrators who completed a brief questionnaire that was administered during March 1979.

The questionnaire from which the data were obtained was comprised of two parts. The first part consisted of a face sheet asking for demographic data. The second part of the questionnaire asked the participant, "With whom should the school nurse collaborate in her/his attempt to           ?" followed by a list of selected

nursing activities. The subjects were instructed to respond to the above question and each school nursing activity by checking on a nominal scale those persons listed that best expressed their opinions. The school nursing activities were identified from a list of proposed school nursing activities (Texas Education Agency, 1975). The persons identified for the nominal scale were identified as being the five persons with whom school nurses said they most often collaborate (Thomas, 1976).

The data collected from the subjects in each group were tabulated to demographically describe the subjects in each group, and to describe the attitudes of the subjects in each group regarding with whom the school nurse should collaborate in her/his attempt to perform selected school nursing activities. The chi square test for independence was then used to determine if a difference in attitudes or in having had course work in communication and/or group dynamics existed among the three groups of subjects. Ten differences in attitude that were significant at the 0.05 level were

identified. Six of the ten (60 percent) of the differences of opinions reflected on the questionnaire involved whether or not school personnel felt that the school nurse should collaborate with the school administrator in her/his attempt to perform six (46 percent) of the thirteen school nursing activities on the questionnaire. The analysis of data also indicated that each of the three groups of subjects--the school nurses, the teachers, and the school administrators--had expressed on the questionnaire at least two opinions that were significantly different from those opinions expressed by the other two groups of subjects. The hypotheses for this study: 1) No significant difference will be identified between the school nurses' and teachers' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities; 2) No significant difference will be identified between the school nurses' and school administrators' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities; and 3) No significant difference will

be identified between the teachers' and school administrators' identification of persons with whom the school nurse should collaborate in performing specified school nursing activities, were consequently rejected.

#### Recommendations

The following recommendations are offered as a result of this study:

(1) Further research related to the concept of collaboration.

(2) Further research identifying members of the school health team.

(3) Further research identifying functions of the school health team.

(4) Further research identifying functions of the individual health team members.

(5) Further research identifying the inter-relationships among the functions of the school health team members.

(6) Additional research to identify the expectations of school personnel regarding the school nurse role.

(7) Additional research to identify the expectations of school nurses regarding the school nurse role.

### Conclusions

The purposes of this study were to ascertain those persons with whom the school nurse should collaborate concerning specified school nursing activities as identified by school nurses, teachers, and school administrators; and to determine if differences exist among the groups in their identification of persons with whom the school nurse should collaborate. The data show the frequency that the groups of subjects who were either school nurses, teachers, or school administrators identified persons as being with whom the school nurse should collaborate. Ten statistically significant differences among the groups in the frequency of their identification of persons were found. The majority (60 percent) of the differences reflected differing opinions regarding whether the school nurse should collaborate with the school administrator. This difference is consistent with the literature that cites that school

nurses and school administrators have differing perceptions regarding the school nurse role (Blauvelt, 1977).

Each of the three groups of subjects were also found to have differed at least twice from the other groups of subjects in the frequency of identification of persons with whom the school nurse should collaborate. This data show that the groups of school nurse, teacher, and school administrator subjects did not agree as to whom the school nurse should collaborate with in the performance of selected school nursing activities. There is a lack of research reported in the literature to either support or refute that finding.

In this study, no statistically significant difference among the three groups was found pertaining to the frequency of having had some formal course work in communication and/or group dynamics. However, this data cannot be considered conclusive that a difference did or did not actually exist. Each subject interpreted the meaning of formal course work in communication and/or group dynamics and no two subjects' descriptions of this "formal course work" were the same.

In the identification of activities which should not be done by the school nurse, there was no statistically significant differences found between the groups of school nurse subjects, teacher subjects, and school administrator subjects. This finding supports the conclusion that the school personnel sampled tended to agree that all of the activities listed on the questionnaire were activities that should be done by the school nurse even though they did not always agree as to with whom the school nurse should collaborate in the performance of those activities.

In summary, the identification by school personnel of those persons with whom the school nurse should collaborate helps to describe the role expectations that the school personnel hold for the school nurse. Meleis (1975) states that a person's role is usually predetermined for him by the expectations of others. Therefore, the finding that the sample groups of school nurses, teachers, and school administrators have different expectations of the school nurse role reflected as different opinions regarding with whom the school

nurse should collaborate in the performance of selected school nursing activities is valuable for several reasons. First, it provides data descriptive of the collaborative functioning of the school nurse. Second, the data indicate discrepancies among school personnel regarding their expectations of the collaborative functioning of the school nurse. And third, the data from this study provide a baseline for later measurement of attitude change of school personnel regarding the collaborative functioning of the school nurse. These three contributions are important first steps in the process of role clarification which is an essential component in the process of role attainment (Meleis, 1975; Meleis and Swendsen, 1978).

APPENDIX A

Dear \_\_\_\_\_:

As partial completion of the requirements leading to a Degree of Master of Science from Texas Woman's University, I am surveying opinions of school personnel regarding with whom the school nurse should collaborate in the performance of selected school nursing activities.

Because you are a professional working with children, I am sure that you must appreciate the importance of the numerous decisions that you and your colleagues must make and implement in order to promote health and combat health problems in the schools. You must also be aware of the potential value of collaboration among professionals in making and implementing decisions. This study has been designed to identify the opinions of school nurses, teachers, and school administrators regarding with whom the school nurse should collaborate, when performing certain school activities that involve some degree of decision making.

I am seeking your opinions regarding with whom the school nurse should collaborate, by asking you to fill out a very short anonymous questionnaire. The questionnaire takes about ten minutes to complete and all information you provide will be kept anonymous, confidential, and will be used only for the purposes of this study.

By participating in this study, you will be contributing your valuable opinions from which suggestions for actuating more effective collaboration between the school nurse and other persons will be made. In May, after the study is completed, I will be happy to provide you with the results of this study.

You have the right to agree or refuse to participate in this study. Your decision whether or not to participate will have absolutely no influence upon your employment position. There are no benefits for participation other than the ones noted in the above paragraph of this letter. There are absolutely no penalties for choosing not to participate. You also have the right to withdraw without consequence your consent to participate and to cease participation in the study at any time while filling out the questionnaire.

If you agree to participate in this study by anonymously completing a short questionnaire, please read and sign the following attached consent form. Thank you.

Sincerely,

Pam Shepard

APPENDIX B



## APPENDIX C

QUESTIONNAIRE

I. Check the appropriate responses and complete the spaces.

- School Nurse
  - a.  supervisory
  - b.  non-supervisory
- Teacher
- School Administrator

Currently employed in  an Elementary School;  a Junior High School;  a Senior High School.

Educational Preparation:  A.D.;  B.S./B.A.;  M.S./M.A.;  Ph.D./Ed.D.

Age: \_\_\_\_\_

Years in Practice/Professional Experience \_\_\_\_\_

Sex:  Male  Female

School Nurses:

Basic Educational Preparation:

- A.D.
- Diploma
- B.S.

Have you had any formal course work in communication or group dynamics?  Yes  No

If yes, describe \_\_\_\_\_

---



- 9. Inform students of all available resources for help with problems such as drug abuse, child abuse, and adolescent pregnancies?
- 10. Increase parents' understanding of the need for communicable disease control?
- 11. Assure continued attention and follow-through of children with special problems?
- 12. Interpret medical recommendations regarding care of children?
- 13. Serve as a health consultant for curriculum planning?

	Teachers	School Administrators	School Counselors	Physicians	Parents	*Other(s)	List *Others
9.							
10.							
11.							
12.							
13.							

Do you agree that all of the above statements should be school nursing activities?

( ) Yes ( ) No

If not, please identify by number those activities which should not be done by school nurses?

APPENDIX D

RESPONSES OBTAINED ON QUESTIONNAIRE FROM  
SAMPLE OF SCHOOL NURSES

Directions: Respond to each of the following statements by checking the selections at the right which express your opinion.

II. With whom should the school nurse collaborate in her/his attempt to

1. Participate in planning and evaluating the total school health program?
2. Serve as a resource person and consultant in the health education and evaluation of students?
3. Offer leadership in coordinating school and community health programs?
4. Observe the environment at school and in community health programs?
5. Observe children to locate symptoms indicating the need for referral for medical and/or other care?
6. Screen for visual and hearing defects?
7. Complete a health history on each child?
8. Plan adaptations in the school program for children with special needs?

	Teachers	School Administrators	School Counselors	Physicians	Parents	*Other(s)	* List Others
11	19	12	13	9	3		Public health, other nurses, therapists
14	10	13	13	8	2		students, health educators
6	16	6	13	11	6		American Lung Association, American Cancer Association, public health
14	18	5	5	6	3		Community authorities, public health
18	0	14	5	11	0		
15	4	5	6	8	5		Speech therapist, audiologist
10	0	6	11	16	0		
15	15	15	11	14	2		Physical therapist, occupational therapist, special resources

9. Inform students of all available resources for help with problems such as drug abuse, child abuse, and adolescent pregnancies?	Others					
	Children's Protective Services, Planned Parenthood, Family Outreach, Drug Abuse Clinic, Educational Service Center	Public health, news media, PTA	Special education department, service agencies, Lions, Kiwanis	Public health, Children's Protective Services	Teachers	
10. Increase parents' understanding of the need for communicable disease control?	13	12	17	9	13	5
11. Assure continued attention and follow-through of children with special problems?	8	7	10	15	5	5
12. Interpret medical recommendations regarding care of children?	17	4	16	11	15	3
13. Serve as a health consultant for curriculum planning?	13	2	8	13	14	1

Do you agree that all of the above statements should be school nursing activities?  
 Yes 17  No 2

If not, please identify by number those activities done by school nurses?  
 13  
 6, 7

1 - no answer  
 2 - Parents  
 3 - Physicians  
 4 - School Counselors  
 5 - School Administrators  
 6 - School Principals  
 7 - Teachers  
 \*Other(s)

RESPONSES OBTAINED ON QUESTIONNAIRE FROM  
SAMPLE OF TEACHERS

Directions: Respond to each of the following statements by checking the selections at the right which express your opinion.

II. With whom should the school nurse collaborate in her/his attempt to

1. Participate in planning and evaluating the total school health program?
2. Serve as a resource person and consultant in the health education and evaluation of students?
3. Offer leadership in coordinating school and community health programs?
4. Observe the environment at school and in community health programs?
5. Observe children to locate symptoms indicating the need for referral for medical and/or other care?
6. Screen for visual and hearing defects?
7. Complete a health history on each child?
8. Plan adaptations in the school program for children with special needs?

	Teachers	School Administrators	School Counselors	Physicians	Parents	*Other(s)	* List Others
14	17	8	14	9	2		Other districts-state
17	8	10	9	14	0		Local health organizations
7	18	3	14	12	2		Community leaders
17	14	8	10	10	1		Hearing center
18	5	11	12	14	0		
16	8	3	5	10	1		
8	4	5	8	19	0		
17	16	15	6	15	0		



RESPONSES OBTAINED ON QUESTIONNAIRE FROM  
SAMPLE OF SCHOOL ADMINISTRATORS



Directions: Respond to each of the following statements by checking the selections at the right which express your opinion.

II. With whom should the school nurse collaborate in her/his attempt to

1. Participate in planning and evaluating the total school health program?
2. Serve as a resource person and consultant in the health education and evaluation of students?
3. Offer leadership in coordinating school and community health programs?
4. Observe the environment at school and in community health programs?
5. Observe children to locate symptoms indicating the need for referral for medical and/or other care?
6. Screen for visual and hearing defects?
7. Complete a health history on each child?
8. Plan adaptations in the school program for children with special needs?

	Teachers	School Administrators	School Counselors	Physicians	Parents	*Other (s)	* List Others
16	20	14	16	11	1	Nurses from other districts	
16	14	11	9	12	0		
8	17	5	13	19	1	Community health organizations	
10	15	9	9	10	1	Public health	
20	12	10	3	9	0		
17	11	8	4	11	1	Region Educational Service Center	
15	9	9	8	18	0		
18	17	15	9	12	0		

APPENDIX E

FREQUENCY OF IDENTIFICATION BY THE SAMPLES OF  
SCHOOL NURSES, TEACHERS, AND SCHOOL  
ADMINISTRATORS OF ACTIVITIES THAT  
SHOULD NOT BE DONE BY THE  
SCHOOL NURSE\*

Activities	School Nurses	Teachers	School Administrators	Overall
1. Participate in planning and evaluating the total school health program?	0	0	0	0
2. Serve as a resource person and consultant in the health education and evaluation of students?	0	0	0	0
3. Offer leadership in coordinating school and community health programs?	0	1	0	1
4. Observe the environment at school and in community health programs?	0	1	1	2
5. Observe children to locate symptoms indicating the need for referral for medical and/or other care?	0	1	0	1
6. Screen for visual and hearing defects?	1	1	0	2
7. Complete a health history on each child?	1	1	1	3
8. Plan adaptations in the school program for children with special needs?	0	1	2	3
9. Inform students of all available resources for help with problems such as drug abuse, child abuse, and adolescent pregnancies?	0	1	1	2
10. Increase parents' understanding of the need for communicable disease control?	0	0	1	1
11. Assure continued attention and follow-through of children with special problems?	0	1	1	2
12. Interpret medical recommendations regarding care of children?	0	2	2	4
13. Serve as a health consultant for curriculum planning?	1	0	0	1

\*N = 60.

APPENDIX F

DESCRIPTIONS OF FORMAL COURSE WORK IN  
COMMUNICATION OR GROUP DYNAMICS TAKEN  
BY SAMPLE OF SCHOOL ADMINISTRATORS

Course in Interpersonal Communication  
Courses in Leadership  
Counseling Techniques for Supervisors  
Inservice for Administrators in District  
Courses for Doctorate in Education  
Workshop on Communication Skills  
College course work  
Numerous workshops  
Guidance courses  
Interactive teaching  
Courses for minor in Speech  
Course in Organizational Theory  
Group Therapy in the Classroom  
Public Relations course

DESCRIPTIONS OF FORMAL COURSE WORK IN  
COMMUNICATION OR GROUP DYNAMICS TAKEN  
BY SAMPLE OF TEACHERS

Course work for Speech/Drama major  
Course in non-directive counseling  
Graduate psychology course  
Course work for Sociology major  
Group Dynamics in Psychology  
Speech courses

DESCRIPTIONS OF FORMAL COURSE WORK IN  
COMMUNICATION OR GROUP DYNAMICS TAKEN  
BY SAMPLE OF SCHOOL NURSES

Inservice programs through the school district  
P.T.A. sponsored programs  
Workshop on Crisis Counseling  
Workshop on Interpersonal Relationships  
Courses required for counselor's certification  
and supervisor's certification  
Eight hour workshop  
Programs sponsored by Education Service Center

APPENDIX G

TEXAS WOMAN'S UNIVERSITY  
Human Research Committee

Name of Investigator: Pamela Shepard Center: Dallas  
Address: P.O. Box 454 Date: 12/20/78  
Lake Dallas, Texas 75065

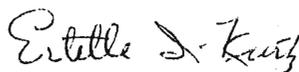
Dear Ms. Shepard:

Your study entitled Attitudes of School Personnel Regarding Collaborative Activities of the School Nurse has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by the Committee is required, according to DHEW regulations.

Sincerely,



Chairman, Human Research  
Review Committee

at Dallas

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING  
DENTON, TEXAS

DALLAS CENTER  
1810 Inwood Road  
Dallas, Texas 75235

HOUSTON CENTER  
1130 M.D. Anderson Blvd.  
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY\*

THE [REDACTED]  
GRANTS TO Pamela Ann Shepard

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

The problem of this study will be to investigate attitudes of school nurses, teachers, and school administrators toward the collaborative activities of the school nurse.

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the final report.
3. The agency (~~will~~) (~~will not~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: Abstract to be provided

Date February 28, 1979

[REDACTED]  
Signature of Agency Personnel

Pamela A. Shepard  
Signature of student

Tommi R. Wallace  
Signature of Faculty Advisor

\*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

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4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: \_\_\_\_\_

Date March 14, 1979

[REDACTED]  
Signature of Agency Personnel

Pamela A. Shepard  
Signature of student

Sommie L. Wallace  
Signature of Faculty Advisor

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3. The agency (~~wants~~) (<sup>does not want</sup> ~~consent~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: \_\_\_\_\_

Date March 15, 1977

  
Signature of Agency Personnel

P. A. Shepard  
Signature of student

Arminie R. Wallace  
Signature of Faculty Advisor

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4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: \_\_\_\_\_

Date March 16, 1979

[REDACTED]  
Signature of Agency Personnel

Pamela A. Shepard  
Signature of student

Sommie R. Walker  
Signature of Faculty Advisor

\*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

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4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: \_\_\_\_\_

Date March 23, 1979

  
Signature of Agency Personnel

Pamela A. Shepard  
Signature of student

Lorrie R. Wallace  
Signature of Faculty Advisor

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THE 

GRANTS TO Patricia Ann Shepard

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3. The agency (~~wants~~) (~~does not want~~) <sup>does not want</sup> a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: 2 copies of Thesis

Date March 23, 1979

  
Signature of Agency Personnel

Patricia A. Shepard  
Signature of student

Jimmie R. Wallace  
Signature of Faculty Advisor

\*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

## REFERENCES CITED

- Allanson, John F. "School Nursing Services--Some Current Justifications and Cost-Benefit Implications." The Journal of School Health, Vol. 48, No. 10, December 1978, pp. 603-607.
- American Nurses' Association, and the American School Health Association. "Recommendations on Educational Preparation and Definition of the Expanded Role and Functions of the School Nurse Practitioner." The Journal of School Health, Vol. 43, No. 9, November 1973, pp. 594-597.
- American Nurses' Association, The American School Health Association, The Department of School Nurses/National Education Association. "Guidelines on Educational Preparation and Competencies of the School Nurse Practitioner." The Journal of School Health, Vol. 48, No. 5, May 1978, pp. 265-268.
- American School Health Association. Guidelines for the School Nurse in the School Health Program. Kent, Ohio, 1974.
- Berg, Beryl, et al. "In Health-Related Tasks, Where Does the School Nurse Function." The Journal of School Health, Vol. 43, No. 5, May 1973, pp. 316-319.
- Blauvelt, Louise. "Closing the Gaps in School Health Services." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 422-425.
- Bryan, Doris S. School Nursing in Transition. Saint Louis: The C. V. Mosby Company, 1973.
- Chinn, Peggy. "A Relationship between Health and School Problems: A Nursing Assessment." The Journal of School Health, Vol. 43, No. 2, February 1973, pp. 85-92.

- Cromwell, Gertrude E. The Nurse in the School Health Program. Philadelphia: W. B. Saunders Company, 1963.
- Densen, P. M., et al. "Childhood Characteristics as Indicators of Adult Health Status." Public Health Reports, Vol. 85, No. 6, November/December 1970, pp. 981-996.
- Eisner, Victor, and Oglesby, Allan. "Health Assessment of Children, VIII. The Unexpected Health Defect." The Journal of School Health, Vol. 42, No. 6, June 1972, pp. 348-350.
- Forbes, Orcilia. "The Role and Functions of the School Nurse as Perceived by 115 Public School Teachers from Three Selected Counties." The Journal of School Health, Vol. 36, No. 3, March 1966, pp. 101-106.
- French, F. E., et al. "Congenital and Acquired Handicaps of Ten-Year-Olds: Report of a Follow-up Study." American Journal of Public Health, Vol. 58, No. 12, December 1968, pp. 1388-1395.
- Fricke, Irma B. "The Illinois Study of School Nurse Practice." The Journal of School Health, Vol. 37, No. 1, January 1967, pp. 24-28.
- Haag, Jessie H. "Observable Signs of Children's Health Problems by Teachers--How Important?" The Journal of School Health, Vol. 44, No. 7, September 1974, pp. 371-373.
- Haag, Jessie H. School Health Program. Philadelphia: Lea & Febiger, 1972.
- Harlin, Vivian K. "Role of Other School Health Team Members." The Journal of School Health, Vol. 47, No. 6, June 1977, pp. 360-362.

- Hicks, John D.; Mowry, George E.; and Burke, Robert E. A History of American Democracy. Boston: Houghton Mifflin Company, 1970.
- Hilmar, Norman A., and McAtee, Patricia A. "The School Nurse Practitioner and her Practice: A Study of Traditional and Expanded Health Care Responsibilities for Nurses in Elementary Schools." The Journal of School Health, Vol. 43, No. 7, September 1973, pp. 431-441.
- Howell, Keith A., and Martin, Jeanne E. "An Evaluation Model for School Health Services." The Journal of School Health, Vol. 48, No. 7, September 1978, pp. 433-442.
- Igoe, Judith B. "Bridging the Gap between Health Professionals and Educators." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 405-409.
- Lynch, Annette. "There is No Health in School Health." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 410-413.
- Meleis, A. I. "Role Insufficiency and Role Supplementation: A Conceptual Framework." Nursing Research, Vol. 24, No. 4, July/August 1975, pp. 264-271.
- Meleis, A. I., and Swendsen, L. A. "Role Supplementation: An Empirical Test of a Nursing Intervention." Nursing Research, Vol. 27, No. 1, January/February 1978, pp. 11-13.
- Morgan, James E. Principles of Administrative and Supervisory Management. Englewood Cliffs, New Jersey: Prentice-Hall Incorporated, 1973.
- Pelizza, John J. "A Comparative Study of How Parents from Different Social Classes Perceive School Health Services." The Journal of School Health, Vol. 43, No. 3, March 1973, pp. 176-180.

- Regan, Patricia A. "A Historical Study of the School Nurse Role." The Journal of School Health, Vol. 46, No. 9, November 1976, pp. 518-521.
- Simon, Helen M. "A Look at Secondary School Health Services." Nursing Outlook, Vol. 16, No. 8, August 1968, pp. 42-44.
- Texas Education Agency. Division of Guidance Services. Guide for Administrators and School Nurses in the School Health Program. Austin, Texas: Government Printing Office, 1975.
- Thomas, Barbara. "The School Nurse as a Member of the School Health Team: Fact or Fiction." The Journal of School Health, Vol. 46, No. 8, October 1976, pp. 466-470.
- Yura, Helen, and Walsh, Mary B. The Nursing Process: Assessing, Planning, Implementing, Evaluating. New York: Prentice-Hall, Incorporated, 1978.

## BIBLIOGRAPHY

- Abdellah, Faye G., and Levine, Eugene. Better Patient Care through Nursing Research. New York: Macmillan Publishing Company, Incorporated, 1965.
- Allanson, John F. "School Nursing Services--Some Current Justifications and Cost-Benefit Implications." The Journal of School Health, Vol. 48, No. 10, December 1978, pp. 603-607.
- American Association for Health, Physical Education, and Recreation. "Position Papers from AAHPER: A Unified Approach to Health Teaching; The School Nurse in Education." The Journal of Health, Physical Education and Recreation, Vol. 42, No. 1, January 1971, pp. 18-19, 59.
- American Nurses' Association and the American School Health Association. "Recommendations on Educational Preparation and Definition of the Expanded Role and Functions of the School Nurse Practitioner." The Journal of School Health, Vol. 43, No. 9, November 1973, pp. 594-597.
- American Nurses' Association, The American School Health Association, The Department of School Nurses/ National Education Association. "Guidelines on Educational Preparation and Competencies of the School Nurse Practitioner." The Journal of School Health, Vol. 48, No. 5, May 1978, pp. 265-268.
- American School Health Association. Guidelines for the School Nurse in the School Health Program. Kent, Ohio, 1974.

- Anderson, C. L. School Health Practice. Saint Louis: The C. V. Mosby Company, 1972.
- Auger, Jeanine R. Behavioral Systems and Nursing. Englewood Cliffs, New Jersey: Prentice-Hall, Incorporated, 1976.
- Berg, Beryl, et al. "In Health-Related Tasks, Where Does the School Nurse Function." The Journal of School Health, Vol. 43, No. 5, May 1973, pp. 316-319.
- Blauvelt, Louise. "Closing the Gaps in School Health Services." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 422-425.
- Brand, M. L. "Action Research for Problem Solving in School Health." School Health Review, Vol. 3, No. 3, May/June 1972, pp. 21-22.
- Beveridge, W. I. B. The Art of Scientific Investigation. New York: W. W. Norton & Company, Incorporated, 1957.
- Bryan, Doris S. School Nursing in Transition. Saint Louis: The C. V. Mosby Company, 1973.
- Chinn, Peggy. "A Relationship between Health and School Problems: A Nursing Assessment." The Journal of School Health, Vol. 43, No. 2, February 1973, pp. 85-92.
- Chinn, Peggy. Child Health Maintenance. Saint Louis: The C. V. Mosby Company, 1974.
- Cromwell, Gertrude E. The Nurse in the School Health Program. Philadelphia: W. B. Saunders Company, 1963.

- Crowley, Eileen A., and Johnson, Judith L. "Multi-professional Perceptions of School Health: Definitions and Scope." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 398-405.
- Denson, P. M., et al. "Childhood Characteristics as Indicators of Adult Health Status." Public Health Reports, Vol. 85, No. 6, November/December 1970, pp. 981-996.
- Eisner, Victor, and Oglesby, Allan. "Health Assessment of Children, VIII. The Unexpected Health Defect." The Journal of School Health, Vol. 42, No. 6, June 1972, pp. 348-350.
- Forbes, Orcilia. "The Role and Functions of the School Nurse as Perceived by 115 Public School Teachers from Three Selected Counties." The Journal of School Health, Vol. 36, No. 3, March 1966, pp. 101-106.
- Frels, Lois. "National Survey--School Nurse Certification." The Journal of School Health, Vol. 44, No. 6, June 1974, pp. 340-341.
- French, F. E., et al. "Congenital and Acquired Handicaps of Ten-Year-Olds: Report of a Follow-up Study." American Journal of Public Health, Vol. 58, No. 12, December 1968, pp. 1388-1395.
- Fricke, Irma B. "The Illinois Study of School Nurse Practice." The Journal of School Health, Vol. 37, No. 1, January 1967, pp. 24-28.
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- Haag, Jessie H. School Health Program. Philadelphia: Lea & Febiger, 1972.

- Harlin, Vivian K. "Role of Other School Health Team Members." The Journal of School Health, Vol. 47, No. 6, June 1977, pp. 360-362.
- Hicks, John D.; Mowry, George E.; and Burke, Robert E. A History of American Democracy. Boston: Houghton Mifflin Company, 1970.
- Hill, A. E. "Educational Preparation for School Health Nursing." The Journal of School Health, Vol. 41, No. 7, September 1971, pp. 354-360.
- Hilmar, Norman A., and McAtee, Patricia A. "The School Nurse Practitioner and her Practice: A Study of Traditional and Expanded Health Care Responsibilities for Nurses in Elementary Schools." The Journal of School Health, Vol. 43, No. 7, September 1973, pp. 431-441.
- Howell, Keith A., and Martin, Jeanne E. "An Evaluation Model for School Health Services." The Journal of School Health, Vol. 48, No. 7, September 1978, pp. 433-442.
- Huseman, Richard C.; Logue, Cal M.; and Freshley, Dwight L. Readings in Interpersonal and Organizational Communication. Boston: Holbrook Press, Incorporated, 1972.
- Igoe, Judith B. "Bridging the Gap Between Health Professionals and Educators." The Journal of School Health, Vol. 47, No. 7, September 1977, pp. 405-409.
- Jenne, Frank H. "Variation in Nursing Service Characteristics and Teachers' Health Observation Practices." The Journal of School Health, Vol. 40, No. 5, May 1970, pp. 248-250.
- Johnson, J. N. "School Nurse Certification with a Health Education Minor Option." The Journal of School Health, Vol. 49, No. 2, February 1979, pp. 70-71.

- Kerlinger, Fred N. Foundations of Behavioral Research.  
New York: Holt, Rinehart and Winston, Incorporated,  
1973.
- Leedy, Paul D. Practical Research: Planning and Design.  
New York: Macmillan Publishing Company, Incorporated,  
1974.
- Lewis, Charles E., et al. "An Evaluation of the Impact  
of Social Nurse Practitioners." The Journal of  
School Health, Vol. 44, No. 6, June 1974, pp.  
331-335.
- Lippitt, R.; Watson, J.; and Westley, B. The Dynamics of  
Planned Change. New York: Harcourt, Brace &  
World, Incorporated, 1958.
- Lowis, Evelyn M. "An Appraisal of the Amount of Time  
Spent on Functions by Los Angeles City School  
Nurses." The Journal of School Health, Vol. 39,  
No. 4, April 1969, pp. 254-257.
- Lynch, Annette, "There is No Health in School Health."  
The Journal of School Health, Vol. 47, No. 7,  
September 1977, pp. 410-413.
- Lysaught, Jerome P. "Bell, Book, and Candle." Today's  
Education, Vol. 62, No. 1, January 1973, pp. 23-24.
- Macdonough, Georgia P. "School Health--1977." The Journal  
of School Health, Vol. 47, No. 7, September 1977,  
pp. 425-428.
- Meleis, A. I. "Role Insufficiency and Role Supplementation:  
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- Morgan, James E. Principles of Administrative and Supervisory Management. Englewood Cliffs, New Jersey: Prentice-Hall, Incorporated, 1973.
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- Regan, Patricia A. "A Historical Study of the School Nurse Role." The Journal of School Health, Vol. 46, No. 9, November 1976, pp. 518-521.
- Riehl, Jean P., and Roy, Callista. Conceptual Models for Nursing Practice. New York: Prentice-Hall, Incorporated, 1974.
- Rubin, Irwin M.; Plovnick, Mark S.; and Fry, Ronald E. Improving the Coordination of Care: A Program for Health Team Development. Cambridge, Massachusetts: Ballinger Publishing Company, 1975.
- Schorr, Lisbeth B. "Social Policy Issues in Improving Child Health Services: A Child Advocate's View." Pediatrics, Vol. 63, No. 3, September 1978, pp. 370-376.
- Silver, Henry K.; Igoe, Judith B.; and McAtee, Patricia R. "School Nurse Practitioners: A Concise Descriptive Definition of their Functions and Activities." The Journal of School Health, Vol. 47, No. 10, December 1977, pp. 598-599.
- Simon, Helen M. "A Look at Secondary School Health Services." Nursing Outlook, Vol. 16, No. 8, August 1968, pp. 42-44.
- Smiley, Olga R. "Public Health Nurses and Teachers in School Health Programs: A Problem in Communication." International Journal of Nursing Studies, Vol. 12, No. 4, 1975.

Smith, Becky J. "An Analytical Study of Selected Writings and their Relationship to Health." The Journal of School Health, Vol. 48, No. 6, June 1978, pp. 366-370.

Texas Education Agency. Division of Guidance Services. Guide for Administrators and School Nurses in the School Health Program. Austin, Texas: Government Printing Office, 1975.

Thomas, Barbara. "The School Nurse as a Member of the School Health Team: Fact or Fiction." The Journal of School Health, Vol. 46, No. 8, October 1976, pp. 466-470.

Weissman, Harold H. Overcoming Mismanagement in the Human Service Professions. San Francisco: Jossey-Bass Publishers, 1973.

Wheatley, George M., and Hallock, Grace T. Health Observation of School Children. New York: McGraw-Hill Book Company, 1965.

Wold, Susan J., and Dogg, Nancy V. "School Nursing: A Framework for Practice." The Journal of School Health, Vol. 48, No. 2, February 1978, pp. 111-114.

Yura, Helen, and Walsh, Mary B. The Nursing Process: Assessing, Planning, Implementing, Evaluating. New York: Prentice-Hall, Incorporated, 1973.