

## INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University  
Microfilms  
International**

300 N. Zeeb Road  
Ann Arbor, MI 48106



8417910

**Todd, Barbara Reynolds**

KNOWLEDGE AND ATTITUDES OF CHILD CARE SERVICES/TEACHER AIDE  
STUDENTS IN NORTH CAROLINA'S EDUCATIONAL REGIONS V AND VII

*The University of North Carolina at Greensboro*

Ph.D. 1984

**University  
Microfilms  
International** 300 N. Zeeb Road, Ann Arbor, MI 48106

**Copyright 1984**

**by**

**Todd, Barbara Reynolds**

**All Rights Reserved**



KNOWLEDGE AND ATTITUDES OF CHILD CARE  
SERVICES/TEACHER AIDE STUDENTS IN  
NORTH CAROLINA'S EDUCATIONAL  
REGIONS V AND VII

by

Barbara Reynolds Todd

A Dissertation submitted to  
The Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

Greensboro  
1984

Approved by

Barbara Clawson  
Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser

Barbara Clawson

Committee Members

Richard H. Hulse

Joseph E. Bynum

William L. Johnson

March 30, 1984

Date of Acceptance by Committee

March 30, 1984

Date of Final Oral Examination

© 1984

BARBARA REYNOLDS TODD

All Rights Reserved

## ACKNOWLEDGEMENTS

The writer wishes to express her appreciation to the many people who offered encouragement, guidance, and assistance in the completion of this study.

A special word of thanks is extended to Dr. Barbara Clawson for her calm reassurance, encouragement, and guidance as dissertation adviser.

Appreciation is extended to Dr. Mildred Johnson, Dr. Joseph Bryson, and Dr. Roland Nelson for their assistance and cooperation as committee members.

Acknowledged with appreciation are those whose efforts allowed this research study to be completed: Wilkes County School System for encouraging advanced study; Mr. E. D. Redding, the writer's principal, for cooperation and encouragement throughout this education process; North Carolina State Department of Public Instruction for providing a list of completers of occupational courses used in this study; students, former students, day care directors, and fellow teachers who were most helpful in the pilot testing and validation of the instrument used for the study; Mrs. Lois Williams for the typing of this dissertation; Mrs. Margaret Styers, Miss Myra Jackson, and Mrs. Lois Todd for assisting in preparing the questionnaire for mailing; Mrs. Ruth Ferguson for grammatical consultation; and to the respondents of the questionnaire for their comments and response. A special word of thanks is extended



to Dr. Nancy White for reviewing the final instrument and checking the answer code for agreement with child development literature, and to Miss Robin Panneton for her statistical consultation.

Most of all, the writer wishes to express her grateful appreciation to her husband, Harrell, for his encouragement and assistance. Also, a special word of thanks is extended to her parents, Tom and Edith Reynolds, for instilling in the writer a love of learning.

## TABLE OF CONTENTS

	Page
APPROVAL PAGE . . . . .	ii
ACKNOWLEDGEMENTS . . . . .	iii
LIST OF TABLES . . . . .	vii
 CHAPTER	
I. INTRODUCTION . . . . .	1
Purpose of the Study . . . . .	5
Statement of Hypotheses . . . . .	5
Definition of Terms . . . . .	6
Basic Assumptions . . . . .	7
II. REVIEW OF LITERATURE . . . . .	8
Need for Study of Child Care . . . . .	8
History . . . . .	8
Societal changes . . . . .	11
Group Day Care . . . . .	17
Child Caregivers and Training for Child Care . . . . .	18
Child Caregivers . . . . .	18
Problems of Caregivers . . . . .	22
Training for Child Care . . . . .	24
Instrumentation Used in Previous Studies . . . . .	29
Related Research . . . . .	29
III. METHOD . . . . .	35
Design of Study . . . . .	35
Sampling Procedures . . . . .	36
Instrumentation . . . . .	37
Data Collection . . . . .	41
Data Analysis . . . . .	42
IV. RESULTS AND DISCUSSION . . . . .	43
Demographic Data . . . . .	44
Responses to the Knowledge Section of Questionnaire. . . . .	48
Response to Attitude Statements . . . . .	55
Analysis of Hypotheses . . . . .	57
Discussion . . . . .	67

	Page
CHAPTER	
V. SUMMARY AND RECOMMENDATIONS . . . . .	69
Summary . . . . .	69
Recommendations . . . . .	72
BIBLIOGRAPHY . . . . .	74
APPENDIX A NORTH CAROLINA CCS/TA COMPETENCIES WITH ITEMS DESIGNED FOR ASSESSMENT . . . . .	81
APPENDIX B QUESTIONNAIRE FOR CHILD CARE SERVICES/TEACHER AIDE COMPLETERS . . . . .	89
APPENDIX C QUESTIONNAIRE FOR DIRECTED OFFICE OCCUPATIONS COMPLETERS. . . . .	100
APPENDIX D LETTERS MAILED WITH QUESTIONNAIRE . . . . .	111
APPENDIX E CORRECT RESPONSES OF COMPLETERS TO THE KNOWLEDGE ITEMS ON THE QUESTIONNAIRE . . . . .	115
APPENDIX F CHI-SQUARE TABLES FOR ITEMS WITH NO SIGNIFICANT DIFFERENCES . . . . .	126

# LIST OF TABLES

	Page
TABLE	
1. Description of Subjects . . . . .	45
2. Percentage of Students Studying Child Development in Course Other Than CCS/TA . . . . .	47
3. Extent of Babysitting Within the Past Two Years . . . . .	47
4. Percentages of Subjects Indicating Preferences for Different Types of Child Care Arrangements . . . . .	48
5. Means, Standard Deviations and Variances of Groups on Knowledge Section of the Questionnaire . . . . .	54
6. Responses of Subjects to the Attitude Section of the Questionnaire . . . . .	56
7. Mean Scores, Standard Deviations, and Variances of the Groups for the Attitude Statements . . . . .	57
8. Chi-Square Table for Knowledge Items Which Differed Significantly by Group . . . . .	58
9. Chi-Square Table for Knowledge Items Which Were Marginally Significant by Group . . . . .	62
10. <u>t</u> -Test for Differences Between Groups on Attitude Section . . . . .	63
11. Chi-Square Table of Significant Differences by Group by Region for Knowledge Items . . . . .	64
A-1. North Carolina CCS/TA Competencies with Items Designed for Assessment . . . . .	82
E-1. Correct Responses of Knowledge Items on the Questionnaire . . . . .	116
F-1. Chi-Square Table for Which No Significant Differences In Responses Occurred by Group . . . . .	127
F-2. Chi-Square Table for Which No Significant Differences In Responses to Attitude Questions Occurred by Group . . .	136
F-3. Chi-Square Table for Which no Significant Difference In Responses Occurred by Group by Region . . . . .	137

#### ABSTRACT

TODD, BARBARA REYNOLDS. Knowledge and Attitudes of Child Care Services/Teacher Aide Students in North Carolina's Educational Regions V and VII. (1984). Directed by: Dr. Barbara Clawson. Pp. 145.

The purposes of this study were to determine whether or not knowledge and attitudes related to child care practices differed between (a) students who had completed Child Care Services/Teacher Aide and students who had never studied the course, and (b) students in Educational Region V and Educational Region VII in North Carolina.

The sample selected for the study consisted of 200 students randomly selected from completers of two North Carolina Occupational Programs in Educational Regions V and VII in 1982. One hundred students had completed Child Care Services/Teacher Aide and 100 students had completed Directed Office Occupations. Fifty of the students representing each of the courses were from each of the educational regions. A mail questionnaire was sent to the students with a return stamped self-addressed envelope and a cover letter explaining the purpose of the research. Follow-up letters and questionnaire booklets were mailed to nonrespondents after two weeks and four weeks. Sixty-one usable questionnaires were returned by Child Care Services/Teacher Aide subjects and 74 usable questionnaires were returned by Directed Office Occupations subjects, giving a return rate of 67.5%.

The instrument used for collecting the data consisted of three parts: demographic data, 16 knowledge questions with a total of 73 responses, and eight attitude statements. Chi square tests were used to analyze each item in the knowledge and attitude sections of the instrument. Significant differences between groups were found for only five items in the knowledge section of the instrument representing little difference between the two groups in relation to knowledge. Response to one of the items on the knowledge section of the instrument revealed a significant effect of both group and region. Thus, the data did not support significant differences by region. A t-test used to analyze the attitude section of the instrument revealed no significant differences between the two groups. Both groups had positive attitudes toward day care centers.

## CHAPTER I

### INTRODUCTION

In the North Carolina public school system, many different areas of vocational education are being taught. One major question that is currently being raised by the public is, "Are the vocational programs needed?" In other words, is the money spent for vocational education producing beneficial results?

Criticism of vocational education has occurred since its beginning. In the past, Hutchins and Adler (1952) wrote that a liberal education should be acquired by all. The need for technical training existed only because it might "help to supply the economic base that will make universal liberal education possible" (p. 20). Vocational training was prevented from being effective because of the mobility of American society. The training received in one place for one kind of work was often not beneficial because the persons trained were employed in several other kinds of jobs in the labor market. Adler (1982) criticized vocational education because of the specialized training it offered in a rapidly changing society. Persons trained for specific jobs would have to be retrained when they participated in the work force. Adler believed that electives and specialization were only appropriate for advanced schooling (colleges, universities, community colleges, and technical institutes). The first twelve years of schooling needed to be basic for everyone, with the exception of a choice of a second language to study. However, within those twelve years of study were some

vocational components. Boys and girls would participate in a wide range of manual activities including cooking, sewing, typing, woodworking, metal working, and crafts. Near the end of the basic schooling would be instruction in choosing and finding a career.

Presently, in various publications vocational education, including home economics, is receiving criticism at the local, state and national levels. In a recent article, Green (1983) mentioned the President's Commission on Excellence in Education which called home economics "one of the frills that is siphoning valuable resources from the basic literacy and science programs" (p. 1). Green's article also stated that the "U. S. News and World Report included home economics as one of the several 'snap' courses smothering real education." (p. 1). With reports similar to these receiving headline coverage in daily newspapers and on television news, the negative image of home economics and vocational education continues to rise. This negative image, in a day of budget cutting at all levels of government, makes it important to know whether a program is producing changes in students' knowledge and attitudes. Do the courses that are being taught make any difference in the lives of persons who take these courses? Once the students are out of school, do they see a need for the material taught in the vocational courses they took? Would they take the courses again? Are the courses really needed? Questions similar to these created an interest in examining the vocational education course Child Care Services/Teacher Aide in the North Carolina Home Economics curriculum.

The North Carolina Child Care Services/Teacher Aide course is an occupational home economics course designed to give students some



experience working with children in a day care, nursery school, or elementary school classroom setting. The students volunteer for the work experience in the classroom settings. Child development, discipline techniques, children's learning activities, needs of children, and exceptional children are topics included in the curriculum. Initially, the Child Care Services/Teacher Aide course was designed as a one-year program. Beginning the school year 1983-'84, the state changed the course to a two-year program. Prior to the change, some local education agencies that operated a day care center as part of the program submitted requests to the State Department of Public Instruction to allow the course to be two years in their school system.

With the present economy, many households must have two persons working to provide for the family's needs. In many of these families, there are small children who must be with caregivers for part of the day. Therefore, child care is an area of concern to parents who must work (Cahn, 1979). Because of the need for child care workers and the desire for quality child care, it would appear that a course such as Child Care Services/Teacher Aide would be beneficial to society. In Career Choices in North Carolina (1982-'83), the demand forecast for child care employees was high. This provided additional support for examining the results of the Child Care Services/Teacher Aide course ("North Carolina State Occupational . . ." 1982-1983).

A valid economic problem of the 1980's is training needs of workers. As a result of advanced technology's displacement of many workers, secondary educators in the United States have been encouraged to focus training on flexibility and generalized skills rather than on jobs which

may be changed or abolished (Hopkins, 1982). The Child Care Services/Teacher Aide course teaches skills which help one to get along with people and are transferable.

Griggs and McFadden (1980) found, in a thorough review of literature, that little research has been conducted relating to the effectiveness of consumer and homemaking education programs. It was found, however, that the child development and family relationships area was second only to foods and nutrition content in receiving the greatest instructional emphasis in consumer and homemaking programs.

In the past, follow-up studies have been conducted which delineated the number of students completing courses that were employed in the child care field and the place of employment (Butler, 1971; Smith, 1975; Felstehausen, 1971). However, little research has examined whether or not these courses actually make a difference in what people know and what they believe about child care. For these reasons, it seemed that examining the Child Care Services/Teacher Aide program for knowledge and attitudes of former students would be useful to educational program developers.

Presently, the state of North Carolina requires a one-year and a five-year follow-up of vocational students completing courses in high school. Employment data, biographical, and geographical information are the types of information obtained from these follow-up studies. Knowledge and attitude are not examined.

### Purpose of the Study

The overall purpose of this study was to determine whether or not knowledge and attitudes related to child care practices of students studying Child Care Services/Teacher Aide differed from those of students who had never studied or completed the course. Recognizing that other variables may effect knowledge and attitudes, the relationship between knowledge and attitudes and race, parental status, and marital status were examined when sufficient numbers of persons were found to be in those categories.

### Statement of Hypotheses

The hypotheses for this study were the following:

- H<sub>1</sub>: There is no difference in student knowledge and attitudes related to child care practices between students successfully completing the North Carolina Child Care Services/Teacher Aide curriculum and those who have not studied the curriculum.
- H<sub>2</sub>: There is no difference in student knowledge and attitudes related to child care practices between students successfully completing the Child Care Services/Teacher Aide course in Educational Region V and Educational Region VII in North Carolina and those who have not studied the curriculum.
- H<sub>3</sub>: There is no difference in student knowledge and attitudes related to child care practices of minorities and whites.
- H<sub>4</sub>: There is no difference in student knowledge and attitudes related to child care practices of parents and non-parents.

H<sub>5</sub>: There is no difference in student knowledge and attitudes related to child care practices of married persons and single persons.

#### Definition of Terms

**Child Care Services/Teacher Aide:** A one-year course in occupational home economics taught at the secondary level in North Carolina. It includes on-the-job experience with young children. As of the 1983-'84 school year, a second year in Child Care Services/Teacher Aide is now being offered.

**Directed Office Occupations:** An occupational business course taught at the secondary level in North Carolina. Simulated office experiences are provided in the class.

**North Carolina Educational Region V (North Central Educational Region):** School systems in the counties of Alamance, Caswell, Chatham, Davidson, Forsyth, Guilford, Orange, Person, Randolph, Rockingham, and Stokes.

**North Carolina Educational Region VII (Northwest Educational Region):** School systems in the counties of Alexander, Alleghany, Ashe, Avery, Burke, Caldwell, Catawba, Davie, Iredell, Surry, Watauga, Wilkes, and Yadkin.

**Occupational Home Economics:** Courses that prepare males and females for paid employment in home economics occupations (Griffin, 1982).

**Successful Completion:** Students who have met all of the competencies in the North Carolina curriculum guide for Child Care Services/Teacher Aide.

### Basic Assumptions

The school attended was not a variable in this study. The use of a table of random numbers in selecting the sample from the population served to eliminate differences based on attending a particular school. Because a random sample was selected from the population, it was assumed that the variability among schools was minimized.

The students taking the Child Care Services/Teacher Aide course and the Directed Office Occupations course were both in vocational programs which have on-the-job experiences; therefore, it was believed that the ability level of the students was likely to be similar. In addition, when a sample of newly enrolled students in both courses were pretested with the proposed data collection instrument, the students responded similarly to the questions.

## CHAPTER II

### REVIEW OF LITERATURE

This study was conducted to determine whether knowledge and attitudes related to child care practices of students studying Child Care Services/Teacher Aide differed from those of students who had never studied or completed the course. In this chapter, the need for the study of child care, caregivers and training for child care, instrumentation used in previous studies, and other research pertaining to child care and training for employment will be presented.

#### Need for Study of Child Care

##### History

Day care for children has not resulted simply as a product of women going to work in this century. Wet nurses were hired by rich families to care for infants in the 1700's. As a result of being wet nurses, some of these women let their own children go to orphanages or early day care ventures. With increasing industrialization, urbanization, and labor force working mothers, the development of day nurseries grew (Authier, 1979).

As early as 1907, early childhood experiences and continuity in early childhood experiences were considered important for the development of children. The present concern for continuity in experiences for growing children grew out of efforts to equalize educational opportunities for children from environments that were not considered to be conducive

to optimum growth. The programs designed to provide continuity sought to tie together the elements in the child's and family's life. "Health, housing, cultural, and community concerns are brought together, with parents as essential members of the team" (Dittman, 1979, p. 5). Child care programs also sought to provide continuity from conception to adulthood.

The aim is to provide opportunity and challenge for each, regardless of age, wherein expectations are geared to level or need rather than according to a preconceived notion of what is right for a 5-year-old, or what the curriculum guide mandates for second graders. (Dittman, 1979, p. 5)

With World War II came day care centers rather than day nurseries. The mothers needed day care to enable them to work in war-related industries. When the war ended, federal grants given to day care were withdrawn and the federally sponsored centers closed. However, since women did not leave the labor force jobs after the war, they were forced to find some other type of child care arrangement (Authier, 1979).

It was not until 1960 that the need for day care services for working mothers was again acknowledged by the federal government. In 1962, Title IV-B of the 1962 amendments to the Social Security Act marked the re-entry of the federal government into day care. It appropriated funds to state welfare agencies for day care services. (Authier, 1979).

In the sixties and seventies, some people wanted to have the government sponsor day care programs for all Americans, not just for Social Service agency recipients. However, Bruce-Briggs (1977) found

in a survey of research that many women preferred informal arrangements of child care closer to home rather than having their children in day care centers. The mothers believed that their children were being adequately cared for in the places in which they were being kept.

In 1970, at the White House Conference on Children, the delegates voted to promote expanded, comprehensive child care services. However, this has not yet occurred. Two bills which have attempted to help child care have been vetoed by two different presidents. The Comprehensive Child Care Act in 1971 was vetoed by President Nixon and the Child and Family Services Act in 1976 was vetoed by President Ford. The following year, Auerbach (1977) suggested that America needed a child care system which would be responsive to the needs of the individual community.

In 1975, Title XX of the social services amendments to the Social Security Act allowed funding of day care services for welfare and low-income families. The goals of the social services amendments were to allow people to work and to keep them off welfare rolls. Even though day care services for welfare and low-income families have occurred, no attempt has been successful in expanding or developing programs to provide adequate care for all children in the United States (Authier, 1979).

In 1977, 61 percent of all child care consisted of care in the child's own home or by relatives; 31 percent of the child care occurred in a group day care center. Prescott (1978) looked at the way children's activities were initiated in the three settings. It was found that the day care centers' activities were more structured and regimented than care in family day care settings or in the child's own home.



### Societal changes

Because of today's economy, many families find it necessary to obtain child care services. There is an increasing number of one-parent families for whom child care is necessary as well as two-parent families with both parents working. These parents must have some place for their children to stay when they are not in school (Crouter, 1982).

With the increase in labor force participation, there are still very few married women who have chosen not to bear and rear children. "Participation in the labor force makes demands on the time and energy of a woman and limits the amount of time available for child care and domestic obligation . . ." (Beckman, 1978, p. 217).

Illustrative of this increase in the early 70's, about 4.5 million working mothers had children under the age of six (Auerbach-Fink, 1977). By 1974, the working mothers had about six million children under age 6. These children were cared for in "day care centers, private pre-school programs, family day care and by relatives" (Peterman, 1977, p. 520).

Among women 20 to 24 years old who were married and living with their husbands, more than half were members of the labor force in 1975, as compared to only 26 percent in 1950. Similarly, for women 25 to 29 years old of the same marital status the comparable figures were 47 percent in 1975 and 22 percent in 1950 (Norton & Glick, 1976, p. 4).

Stone (1978) said "one third of mothers of preschoolers and one-half of mothers of school-age children are working" (p. 16). Crouter (1982) focused on this change in society. In Crouter's article, it was mentioned that researchers began studying the effects of working mothers on children as early as the 1930's. Even with research dating back that far, there was still no clear answer as to the effect of work

experiences on children. Much of the early research had flaws in the methodology of conducting the research. Hoffman conducted studies in the 1960's and 70's which concluded that there was no universally predictable effect on the child from the mother's working outside the home.

In the past, the mother was expected to stay at home and care for her children. Because of economic conditions and the push for equality, many children now are cared for outside the home. Group day care has been one response to the need for child care (Cartwright & Seaver, 1977). Other arrangements for care of children made by working parents include babysitting by relatives and strangers, exchange child care, live-in relatives, shared custody, and home day care. Family day care homes often are the only choices available for families that have infants and toddlers. Parents who work odd shifts or only part of a week or month choose family day care homes because of the caregiver's acceptance of flexible schedules. One advantage of some family day care homes is the exposure of the beauty of grass, trees, flowers, fences and the general home environment. Family day care homes can be an excellent resource if the caregivers are aware of the learning experiences young children need (Thiel, 1982).

Although many children are cared for outside the home, White (1981) was convinced that babies should be cared for in the home by the parents for optimum growth. He believed parents provided more excitement and enthusiasm than caregivers do at the early accomplishments of babies, such as the first step and the first word. This extra excitement and

enthusiasm provide encouragement for the infant to continue to learn. White did admit that there were three situations where substitute child care did make sense. Those situations were as follows:

1. When a family cannot raise its own children due to alcoholism, drug abuse, or debilitating conditions of the parents
2. When a family does not want to care for the baby
3. When the care is provided on a part-time basis.

White believed part-time substitute care was good for the infant and the parent. Part-time substitute care could free the parents to work, go to school, have fun, and provide psychological relief.

Even though parents may prefer other forms of child care, home-based caregiving is the major form of child care that is provided in the United States today. These caregivers work alone in most situations. Guidance and information are not received which are available to group day caregivers. About the only source of information available is from the licensing office (Rodriguez & Albert, 1981). Since babysitting is the most common child care arrangement, Honig (1979) felt that it was important to upgrade the quality of those caregivers. It was suggested that junior high schools and senior high schools offer required courses in child development and child care skills in order to upgrade the quality of the citizenry as parents and parent substitutes. Strober (1979) agreed that many parents want trained child care workers to stay with their children. The parents seem more satisfied with this type of arrangement than with leaving children with untrained relatives or neighbors.

Hofferth (1979) wrote:

The next decade is likely to be a period of greatly increased concern in the United States about the daytime care of children. The children of the baby boom era (1946-1964) are just now beginning to have their own babies which will greatly increase the number of preschoolers over the next 10 years (p. 649).

Dail (1982) mentioned that in the next ten years "the number of preschool children of working mothers will increase 63 percent" (p. 23). Assuming that employed mothers will have one child under six, by 1990 there will be 10.4 million children under six with mothers in the labor force (Hofferth, 1979). If these projections are accurate, day care facilities for young children will become more important to American society. With the increase in need for child care services, well-trained caregivers are desired and needed according to women interviewed in the seventies. They wanted their children to receive more than just custodial care (Reeder & Mitchell, 1982; Auerbach-Fink, 1977).

Another group of parents is composed of single adoptive mothers. Many of these women are doctors and lawyers who were initially career oriented, but after their career was well established they decided they wanted a child (Dougherty, 1978). This is a relatively new group of people who need and want quality child care.

In addition, many professional married women have chosen to have fewer children in order to reduce the costs of parenthood and role conflicts. If some form of acceptable and developmental child care were available, those women might consider having additional children. Job sharing, better day care facilities and increased participation by

fathers in household and child care activities might help to reduce the frustration felt by women who work and are mothers (Beckman, 1978).

Some community colleges and universities have found that many of their students are not the traditional single 18-to 24-year old student. Instead, many of the students are parents with a need for child care. Northern Virginia Community College was a school that recognized this need and opened a child care center with a focus on child development. The center has served the needs of the students as well as provided instructional projects for the psychology department and the early childhood education major (Billups & Ernst, 1977).

In addition to the working trends, the divorce rate is high. With 40% of American marriages ending in divorce, a large number of children are growing up in one-parent families (Ferguson & Blankenship, 1980). The family situations present problems with which child caregivers need to be concerned. The children may have some special needs that should be met because of the home situation (Norton & Glick, 1976).

Frequent divorces and remarriages are complicating the lives of children and are making continuity in children's lives extremely difficult. With the increase in discontinuity, teachers can be useful in helping to provide continuity by being receptive to the children, by listening sensitively to what the parents are saying, thus reaching out to help both children and parents (Dittman, 1979). With the changes in society, the family will become less and less influential in molding children's values and behavior. With these changes, much of child rearing may be left in the hands of the child care worker. If this happens, the primary

purposes of child care workers would be to promote normal development and to prevent maladaptive behavior among the children. With these extra responsibilities, formal training of child care workers becomes even more important (Goocher, 1976).

With lifestyles changing so much, day care needs to be flexible.

Flexible schedules, both full and part day, with educational experiences, opportunities for creativity and multicultural learning experiences would be available. Qualified staff of both sexes, well trained and tuned in to the language of the families being served, would have the necessary skills to meet the needs of the family (Auerbach, 1977, p. 28).

Another concept of child care which is being used in some schools and businesses is drop-in child care. The children are left in this type of facility for varying lengths of time. Therefore, a formal teaching schedule is not feasible. Some individualized art activities can be carried out with the children. These types of facilities are good for those parents who are taking college classes or shopping. However, they can not provide the individualized educational plans that more traditional child care arrangements can provide (VanCamp & Grimes, 1977).

One group of children often not considered when studying child care is school age children. Many of these children need somewhere to stay before and after school if the parents work. Harris (1977) found that many parents with three or fewer children felt their child 6 - 9 years old would be all right to go to school from home without help. They did feel that help was needed after school, however. The parents who had attended college felt children needed assistance going to school. Sixty-eight percent of the parents interviewed preferred group day care

for their children following school hours. The reason given for this preference was their belief that the children were properly cared for and supervised during this time. It was suggested that some type of arrangement might be made to use school facilities until parents could pick their children up after work.

### Group day care

Quality group day care centers provide excellent developmental care for children. These centers have a variety of adult role models, in addition to providing opportunities for the staff to attend training sessions. In any child care arrangement, if quality child care is the goal, there is a good chance that the experience will be a positive one for the child (Honig, 1979).

Cubbage (1976) discussed the main goals for group day care. In the past, the main concern was the health and safety of the child. This focus has changed to one of serving the whole child's needs. Day care has come to be concerned with social, emotional, cognitive, and psychomotor needs of children.

Authier (1979) stated that day care served four basic purposes. Those purposes were to provide (a) substitute care while parents participate in the work force or school, (b) substitute care for parents who are physically or mentally ill, (c) stimulation and developmental activities for children with inadequate home environment, and (d) an alternative to institutionalization of children whose lives are in danger at home. In order to assure that day care provides quality child care, educating parents about day care is important.

Care of children away from parents depends on the services they select. Generally, health and safety features are two items examined carefully. In addition, the quality of adult-child and peer-child interactions, program activities, and home-center coordination are examined by most parents seeking child care services (Endsley & Bradbard, 1978; Grubb & Lazerson, 1977).

When parents work or cannot provide child care in the home, a decision has to be made concerning the care of their children. Influences on that decision include (a) income of the parents, (b) parental preference, (c) types of child care available, (d) cost of the types of child care available, and (e) parental education. Regardless of the decision, parents want to feel that their children will be in a good situation. Most seem to want trained caregivers or quality care, regardless of the type of child care arrangement that is made.

### Child Caregivers and Training for Child Care

#### Child Caregivers

Child caregivers may have many different titles and responsibilities. They may be teachers, aides, social workers, social worker aides, or recreational leaders. The aide in child care may be found working in many different settings. Some of those settings include

1. Working in the public schools as teacher aides
2. Working as a social worker aide in day care
3. Working with handicapped children's education



In addition to these jobs, the paraprofessional child care worker may be found working in hospitals, camps, large hotels and recreational facilities, private homes, industrial day care facilities, and church day care or nursery centers. Since the aides are working in so many types of places, training of these workers is a necessity (Peterman, 1977).

According to Johnson and Faunce (1973), the role of the teacher aide has changed from being a helper, tying shoelaces, and cleaning chalkboards and erasers to being directly involved in the educational process. This change would indicate a need for paraprofessionals to be trained in instructional methods and supervising techniques appropriate for use with children.

Paraprofessionals work in many other jobs. They may work in developmental day care centers in activities which help to strengthen children's abilities, in juvenile homes, foster homes, or children's homes as daily helpers of routine housekeeping activities, or in many different types of day care or nursery centers (Conger & Rose, 1979). With so many types of jobs and places where child care services are offered, the need for additional personnel trained in child care is present.

The aide in handicapped education became important with the development of P. L. 94 - 142. Since an individualized education plan is required for all handicapped children, the paraprofessionals or aides have been involved in working with students individually and in small groups with school work as well as helping with children's physical needs. These aides need to study child development as well as causes

of disabilities. They need to be knowledgeable of children and their disabilities as well as extremely patient (Kaplan, 1978).

Jacobson (1978) reported that infant day care workers need to be competent in interpersonal skills in order to assure quality care of infants. Past research has indicated that all areas of an infant's development--physical, social, emotional, and intellectual are shaped by the primary caregivers. In research on mother-infant interaction, it was found that the mothers of infants who were determined to be more capable had spent more time with intellectual activities and had used facilitative interaction techniques. Also, it was found that mothers who played with their babies more had babies with higher developmental scores. These mother-infant studies can be used as a basis for helping day care workers be positive influences in a baby's life. In day care research, it has been found that families and children are happier if the caregivers have background, values, and expectations similar to those of the parents. Because research which has been done indicates that the first three years of life are a foundation for the way children grow and develop later, it is extremely important that caregivers interact properly with infants to provide the best foundation possible.

Since the major psychological need of infants is security, caregivers need to provide many opportunities for loving interactions with babies. Bottle-fed babies need to be held in order to allow the babies to satisfy their needs for warmth and touching (Honig, 1981).

Rubenstein and Howes (1979) compared infants cared for in day care settings and at home, and reported that there seemed to be no significant differences in the two environments. Both centers and homes can provide

stimulating and responsive environments for infants. The differences found were in the social interaction between adults and infants. In the day care center, more positive exchanges occurred between the infant and the caregiver (smiling, holding, hugging, mutual play). More negative expressions occurred in the home between infants and caregivers (crying, reprimanding). This implies that in a social context, caregiving at the day care center was more positive for both the infant and the caregiver. "The day-care infants cried less than the home-reared ones . . . The developmental level of play was higher in day care" (p. 21). Rubenstein & Howes (1979) suggested that infants may benefit from day care "in terms of being able to interact effectively with peers and other adults" (p. 23).

Tyler and Dittman (1980) studied the interaction of toddlers and caregivers in home and day care settings. It was found that caregivers and toddlers in the home setting spent more time talking to each other than did the caregivers and toddlers in centers. The children in home care showed more emotions than did children in center care. The children in center care spent more time thumb sucking and hair twirling than did children in home care. The children in the center usually were not allowed to view day-to-day operations of adults as were the ones in the home. The children in home care had more opportunity to see where things were stored, listen to phone calls, and observe general household tasks. These authors concluded by saying that from their research findings, neither home nor day care setting provided the optimal situation for meeting the toddler's needs for independence and stimulation. It was recommended that more and better training programs needed to be

developed and used to train adults to care for children in home and group settings.

Schwartz (1979) reported that some studies on group care of infants indicated that a quality child care program may have a beneficial effect on development of children. Also, these programs may prevent developmental declines in intellectual functioning of children with limitations due to low income. However, Schwartz found that the majority of the studies done do not report either negative or positive results. Instead, it was reported that group care of infants and toddlers was not harmful to a young child's development if the child care was consistent, nurturing, and individualized. Therefore, caregivers need to be trained to provide programs with these characteristics.

In a study reported by Stevens (1982) on family day caregivers, it was found that caregivers with more child care training spent more time interacting with the children in their care than did nontrained caregivers. Also, the interactions which occurred were positive and stimulating to the children. The trained caregivers spent more time teaching and helping the children than did less trained caregivers. When the parents of children in family day care homes were questioned, it was found that the parents looked at the personality and experience of the caregiver, referral by others, and ongoing close relationships when selecting a child caregiver.

#### Problems of Caregivers

Many problems occur when working in day care centers. Often, training of the workers will help to eliminate the problems. One of

the problems found in some infant day care centers has been that the staff spend most of their time on housekeeping duties and in the preparation of food and other materials. When this occurred, developmental activities with the infants were often neglected. Staff management and recording of housekeeping duties on a chart tended to help eliminate this problem (Kunz, Lutzker, Cuvo, Eddleman, Lutzker, Megson, & Gulley, 1982).

Another aspect of child caregiving which indicates a need for training of workers is the high turnover rate at most day care centers. The rate has been 15 to 20 percent a year. Much of this turnover has been due to staff burn-out. Burn-out may be due to the nature of the work, the personality of the worker, or the adult-child ratio. Additional factors contributing to burn-out may be low wages, stressful working conditions, and constant intense interactions with children (Whitebook, Howes, Darrah, & Friedman, 1981).

Maslach and Pines (1977) found in their research related to burn-out that day care staff members experience personal stress and run the risk of burn-out because they work closely and intensely with other people (children) for an extended period of time. Another reason that burn-out occurs in child care is that staff members spend most of their time in caregiving functions. In one day, the staff member may be teaching children, giving instructions, handling arguments, setting limits, consoling the unhappy children, serving food, cleaning up messes, laughing, singing, and dancing. Except for brief periods, the child care worker is giving and caring for children, day in and day out, in an environment of commotion and activity. "Child care work

is surely one of the most demanding jobs one can undertake, and yet one with a minimum of rewards" (Seiderman, 1978, p. 7). This is a perfect situation for burn-out to occur. Because of the many problems and pressures encountered in child care, training is important for the caregiver as well as for the child because burn-out is harmful to both the worker and the child. Negative feelings and despair are felt by both. Coping defenses against despair are also diminished when on the job if previous training has not occurred (Freudenberger, 1977).

### Training for child care

One of the foundations in the training of child care workers is knowledge of child development. Hildebrand (1983) listed six major developmental principles that were important for child caregivers to understand:

1. Development takes place on a foundation that is already there.
2. Development proceeds from the general to the specific.
3. Development proceeds in stages.
4. Developmental rates and patterns differ among individuals.
5. The early years of development are of vital importance because they come first.
6. The developing individual strives toward health and to reach a maximum potential (pp. 183-184).

These principles allow caregivers to work toward helping the children in their care to develop to their potential. Hines (1983) emphasized the need for child care workers to be trained and knowledgeable in child development. In addition, the need for staff development after one is employed was emphasized.

Atwood (1973), in discussing the teaching of child care, emphasized that child care services were semi-technical. They drew on all of the learning domains--cognitive, psychomotor, and affective. Tramm (1973) found that child care employers wanted entry level workers to

1. Have an acceptance of body functions
2. Know how to talk to children and to see possibilities for conversation and play in ordinary materials
3. Be able to help the children develop desirable habits and to lead each child to be more responsible for himself and his own actions
4. Serve children's foods and supervise eating, toileting, and sleeping
5. Keep the children safe (p. 223).

Characteristics of preferred employees included dependability, cheerfulness, enthusiasm, and willingness to follow directions and routines.

In an article by Martin (1972), major topics were given as items to be studied during a child care aide course. Those topics included (a) the role of the aide, (b) the child and his relationship to his family and to a child care center, (c) children's eating habits and food needs, (d) children's activities--including play, books and music, toys and games, and nature and science, (e) health and safety, (f) infant care, and (g) the exceptional child.

Since previous research has indicated that the most important years in a person's life are the early years, it seems extremely important that quality child care be made available for persons who need child care services. Auerbach (1977) suggested that high schools should offer infant and preschool programs in order for high school students to have an opportunity to learn about child care. Because of the overwhelming evidence of the value of early childhood education, the North

Carolina Child Care Services/Teacher Aide program was developed in an attempt to help train students to work in early childhood education jobs.

Many other school systems in the United States have developed programs to work with children in the past fifteen years. An important aspect of such training is actual experience working with children (Morton, 1975; McAbee & Herring, 1972). The Fort Worth schools developed three different pre-employment laboratory training programs. Each program was designed to provide additional child care and guidance facilities outside the home as well as to provide training for persons to work with children. These programs were designed for eleventh and twelfth grade students who were sixteen years old or older. The three programs differed in the laboratory experience. One program was held on the school campus with small children attending four days a week. It was a nursery school run by the high school with two different groups of children attending each day. A second program had a training agreement with a private day care center located nearby. The third program used elementary school kindergartens as the laboratory experience for training (McAbee & Herring, 1972). Another method of gaining laboratory experience in child care is through a cooperative home economics program which allows classroom training and on-the-job training (Lynch & Harris, 1975).

In Oklahoma, an evaluation was made of their Training for Child Care Careers program. This evaluation indicated that the training had been used by child caregivers and had been accessible to them. The caregivers felt that the training had helped them develop skills in



classroom management and guidance. They believed the training helped them to deal with their own children and grandchildren (Meszaros, Stratton, & Hall, 1983).

Cobe (1976) described a day care career training program developed in Georgia. The program contained 25 curriculum modules with laboratory experiences as part of the training. The center for the children that served as the laboratory for the day care training program worked with the parents as well as the students in the training program. This program was considered to be a realistic and positive method for teaching teenagers about children and could be used at both the secondary and postsecondary level. In addition to being a training program for students, it provided valuable learning experiences for the preschoolers. "The children enrolled in the lab show greater motor, social and emotional development than their peers" (p. 202).

Rhode Island is one of the few states to develop a statewide in-service training program for licensed day care homes. The program began in one neighborhood and grew to reach all the family day care providers in the state. The program trained selected family day caregivers to train other day care providers. Through the use of this program in Rhode Island, the family day care providers have come to provide more developmental services to children rather than just babysitting (Goldsmith, 1979).

Bookman (1976) described a course offered by Cornell entitled "Practicum in Understanding Family Day Care." It was believed that this course was needed because family day care was virtually ignored by

colleges and universities even though about two million children were cared for in day care homes. The course was designed to place students in a day care home to familiarize them with the setting and to provide resources for the day care mothers. Both the students and the day care mothers were pleased with the interactions and the training each received.

Wattenburg (1977) suggested that training for family day care providers needed to be flexible in time and diversified in content and format in order to be useful to the wide variety of providers. It was also found that a positive correlation existed between participation in training and stability in providing family day care.

One alternative available for training is the Child Development Associate (CDA) program. The CDA program was designed to improve the quality of child care in the United States. This program uses competency as the foundation for training and assessment. The CDA was based on demonstrated competence in the assumption of responsibility for a group of young children rather than on courses taken, academic credits earned, or degrees awarded. The CDA has been linked to government sponsored programs mainly, even though proprietary day care centers would benefit from the competency based training (Zigler & Kagan, 1981).

Many articles have been written expressing the view that caregivers need to be trained. Also, many suggestions have been made as to the content that needed to be taught. However, further research needs to be done to determine the effect of training programs on the completers of the program.

### Instrumentation Used In Previous Studies

Many different instruments have been developed for use in follow-up studies and for assessing attitudes related to child rearing practices. Schmidt (1974) developed and validated a follow-up instrument which was mainly concerned with employment, demographic, and educational information. Bailey and Ellis (1974) prepared an instrument to measure educational situational variables and preschool competencies desired by parents. It focused on parental perceptions and their influence on early childhood education. Nelson and Jacoby (1967) designed multiple-choice knowledge questions to assess secondary occupational home economics programs through a follow-up study. Gritzmacher, Shannon, Watts, and Schultz devised an instrument to compare the knowledge of child development/parenting concepts of students who had completed a child development/parenting course with similar students who had not enrolled in such a class (Gritzmacher, Shannon, & Watts, 1981). Other instruments related to measuring children's behaviors and parental attitudes were developed by Bernal and North (1972), Schaefer and Bell (1958), Kallman and Stollak (1974), and Block (1975).

### Related Research

In the past, follow-up studies have been done to determine whether students who successfully completed courses similar to Child Care Services/Teacher Aide were employed in the field of child care. Some of the follow-up studies related to employment of students completing courses similar to Child Care Services/Teacher Aide were conducted by

Butler (1971), Felstehausen (1971), and Smith (1975). Butler confined the study to New York Child Care Service graduates, and focused on the success of the child care service programs in preparing students for work in the community and on employers' satisfaction with the New York Child Care Service graduates. From the respondents, it was found that only 12 percent were employed in child care services. Those who were employed in the child care occupations were found to be successful employees. Felstehausen (1971) studied Cooperative Home Economics graduates and their employment records. Smith (1975) researched Occupational Home Economics graduates as a large group and obtained employment data on them.

Nelson (1979) reviewed Home Economics Education research. Included in this review were summaries of Allen's and Dennison's research. In 1975, Allen investigated the possible relationship between home economics training and day care services. From this study, it was concluded that home economics could easily relate to comprehensive day care programs. In 1978, Dennison found a significant relationship between employment status and marital status, employment status and number of children, employment status and academic achievement, and employment status and willingness to relocate to get a job in the child care field. Persons found more likely to be employed in the field were married, had no children, made higher grades, and were willing to relocate. It was found that a small percentage (28%) of students who had studied child development actually used it for employment.

In 1978, Miksis conducted a study on students' understanding of children's behavior and of the students' perceptions of self-concept,

ideal marriage partner, and their marriage role expectations. The students participating in the study were enrolled in a full academic year course in child development. The course involved classroom study, observations of children, and participation in a preschool laboratory. "The students had significant (.05) increase in the total posttest scores on understanding the behavior of young children" (Griggs & McFadden, 1980, p. 13).

In 1970, Harrison conducted a study which was designed to measure changes in 18 tenth, eleventh, and twelfth grade students during their enrollment in a high school child development course. This course involved classroom study and participation in a child observation center. The students "showed an increase in their understanding of the behavior of preschool children at the .05 level of significance" (Griggs & McFadden, 1980, p. 14).

In 1980, Sand gave a Parenthood Test to students enrolled in ten different high schools in Iowa. The Parenthood Test was composed of a knowledge section and an attitudinal section. In the study, the experimental group consisted of students who had taken a one-semester child development course. The control group consisted of students who were enrolled in other consumer and homemaking education courses. Significant differences were found "in the knowledge scores between males and females, between grade levels, between schools, and between students who had taken a comprehensive home economics course and those who had not" (Griggs & McFadden, 1980, p. 19). Also, it was found that students who had taken a course in child development had higher attitude scores on parenting concepts than a comparison group of students.

In addition, it was found that the more experience students had with children, the more capable they felt about working with children and handling situations which occurred.

In 1978, the evaluation of secondary child development/parenting programs was proposed at the American Vocational Association's pre-session on Impact Research in Home Economics. The research design and instrumentation for that assessment were developed cooperatively by Gritzmacher (Ohio State University), Shannon and Watts (University of Minnesota, Duluth), and Schultz (Iowa State University). The purpose of the study was to compare the knowledge of child development/parenting concepts of students who had completed a child development/parenting course with similar students who had not enrolled in such a class. Several states participated in this research project. The results from all the groups revealed that students studying parenting/child development concepts scored higher on the posttest given than did the comparison group (Gritzmacher, Shannon, & Watts, 1981).

In a study by Rickel, Dudley, and Berman (1960), it was stated that many factors contribute to knowledge of parenting and attitudes toward parenting. Some of those factors included race and socioeconomic differences. In an article by Davis (1979), the view was presented that "the child's psychological development is profoundly and significantly influenced by the kind of care he or she receives" (p. 86). The importance of training of the youth in the areas of parenting and child development needs to be realized.

Turner (1971) felt that home economics courses should change as society changes. Because most people work and many people are interested

in helping others, it was believed that work and helping others should be the focus of new home economics courses offered. One of the courses the school system chose to offer combined health care and child care in a job-training program for entry level positions in this area. Different communities have different needs, but home economics can often help meet those community needs.

Puechler (1976) found when teaching child development that most of the students knew little about children. Suggestions were made for improving the teaching process of child development. It was recognized that many of the students had a great deal of contact with children, but really did not understand the basic concepts related to child development and parenting.

Spitze and Eves (1983) reported results obtained from a 1981 survey of home economics teachers which focused on the content needed in high school home economics classes. The respondents to this survey ranked protecting children and helping them develop as the third most important area to be taught in high school home economics courses. Therefore, the area of child care was viewed as an important area to be studied. This was verified by Cross (1979), who indicated that competencies needed in today's society include "parenting, maintaining interpersonal relationships, developing coping skills, managing financial resources and meeting nutritional needs . . ." (p. 37). In the area of parenting, the topics included (a) health and physical care of a child, (b) prenatal and postnatal care, and (c) provision of food, clothing and shelter.

Griggs and McFadden (1980) stated that additional data were needed on the outcomes of home economics programs. From examination of past research, the research seemed to have been in the following major categories of child development and parenting: (a) employment data; (b) understanding of child care; (c) attitudes toward parenting and child care; (d) knowledge of parenting and child development concepts; (e) effects of day care; and (f) training for child care. There appeared to be a lack of information regarding follow-up data concerning knowledge and attitudes of students who have completed an occupational child development or parenting course. For this reason, it seemed important to conduct this study.



### CHAPTER III

#### METHOD

The purpose of this study was to compare the knowledge and attitudes of students who had successfully completed the course Child Care Services/Teacher Aide with a control group of students who had not studied Child Care Services/Teacher Aide. The knowledge and attitudes of both groups were assessed through the use of a questionnaire based on the competencies taught in the Child Care Services/Teacher Aide course and principles day care directors believed were important. In this chapter, the design of the study, the sampling procedure, instrumentation, data collection, and data analysis are discussed.

#### Design of Study

The study was ex post facto in design since students who graduated in the spring of 1982 were the subjects and there was no experimental treatment. Two groups of students who studied vocational education courses participated in the study. The experimental group consisted of students who had completed the Child Care Services/Teacher Aide course, and the control group consisted of Directed Office Occupations students who had not studied home economics courses that taught child development competencies. The reason for selecting the students completing the Directed Office Occupations course as the control group was that both courses are advanced level courses in vocational curriculum areas, and it was believed that the ability level of the groups would be similar.

The design of the study is illustrated in the following diagram:

Group	Independent Variable	Dependent Variable
(E)	(X)	0
(C)		0

**Symbols:**

(E) = Experimental group: ( ) indicates no manipulation

(C) = Control group

(X) = Independent variable: Completed course Child Care  
Services/Teacher Aide

0 = Dependent variable: Knowledge and attitudes related to  
child care

(Gay, 1976)

**Sampling Procedure**

The population for this study consisted of students who had graduated from public high schools in Educational Region V and Educational Region VII in the spring of 1982. Educational Region V was chosen for the study because it represented urban areas such as Winston-Salem and Greensboro, and Educational Region VII was chosen for its rural characteristics. Also, both regions are located in the northern part of the state and are adjoining.

Two groups from this population were selected for the study. One group included 100 students randomly selected from a list of those who

had completed Child Care Services/Teacher Aide (CCS/TA, North Carolina State Course Number 7133), and the other group included 100 students randomly selected from a list of those who had completed Directed Office Occupations (DOO, North Carolina State Course Number 6623).

Students for the sample were selected from a list of completers of the two courses for the year 1981-82 obtained from the North Carolina State Department of Public Instruction for Educational Regions V and VII. Since a small number of males took the courses, this study was limited to female students in an attempt to reduce the number of variables. Because only nine schools in Educational Regions V and VII offered both the courses, all schools which offered either of the courses were included in the population. Region V had 260 students who had completed Child Care Services/Teacher Aide, and Region VII had 158 students who had completed the course. In Region V, 175 students completed Directed Office Occupations, and 144 students completed the course in Region VII. Thus, the sample of 100 was chosen from a total of 719 completers of the two courses in 1982. The sample included 50 persons from both Region V and Region VII for each of the courses.

#### Instrumentation

Several instruments were examined during the process of deciding upon an instrument for use in this study. A short description of the instruments was included in Chapter II. Since none of the instruments found matched the Child Care Services/Teacher Aide competencies in North Carolina, it was decided that an instrument needed to be developed to match the competencies taught in the course being studied.

Competencies defined in the North Carolina Curriculum Guide for Child Care Services/Teacher Aide were used as a basis for the development of the questions. A list of the competencies and the items to which they related are shown in Appendix A. Ideas for a limited number of the items came from child care literature (Brown & Plihal, 1966; Gritzmacher, Shannon & Watts, 1981; Nelson & Jacoby, 1967) and were adapted for use in the study when they matched the competencies. Other items were developed to identify the attitudes of the subjects concerning day care centers. The last part of the questionnaire requested demographic data. Suggestions given by Dillman (1978) served as a guide during the development of the instrument.

After the first draft of the instrument was completed, it was given to a university professor, two high school teachers, two day care directors and one early childhood education teacher for review. All of the individuals except the day care directors were knowledgeable of evaluation techniques. The day care directors examined the questionnaire in relation to items they believed were important for beginning workers to know and what they wanted their employees to be able to do. The university professor and the teachers examined the instrument for match of the item to the competency. It was recognized that paper-and-pencil items do not match competencies that include the behaviors "plan, prepare, and demonstrate". However, it was believed by those who reviewed the questions that the match was as close as possible using a paper-and-pencil assessment tool. After receiving feedback from those individuals, the questionnaire was revised.

The questionnaire was pilot tested with two students who had completed Child Care Services/Teacher Aide but were still in high school and with three students who had graduated from high school but had not taken the Child Care Services/Teacher Aide course. The clarity of the items and the length of the instrument were major concerns examined through the pilot testing. Dillman (1978) recommended that mail surveys not be over twelve pages, with two of those pages being a front and back cover. Since the instrument pilot tested was sixteen pages, it needed to be shortened. The match of the item and the competency were considered in the decision of which items to eliminate, as well as the extent to which each item could be considered common knowledge based on the pilot test. The final instrument consisted of 40 questions for Child Care Services/Teacher Aide respondents and 39 questions for Directed Office Occupations respondents and took about 20 minutes to complete. The instrument was then coded by the researcher as to right and wrong answers to the questions. A copy of the answer code was sent to a university professor, who is a specialist in child development, for examination. After receiving feedback from the professor, the code sheet was finalized.

The final version of the instrument consisted of three sections: knowledge, attitude, and demographic data. The knowledge section contained 16 items with multiple responses to each item for a total of 73 responses. For each response, the subjects were instructed to circle yes, no, or uncertain. Correct answers were given a score of 1, incorrect responses were given a score of 3, and uncertain responses were given a score of 2. A score of 73 would result if all items were

answered correctly with a score of 219 indicating all of the responses were incorrect. Thus, the lower the score, the more knowledgeable the respondent on the subject of child care.

The attitude section consisted of eight statements related to day care centers, which were answered with a Likert Scale using responses of strongly agree, agree, uncertain, disagree, and strongly disagree. For the scoring of favorable statements the alternatives were weighted 5, 4, 3, 2, 1 from strongly agree to strongly disagree. Scoring was reversed for unfavorable statements. Therefore, a higher score indicated a more favorable attitude toward day care. The demographic data section contained 13 questions. The last page provided subjects an opportunity to make any additional comments about the need for child care or child care services.

The instrument was pretested with students enrolled in Child Care Services/Teacher Aide and Directed Office Occupations in Wilkes County in the fall of 1983. The results of this pretest showed that initially students in both of the sample groups used tended to answer the questions similarly. Since it was early in the school year and students in Child Care Services/Teacher Aide had studied only a limited number of the competencies at the time of pretesting, it was expected that both groups would answer the questions similarly if they were similar in ability. The final pretested instrument was found to be clear to the students.

In the preparation of the instrument for mailing, a professional printing company reduced the print to fit on a  $5\frac{1}{2}$ " x  $8\frac{1}{2}$ " page. Two different forms of the booklet were printed for the completers of the two courses. The Child Care Services/Teacher Aide questionnaire is in

Appendix B and the Directed Office Occupations Questionnaire is in Appendix C. The booklets had different illustrations on the front cover for the purpose of identification. In the questionnaire itself, the first question was different in that it addressed the graduate of the specific courses. The CCS/TA questionnaire had one additional question which was "If you had a chance to take the Child Care Services/Teacher Aide course again, would you take it?"

#### Data Collection

The data were collected from a random sample of Child Care Services/Teacher Aide students and of Directed Office Occupations students in Educational Regions V and VII in North Carolina through the use of a mail survey. A mail survey was chosen because the only information that could be obtained on the completers of the courses was their names and addresses. Also, talking with high school students revealed that they preferred a mail survey rather than a telephone survey. Students stated an unwillingness to send their telephone numbers to an individual through the mail. A cover letter explaining the purpose of the research study was sent with the questionnaire booklet, as was a self-addressed, stamped envelope. Address corrections were automatic from the U. S. Postal Service with first class mailings; therefore, any follow-up mailing was expected to reach the respondents. The mailout package was prepared and mailed on Tuesday, January 3, 1984.

The month of January was selected as the time to send the questionnaire so that students who were in college would be likely to be at home and would receive their mail. After two weeks, a letter and

replacement questionnaire were sent to nonrespondents. After four weeks, a final letter and replacement questionnaire were sent by certified mail to emphasize the importance of the questionnaire (Dillman, 1978). A copy of the letters mailed is found in Appendix D.

### Data Analysis

Two-by-two factorial analyses of variance, the Kruskal-Wallis, were used to determine whether or not there were differences due to group, region, marital status, parental status or race. The 73 knowledge items in the instrument based on content of the Child Care Services/Teacher Aide course were analyzed by a chi square on each response to determine whether or not there were differences by group or region. The attitude section was analyzed by a nonparametric t-test as well as by chi square tests for each statement. The level of significance selected was .05. Statistical consultation and programming for this research was provided by the Statistical Consulting Center in the Department of Mathematics at the University of North Carolina at Greensboro.



## CHAPTER IV

### RESULTS AND DISCUSSION

The major purpose of this study was to examine the knowledge and attitudes of students who had successfully completed the course Child Care Services/Teacher Aide as compared to a group of students who had not studied Child Care Services/Teacher Aide. The knowledge and attitudes of both groups were assessed through the use of a questionnaire based on the competencies taught in the Child Care Services/Teacher Aide course and principles day care directors believed were important for inclusion in the course. Educational Regions V (North Central) and VII (Northwest) in North Carolina, adjoining regions in the northern part of the state, were chosen for the study.

A mail questionnaire was sent to the 200 graduates in the sample. After the initial mailing of questionnaires, 89 (44.5%) were returned. Twenty-eight (14%) of the questionnaires mailed were returned after the first follow-up mailing. After the second follow-up mailing, 26 (13%) were returned. Out of the 143 (71.5%) questionnaires returned, only 135 (67.5%) were actually usable in the analysis. The eight questionnaires returned which were not usable fell into three categories. One of the subjects was a male, one had been returned by a parent with a note that the daughter was deceased, and six did not complete the course in 1982 as the State Department of Public Instruction (SDPI) list had stated.

Twenty-three members of the sample who responded did not graduate in 1982 as the list of completers from the SDPI had suggested. Responses to the questionnaire appeared to indicate that they graduated in the summer of 1982, in the spring of 1983, or dropped out of school. However, after comparing marital and parental status, and the length of time since completion of the courses with the 1982 graduates, it was found that the two groups were similar. Therefore, responses from those twenty-three subjects were included in the data to be analyzed.

Of the usable returns, 29 were from Region V Child Care Services/Teacher Aide subjects; 32 were from Region VII Child Care Services/Teacher Aide subjects; 37 were from Region V Directed Office Occupations subjects; and 37 were from Region VII Directed Office Occupations subjects.

#### Demographic Data

A description of the subjects who returned the questionnaires which were usable is given in Table 1. The Directed Office Occupations subjects were approximately one-half year older than the Child Care Services/Teacher Aide subjects. More of the CCS/TA subjects were married (27.87% vs. 20.27%) and had children (11.48% vs. 8.11%) than the DOO subjects. More of the CCS/TA subjects were employed full-time than were the DOO subjects (52.46% vs. 43.24%, respectively). Another difference observed was that 16.39% of the CCS/TA subjects were full-time homemakers, whereas only 2.70% of the DOO subjects were in this category. More DOO subjects (29.73%) were students than were CCS/TA subjects (18.03%). Twelve persons in both groups classified themselves

in more than one employment category. More minorities enrolled in and completed CCS/TA than DOO (19.67% vs. 13.51%, respectively).

Table 1

Description of Subjects

Group	Course					
	CCS/TA			DOO		
	Region V	Region VII	Total	Region V	Region VII	Total
<b>Marital Status</b>						
Married	20.69	34.38	27.87	16.22	24.32	20.27
Divorced	-	-	-	5.41	-	2.70
Separated	-	3.13	1.64	-	-	-
Single	79.31	62.49	70.49	78.37	75.68	77.03
<b>Age</b>						
	18.75 yrs.	18.94 yrs.	18.85 yrs.	19.30 yrs.	19.35 yrs.	19.33 yrs.
<b>Parental Status</b>						
Parents	6.90	15.63	11.48	5.41	10.81	8.11
Non-parents	93.10	84.37	88.52	94.59	89.19	91.89
<b>Employment Status<sup>a</sup></b>						
Full-time	58.62	46.88	52.46	43.24	43.24	43.24
Part-time	17.24	31.25	24.59	18.92	29.73	23.32
Full-time Homemaker	10.34	21.88	16.39	-	5.41	2.70
Student	13.79	21.88	18.03	21.62	37.84	29.73

Table 1 (continued)

Description of Subjects

Group	Course					
	CCS/TA			DOO		
	Region V	Region VII	Total	Region V	Region VII	Total
<b>Race</b>						
Black	27.59	12.50	19.67	16.22	8.11	12.16
Oriental	-	-	-	2.70	-	2.35
White	68.97	78.13	73.77	81.08	91.89	86.49
No response	3.45	9.38	6.56	-	-	-

Note: The values represent percentages except for age, which is mean age for the groups. CCS/TA = 61 subjects, Region V = 29, Region VII = 32; DOO = 74 subjects, Region V = 37, Region VII = 37.

<sup>a</sup>Some subjects classified themselves in two categories.

Table 2 shows the percentage of subjects in the groups which had received some training in child development in courses other than Child Care Services/Teacher Aide. Courses which are required for graduation such as health and biology often include some study of child development principles.

In addition to the study of child development in other courses, 40.54% of the Directed Office Occupations subjects in Region V and 54.05% in Region VII had done some or extensive babysitting within the past two years (Table 3). The CCS/TA subjects in Region V and Region VII had

also done some or extensive babysitting within the past two years (65.52% and 78.13%, respectively).

Table 2

Percentages of Students Studying Child Development In Courses Other Than Child Care Services/Teacher Aide

Group	Region	Health Course	Biology Course	Other Course
CCS/TA	V	89.66	48.28	31.03
CCS/TA	VII	81.25	56.25	43.75
DOO	V	70.27	54.05	29.73
DOO	VII	67.57	45.95	29.73

Table 3

Extent of Babysitting Within the Past Two Years

Group	Region	Limited	Some	Extensive
CCS/TA	V	10.34	24.14	41.38
CCS/TA	VII	9.38	25.00	53.13
DOO	V	29.73	8.11	32.42
DOO	VII	18.92	13.51	40.54

Note: The values represent percentages of the subjects.

In response to a question which asked what type of child care they would try to find for a child of their own, the majority of the subjects showed a preference for day care centers. The least preferred alternative was babysitter/neighbor. Table 4 gives the results of the responses to the question related to child care preference.

Table 4

Percentages of Subjects Indicating Preferences for Different Types of Child Care Arrangements

Group	Region	Babysitter/ Relative	Babysitter/ Neighbor	Day Care Center	Nursery Center
CCS/TA	V	41.38	17.24	75.86	48.28
CCS/TA	VII	43.75	28.13	84.38	56.25
DOO	V	51.35	27.03	70.27	54.05
DOO	VII	62.16	27.03	64.86	51.35

Note: Subjects could answer yes to more than one category; therefore, the percentages do not add up to 100%.

At the end of the questionnaire, subjects were asked to make comments about the need for child care or child care services. One of the DOO subjects suggested that a course in child development should be required of all persons before graduation from high school. Another subject mentioned that the cost of enrolling children in day care centers forced many young mothers to choose other forms of child care, even when day care was preferred by the mother.

The additional question for the CCS/TA subjects, "If you had a chance to take the CCS/TA course again, would you take it?" was answered yes by 96.71% of the subjects. One subject from each region answered the question negatively.

Responses to the Knowledge Section of the Questionnaire

The percentage of correct responses to each of the knowledge questions by the CCS/TA and DOO subjects is given in Appendix E.

After examination of the percentages of correct responses to the knowledge items of the questionnaire, it was evident that few differences existed between the CCS/TA and DOO subjects. The significant differences will be discussed in the section related to the hypotheses. In this section, the responses of the Child Care Services/Teacher Aide subjects will be discussed.

Question I described a home setting with a 10-month-old child. The question was designed to measure the assessment of basic needs of children. Approximately 50% of the subjects answered correctly three of the four responses to the situation given. Less than 10% recognized that the response "He is cutting teeth" was incorrect.

The situation presented in question II dealt with speech and hearing problems. It was designed to identify guidelines for working with exceptional children. Three of the responses were answered correctly by 73% to 93% of the subjects. The response "Give the child help only when needed" was answered correctly by only 19.67% of the subjects.

The third situation described a child care center worker's pre-reading activities. The question was designed to assess skills in management of learning experiences for children. Two of the responses, "3-year-olds have short attention spans" and "3-year-olds don't like to have stories read to them" were answered correctly by 83.61% and 65.57%, respectively, of the subjects. Two of the responses "The stories were uninteresting" and "The children were tired" were answered correctly by approximately one-third of the subjects.

Question IV presented examples of children's stories. Subjects were asked to choose the most appropriate stories and give the reasons for not selecting the other stories. This item matched the curriculum competency related to selection of instructional materials. Results of this item indicated much confusion existed as to appropriate stories for children. "Cinderella" was the only story over 50% of the subjects recognized as being appropriate for the specified age group. The other three stories were answered correctly by approximately 5 to 20% of the subjects. The reasons for not selecting stories were somewhat better understood. Two of the responses were answered correctly by approximately 50% of the subjects; one by 72.13% and one by only 14.75% of the subjects.

Question V, which was designed to assess the avenues of interaction among families and agencies, described a situation in which child abuse was suspected. Over 50% of the subjects recognized that it was correct to call Social Services and not to call the police. Approximately 30% of the subjects knew that calling the Health Department or confronting the parents was inappropriate.

Question VI was designed to measure ability to handle situations dealing with people. A situation was given in which a crying two-year-old and an angry parent came to a day care center. Three of the responses dealing with the child were answered correctly by more than three-fourths of the subjects. One response "Take the child to his/her friend" was answered correctly by approximately 50% of the subjects. Two of the responses dealing with the parent were answered correctly by



approximately 70% of the subjects, and the response "Get the teacher/director" was answered correctly by 40.98% of the subjects.

The situation presented in question VII was designed to identify employee responsibilities. A situation was given in which several co-workers were out with the flu and a friend was coming to visit a worker. Two of the responses were answered correctly by more than 80% of the subjects. The response "Take a vacation day" was recognized as incorrect by approximately two-thirds of the subjects, as was the response "Take her friend to work" by approximately 45% of the subjects.

Question VIII presented a situation in which the teacher and the aide were inconsistent in disciplining a child. It was designed to measure the analysis of guidance principles for children. Over 80% of the subjects recognized that this behavior would confuse the child; the other responses were recognized as being incorrect by approximately half of the subjects.

The situation presented in question IX dealt with obtaining information about requirements for opening a home day care center. Approximately 85% of the subjects recognized that the Office of Day Care Licenses was the appropriate response, whereas 60% recognized that the Police Department was an inappropriate response. Approximately 20% of the subjects knew that contacting the Social Services Department and the Health Department were inappropriate responses.

Planning nutritious foods is one of the competencies needed by day care workers. Question X dealt with appropriate snacks for children. The responses "Milk and peanut butter cookies" and "Tea and potato chips" were answered correctly by over 80% of the subjects. The other two

responses "Kool-aid and crackers" and "Peach milk shake" were answered correctly by approximately 30% of the subjects.

Question XI was designed to assess the ability to describe the role of play in the development of children. Three of the responses dealing with effective play things for stimulating a child's creative self-expression were answered correctly by more than 70% of the subjects, with the responses ranging from 73.77% to 91.80%. The response "Coloring books and crayons" was recognized as an incorrect answer by only 14.75% of the subjects.

Being able to identify the growth and developmental patterns of children was the subject of question XII. Only one response, "Johnny is at the parallel stage of play" was answered correctly by over 50% of the subjects. The other three responses were answered correctly by 19.67% to 36.07% of the subjects.

Question XIII dealt with ethical practices for employees. The situation was given in which a child seemed to be slower than other children. When responding to this question, more than 75% of the subjects recognized that the observation should be discussed with the teacher but not with Jane's neighbor and Social Services employees. Less than 15% realized that the child care worker should not discuss the observation immediately with Jane's parents.

Managing child care responsibilities was the subject of question XIV. A play yard was the setting in which an aide was caring for children. Only one response, coded "yes", "Examine the playground and remove any hazardous objects" was answered correctly by more than 85%.

of the subjects. The other three responses "Direct and organize games for the children to play," "Help the children solve any minor conflicts which arise," and "Observe the children's behavior and report back to the director of the center" were answered correctly by less than 40% of the subjects, with responses of the subjects ranging from approximately 20% to approximately 40%.

Question XV dealt with safety practices in a day care center. Two of the responses "Place protective covers over electrical outlets" and "Keep equipment cords out of the children's way" were answered correctly by over 85% of the subjects, with the other two responses being answered correctly by less than 50% of the subjects. The response "Place shag carpet on the floor" was recognized as incorrect by 47.54% of the subjects, as was "Paint orange squares around dangerous areas or objects in the center" by 22.95% of the subjects.

The last question in the knowledge section of the test dealt with first aid treatment for burns. In question XVI, 81.97% of the subjects recognized that placing the burned area in cold water was a correct response. The other three responses "Hold the burned area under lukewarm running water," "Cover the burned area with butter," and "Cover the burned area with a band-aid" were answered correctly by approximately 50% to 70% of the subjects.

For each of the situations, there tended to be individual items for which the percentages of correct responses was high. Items for which the majority of the responses were high included guidelines for working with exceptional children, ability to handle human relations situations, identification of employee responsibilities, description of

the role of play in children's development, description of ethical practices for employees, and recognition of safety practices appropriate for child care facilities. Items for which the majority of the responses tended to be low included selection of appropriate materials, recognition of avenues of interaction among families and community agencies, and identification of growth patterns of children.

The means, standard deviations, and variances of the groups on the knowledge section of the questionnaire are given in Table 5. The mean score of the Child Care Services/Teacher Aide subjects (113.27) was slightly better than the mean score of the Directed Office Occupations subjects (116.74).

Table 5

Means, Standard Deviations, and Variances of the Groups on the Knowledge Section of the Questionnaire

Group	Region	Mean	Standard Deviation	Variance
CCS/TA	V	114.00	9.19	84.55
CCS/TA	VII	112.62	11.01	121.13
CCS/TA Total		113.27	10.12	102.32
DOO	V	116.58	9.37	87.75
DOO	VII	116.91	6.57	43.15
DOO Total		116.74	8.03	64.47

Note: The lower the score, the more knowledge represented.

### Response to Attitude Statements

The attitude of the Child Care Services/Teacher Aide and Directed Office Occupations subjects toward day care centers was examined through the use of eight statements. The responses to the attitude section of the questionnaire are given in Table 6. The strongly agree (SA) and agree (A) responses were combined for the table, as were the disagree (D) and strongly disagree (SD) responses.

Items with which more than 75% of the CCS/TA subjects agreed stated that day care centers are excellent for the care of preschool children, most personnel in day care centers use appropriate methods of discipline when caring for children, and day care centers provide experiences that help to stimulate a child's intellectual development.

The only item with which more than 75% of the D00 subjects agreed was that day care centers provide experiences that help to stimulate a child's intellectual development. Although the D00 subjects generally responded with agreement to the other items mentioned previously, the percentage of subjects who agreed was less than from the CCS/TA group. Approximately two-thirds of the subjects in the D00 group agreed with those statements. Both groups had approximately 70% of the subjects agree with Item II, "If parents work, preschool children should stay with an individual trained in child care."

Ideas with which there was little agreement by the subjects of both groups were that preschool children should be cared for in the home by a babysitter or in the babysitter's home if both parents work, that any individual who loves children would be a good child care aide regardless of educational ability and training, and that children are

Table 6

Responses of Subjects to the Attitude Section of the Questionnaire

Item	CCS/TA			DOO		
	A	U	D	A	U	D
I. If both parents work, pre-school children should be cared for in the home of a babysitter.	24.59	26.23	47.54	28.38	31.08	40.54
II. If parents work, preschool children should stay with an individual trained in child care.	70.49	11.48	14.75	71.62	12.16	16.22
III. Day care centers are excellent for the care of preschool children.	85.25	6.56	4.92	67.57	16.22	2.70
IV. If the parents work, pre-school children should be cared for in a babysitter's home.	19.67	29.51	39.19	10.81	36.49	52.70
V. Most personnel in day care centers use appropriate methods of discipline when caring for children.	77.05	14.75	4.92	66.22	28.38	5.41
VI. Any individual who loves children would be a good child care aide regardless of educational ability and training.	19.67	19.67	57.38	14.86	20.27	63.51
VII. Children are usually unhappy in a day care center.	4.92	13.11	78.69	5.41	20.27	74.32
VIII. Day care centers provide experiences that help to stimulate a child's intellectual development.	88.52	8.20	-	83.78	12.16	4.05

Note: Numbers represent percentages. A represents agreement; U represents uncertain; D represents disagreement.

usually unhappy in a day care center. The mean scores for the two groups on the attitude statements were similar and indicated a positive stance toward day care centers (Table 7).

Table 7

Mean Scores, Standard Deviations, and Variances of the Groups for the Attitude Statements

Group	Region	Mean	Standard Deviation	Variance
CCS/TA	V	30.96	3.67	13.50
CCS/TA	VII	30.13	3.28	10.78
CCS/TA Total		30.52	3.47	12.01
DOO	V	29.78	3.23	10.45
DOO	VII	29.41	2.73	7.47
DOO Total		29.59	2.98	8.87

Note: Maximum positive score = 40.

Analysis of Hypotheses

The chi square analyses for  $H_1$ : There is no difference in student knowledge and attitude related to child care practices between students successfully completing the Child Care Services/Teacher Aide curriculum and those who have not studied the curriculum, revealed that responses to five of the knowledge questions were found to differ significantly between the two groups (Table 8). Thirty of the 73 responses to the knowledge section of the instrument were unable to be analyzed due to insufficient cell size in more than one of the cells for the chi

square analysis. The chi square tables for the items with no significant differences are included in Table F-1 in Appendix F.

Table 8

Chi-Square Table for Knowledge Items Which Differed Significantly by Group

Group	Correct	Uncertain	Incorrect
I. 1. He feels left out			
CCS/TA	72.73	16.36	10.91
DOO	83.78	2.70	13.51
$\chi^2 = 7.57, df = 2, p = 0.02$			
V. 21. Call the Police Department			
CCS/TA	75.00	18.75	6.25
DOO	54.55	19.70	25.76
$\chi^2 = 7.88, df = 2, p = 0.02$			
IX. 44. Police Department			
CCS/TA	79.59	10.20	10.20
DOO	60.00	29.23	10.77
$\chi^2 = 6.38, df = 2, p = 0.04$			
XII. 58. Johnny is at the parallel stage of play			
CCS/TA	60.38	18.87	20.75
DOO	42.86	45.71	11.43
$\chi^2 = 9.90, df = 2, p = 0.007$			



Table 8 (continued)

Correct	Correct	Uncertain	Incorrect
XVI. 72. Cover the burned area with butter			
CCS/TA	57.41	7.41	35.19
D00	35.21	15.49	49.30
$\chi^2 = 6.46, df = 2, p = 0.04$			

Note: Values represent percentage of subjects.

One of the responses to the test item dealing with assessment of basic needs of children resulted in significant differences between the two groups. The uncertain response by the CCS/TA group was the cell of interest for question I. 1. More of the subjects than one would expect by chance were uncertain about whether the right answer was "He feels left out."

A response to the test item which corresponded to the competency related to forming conclusions concerning avenues of interaction among families and community organizations and agencies resulted in significant differences. The item dealt with suspected child abuse. The response "Call the Police Department" (V. 21) was the item which resulted in differences. The incorrect response was the cell which more of the D00 subjects selected than one would expect by chance.

One of the responses to the test item dealing with sources of information about day care center regulations resulted in significant differences between the two groups. The response "Police Department"

(IX. 44) as a source of information was the item which revealed differences. The uncertain response was the one selected by more of the D00 subjects and fewer of the CCS/TA subjects than would be expected by chance.

A response to the test item which corresponded to the competency related to development patterns of children resulted in significant differences. The item dealt with 3-year-old boy's behavior during play. The response "Johnny is at the parallel stage of play" (XII. 58) revealed differences. The uncertain response was selected by more of the D00 subjects than would be expected by chance.

The last item which resulted in significant differences corresponded to the competency dealing with health and safety practices needed for the care of children. The test item dealt with first aid for minor burns. The uncertain response contained the cells with the differences for question XVI. 72. More of the D00 subjects were uncertain about whether "Cover the burned area with butter" was an appropriate treatment than one would expect by chance and fewer of the CCS/TA subjects were uncertain about the same response than would be expected by chance.

Of the five situations where there were significant differences, an incorrect response was the cell of interest in one situation and in that case more D00 and fewer CCS/TA students selected the incorrect answer than would be expected. The uncertain cell was the one of interest in the other four cases. In one of those situations more CCS/TA than D00 subjects were uncertain about a right answer than would be expected. In three cases more D00 than CCS/TA responses were

uncertain than would be expected with two or those responses representing a correct answer and one representing an incorrect answer.

In addition to the five items for which there were significant differences, there were three items which were considered marginally significant (Table 9). The response "He is cutting teeth" to the test item dealing with assessment of basic needs of children resulted in marginally significant differences between the two groups. The correct response contained the cells with the differences for item I. 4. More of the DOO subjects and fewer of the CCS/TA subjects answered the item correctly than would be expected by chance.

One of the responses to the item dealing with suspected child abuse also resulted in marginally significant differences. The uncertain response by the CCS/TA subjects was the cell with differences for item V. 22 "Confront the parents." More of the subjects were uncertain than one would expect by chance.

The response to the item concerning a child's developmental stage which resulted in marginally significant differences was XII. 57 "Johnny is socially immature." Again, the uncertain response was where the bigger differences occurred. More of the DOO and fewer of the CCS/TA subjects answered "uncertain" than one would expect by chance.

No significant differences were found in the responses to the four attitude statements which could be analyzed with the chi square tests. (Table F-2 in Appendix F). Four of the eight attitude statements could not be analyzed due to insufficient cell sizes, even after strongly agree (SA) and agree (A), and disagree (D) and strongly

disagree (SD) responses were combined in an attempt to obtain cell sizes large enough to test for differences.

Table 9

Chi-Square Table for Knowledge Items Which Were Marginally Significant  
By Group

Group	Correct	Uncertain	Incorrect
I. 4. He is cutting teeth			
CCS/TA	8.93	21.43	69.64
DOO	17.39	33.33	49.28
$\chi^2 = 5.39, df = 2, p = 0.97$			
V. 22. Confront the parents			
CCS/TA	35.85	15.09	49.06
DOO	37.50	31.25	31.25
$\chi^2 = 5.52, df = 2, p = 0.06$			
XII. 57. Johnny is socially immature			
CCS/TA	42.14	15.69	41.18
DOO	28.57	34.29	37.14
$\chi^2 = 5.79, df = 2, p = 0.06$			

Note: Values represent percentages of responses by the subjects.

The attitude component of the questionnaire was further analyzed by use of a t-test. Differences between the CCS/TA and DOO groups were not significant (Table 10).

Table 10

t-Test for Differences Between Group on Attitude Section

Group	Mean	Standard Deviation	Standard Error	<u>t</u>	df	(p)
CCS/TA	20.92	4.54	0.59	-1.36	113.51	0.18
DOO	21.91	3.72	0.43			

Since so few of the chi-square tests were found to be significant in the knowledge section of the questionnaire, the two-way analysis of variance (ANOVA) was not computed. Another reason for not computing an ANOVA was that responses to 30 of the 73 questions failed to produce cells of sufficient size and it was believed that an ANOVA would not give accurate information.

The analyses for H<sub>2</sub>: There is no difference in student knowledge and attitudes related to child care practices between students successfully completing the Child Care Services/Teacher Aide course in Educational Region V and Educational Region VII in North Carolina and those who had not studied the curriculum, indicated that four of the responses were found to be significant when analyzed by group and by region (Table 11). The items which were found to have no significant differences are in Table F-3 in Appendix F.

Table 11

Chi-Square Table of Significant Differences by Group by Region for  
Knowledge Items

Group	Region	Correct	Uncertain	Incorrect
I. 4. He is cutting teeth				
CCS/TA	V	14.29	14.29	71.43
DOO	V	17.65	41.18	41.18
$\chi^2 = 6.49, df = 2, p = 0.04$				
III. 12. The children were tired				
CCS/TA	VII	46.15	34.62	19.23
DOO	VII	15.63	40.63	43.75
$\chi^2 = 7.33, df = 2, p = 0.03$				
XII. 58. Johnny is at the parallel stage of play				
CCS/TA	VII	62.07	13.79	24.14
DOO	VII	41.67	41.67	16.67
$\chi^2 = 6.03, df = 2, p = 0.049$				
XVI. 72. Cover the burned area with butter				
CCS/TA	V	62.50	12.50	25.00
DOO	V	27.78	22.22	50.00
$\chi^2 = 7.16, df = 2, p = 0.03$				

Note: Values represent percentages of responses by the subjects.

The procedure used to test for differences by region involved the use of separate chi-square analyses by group and by region. If both of the results of the chi-square analyses were found to be significant, a group effect would exist but not a region effect. If one of the chi-square analyses by region indicated a significant difference, and the second chi-square analysis by region revealed no significant difference existed, then there would be a group and a region effect. If both of the chi-square analyses indicated no significant differences, then there would be no effect of either group or region.

One of the responses to the test items dealing with assessment of basic needs of children resulted in significant differences between the groups in one of the regions. Fewer of the CCS/TA subjects and more of the DOO subjects chose the uncertain response to "He is cutting teeth" than would be expected by chance. Although the previous analysis did not reveal differences by group when region was ignored, there was a significant difference in Region V alone.

A response (III. 12. The children were tired) to the test item related to planning activities for 3-year-olds revealed significant differences in Region VII. The correct answer and the incorrect answer were the answers where the cells indicated differences occurred. More of the CCS/TA group and fewer of the DOO group chose the correct answer than would be expected from a distribution by chance. The opposite response pattern was the result when examining the responses to the incorrect answer. Since there was no significant difference in III. 12 by group in Region V, a group effect and a region effect were found for this item.

A response to the test item which corresponded to the competency related to development patterns of children resulted in significant differences. The item dealt with a 3-year-old boy's behavior during play. The response "Johnny is at the parallel stage of play" (XII. 58) indicated differences. Fewer of the CCS/TA subjects and more of the DOO subjects answered uncertain than would be expected from chance. Since two of the cells in the Region V analysis contained fewer numbers than the statistical analysis required, no decision could be made concerning region effect for this response. There was, however, a significant difference between groups in Region VII.

The last item found to have significant differences corresponded to the competency dealing with health and safety practices needed for the care of children. The test item dealt with first aid for minor burns. The correct response contained the cells with the differences for question XVI. 72. In Region V, more of the CCS/TA subjects chose "no" as the correct answer to "Cover the burned area with butter" than would be expected by chance and fewer of the DOO subjects chose the correct answer than would be expected by chance. The previous analysis by group indicated difference in the uncertain cell. However, when analyzed by group by region, a significant difference existed in Region V related to the correct answer to the item.

In summary, there were differences by group in Region V in two cases and in Region VII in one case. In only one instance was there a significant difference by group by region. Content of the questions pertained to children's basic needs, children's developmental rate, management of learning activities, and first aid for burns.



Analyses by chi-square tests were attempted by group by region on the attitude statements. However, due to insufficient cell size in several of the cells none of the chi square tests were of value.

Since the majority of subjects were single, non-parents, and white, the following hypotheses were not analyzed:

H<sub>3</sub>: There is no difference in student knowledge and attitude related to child care practices of minorities and whites.

H<sub>4</sub>: There is no difference in student knowledge and attitude related to child care practices of parents and non-parents.

H<sub>5</sub>: There is no difference in student knowledge and attitude related to child care practices of married persons and single persons.

### Discussion

Two of the influences which may have contributed to few significant differences in this study were required courses which include the teaching of child development concepts and babysitting experience of the subjects. The problem of cell sizes being too small in several of the chi-square tests failed to allow those items to be tested. Deleting the uncertain category in responses to knowledge items could increase the cell sizes and allow additional items to be analyzed. Another possible influence on the results of the study was the instrument, which may have failed to discriminate adequately between groups.

Although this study did not indicate significant differences between groups who had studied CCS/TA and groups who had not studied the course, the researcher believes from personal classroom experiences

that the CCS/TA course does make a difference in students' knowledge of child care and attitudes toward day care. Rather than comparing two groups after completing occupational curriculums, a more appropriate design might be to study only CCS/TA students using a pretest, post-test design.

Both groups were found to have positive attitudes toward day care centers from the scores on the attitude statements. In addition, in response to the question relating to preference for type of child care, day care centers were chosen by the majority of both groups, a further indication of a positive attitude toward day care centers.

From the descriptive results of this study, areas which seemed to need strengthening in the Child Care Services/Teacher Aide curriculum include first aid, methods of working with exceptional children, selection of appropriate stories for use with children, nutritional snacks for children, and understanding of children's actions and play. Since there were few differences between the groups in this study, additional work may need to be done to identify appropriate content for the course.

With as many cases of child abuse as are being reported and with the problems related to teenage pregnancies, there still would seem to be a need for the study of child care and child development. However, some of the competencies may need to be changed and curriculum guides may need to be updated to be effective in training students.

## CHAPTER V

### SUMMARY AND RECOMMENDATIONS

The overall purpose of this study was to determine whether or not knowledge and attitudes related to child care practices of students who had studied Child Care Services/Teacher Aide differed from those of students who had never studied or completed the course. The knowledge and attitudes of both groups were assessed through the use of a questionnaire based on the competencies taught in the North Carolina Child Care Services/Teacher Aide course and principles day care directors felt were important.

#### Summary

An ex post facto study was conducted with 1982 completers of the Child Care Services/Teacher Aide course and the Directed Office Occupations course from Educational Regions V and VII who graduated in 1982 or 1983. The CCS/TA subjects were considered to be the experimental group and the DOO subjects were considered to be the control group. The students for the study had been enrolled in vocational education programs at the secondary level. The sample was composed of two groups of 100 students randomly selected from completers of the two courses with 50 students from each group being from Region V and 50 from Region VII.

Since an instrument could not be found that matched the competencies taught in the North Carolina Child Services/Teacher Aide class, an

instrument was developed which matched the competencies taught. The instrument consisted of three parts: knowledge, attitude, and demographic data. The knowledge section included 16 situations with multiple responses to each situation. There were 73 responses in this section. The attitude section consisted of eight statements related to day care centers. The demographic section contained 13 questions. The questionnaire was checked for content and competency test item match by a university professor, teachers, and day care directors. The instrument was pilot tested, revised, and then pretested by students newly enrolled in the two curriculums.

A mail survey was used because the home address was the only information available for the completers of the courses. A cover letter explaining the purpose of the research was sent with a questionnaire booklet and a stamped self-addressed envelope to each subject. After two weeks a letter and replacement questionnaire were sent to non-respondents. Four weeks later a final letter and questionnaire were sent by certified mail. The return rate for the questionnaire was 71.5%, but only 67.5% of the responses were usable due to inaccurate information from the list used or death of a subject.

The two hypotheses which were analyzed are listed in the following section with a summary of the results.

$H_1$ : There is no difference in student knowledge and attitudes related to child care practices between students successfully completing the North Carolina Child Care Services/Teacher Aide curriculum and those who have not studied the curriculum.

Chi square tests were used to analyze each of the 73 responses to the knowledge section of the questionnaire and the 8 responses to the attitude section of the questionnaire. Significant differences between groups were found for five items which related to identification of children's needs, identification of children's developmental rate, methods of handling suspected child abuse, information related to day care regulations and first aid treatments. The remainder of the responses indicated that the two groups had similar knowledge in those areas of child development. Therefore, insufficient support was found to be able to reject the null hypothesis.

A t-test analysis of the scores from the attitude section revealed that there were no significant differences between the two groups in attitude toward day care centers. Both groups had positive attitudes.

H<sub>2</sub>: There is no difference in student knowledge and attitude related to child care practices between students successfully completing the Child Care Services/Teacher Aide course in Educational Region V and Educational Region VII in North Carolina.

Chi square tests were used to analyze each of the responses to the knowledge and attitude items of the instrument comparing both group and region. Responses to three items revealed a difference between groups within one of the regions; responses to one of the items revealed a significant effect of both group and region. Content of the questions pertained to children's basic needs, children's developmental rate, management of learning activities, and first aid for burns. When the analysis was examined to see if an effect of both group and region were found, only the question response related to planning activities for

3-year-olds showed a region effect. The other significant results did not have a matching region chi square with all of the cells of the chi-square large enough. Due to insufficient cell size, it also was not possible to test for differences in attitudes by region. Therefore, these results do not permit rejection of the null hypothesis.

H<sub>3</sub>, H<sub>4</sub>, and H<sub>5</sub> were not analyzed due to the small number of respondents who were minorities, parents, and married. The groups were too unequal in size for a meaningful analysis.

#### Recommendations

The following recommendations are made for further study:

1. Replicate studies similar to this in other geographic areas because there are few studies relating to knowledge and attitudes of students who have completed high school occupational programs.
2. Obtain information on the validity and reliability of instruments to measure student knowledge and attitudes related to all occupational home economics programs.
3. Conduct needs assessment as a basis for revising curriculum guides to eliminate the teaching of similar content in required courses and occupational courses.
4. Conduct studies comparing the ability level of students enrolled in occupational home economics programs to those students enrolled in other occupational education programs.
5. Conduct studies using pre- and posttest scores to assess degree of student learning.

-6. Conduct studies which examine the relationship between personality as well as knowledge measures and performance of child care workers.

## BIBLIOGRAPHY

- Adler, M. J. (1982). The paideia proposal: An educational manifesto. New York: Macmillan.
- American Psychological Association. (1983). Publication manual of the American Psychological Association (3rd ed.). Washington, DC: Author.
- Atwood, J. C. (1973). Learning comes out in the open. American Vocational Journal, 48 (4), 55.
- Auerbach, S. (1977). Child care: Where do we go from here? Day Care and Early Education, 5 (1), 28-30.
- Auerbach-Fink, S. (1977). Mothers' expectations of child care. Young Children, 32 (4), 12-21.
- Authier, K. (1979). Defining the care in child care. Social Work: Journal of the National Association of Social Workers, 24, 500-504.
- Bailey, J. E., III, & Ellis, D. B. (1974). Development of an instrument to measure educational situational variables and preschool competencies desired by parents. (Report No. TM 004 679. Ft. Lauderdale, FL: Nova University. (ERIC Document Reproduction Service No. ED 109 219).
- Beckman, L. J. (1978). The relative rewards and costs of parenthood and employment for employed women. Psychology of Women Quarterly, 2, 215-234.
- Bernal, M. E., & North, J. W. (1972). Scoring system for home. Unpublished manuscript, University of Denver.
- Billips, L., & Ernst, R. J. (1977). Necessity for child care. Community and Junior College Journal, 47 (7), 44-46.
- Block, J. H. (1975). Child-rearing practices report (Test No. 007507). Princeton, NJ: Educational Testing Service.
- Bookman, R. (1976). Family day care: In a class by itself. Day Care and Early Education, 4 (1), 11-12; 42.
- Brown, M., & Plihal, J. (1966). Evaluative materials for use in teaching child development. Minneapolis, MN: Burgess.



- Bruce-Briggs, B. (1977). "Child care": The fiscal time bomb. The Public Interest, 49 (3), 87-102.
- Butler, S. E. (1971). A follow-up study of New York state child care services graduates 1966-1970. Unpublished master's thesis, Cornell University, Ithaca, NY.
- Cahn, A. F. (1979). Summary. In A. F. Cahn (Ed.), Women in the U. S. labor force (pp. 1-22). New York: Praeger Publishers.
- Cartwright, C. A., & Seaver, J. W. (1977). Making the most of the normal child's preschool years. Educational Horizons, 56, 21-25.
- Cobe, B. (1976). Day care with a difference. Forecast for home economics, 22 (1), 134-135; 202.
- Conger, F. S., & Rose, I. B. (1979). Child care aide skills. New York: McGraw-Hill.
- Cross, A. A. (1979). Charting the course for consumer-homemaking education. Voc Ed, 54 (4), 37-39.
- Crouter, A. E. (1982). The children of working parents. Children Today, 11 (4), 25-28.
- Cubbage, M. L. (1976). Jottings of an early childhood consultant. Health Education, 7 (3), 20-24.
- Dail, P. W. (1982). Who will mind the child? A dilemma for some employed parents. Journal of Home Economics, 74 (1), 22-23.
- Davis, A. J. (1979). Parent-child interaction and the socialization process: A critical analysis of the research. Contemporary Education, 50 (2), 86-91.
- Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley & Sons.
- Dittman, L. L. (1979). Bridging the gap between nursery school, kindergarten, and primary experiences: Continuity in early childhood experience. Viewpoints in Teaching and Learning, 55 (3), 2-9.
- Dougherty, S. A. (1978). Single adoptive mothers and their children. Social Work: Journal of the National Association of Social Workers, 23, 311-314.
- Endsley, R. C., & Bradbard, M. R. (1978). Helping parents select quality day care through the use of a guide. The Family Coordinator, 27, 167-172.

- Felstehausen, J. T. (1971). A follow-up study of Illinois home economics job training programs. Unpublished master's thesis, Eastern Illinois University, Charleston, IL.
- Ferguson, Y., & Blankenship, M. L. (1980). The class where fairytales are left behind. Voc Ed, 55 (4), 24-27; 45.
- Freudenberger, H. J. (1977). Burn-out: Occupational hazard of the child care worker. Child Care Quarterly, 6, 90-99.
- Gay, L. R. (1976). Educational research: Competencies for analysis and application. Columbus, OH: Charles E. Merrill.
- Goldsmith, M. J. (1979). The Rhode Island Connection: A family day care training program. Children Today, 8 (4), 2-5; 37.
- Goocher, B. E. (1976). Child care responsibilities in the 21st century. Child Care Quarterly, 5, 167-180.
- Green, K. (1983, October). Consider . . . The 'rising tide of mediocrity.' Momentum Plus, p. 1.
- Griffin, W. P. (1982). Definitions from "Standards for vocational home economics education." Voc Ed, 57 (6), 32c.
- Griggs, M. B., & McFadden, J. R. (1980). The effectiveness of consumer and homemaking education: A review and synthesis of extant data. Washington, DC: U. S. Department of Education (NIE).
- Gritzmacher, J. E., Shannon, T., & Watts, J. (1981). Effectiveness of parenting/child development vocational home economics program. Illinois Teacher, 24, 227-229.
- Grubb, W. N., & Lazerson, M. (1977). Child care, government financing, and the public schools: Lessons from the California children's centers. School Review, 86 (1), 5-30.
- Harris, O. C. (1977). Day care: Have we forgotten the school-age child? Child Welfare, 56, 440-448.
- Hildebrand, V. (1983). Developmental principles for preparing people to work effectively with young children. Illinois Teacher, 26, 183-185.
- Hines, R. P. (1983). Techniques for preparing people to work effectively with young children. Illinois Teacher, 26, 186-187.
- Hofferth, S. L. (1979). Day care in the next decade: 1980-1990. Journal of Marriage and the Family, 41, 649-658.

- Honig, A. S. (1979). Child care alternatives and options for parents. Viewpoints in Teaching and Learning, 55 (3), 10-18.
- Honig, A. S. (1981). What are the needs of infants? Young Children 37 (1), 3-10.
- Hopkins, C. O. (1982). The year 1990 and beyond. Voc Ed, 57 (8), 31-32.
- Hutchins, R. M., & Adler, M. J. (1952). The great conversation. Chicago: Encyclopedia Britannica, Inc.
- Jacobson, A. L. (1978). Infant day care: Toward a more human environment. Young Children, 33 (5), 14-21.
- Johnson, L., & Faunce, R. W. (1973). Teacher aides: A developing role. The Elementary School Journal, 74 (3), 136-144.
- Kallman, J. R., & Stollak, G. E. (1974). Maternal behavior toward children in need arousing situations. Princeton, NJ: Educational Testing Service.
- Kaplan, G. R. (1978). The vital link: Paraprofessionals and the education of handicapped children (Contract No. G007601963). New York: City University of New York. (ERIC Document Reproduction Service No. 165 373).
- Kunz, G. G. R., Lutzker, J. R., Cuvo, A. J., Eddleman, J., Lutzker, S. A., Megson, D., & Gulley, B. (1982). Evaluating strategies to improve careprovider performance on health and developmental tasks in an infant care facility. Journal of Applied Behavior Analysis, 15, 521-531.
- Lynch, R. L., & Harris, R. D. (1975). Want to start a co-op program in home economics? Here's how. American Vocational Journal, 50 (9), 32-33; 54.
- Martin, D (1972). Child care aide job analysis form and proposed course of study. Illinois Teacher, 15, 189-190.
- Maslach, C., & Pines, A. (1977). The burn-out system in the day care setting. Child Care Quarterly, 6, 100-113.
- McAbee, R. M., & Herrin, B. (1972). Child care training looms large as vocational subject in Fort Worth. American Vocational Journal, 47 (5), 34-35.
- Meszaros, P. S., Stratton, B. S., & Hall, M. (1983). Educational cooperation to benefit young children. Journal of Home Economics, 75 (1), 35-37.

- Morton, K. L. (1975). Child care occupations. Illinois Teacher, 18, 212-213.
- Nelson, H. Y. (1979). Home economics education: A review and synthesis of the research. Columbus, OH: Ohio State University. (ERIC Document Reproduction Service No. ED 179-768).
- Nelson, H. Y., & Jacoby, G. P. (1967). Evaluation of secondary school programs to prepare students for wage earning in occupations related to home economics. New York: Cornell University. (ERIC Document Reproduction Service No. ED 022 030).
- North Carolina State Occupational Information Coordinating Committee and the North Carolina Balance of State Private Industry Council. (1982-1983). Career choices in North Carolina. Raleigh, NC: Author.
- Norton, A. J., & Glick, P. C. (1976). Changes in American family life. Children Today, 5 (3), 2-4; 44.
- Peterman, P. J. (1977). Paraprofessional social workers in day care. Child Welfare, 56, 519-525.
- Prescott, E. (1978). Is day care as good as a good home? Young Children, 33 (2), 13-19.
- Puechler, B. (1976). Suggestions for teaching freshman-sophomore child development. The Family Coordinator, 25, 303-304.
- Reeder, E. N., & Mitchell, T. E. (1982). An interdisciplinary venture in early childhood education. Journal of Home Economics, 74 (3), 34-35.
- Rickel, A. W., Dudley, G., & Berman, S (1960). An evaluation of parent training. Evaluation Review: A Journal of Applied Social Research, 4, 389-401.
- Rodriguez, D., & Albert, M. (1981). Self-evaluation for family day caregivers. Child Welfare, 60, 263-367.
- Rubenstein, J. L., & Howes, C. (1979). Caregiving and infant behavior in day care and in homes. Developmental Psychology, 15 (1), 1-23.
- Schaefer, E. S., & Bell, R. Q. (1958). Development of a parental attitude research instrument. Child Development, 29, 339-361.
- Schmidt, R. L. (1974). The development and validation of follow-up instruments for secondary schools and vocational-technical institutes in the state of Washington. Doctoral thesis, Washington State University. (University Microfilms N. 75-16, 394).

- Schwartz, J. I. (1979). The care of infants and toddlers in group settings. Childhood Education, 56, 88-95.
- Seiderman, S. (1978). Combatting staff burn-out. Day Care and Early Education, 5 (4), 6-9.
- Smith, P. C. (1975). An identification of factors relating occupational Home Economics training with employment patterns and job relatedness: A follow-up study. Unpublished master's thesis, Purdue University.
- Spitze, H. T., & Eves, P. (1983). "Illinois Teacher" survey: What content is important for high school home economics? Illinois Teacher, 36, 157-158.
- Stevens, J. H., Jr. (1982). Research in review. The national day care home study: Family day care in the United States. Young Children 37 (4), 59-66.
- Stone, J. P. (1978). Problems of the single parent of the preschool child. Day Care and Early Education, 5 (3), 16-17.
- Strober, M. H. (1979). Economic aspects of child care. In A. E. Cahn (Ed.), Women in the U. S. labor force (pp. 179-202). New York: Praeger.
- Thiel, C. T. (1982). Day care for Mikey. Illinois Teacher, 26, 49-59.
- Tramm, W. (1973). So you're going to start a child care course! Illinois Teacher, 16, 222-228.
- Turner, W. (1971). Why change? Illinois Teacher, 14, 188-192.
- Tyler, B., & Dittman, L. (1980). Meeting the toddler more than halfway: The behavior of toddlers and their caregivers. Young Children, 35 (2), 39-46.
- VanCamp, S. S., & Grimes, A. (1977). Drop-in child care. Journal of Home Economics, 69 (1), 11-13.
- Wattenberg, E. (1977). Characteristics of family day care providers: Implications for training. Child Welfare, 56, 211-225.
- White, B. L. (1981). Viewpoint: Should you stay home with your baby? Young Children, 37 (1), 11-17.
- Whitebook, M., Howes, C., Darrah, R., & Friedman, J. (1981). Who's minding the child care workers? A look at staff burn-out. Children Today, 10 (1), 2-6.

Zigler, E., & Kagan, S. L. (1981). Viewpoint: The Child Development Associate: A challenge for the 1980's. Young Children, 36 (5), 10-15.

APPENDIX A

North Carolina CCS/TA Competencies  
With Items Designed for Assessment

Table A-1

North Carolina CCS/TA Competencies With Items Designed for Assessment

Competency	Questionnaire Item
001. Assess basic needs of children.	<p data-bbox="774 536 1386 998">I. Suppose you have a neighbor whose husband works a long distance from home. Your neighbor works at home and cares for their 10 month old son. The husband is gone all day and usually arrives home after 7:00 P.M. When the husband gets home, the wife has already fed their son and put him to bed. Recently the son has been crying while the parents are eating dinner and watching television. When the mother checks on the son, he is usually dry and comfortable. Why might the child cry?</p> <ol data-bbox="837 1029 1354 1178" style="list-style-type: none"> <li>1. He feels left out</li> <li>2. He is afraid of the dark</li> <li>3. The mother was cross with him during the day</li> <li>4. He is cutting teeth</li> </ol>
009. Identify characteristics of guidelines for working with exceptional children.	<p data-bbox="758 1217 1401 1338">II. Jeff is working as a child care aide in a class with a child that has speech and hearing problems. How should Jeff treat this child?</p> <ol data-bbox="837 1370 1354 1551" style="list-style-type: none"> <li>1. Speak to the child only when necessary</li> <li>2. Give the child help only when needed</li> <li>3. Ignore the child</li> <li>4. Face the child when talking</li> </ol>



Table A-1 (continued)

Competency	Questionnaire Item
006. Demonstrate skills in management of learning experiences for infants and children.	<p>III. Mary Ann was an aide in a child care center. She wanted all of the children that she worked with to develop to their fullest potential. In order to assure this, she spent 1 hour each morning with her 3-year-old group in pre-reading activities. After 1 week of this practice, she noticed that she was constantly having discipline problems during this time. Why was Mary Ann having discipline problems during the pre-reading activities?</p> <p>9. The stories were uninteresting</p> <p>10. 3 year olds have short attention spans</p> <p>11. 3 year olds don't like to have stories read to them</p> <p>12. The children were tired</p>
007. Select, prepare, use, and care for audio visual aids, equipment, supplies and other instructional materials.	<p>IV. Part of the job of a child caregiver is to select items to use when working with children. Which of the following stories would be the most appropriate for use with an average 3-year-old group of children?</p> <p>13. Cinderella</p> <p>14. Jack and the Beanstalk</p> <p>15. Lady and the Tramp</p> <p>16. Winnie the Poo - The Blustery Day</p> <p>a. Why would you not select the story or stories that you felt were inappropriate for 3 year olds?</p> <p>17. Too unrealistic</p> <p>18. Rewards theft</p> <p>19. Too complicated</p> <p>20. Too much animation</p>

Table A-1 (continued)

Competency	Questionnaire Item
010. Form conclusions concerning avenues of interaction among families and community organizations and agencies.	<p>V. Jeannine is a teacher at a day care center. Recently, she noticed that one of the children in her class comes to the center every Monday with bruises, cuts and burns. Jeannine discussed her observation with the day care director. They both suspect child abuse may be occurring. What should they do?</p> <p>21. Call the Police Department  22. Confront the parents  23. Call Social Services  24. Call the Health Department</p>
011. Demonstrate human relation skills.	<p>VI. Suppose you were a child care worker in a day care center. One morning a very angry parent brings a crying two year old in your room. How would you deal with the child?</p> <p>25. Ignore the child  26. Provide an activity for the child  27. Put the child in a corner  28. Take the child to his/her friend</p> <p>a. How would you deal with the parent?</p> <p>29. Talk to the parent  30. Lecture the parent  31. Ignore the parent  32. Get the teacher/director</p>

Table A-1 (continued)

Competency	Questionnaire Item
016. Identify employee regulations, roles and responsibilities.	<p>VII. Jill is employed at a Nursery Center where several of her co-workers are out with the flu. Jill has a friend visiting her from out of state for one day. Since beginning work this year, Jill has not taken any sick leave. What should Jill do in this situation?</p> <p>33. Call in sick  34. Take her friend to work  35. Go to work and visit her friend after work  36. Take a vacation day</p>
003. Analyze behavior and guidance principles for children.	<p>VIII. Adults react to the behavior of children in many ways. At a day care center where she attends, Jane gets in a fight and receives a black eye. The teacher scolded her for fighting. However, the child care aide praised her for defending herself. Is this appropriate behavior for the aide?</p> <p>37. No  38. Yes  a. Why do you feel that way?</p> <p>39. Shows individuality  40. Encourages independence  41. Encourages positive behavior  42. Would confuse the child</p>

Table A-1 (continued)

Competency	Questionnaire Item
023. Analyze licensing requirements and standards for child care facilities.	IX. Tommy and Janice have recently married and bought a home with a large back yard and a full size basement. If Janice were to open a day care center in her home, where would she learn of the regulations which she would have to follow?  43. Social Services Department 44. Police Department 45. Health Department 46. Office of Day Care Licenses
004. Plan and prepare a variety of nutritious food for infants and children.	X. Since food is very important in the proper development of a child, please indicate whether the following snacks would be appropriate for an 18 month old child.  47. Milk and peanut butter cookies 48. Kool-aid and crackers 49. Peach milk shake 50. Tea and potato chips
005. Describe the role of play in the development of children.	XI. Of the following play things for children, which would be effective in stimulating a child's creative self-expression?  51. Paints, clay, tools 52. Wind-up or mechanical toys 53. Blocks and manipulative toys 54. Coloring books and crayons

Table A-1 (continued)

Competency	Questionnaire Item
002. Distinguish growth and development patterns of children.	<p>XII. When 3 year old Johnny was building a block tower, another child approached to join the project. Johnny said, "No, no, you can't" and pushed him away. Why did Johnny behave as he did?</p> <p>55. Johnny is an only child  56. Johnny is a selfish child  57. Johnny is socially immature  58. Johnny is at the parallel stage of play</p>
014. Describe ethical practices for employees.	<p>XIII. A child care worker notices that Jane seemed to be slower than the other children in her group in both physical and mental development. Of the following actions, which would be appropriate for a child care worker?</p> <p>59. Discuss his/her observations with the teacher of Jane's group  60. Discuss his/her observations immediately with Jane's parents  61. Discuss his/her observations with Jane's neighbor  62. Call Social Services and ask them to investigate the home</p>

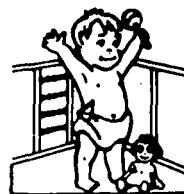
Table A-1 (continued)

Competency	Questionnaire Item
020. Demonstrate skills in the management of teacher aide/child care responsibilities.	<p>XIV. A child caregiver has been assigned to care for the children in an open play yard. Which of the following would you consider to be the first responsibility of the caregiver?</p> <p>63. Direct and organize games for the children to play</p> <p>64. Examine the playground and remove any hazardous objects</p> <p>65. Help the children solve any minor conflicts which arise</p> <p>66. Observe the children's behavior and report back to the director of the center</p>
021. Demonstrate safety principles and practices appropriate for child care facilities.	<p>XV. In homes and day care centers, there are many hazards to safety. Which of the following would be important to guarantee safety in a day care center?</p> <p>67. Place protective covers over electrical outlets</p> <p>68. Place shag carpet on the floor</p> <p>69. Keep equipment cords out of the children's way</p> <p>70. Paint orange squares around dangerous areas or objects in the center</p>
022. Integrate health and safety practices for care of children.	<p>XVI. Which of the following treatments should be used for minor burns?</p> <p>71. Hold the burned area under lukewarm running water</p> <p>72. Cover the burned area with butter</p> <p>73. Immediately place the burned area in cold water</p> <p>74. Cover the burned area with a band-aid</p>

APPENDIX B  
Questionnaire for Child Care  
Services/Teacher Aide Completers

**TOO BAD CHILDREN DON'T COME WITH DIRECTIONS!**

This survey is being done to better understand the attitudes and knowledge related to child care when parents have to work. The opinions of recent high school graduates who have studied vocational courses is important to us when updating a curriculum for high school courses. If you wish to comment on any question or qualify your answers, please feel free to use the space in the margins. Your comments will be read and taken into account.



Thank you for your help!

Barbara R. Todd, Graduate Student  
School of Home Economics  
Department of Home Economics Education, Consumer Science and Management  
University of North Carolina at Greensboro  
Greensboro, North Carolina 27412



Participant # \_\_\_\_\_

Q.1. Did you complete the vocational course Child Care Services/Teacher Aide in the spring of 1982? (Circle one)

1. No  
2. Yes

→ (If no) Inasmuch as the purpose of this study is to obtain follow-up information from students completing the Child Care Services/Teacher Aide course, it is not necessary for you to complete the remainder of the questions. However, any comments you might like to make concerning child care and child care services would be appreciated. Above all, please return the questionnaire so I will know that you did not complete the course in the year used in the study.

Q.2. Did you graduate from high school in the spring of 1982?

1. No  
2. Yes

Q.3. If you had a chance to take the Child Care Services/Teacher Aide course again, would you take it?

1. No . . . Why not? \_\_\_\_\_  
2. Yes . . . Why? \_\_\_\_\_

Q.4. Much has been written in recent years about the need for child care and child care practices. Please give your opinion concerning the following questions by answering Yes, No, or Uncertain to each response in this first group of questions.  
(Circle your answer)

I. Suppose you have a neighbor whose husband works a long distance from home. Your neighbor works at home and cares for their 10 month old son. The husband is gone all day and usually arrives home after 7:00 P.M. When the husband gets home, the wife has already fed their son and put him to bed. Recently the son has been crying while the parents are eating dinner and watching television. When the mother checks on the son, he is usually dry and comfortable. Why might the child cry?

- |   |     |    |           |
|---|-----|----|-----------|
| 1. He feels left out                            | Yes | No | Uncertain |
| 2. He is afraid of the dark                     | Yes | No | Uncertain |
| 3. The mother was cross with him during the day | Yes | No | Uncertain |
| 4. He is cutting teeth                          | Yes | No | Uncertain |

II. Jeff is working as a child care aide in a class with a child that has speech and hearing problems. How should Jeff treat this child?

- |   |     |    |           |
|---|-----|----|-----------|
| 5. Speak to the child only when necessary | Yes | No | Uncertain |
| 6. Give the child help only when needed   | Yes | No | Uncertain |
| 7. Ignore the child                       | Yes | No | Uncertain |
| 8. Face the child when talking            | Yes | No | Uncertain |

III. Mary Ann was an aide in a child care center. She wanted all of the children that she worked with to develop to their fullest potential. In order to assure this, she spent 1 hour each morning with her 3-year-old group in pre-reading activities. After 1 week of this practice, she noticed that she was constantly having discipline problems during this time. Why was Mary Ann having discipline problems during the pre-reading activities?

- |   |     |    |           |
|---|-----|----|-----------|
| 9. The stories were uninteresting                       | Yes | No | Uncertain |
| 10. 3 year olds have short attention spans              | Yes | No | Uncertain |
| 11. 3 year olds don't like to have stories read to them | Yes | No | Uncertain |
| 12. The children were tired                             | Yes | No | Uncertain |

IV. Part of the job of a child caregiver is to select items to use when working with children. Which of the following stories would be the most appropriate for use with an average 3-year-old group of children?

- |                                       |     |    |           |
|---------------------------------------|-----|----|-----------|
| 13. Cinderella                        | Yes | No | Uncertain |
| 14. Jack and the Beanstalk            | Yes | No | Uncertain |
| 15. Lady and the Tramp                | Yes | No | Uncertain |
| 16. Winnie the Poo - The Blustery Day | Yes | No | Uncertain |

a. Why would you not select the story or stories that you felt were inappropriate for 3 year olds?

- |                        |     |    |           |
|------------------------|-----|----|-----------|
| 17. Too unrealistic    | Yes | No | Uncertain |
| 18. Rewards theft      | Yes | No | Uncertain |
| 19. Too complicated    | Yes | No | Uncertain |
| 20. Too much animation | Yes | No | Uncertain |

V. Jeannine is a teacher at a day care center. Recently, she noticed that one of the children in her class comes to the center every Monday with bruises, cuts and burns. Jeannine discussed her observation with the day care director. They both suspect child abuse may be occurring. What should they do?

- |                                |     |    |           |
|--------------------------------|-----|----|-----------|
| 21. Call the Police Department | Yes | No | Uncertain |
| 22. Confront the parents       | Yes | No | Uncertain |
| 23. Call Social Services       | Yes | No | Uncertain |
| 24. Call the Health Department | Yes | No | Uncertain |

VI. Suppose you were a child care worker in a day care center. One morning a very angry parent brings a crying two year old in your room. How would you deal with the child?

- |                                       |     |    |           |
|---------------------------------------|-----|----|-----------|
| 25. Ignore the child                  | Yes | No | Uncertain |
| 26. Provide an activity for the child | Yes | No | Uncertain |
| 27. Put the child in a corner         | Yes | No | Uncertain |
| 28. Take the child to his/her friend  | Yes | No | Uncertain |

a. How would you deal with the parent?

- |                              |     |    |           |
|------------------------------|-----|----|-----------|
| 29. Talk to the parent       | Yes | No | Uncertain |
| 30. Lecture the parent       | Yes | No | Uncertain |
| 31. Ignore the parent        | Yes | No | Uncertain |
| 32. Get the teacher/director | Yes | No | Uncertain |

VII. Jill is employed at a Nursery Center where several of her co-workers are out with the flu. Jill has a friend visiting her from out of state for one day. Since beginning work this year, Jill has not taken any sick leave. What should Jill do in this situation?

- |  |     |    |           |
|--|-----|----|-----------|
| 33. Call in sick                               | Yes | No | Uncertain |
| 34. Take her friend to work                    | Yes | No | Uncertain |
| 35. Go to work and visit her friend after work | Yes | No | Uncertain |
| 36. Take a vacation day                        | Yes | No | Uncertain |

VIII. Adults react to the behavior of children in many ways. At a day care center where she attends, Jane gets in a fight and receives a black eye. The teacher scolded her for fighting. However, the child care aide praised her for defending herself. Is this appropriate behavior for the aide?

37. No  
38. Yes

a. Why do you feel that way?

- |                                  |     |    |           |
|----------------------------------|-----|----|-----------|
| 39. Shows individuality          | Yes | No | Uncertain |
| 40. Encourages independence      | Yes | No | Uncertain |
| 41. Encourages positive behavior | Yes | No | Uncertain |
| 42. Would confuse the child      | Yes | No | Uncertain |

IX. Tommy and Janice have recently married and bought a home with a large back yard and a full size basement. If Janice were to open a day care center in her home, where would she learn of the regulations which she would have to follow?

- |                                 |     |    |           |
|---------------------------------|-----|----|-----------|
| 43. Social Services Department  | Yes | No | Uncertain |
| 44. Police Department           | Yes | No | Uncertain |
| 45. Health Department           | Yes | No | Uncertain |
| 46. Office of Day Care Licenses | Yes | No | Uncertain |

- X. Since food is very important in the proper development of a child, please indicate whether the following snacks would be appropriate for an 18 month old child.

47. Milk and peanut butter cookies	Yes	No	Uncertain
48. Kool-aid and crackers	Yes	No	Uncertain
49. Peach milk shake	Yes	No	Uncertain
50. Tea and potato chips	Yes	No	Uncertain

- XI. Of the following play things for children, which would be effective in stimulating a child's creative self-expression?

51. Paints, clay, tools	Yes	No	Uncertain
52. Wind-up or mechanical toys	Yes	No	Uncertain
53. Blocks and manipulative toys	Yes	No	Uncertain
54. Coloring books and crayons	Yes	No	Uncertain

- XII. When 3 year old Johnny was building a block tower, another child approached to join the project. Johnny said, "No, no, you can't" and pushed him away. Why did Johnny behave as he did?

55. Johnny is an only child	Yes	No	Uncertain
56. Johnny is a selfish child	Yes	No	Uncertain
57. Johnny is socially immature	Yes	No	Uncertain
58. Johnny is at the parallel stage of play	Yes	No	Uncertain

- XIII. A child care worker notices that Jane seemed to be slower than the other children in her group in both physical and mental development. Of the following actions, which would be appropriate for a child care worker?

59. Discuss his/her observation with the teacher of Jane's group	Yes	No	Uncertain
60. Discuss his/her observations immediately with Jane's parents	Yes	No	Uncertain
61. Discuss his/her observations with Jane's neighbor	Yes	No	Uncertain
62. Call Social Services and ask them to investigate the home	Yes	No	Uncertain

XIV. A child caregiver has been assigned to care for the children in an open play yard. Which of the following would you consider to be the first responsibility of the caregiver?

- |   |     |    |           |
|---|-----|----|-----------|
| 63. Direct and organize games for the children to play                            | Yes | No | Uncertain |
| 64. Examine the playground and remove any hazardous objects                       | Yes | No | Uncertain |
| 65. Help the children solve any minor conflicts which arise                       | Yes | No | Uncertain |
| 66. Observe the children's behavior and report back to the director of the center | Yes | No | Uncertain |

XV. In homes and day care centers, there are many hazards to safety. Which of the following would be important to guarantee safety in a day care center?

- |  |     |    |           |
|--|-----|----|-----------|
| 67. Place protective covers over electrical outlets                      | Yes | No | Uncertain |
| 68. Place shag carpet on the floor                                       | Yes | No | Uncertain |
| 69. Keep equipment cords out of the children's way                       | Yes | No | Uncertain |
| 70. Paint orange squares around dangerous areas or objects in the center | Yes | No | Uncertain |

XVI. Which of the following treatments should be used for minor burns?

- |   |     |    |           |
|---|-----|----|-----------|
| 71. Hold the burned area under lukewarm running water | Yes | No | Uncertain |
| 72. Cover the burned area with butter                 | Yes | No | Uncertain |
| 73. Immediately place the burned area in cold water   | Yes | No | Uncertain |
| 74. Cover the burned area with a band-aid             | Yes | No | Uncertain |

Q.5. This study is also concerned with how people feel about the care of children. Please read each of the following statements and indicate how you feel about the statement.

SA means Strongly Agree  
 A means Agree  
 U means Uncertain  
 D means Disagree  
 SD means Strongly Disagree

Your Feelings (Circle Your Answer)				
1	2	3	4	5

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| I. If both parents work, preschool children should be cared for in the home by a babysitter.                          | SA | A | U | D | SD |
| II. If parents work, preschool children should stay with an individual trained in child care.                         | SA | A | U | D | SD |
| III. Day care centers are excellent for the care of preschool children.   | SA | A | U | D | SD |
| IV. If the parents work, preschool children should be cared for in a babysitter's home.                               | SA | A | U | D | SD |
| V. Most personnel in day care centers use appropriate methods of discipline when caring for children.                 | SA | A | U | D | SD |
| VI. Any individual who loves children would be a good child care aide regardless of educational ability and training. | SA | A | U | D | SD |
| VII. Children are usually unhappy in a day care center.   | SA | A | U | D | SD |
| VIII. Day care centers provide experience that help to stimulate a child's intellectual development.                  | SA | A | U | D | SD |

Finally, I would like to ask a few questions about yourself for statistical purposes.

Q.6. What were the sources of information that you used in answering these questions? (Circle number of your answer)

1. Friends
2. Classes
3. Experience

Q.7. Your present marital status. (Circle number)

1. Single, never married
2. Married
3. Divorced
4. Separated
5. Widowed

Q.8. Your sex. (Circle number)

1. Male
2. Female

Q.9. Do you have any children? (Circle number)

1. No
2. Yes . . . How many? \_\_\_\_\_  
. . . What are the ages? \_\_\_\_\_

Q.10. Your present age: \_\_\_\_\_ years

Q.11. Have you taken any course which pertained to children, either in school or through community groups other than Child Care Services/Teacher Aide? (Circle number)

1. No
2. Yes . . . What was the course? \_\_\_\_\_  
Who sponsored the course? \_\_\_\_\_  
When did you take it? \_\_\_\_\_

Q.12. Within the past two years, have you taken care of any children or done any babysitting? (Circle number)

1. No
2. Yes . . . Amount of time spent babysitting, etc. (Circle number)
  1. Limited (Less than once a month)
  2. Some (2-3 times a month)
  3. Extensive (Once a week or more). . . Ages of the children with whom you worked  
\_\_\_\_\_

Q.13. Are you presently? (Circle number)

1. Full-time homemaker
2. Seeking employment
3. Employed (Part-time) Type of employment \_\_\_\_\_
4. Employed (Full-time) Type of employment \_\_\_\_\_
5. Student

Q.14. Are you enrolled in a college or community college? (Circle number)

1. No
2. Yes . . . Where attending? \_\_\_\_\_
  - . . . Are you presently taking or have you taken courses in child development? (Circle number)
    1. No
    2. Yes
  - . . . Are you planning to study child development during your college years? (Circle number)
    1. No
    2. Yes

Q.15. Which of the following best describes your racial or ethnic identification? (Circle number)

1. Black (Negro)
2. Chicano (Mexican-American)
3. Native American (Indian)
4. White (Caucasian)
5. Oriental
6. Other . . . Specify \_\_\_\_\_

Q.16. If you had to find care for a child of your own, what type of child care would you try to find? (Circle response)

- |                          |     |    |           |
|--------------------------|-----|----|-----------|
| 1. Babysitter/relative   | Yes | No | Uncertain |
| 2. Babysitter/neighbor   | Yes | No | Uncertain |
| 3. Day care center       | Yes | No | Uncertain |
| 4. Nursery center        | Yes | No | Uncertain |
| 5. Other (Specify) _____ |     |    |           |

Q.17. Did your high school Health course cover any topics related to child growth and development? (Circle number)

1. No
2. Yes

Q.18. Did your high school Biology course cover any topics related to child growth and development? (Circle number)

1. No
2. Yes



Is there anything else that you would like to say about the need for child care or child care services? If so, please use this space for that purpose.

Also, any comments you wish to make that you think would help in designing classes in child care which would benefit the public will be appreciated, either here or in a separate letter.

---

Your contribution to this effort is very greatly appreciated. If you would like a summary of results, please print your name and address on the back of the return envelope (NOT on this questionnaire). We will see that you get it.

APPENDIX C

Questionnaire for Directed Office

Occupations Completers

## TOO BAD CHILDREN DON'T COME WITH DIRECTIONS!

This survey is being done to better understand the attitudes and knowledge related to child care when parents have to work. The opinions of recent high school graduates who have studied vocational courses is important to us when updating a curriculum for high school courses. Please answer all of the questions. If you wish to comment on any question or qualify your answers, please feel free to use the space in the margins. Your comments will be read and taken into account.



Thank you for your help!

Barbara R. Todd, Graduate Student  
School of Home Economics  
Department of Home Economics Education, Consumer Science and Management  
University of North Carolina at Greensboro  
Greensboro, North Carolina 27412

Participant # \_\_\_\_\_

Q.1. Did you complete the vocational course Directed Office Occupations in the spring of 1982? (Circle one)

1. No  
2. Yes

→ (If no) Inasmuch as the purpose of this study is to find out how persons completing the Business and Office Occupations course feel about the need for child care and child care services, it is not necessary for you to complete the remainder of the questions. However, any comments you might like to make concerning child care and child care services would be appreciated. Above all, please return the questionnaire so I will know that you did not complete the course in the year used in the study.

Q.2. Did you graduate from high school in the spring of 1982?

1. No  
2. Yes

Q.3. Much has been written in recent years about the need for child care and child care practices. Since child care is a need many business women and men have, it is very important that your views concerning child care be known so that schools can train personnel to provide the services you feel are important. For this reason, please give your opinion to the following questions by answering Yes, No or Uncertain to each response in this first group of questions. (Circle your answer)

I. Suppose you have a neighbor whose husband works a long distance from home. Your neighbor works at home and cares for their 10 month old son. The husband is gone all day and usually arrives home after 7:00 P.M. When the husband gets home, the wife has already fed their son and put him to bed. Recently the son has been crying while the parents are eating dinner and watching television. When the mother checks on the son, he is usually dry and comfortable. Why might the child cry?

- |   |     |    |           |
|---|-----|----|-----------|
| 1. He feels left out                            | Yes | No | Uncertain |
| 2. He is afraid of the dark                     | Yes | No | Uncertain |
| 3. The mother was cross with him during the day | Yes | No | Uncertain |
| 4. He is cutting teeth                          | Yes | No | Uncertain |

II. Jeff is working as a child care aide in a class with a child that has speech and hearing problems. How should Jeff treat this child?

- |   |     |    |           |
|---|-----|----|-----------|
| 5. Speak to the child only when necessary | Yes | No | Uncertain |
| 6. Give the child help only when needed   | Yes | No | Uncertain |
| 7. Ignore the child                       | Yes | No | Uncertain |
| 8. Face the child when talking            | Yes | No | Uncertain |

III. Mary Ann was an aide in a child care center. She wanted all of the children that she worked with to develop to their fullest potential. In order to assure this, she spent 1 hour each morning with her 3-year-old group in pre-reading activities. After 1 week of this practice, she noticed that she was constantly having discipline problems during this time. Why was Mary Ann having discipline problems during the pre-reading activities?

- |   |     |    |           |
|---|-----|----|-----------|
| 9. The stories were uninteresting                       | Yes | No | Uncertain |
| 10. 3 year olds have short attention spans              | Yes | No | Uncertain |
| 11. 3 year olds don't like to have stories read to them | Yes | No | Uncertain |
| 12. The children were tired                             | Yes | No | Uncertain |

IV. Part of the job of a child caregiver is to select items to use when working with children. Which of the following stories would be the most appropriate for use with an average 3-year-old group of children?

- |                                       |     |    |           |
|---------------------------------------|-----|----|-----------|
| 13. Cinderella                        | Yes | No | Uncertain |
| 14. Jack and the Beanstalk            | Yes | No | Uncertain |
| 15. Lady and the Tramp                | Yes | No | Uncertain |
| 16. Winnie the Poo - The Blustery Day | Yes | No | Uncertain |

a. Why would you not select the story or stories that you felt were inappropriate for 3 year olds?

- |                        |     |    |           |
|------------------------|-----|----|-----------|
| 17. Too unrealistic    | Yes | No | Uncertain |
| 18. Rewards theft      | Yes | No | Uncertain |
| 19. Too complicated    | Yes | No | Uncertain |
| 20. Too much animation | Yes | No | Uncertain |

V. Jeannine is a teacher at a day care center. Recently, she noticed that one of the children in her class comes to the center every Monday with bruises, cuts and burns. Jeannine discussed her observations with the day care director. They both suspect child abuse may be occurring. What should they do?

- |                                |     |    |           |
|--------------------------------|-----|----|-----------|
| 21. Call the Police Department | Yes | No | Uncertain |
| 22. Confront the parents       | Yes | No | Uncertain |
| 23. Call Social Services       | Yes | No | Uncertain |
| 24. Call the Health Department | Yes | No | Uncertain |

VI. Suppose you were a child care worker in a day care center. One morning a very angry parent brings a crying two year old in your room. How would you deal with the child?

- |                                       |     |    |           |
|---------------------------------------|-----|----|-----------|
| 25. Ignore the child                  | Yes | No | Uncertain |
| 26. Provide an activity for the child | Yes | No | Uncertain |
| 27. Put the child in a corner         | Yes | No | Uncertain |
| 28. Take the child to his/her friend  | Yes | No | Uncertain |

a. How would you deal with the parent?

- |                              |     |    |           |
|------------------------------|-----|----|-----------|
| 29. Talk to the parent       | Yes | No | Uncertain |
| 30. Lecture the parent       | Yes | No | Uncertain |
| 31. Ignore the parent        | Yes | No | Uncertain |
| 32. Get the teacher/director | Yes | No | Uncertain |

VII. Jill is employed at a Nursery Center where several of her co-workers are out with the flu. Jill has a friend visiting her from out of state for one day. Since beginning work this year, Jill has not taken any sick leave. What should Jill do in this situation?

- |  |     |    |           |
|--|-----|----|-----------|
| 33. Call in sick                               | Yes | No | Uncertain |
| 34. Take her friend to work                    | Yes | No | Uncertain |
| 35. Go to work and visit her friend after work | Yes | No | Uncertain |
| 36. Take a vacation day                        | Yes | No | Uncertain |

VIII. Adults react to the behavior of children in many ways. At a day care center where she attends, Jane gets in a fight and receives a black eye. The teacher scolded her for fighting. However, the child care aide praised her for defending herself. Is this appropriate behavior for the aide?

37. No  
38. Yes

a. Why do you feel that way?

- |                                  |     |    |           |
|----------------------------------|-----|----|-----------|
| 39. Shows individuality          | Yes | No | Uncertain |
| 40. Encourages independence      | Yes | No | Uncertain |
| 41. Encourages positive behavior | Yes | No | Uncertain |
| 42. Would confuse the child      | Yes | No | Uncertain |

IX. Tommy and Janice have recently married and bought a home with a large back yard and a full size basement. If Janice were to open a day care center in her home, where would she learn of the regulations which she would have to follow?

- |                                 |     |    |           |
|---------------------------------|-----|----|-----------|
| 43. Social Services Department  | Yes | No | Uncertain |
| 44. Police Department           | Yes | No | Uncertain |
| 45. Health Department           | Yes | No | Uncertain |
| 46. Office of Day Care Licenses | Yes | No | Uncertain |

- X. Since food is very important in the proper development of a child, please indicate whether the following snacks would be appropriate for an 18 month old child.

47. Milk and peanut butter cookies	Yes	No	Uncertain
48. Kool-aid and crackers	Yes	No	Uncertain
49. Peach milk shake	Yes	No	Uncertain
50. Tea and potato chips	Yes	No	Uncertain

- XI. Of the following play things for children, which would be effective in stimulating a child's creative self-expression?

51. Paints, clay, tools	Yes	No	Uncertain
52. Wind-up or mechanical toys	Yes	No	Uncertain
53. Blocks and manipulative toys	Yes	No	Uncertain
54. Coloring books and crayons	Yes	No	Uncertain

- XII. When 3 year old Johnny was building a block tower, another child approached to join the project. Johnny said, "No, no, you can't" and pushed him away. Why did Johnny behave as he did?

55. Johnny is an only child	Yes	No	Uncertain
56. Johnny is a selfish child	Yes	No	Uncertain
57. Johnny is socially immature	Yes	No	Uncertain
58. Johnny is at the parallel stage of play	Yes	No	Uncertain

- XIII. A child care worker notices that Jane seemed to be slower than the other children in her group in both physical and mental development. Of the following actions, which would be appropriate for a child care worker?

59. Discuss his/her observations with the teacher of Jane's group	Yes	No	Uncertain
60. Discuss his/her observations immediately with Jane's parents	Yes	No	Uncertain
61. Discuss his/her observations with Jane's neighbor	Yes	No	Uncertain
62. Call Social Services and ask them to investigate the home	Yes	No	Uncertain

XIV. A child caregiver has been assigned to care for the children in an open play yard. Which of the following would you consider to be the first responsibility of the caregiver?

- |   |     |    |           |
|---|-----|----|-----------|
| 63. Direct and organize games for the children to play                            | Yes | No | Uncertain |
| 64. Examine the playground and remove any hazardous objects                       | Yes | No | Uncertain |
| 65. Help the children solve any minor conflicts which arise                       | Yes | No | Uncertain |
| 66. Observe the children's behavior and report back to the director of the center | Yes | No | Uncertain |

XV. In homes and day care centers, there are many hazards to safety. Which of the following would be important to guarantee safety in a day care center?

- |  |     |    |           |
|--|-----|----|-----------|
| 67. Place protective covers over electrical outlets                      | Yes | No | Uncertain |
| 68. Place shag carpet on the floor                                       | Yes | No | Uncertain |
| 69. Keep equipment cords out of the children's way                       | Yes | No | Uncertain |
| 70. Paint orange squares around dangerous areas or objects in the center | Yes | No | Uncertain |

XVI. Which of the following treatments should be used for minor burns?

- |   |     |    |           |
|---|-----|----|-----------|
| 71. Hold the burned area under lukewarm running water | Yes | No | Uncertain |
| 72. Cover the burned area with butter                 | Yes | No | Uncertain |
| 73. Immediately place the burned area in cold water   | Yes | No | Uncertain |
| 74. Cover the burned area with a band-aid             | Yes | No | Uncertain |



Q.4. This study is also concerned with how people feel about the care of children. Please read each of the following statements and indicate how you feel about the statement.

SA means Strongly Agree  
 A means Agree  
 U means Uncertain  
 D means Disagree  
 SD means Strongly Disagree

Your Feelings (Circle Your Answer)				
1	2	3	4	5

- |   |    |   |   |   |    |
|---|----|---|---|---|----|
| I. If both parents work, preschool children should be cared for in the home by a babysitter.                          | SA | A | U | D | SD |
| II. If parents work, preschool children should stay with an individual trained in child care.                         | SA | A | U | D | SD |
| III. Day care centers are excellent for the care of preschool children.   | SA | A | U | D | SD |
| IV. If the parents work, preschool children should be cared for in a babysitter's home.                               | SA | A | U | D | SD |
| V. Most personnel in day care centers use appropriate methods of discipline when caring for children.                 | SA | A | U | D | SD |
| VI. Any individual who loves children would be a good child care aide regardless of educational ability and training. | SA | A | U | D | SD |
| VII. Children are usually unhappy in a day care center.   | SA | A | U | D | SD |
| VIII. Day care centers provide experiences that help to stimulate a child's intellectual development.                 | SA | A | U | D | SD |

Finally, I would like to ask a few questions about yourself for statistical purposes.

Q.5. What were the sources of information that you used in answering these questions? (Circle number of your answer)

1. Friends
2. Classes
3. Experience

Q.6. Your present marital status. (Circle number)

1. Single, never married
2. Married
3. Divorced
4. Separated
5. Widowed

Q.7. Your sex. (Circle number)

1. Male
2. Female

Q.8. Do you have any children? (Circle number)

1. No
2. Yes . . . How many? \_\_\_\_\_  
    . . . What are the ages? \_\_\_\_\_

Q.9. Your present age: \_\_\_\_\_ years

Q.10. Have you taken any course which pertained to children, either in school or through community groups? (Circle number)

1. No
2. Yes . . . What was the course? \_\_\_\_\_  
    . . . Who sponsored the course? \_\_\_\_\_  
    . . . When did you take it? \_\_\_\_\_

Q.11. Within the past two years, have you taken care of any children or done any baby sitting? (Circle number)

1. No
2. Yes . . . Amount of time spent babysitting, etc. (Circle number)
  1. Limited (Less than once a month)
  2. Some (2-3 times a month)
  3. Extensive (Once a week or more)  
    . . . Ages of the children with whom you worked  
    \_\_\_\_\_

Q.12. Are you presently: (Circle number)

1. Full-time homemaker
2. Seeking employment
3. Employed part-time. Type of employment \_\_\_\_\_
4. Employed full-time. Type of employment \_\_\_\_\_
5. Student

Q.13. Are you enrolled in a college or community college? (Circle number)

1. No
2. Yes . . . Where attending? \_\_\_\_\_
  - . . . Are you presently taking or have you taken courses in child development? (Circle number)
    1. No
    2. Yes
  - . . . Are you planning to study child development during your college years? (Circle number)
    1. No
    2. Yes

Q.14. Which of the following best describes your racial or ethnic identification? (Circle number)

1. Black (Negro)
2. Chicano (Mexican-American)
3. Native American (Indian)
4. White (Caucasian)
5. Oriental
6. Other . . . Specify \_\_\_\_\_

Q.15. If you had to find care for a child of your own, what type of child care would you try to find? (Circle response)

- |                          |     |    |           |
|--------------------------|-----|----|-----------|
| 1. Babysitter/relative   | Yes | No | Uncertain |
| 2. Babysitter/neighbor   | Yes | No | Uncertain |
| 3. Day care center       | Yes | No | Uncertain |
| 4. Nursery center        | Yes | No | Uncertain |
| 5. Other (Specify) _____ |     |    |           |

Q.16. Did your high school Health course cover any topics related to child growth and development? (Circle number)

1. No
2. Yes

Q.17. Did your high school Biology course cover any topics related to child growth and development? (Circle number)

1. No
2. Yes

Is there anything else that you would like to say about the need for child care or child care services? If so, please use this space for that purpose.

Also, any comments you wish to make that you think would help in designing classes in child care which would benefit the public will be appreciated, either here or in a separate letter.

---

Your contribution to this effort is very greatly appreciated. If you would like a summary of results, please print your name and address on the back of the return envelope (NOT on this questionnaire). We will see that you get it.

APPENDIX D

Letters Mailed With Questionnaire



# THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

*School of Home Economics  
Department of Home Economics Education,  
Consumer Science, Management  
(919) 379-5896*

January 3, 1984

Dear

Have you ever thought about the kind of care you would want for your children if you had children and were employed? Over 50% of mothers with pre-school children are employed today and are having to find part-time or full-time care for their children. However, very little information is known about personal preferences for care of children.

In order to obtain some information on child care and child care services preferred by recent high school graduates, you were selected from a list of 1982 completers of vocational courses obtained from the North Carolina State Department of Public Instruction to participate in this study. In order to have accurate information on the thinking and opinions of persons your age, it is extremely important that each questionnaire be completed and returned! It will take only about 20 minutes of your time to complete the questionnaire.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that your name may be checked off of the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

As a token of my appreciation for your prompt response to this questionnaire, I will mail you a check for \$2.00 upon receipt of your completed questionnaire if your response is postmarked by January 10, 1984, or \$1.00 if your response is postmarked between January 11, 1984 and January 17, 1984.

If you have any questions, please don't hesitate to contact me at the Wilkes Career Education Center (919) 667-3653. Thank you for your assistance!

Sincerely,

*Barbara R. Todd*

(Mrs.) Barbara R. Todd, Teacher  
Wilkes Career Education Center

*Barbara Clawson*

Dr. Barbara Clawson, Professor  
University of North Carolina at Greensboro

GREENSBORO, NORTH CAROLINA / 27412-5001

THE UNIVERSITY OF NORTH CAROLINA is composed of the sixteen public senior institutions in North Carolina

an equal opportunity employer



# THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

*School of Home Economics  
Department of Home Economics Education,  
Consumer Science, Management  
(919) 379-5896*

January 18, 1984

Dear

About two weeks ago you were sent a questionnaire seeking your opinion on child care and child care services preferred by recent high school graduates. As of today, we have not received your completed questionnaire.

We are writing to you again because of the importance each questionnaire has to the usefulness of this study. Your name was drawn through a scientific sampling process in which every 1982 graduate completing either Child Care Services/Teacher Aide or Directed Office Occupations in North Carolina's Educational Regions V and VII had an equal chance of being selected. In order for the results of this study to be truly representative of the opinions of 1982 graduates, it is essential that each person in the sample return their questionnaire. As mentioned in the last letter, you may be assured of complete confidentiality.

In the event that your questionnaire has been misplaced, a replacement is enclosed. Your cooperation is greatly appreciated.

Cordially,

*Barbara R. Todd*

(Mrs.) Barbara R. Todd, Teacher  
Wilkes Career Education Center

*Barbara Clawson*

Dr. Barbara Clawson, Professor  
University of North Carolina at  
Greensboro

GREENSBORO, NORTH CAROLINA / 27412-5001

THE UNIVERSITY OF NORTH CAROLINA is composed of the sixteen public senior institutions in North Carolina  
an equal opportunity employer



# THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

*School of Home Economics  
Department of Home Economics Education,  
Consumer Science, Management  
(919) 379-5896*

January 30, 1984

Dear

We are writing to you about our study of child care and child care services preferred by recent high school graduates. We have not yet received your completed questionnaire.

The large number of questionnaires returned is very encouraging. But, whether we will be able to describe accurately the feelings of recent high school graduates in North Carolina's Educational Regions V and VII depends upon you and the others who have not yet responded. Past experience suggests that those of you who have not yet sent in your questionnaire may hold quite different preferences than those who have returned the questionnaire.

This is the first follow-up study concerning child care service preferences of recent high school graduates in your region of the state. Therefore, the results are of importance to the persons planning and updating the high school curriculum. The usefulness of our results depends on how accurately we are able to describe what recent graduates want.

It is for these reasons that we are sending this by certified mail to insure delivery. In case our correspondence did not reach you, a replacement questionnaire is enclosed. May I urge you to complete and return it as quickly as possible.

Your contribution to the success of this study will be appreciated greatly!

Most sincerely,

*Barbara R. Todd*

(Mrs.) Barbara R. Todd, Teacher  
Wilkes Career Education Center

*Barbara Clawson*

Dr. Barbara Clawson, Professor  
University of North Carolina at  
Greensboro

GREENSBORO, NORTH CAROLINA / 27412-5001

THE UNIVERSITY OF NORTH CAROLINA is composed of the sixteen public senior institutions in North Carolina  
an equal opportunity employer



APPENDIX E

Correct Responses of Completers  
to the Knowledge Items on the  
Questionnaire

Table E-1

Percentages of Subjects Correctly Responding to the Knowledge Items on  
the Questionnaire

Test Items	CCS/TA	DOO
I. Suppose you have a neighbor whose husband works a long distance from home. Your neighbor works at home and cares for their 10 month old son. The husband is gone all day and usually arrives home after 7:00 P.M. When the husband gets home, the wife has already fed their son and put him to bed. Recently the son has been crying while the parents are eating dinner and watching television. When the mother checks on the son, he is usually dry and comfortable. Why might the child cry?		
1. He feels left out <u>Yes</u> No Uncertain	65.57	83.78
2. He is afraid of the dark		
Yes <u>No</u> Uncertain	42.62	44.59
3. The mother was cross with him during the day		
Yes <u>No</u> Uncertain	57.38	63.51
4. He is cutting teeth Yes <u>No</u> Uncertain	8.20	16.22
II. Jeff is working as a child care aide in a class with a child that has speech and hearing problems. How should Jeff treat this child?		
5. Speak to the child only when necessary		
Yes <u>No</u> Uncertain	73.77	86.49

Table E-1 (continued)

Test Items	CCS/TA	D00
6. Give the child help only when needed		
<u>Yes</u> No Uncertain	19.67	17.57
7. Ignore the child Yes <u>No</u> Uncertain	81.97	94.59
8. Face the child when talking		
<u>Yes</u> No Uncertain	93.44	95.95
III. Mary Ann was an aide in a child care center. She wanted all of the children that she worked with to develop to their fullest potential. In order to assure this, she spent 1 hour each morning with her 3-year-old group in pre-reading activities. After 1 week of this practice, she noticed that she was constantly having discipline problems during this time. Why was Mary Ann having discipline problems during the pre-reading activities?		
9. The stories were uninteresting		
Yes <u>No</u> Uncertain	32.79	35.14
10. 3 year olds have short attention spans		
<u>Yes</u> No Uncertain	83.61	89.19
11. 3 year olds don't like to have stories read to them		
Yes <u>No</u> Uncertain	65.57	58.11
12. The children were tired		
<u>Yes</u> No Uncertain	34.43	21.62

Table E-1 (continued)

Test Items	CCS/TA	DOO
IV. Part of the job of a child caregiver is to select items to use when working with children. Which of the following stories would be the most appropriate for use with an average 3-year-old group of children?		
13. Cinderella <u>Yes</u> No Uncertain	52.46	48.65
14. Jack and the Beanstalk		
Yes <u>No</u> Uncertain	16.39	20.27
15. Lady and the Tramp <u>Yes</u> No Uncertain	21.31	21.62
16. Winnie the Poo - The Blustery Day		
Yes <u>No</u> Uncertain	4.92	8.11
a. Why would you not select the story or stories that you felt were inappropriate for 3 year olds?		
17. Too unrealistic Yes <u>No</u> Uncertain	45.90	59.46
18. Rewards theft <u>Yes</u> No Uncertain	14.75	20.27
19. Too complicated <u>Yes</u> No Uncertain	72.13	68.92
20. Too much animation Yes <u>No</u> Uncertain	47.54	59.46
V. Jeannine is a teacher at a day care center. Recently, she noticed that one of the children in her class comes to the center every Monday with bruises, cuts and burns. Jeannine discussed her observation with the day care director. They both suspect child abuse may be occurring. What should they do?		
21. Call the Police Department		
Yes <u>No</u> Uncertain	59.02	48.65

Table E-1 (continued)

Test Items	CCS/TA	D00
22. Confront the parents		
Yes <u>No</u> Uncertain	31.15	32.43
23. Call Social Services		
<u>Yes</u> No Uncertain	77.05	89.19
24. Call the Health Department		
Yes <u>No</u> Uncertain	27.87	27.03
VI. Suppose you were a child care worker in a day care center. One morning a very angry parent brings a crying two year old in your room. How would you deal with the child?		
25. Ignore the child Yes <u>No</u> Uncertain	77.05	89.19
26. Provide an activity for the child		
<u>Yes</u> No Uncertain	91.80	91.89
27. Put the child in a corner		
Yes <u>No</u> Uncertain	77.05	89.19
28. Take the child to his/her friend		
<u>Yes</u> No Uncertain	52.46	63.51
a. How would you deal with the parent?		
29. Talk to the parent <u>Yes</u> No Uncertain	77.05	87.84
30. Lecture the parent Yes <u>No</u> Uncertain	75.41	82.43
31. Ignore the parent Yes <u>No</u> Uncertain	68.85	82.43
32. Get the teacher/director		
<u>Yes</u> No Uncertain	40.98	33.78

Table E-1 (continued)

Test Items	CCS/TA	DOO
<p>VII. Jill is employed at a Nursery Center where several of her co-workers are out with the flu. Jill has a friend visiting her from out of state for one day. Since beginning work this year, Jill has not taken any sick leave. What should Jill do in this situation?</p>		
33. Call in sick    Yes <u>No</u> Uncertain	80.33	85.14
34. Take her friend to work		
Yes <u>No</u> Uncertain	44.26	36.49
35. Go to work and visit her friend after work		
<u>Yes</u> No    Uncertain	91.80	87.84
36. Take a vacation day    Yes <u>No</u> Uncertain	65.57	70.27
<p>VIII. Adults react to the behavior of children in many ways. At a day care center where she attends, Jane gets in a fight and receives a black eye. The teacher scolded her for fighting. However, the child care aide praised her for defending herself. Is this appropriate behavior for the aide?</p>		
37. <u>No</u>	88.52	85.14
38.    Yes		
a. Why do you feel that way?		
39. Shows individuality    Yes <u>No</u> Uncertain	42.62	48.65
40. Encourages independence		
Yes <u>No</u> Uncertain	50.82	40.54

Table E-1 (continued)

Test Items	CCS/TA	DOO
41. Encourages positive behavior		
Yes <u>No</u> Uncertain	50.82	51.35
42. Would confuse the child		
<u>Yes</u> No Uncertain	86.89	78.38
IX. Tommy and Janice have recently married and bought a home with a large back yard and a full size basement. If Janice were to open a day care center in her home, where would she learn of the regulations which she would have to follow?		
43. Social Services Department		
Yes <u>No</u> Uncertain	18.03	12.16
44. Police Department Yes <u>No</u> Uncertain	63.93	52.70
45. Health Department Yes <u>No</u> Uncertain	19.67	25.68
46. Office of Day Care Licenses		
<u>Yes</u> No Uncertain	88.52	82.43
X. Since food is very important in the proper development of a child, please indicate whether the following snacks would be appropriate for an 18 month old child.		
47. Milk and peanut butter cookies		
<u>Yes</u> No Uncertain	83.61	82.43
48. Kool-aid and crackers		
Yes <u>No</u> Uncertain	26.23	40.54

Table E-1 (continued)

Test Items				CCS/TA	D00
49.	Peach milk shake	<u>Yes</u>	No    Uncertain	34.43	29.73
50.	Tea and potato chips				
		Yes	<u>No</u> Uncertain	83.61	82.43
XI.	Of the following play things for children, which would be effective in stimulating a child's creative self-expression?				
51.	Paints, clay, tools	<u>Yes</u>	No    Uncertain	91.80	85.14
52.	Wind-up or mechanical toys				
		Yes	<u>No</u> Uncertain	73.77	68.92
53.	Blocks and manipulative toys				
		<u>Yes</u>	No    Uncertain	85.25	81.08
54.	Coloring books and crayons				
		Yes	<u>No</u> Uncertain	14.75	9.46
XII.	When 3 year old Johnny was building a block tower, another child approached to join the project. Johnny said, "No, no, you can't" and pushed him away. Why did Johnny behave as he did?				
55.	Johnny is an only child				
		Yes	<u>No</u> Uncertain	19.67	16.22
56.	Johnny is a selfish child				
		Yes	<u>No</u> Uncertain	22.95	17.57
57.	Johnny is socially immature				
		Yes	<u>No</u> Uncertain	36.07	27.03



Table E-1 (continued)

Test Items		CCS/TA	D00
58. Johnny is at the parallel stage of play			
<u>Yes</u>	No Uncertain	52.46	40.54
XIII. A child care worker notices that Jane seemed to be slower than the other children in her group in both physical and mental development. Of the following actions, which would be appropriate for a child care worker?			
59. Discuss his/her observations with the teacher of Jane's group			
<u>Yes</u>	No Uncertain	88.52	90.54
60. Discuss his/her observations immediately with Jane's parents			
Yes	<u>No</u> Uncertain	14.75	13.51
61. Discuss his/her observations with Jane's neighbor			
Yes	<u>No</u> Uncertain	85.25	87.84
62. Call Social Services and ask them to investigate the home			
Yes	<u>No</u> Uncertain	75.41	75.68
XIV. A child caregiver has been assigned to care for the children in an open play yard. Which of the following would you consider to be the first responsibility of the caregiver?			
63. Direct and organize games for the children to play			
Yes	<u>No</u> Uncertain	19.67	21.62

Table E-1 (continued)

Test Items	CCS/TA	D00
64. Examine the playground and remove any hazardous objects		
<u>Yes</u> No Uncertain	88.52	91.89
65. Help the children solve any minor conflicts which arise		
Yes <u>No</u> Uncertain	19.67	32.43
66. Observe the children's behavior and report back to the director of the center		
Yes <u>No</u> Uncertain	39.34	43.24
XV. In homes and day care centers, there are many hazards to safety. Which of the following would be important to guarantee safety in a day care center?		
67. Place protective covers over electrical outlets		
<u>Yes</u> No Uncertain	91.80	93.24
68. Place shag carpet on the floor		
Yes <u>No</u> Uncertain	74.54	48.65
69. Keep equipment cords out of the children's way		
<u>Yes</u> No Uncertain	88.52	94.59
70. Paint orange squares around dangerous areas or objects in the center		
Yes <u>No</u> Uncertain	22.95	28.38

Table E-1 (continued)

Test Items			CCS/TA	D00
XVI. Which of the following treatments should be used for minor burns?				
71. Hold the burned area under lukewarm running water				
Yes	<u>No</u>	Uncertain	68.85	72.97
72. Cover the burned area with butter				
Yes	<u>No</u>	Uncertain	49.18	33.78
73. Immediately place the burned area in cold water.				
<u>Yes</u>	No	Uncertain	81.97	82.43
74. Cover the burned area with a band-aid				
Yes	<u>No</u>	Uncertain	60.66	75.68

Note: CCS/TA = 61 subjects, D00 = 74 subjects; Total = 135 subjects.

APPENDIX F

Chi-Square Tables for Items

With No Significant Differences

Table F-1

Chi-Square Table for Which No Significant Differences in Responses  
Occurred by Group

Group	Correct	Uncertain	Incorrect
I. 2. He is afraid of the dark			
CCS/TA	50.00	30.77	19.23
DOO	47.83	23.19	28.99
$\chi^2 = 1.81, df = 2, p = 0.40$			
III. 9. The stories were uninteresting			
CCS/TA	40.00	38.00	22.00
DOO	38.81	43.28	17.91
$\chi^2 = 0.45, df = 2, p = 0.80$			
III. 11. 3 year olds don't like to have stories read to them			
CCS/TA	78.43	13.73	7.84
DOO	65.15	25.76	9.09
$\chi^2 = 2.80, df = 2, p = 0.25$			
III. 12. The children were tired			
CCS/TA	42.00	30.00	28.00
DOO	24.62	33.85	41.54
$\chi^2 = 4.24, df = 2, p = 0.12$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
IV. 13. Cinderella			
CCS/TA	65.31	14.29	20.41
DOO	52.94	16.18	30.88
$\chi^2 = 1.99, df = 2, p = 0.37$			
IV. 14. Jack and the Beanstalk			
CCS/TA	19.61	9.80	70.59
DOO	22.06	8.82	69.12
$\chi^2 = 0.12, df = 2, p = 0.94$			
IV. 15. Lady and the Tramp			
CCS/TA	27.08	25.00	47.92
DOO	23.53	17.65	58.82
$\chi^2 = 1.49, df = 2, p = 0.47$			
IV. 17. Too unrealistic			
CCS/TA	66.67	16.67	16.67
DOO	70.97	11.29	17.74
$\chi^2 = 0.62, df = 2, p = 0.73$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
IV. 18. Rewards theft			
CCS/TA	20.93	20.93	58.14
DOO	24.19	17.74	58.06
$\chi^2 = 0.25, df = 2, p = 0.88$			
IV. 19. Too complicated			
CCS/TA	84.62	7.69	7.69
DOO	77.17	7.58	15.15
$\chi^2 = 1.56, df = 2, p = 0.46$			
IV. 20. Too much animation			
CCS/TA	65.91	22.73	11.36
DOO	70.97	9.68	19.35
$\chi^2 = 4.02, df = 2, p = 0.13$			
V. 24. Call the Health Department			
CCS/TA	34.00	24.00	42.00
DOO	30.77	16.92	52.31
$\chi^2 = 1.43, df = 2, p = 0.49$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
VI. 28. Take the child to his/her friend			
CCS/TA	65.31	24.49	10.20
DOO	70.15	20.90	8.96
$\chi^2 = 0.31, df = 2, p = 0.86$			
VI. 32. Get the teacher/director			
CCS/TA	48.08	25.00	26.92
DOO	38.46	30.77	30.77
$\chi^2 = 1.11, df = 2, p = 0.57$			
VII. 34. Take her friend to work			
CCS/TA	52.94	27.45	19.61
DOO	40.91	31.82	27.27
$\chi^2 = 1.79, df = 2, p = 0.41$			
VIII. 37-38. Is this appropriate behavior for the Aide? No - Yes			
CCS/TA	93.10		6.90
DOO	88.73		11.27
$\chi^2 = 0.30, df = 1, p = 0.59$			



Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
VIII. 39. Shows individuality			
CCS/TA	56.52	13.04	30.43
DOO	56.25	18.75	25.00
$\chi^2 = 0.82, df = 2, p = 0.66$			
VIII. 40. Encourages independence			
CCS/TA	65.96	14.89	19.15
DOO	46.88	29.69	23.44
$\chi^2 = 4.56, df = 2, p = 0.10$			
VIII. 42. Would confuse the child			
CCS/TA	65.96	10.64	23.40
DOO	58.46	20.00	21.54
$\chi^2 = 1.78, df = 2, p = 0.41$			
IX. 43. Social Services Department			
CCS/TA	22.45	26.53	51.02
DOO	19.57	23.91	56.52
$\chi^2 = 4.16, df = 2, p = 0.13$			
IX. 45. Health Department			
CCS/TA	24.00	12.00	64.00
DOO	28.79	22.73	48.49
$\chi^2 = 3.29, df = 2, p = 0.19$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
X. 48. Kool-aid and crackers			
CCS/TA	29.63	16.67	53.70
DOO	43.48	11.59	44.93
$\chi^2 = 2.60, df = 2, p = 0.27$			
X. 49. Peach milk shake			
CCS/TA	40.38	19.23	40.38
DOO	31.88	20.29	47.83
$\chi^2 = 0.99, df = 2, p = 0.61$			
X. 50. Tea and potato chips			
CCS/TA	98.08	-	1.92
DOO	88.41	-	11.59
$\chi^2 = 2.75, df = 1, p = 0.10$			
XI. 52. Wind-up or mechanical toys			
CCS/TA	84.91	7.55	7.55
DOO	77.27	12.12	10.61
$\chi^2 = 1.12, df = 2, p = 0.57$			
XI. 54. Coloring books and crayons			
CCS/TA	16.36	10.91	72.73
DOO	10.29	5.88	83.82
$\chi^2 = 2.28, df = 2, p = 0.32$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
XII. 55. Johnny is an only child			
CCS/TA	23.53	47.06	29.41
DOO	17.65	55.88	26.47
$\chi^2 = 1.03, df = 2, p = 0.60$			
XII. 56. Johnny is a selfish child			
CCS/TA	25.00	28.57	46.43
DOO	18.57	30.00	51.43
$\chi^2 = 0.78, df = 2, p = 0.68$			
XIII. 60. Discuss his/her observations immediately with Jane's parents			
CCS/TA	15.52	12.07	72.41
DOO	13.51	9.46	77.03
$\chi^2 = 0.39, df = 2, p = 0.82$			
XIV. 65. Help the children solve any minor conflicts which arise			
CCS/TA	23.53	9.80	66.67
DOO	36.36	10.61	53.03
$\chi^2 = 2.47, df = 2, p = 0.29$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
XIV. 66. Observe the children's behavior and report back to the director of the center			
CCS/TA	47.06	17.65	35.29
DOO	48.48	15.15	36.36
$\chi^2 = 0.13, df = 2, p = 0.94$			
XV. 68. Place shag carpet on the floor			
CCS/TA	56.60	30.29	13.21
DOO	50.70	28.17	21.13
$\chi^2 = 1.31, df = 2, p = 0.52$			
XV. 70. Paint orange squares around dangerous areas of objects in the center			
CCS/TA	25.93	25.93	48.15
DOO	29.17	26.39	44.44
$\chi^2 = 0.21, df = 2, p = 0.90$			
XVI. 71. Hold the burned area under lukewarm running water			
CCS/TA	81.13	9.43	9.43
DOO	78.26	11.59	10.14
$\chi^2 = 0.18, df = 2, p = 0.92$			

Table F-1 (continued)

Group	Correct	Uncertain	Incorrect
XVI. 74. Cover the burned area with a band-aid			
CCS/TA	73.08	15.38	11.54
DOO	81.16	4.35	14.49
$\chi^2 = 4.42, df = 2, p = 0.11$			

Note: Values represent percentages.

Table F-2

Chi-Square Table for Which No Significant Differences In Responses to Attitude Questions Occurred by Group

Group	SA/A	U	D/SD
I. If both parents work, preschool children should be cared for in the home by a babysitter.			
CCS/TA	25.00	26.67	48.33
DOO	28.38	31.08	40.54
$\chi^2 = 0.82, df = 2, p = 0.66$			
II. If parents work, preschool children should stay with an individual trained in child care.			
CCS/TA	72.88	11.86	15.25
DOO	71.62	12.16	16.22
$\chi^2 = 0.03, df = 2, p = 0.99$			
IV. If the parents work, preschool children should be cared for in a babysitter's home.			
CCS/TA	20.34	30.51	49.15
DOO	10.81	36.49	52.70
$\chi^2 = 2.41, df = 2, p = 0.30$			
VI. Any individual who loves children would be a good child care aide regardless of educational ability and training.			
CCS/TA	20.34	20.34	59.32
DOO	15.07	20.55	64.38
$\chi^2 = 0.66, df = 2, p = 0.72$			

Note: Values represent percentages.

Table F-3

Chi-Square Table for Which No Significant Differences in Responses  
Occurred by Group by Region

Group	Region	Correct	Uncertain	Incorrect
I. 2. He is afraid of the dark				
CCS/TA	V	50.00	33.33	16.67
DOO	V	50.00	17.65	32.35
$\chi^2 = 2.77, df = 2, p = 0.25$				
CCS/TA	VII	50.00	28.57	21.43
DOO	VII	45.71	28.57	25.71
$\chi^2 = 0.18, df = 2, p = 0.91$				
III. 9. The stories were uninteresting				
CCS/TA	V	37.50	41.67	20.83
DOO	V	41.18	38.24	20.59
$\chi^2 = 0.09, df = 2, p = 0.96$				
CCS/TA	VII	42.31	34.62	23.07
DOO	VII	36.36	48.48	15.15
$\chi^2 = 1.28, df = 2, p = 0.53$				
III. 11. 3 year olds don't like to have stories read to them				
CCS/TA	V	70.83	12.50	16.67
DOO	V	57.58	27.27	15.15
$\chi^2 = 1.85, df = 2, p = 0.40$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
III. 12. The children were tired				
CCS/TA	V	37.50	25.00	37.50
DOO	V	33.33	27.27	39.40
$\chi^2 = 0.11, df = 2, p = 0.95$				
IV. 13. Cinderella				
CCS/TA	V	58.33	12.50	29.17
DOO	V	47.06	17.65	35.29
$\chi^2 = 0.75, df = 2, p = 0.69$				
CCS/TA	VII	72.00	16.00	12.00
DOO	VII	58.82	14.71	26.47
$\chi^2 = 1.89, df = 2, p = 0.39$				
IV. 15. Lady and the Tramp				
CCS/TA	V	30.43	17.39	52.17
DOO	V	23.53	17.65	58.82
$\chi^2 = 0.36, df = 2, p = 0.84$				
CCS/TA	VII	24.00	32.00	44.00
DOO	VII	23.53	17.65	58.82
$\chi^2 = 1.85, df = 2, p = 0.40$				



Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
IV. 18. Rewards theft				
CCS/TA	VII	27.27	13.64	59.09
DOO	VII	21.88	18.75	59.38
$\chi^2 = 0.36, df = 2, p = 0.83$				
V. 21. Call the Police Department				
CCS/TA	VII	68.00	20.00	12.00
DOO	VII	60.61	21.21	18.18
$\chi^2 = 0.48, df = 2, p = 0.79$				
V. 22. Confront the parents				
CCS/TA	V	42.31	7.69	50.00
DOO	V	34.38	31.25	34.38
$\chi^2 = 4.93, df = 2, p = 0.08$				
CCS/TA	VII	29.63	22.22	48.15
DOO	VII	40.63	31.25	28.13
$\chi^2 = 2.51, df = 2, p = 0.28$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
V. 24. Call the Health Department				
CCS/TA	V	37.50	20.83	41.67
DOO	V	31.25	21.88	46.88
$\chi^2 = 0.25, df = 2, p = 0.88$				
CCS/TA	VII	30.77	26.92	42.31
DOO	VII	30.30	12.12	57.58
$\chi^2 = 2.38, df = 2, p = 0.30$				
VI. 32. Get the teacher/director				
CCS/TA	V	62.50	8.33	29.17
DOO	V	40.63	31.25	28.13
$\chi^2 = 4.68, df = 2, p = 0.10$				
CCS/TA	VII	35.71	39.29	25.00
DOO	VII	36.36	30.30	33.33
$\chi^2 = 0.71, df = 2, p = 0.70$				
VII. 34. Take her friend to work				
CCS/TA	V	54.17	20.83	25.00
DOO	V	45.45	36.36	18.18
$\chi^2 = 1.65, df = 2, p = 0.44$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
VII. 34. Take her friend to work				
CCS/TA	VII	51.85	33.33	14.81
DOO	VII	36.36	27.27	36.36
$\chi^2 = 3.59, df = 2, p = 0.17$				
VIII. 39. Shows individuality				
CCS/TA	V	60.87	17.39	21.74
DOO	V	61.29	16.13	22.58
$\chi^2 = 0.02, df = 2, p = 0.99$				
CCS/TA	VII	52.17	8.70	39.23
DOO	VII	51.52	21.21	27.27
$\chi^2 = 1.92, df = 2, p = 0.38$				
VIII. 40. Encourages independence				
CCS/TA	V	60.87	17.39	21.74
DOO	V	45.16	29.03	25.81
$\chi^2 = 1.46, df = 2, p = 0.48$				
CCS/TA	VII	70.83	12.50	16.67
DOO	VII	48.48	30.30	21.21
$\chi^2 = 3.28, df = 2, p = 0.19$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
VIII. 41. Encourages positive behavior				
CCS/TA	V	65.22	13.04	21.74
DOO	V	54.84	22.58	22.58
$\chi^2 = 0.89, df = 2, p = 0.64$				
IX. 43. Social Services Department				
CCS/TA	V	26.09	21.74	52.17
DOO	V	15.15	24.24	60.61
$\chi^2 = 1.03, df = 2, p = 0.60$				
IX. 45. Health Department				
CCS/TA	V	34.78	13.04	52.17
DOO	V	24.24	30.30	45.45
$\chi^2 = 2.39, df = 2, p = 0.30$				
X. 48. Kool-aid and crackers				
CCS/TA	V	28.00	20.00	52.00
DOO	V	37.14	14.29	48.57
$\chi^2 = 0.69, df = 2, p = 0.71$				
X. 49. Peach milk shake				
CCS/TA	V	29.17	29.17	41.67
DOO	V	34.29	25.71	40.00
$\chi^2 = 0.19, df = 2, p = 0.91$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
XII. 55. Johnny is an only child				
CCS/TA	V	26.09	47.83	26.09
DOO	V	11.76	55.88	32.35
$\chi^2 = 1.95, df = 2, p = 0.38$				
CCS/TA	VII	21.43	46.43	32.14
DOO	VII	23.53	55.88	20.59
$\chi^2 = 1.09, df = 2, p = 0.58$				
XII. 56. Johnny is a selfish child				
CCS/TA	V	23.08	19.23	57.69
DOO	V	22.22	27.78	50.00
$\chi^2 = 0.63, df = 2, p = 0.73$				
CCS/TA	VII	51.85	33.33	14.81
DOO	VII	14.71	32.35	52.94
$\chi^2 = 2.14, df = 2, p = 0.34$				
XII. 57. Johnny is socially immature				
CCS/TA	V	40.91	18.18	40.91
DOO	V	22.22	41.67	36.11
$\chi^2 = 4.01, df = 2, p = 0.13$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
XII. 57. Johnny is socially immature				
CCS/TA	VII	44.83	13.79	41.38
DOO	VII	35.29	26.47	38.24
$\chi^2 = 1.62, df = 2, p = 0.45$				
XIV. 66. Observe the children's behavior and report back to the director of the center				
CCS/TA	V	50.00	20.83	29.17
DOO	V	37.50	15.63	46.88
$\chi^2 = 1.80, df = 2, p = 0.41$				
CCS/TA	VII	44.44	14.81	40.74
DOO	VII	58.82	14.71	26.47
$\chi^2 = 1.53, df = 2, p = 0.47$				
XV. 68. Place shag carpet on the floor				
CCS/TA	V	54.17	33.33	12.50
DOO	V	48.57	31.43	20.00
$\chi^2 = 0.58, df = 2, p = 0.75$				
CCS/TA	VII	58.62	27.59	13.79
DOO	VII	52.78	25.00	22.22
$\chi^2 = 0.76, df = 2, p = 0.68$				

Table F-3 (continued)

Group	Region	Correct	Uncertain	Incorrect
XV. 70. Paint orange squares around dangerous areas or objects in the center				
CCS/TA	V	24.00	20.00	56.00
DOO	V	22.22	33.33	44.44
$\chi^2 = 1.36, df = 2, p = 0.51$				
CCS/TA	VII	27.59	31.03	41.38
DOO	VII	36.11	19.44	44.44
$\chi^2 = 1.27, df = 2, p = 0.53$				

Note: Values represent percentages.