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Developmental Stages of Preschool Educators: A Study of Junior College Students in Taiwan

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DEVELOPMENTAL STAGES OF PRESCHOOL EDUCATORS: A STUDY OF JUNIOR COLLEGE STUDENTS IN TAIWAN

by

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DEDICATION

To

My Parents and My Husband,

Keng-Lieh, Chin-Miao, and Jiann-Shyong

who always give support and encouragement

while I study overseas.

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In the summer of 1990, I came to Utah State University to study English and prepare myself to enter a master's program. Two quarters later, because study overseas was not easy, I quite school and went back home to Taiwan.

After eight months of reconsideration, I came back. During these two years, I could say that completing the program was tremendously hard work. However, what I really wish to say is it was a wonderful experience! After this hard process, I now have confidence to do more research and also enjoy it.

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Hsin-Hui Lin

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The present study applies early field experience theory and developmental stages theory as the basis of teacher training in a junior college program in Taiwan. Two hundred sixty-six junior college students from two junior colleges were surveyed in order to ascertain what factors had an effect on the concept of teaching concerns. Comparisons were made among the following: with/without preschool education background in senior high school, grade, school, age, fathers' educational levels, mothers' educational levels, and fathers' yearly income. The results indicate that early field experiences had a direct effect on teaching concerns. The students' year of study (freshmen vs sophomore) in junior college made a difference depending on whether they had been exposed to an early field experience. The groups that had a preschool education background had

higher mean developmental-teaching-stage scores, in first (freshmen) study year, but lower mean scores in the second (sophomore) study year. The mean developmental-teaching-stage scores for both study years of junior college students with preschool education background were very close to each other. Junior college students without a preschool education background in senior high had a higher mean developmental-teaching-stage score in the second year than in the first year.

(85 pages)

CHAPTER I

INTRODUCTION

For children to receive optimal preschool education, a major concern is for teachers to have good professional training. During the last decades, many studies about teacher training programs have been completed (Hughes, 1977; Baer & Foster, 1974; Hopkins, 1970). Also several theories have been formulated that attempt to predict and explain the development of good teachers. Developmental stages have been formulated by Katz (1972). In her view, the mature teacher from inexperience to maturity must go through four stages as follows: "survival concerns," "mastery," "invention and experimenting," and "professional." The four stages are considered to be a continuous process. A trainee can not progress to the next step without moving through the preceding one (Watts, 1980).

According to Dewey (1904), a prepractice teaching laboratory experience, which now is called "early field experience," should foster reflective criticism of educational purposes and instructional methods. It is in this area that two of the important studies about how early field experience influences teaching training have been done (Sunal, 1980; Bretherton & Robinson, 1965). The results of these two studies suggest that there were no differences in achievement between those students who

had early field experience and those who did not. Interestingly, it had been found that students who have completed early field experiences show more positive self-concepts than students who had not done so.

In these same surveys, researchers tried to investigate the most helpful program for training teachers. They interviewed or sent a questionnaire to former students who were now school teachers (Baer & Foster, 1974; Book, Byers & Freeman, 1983; Applegate & Lasley, 1983). The results showed that graduating students rated the two most valuable parts of the program as follows: student teaching and other laboratory experiences.

Recently, interest in preschool education has increased in Taiwan. Since more and more kindergartens have been set up very recently, it is hard to find well-trained, experienced, and professional preschool teachers. Under the educational system in Taiwan, there have been three ways for obtaining teacher training. One is from the vocational senior high school. In these schools, three years of preschool teacher training courses have been offered. Another is from colleges or universities where four-year training programs have been taught. The other is junior colleges where two years of courses have been taught. These junior college students' educational background in senior high school can be

divided into three categories: general senior high school, vocational senior high school with a major in preschool education, and vocational senior high school with other majors.

If the Katz developmental stage theory is as hypothesized, it is very important to compare the developmental stages of these two groups: junior college students who graduated from general senior high school and those from vocational senior high school.

The manifest difference between the two groups of the junior college students is the experience of preschool education. Comparing performance between these two groups, students who had preschool education backgrounds in senior high school and those who did not, would be an important way of testing Dewey's assertion concerning the importance of prepractice teaching.

CHAPTER II

REVIEW OF LITERATURE

An Overview

Many different theories and much research have been concerned with training people to become preschool teachers. Burden (1980) proposed that a teacher's character made a significant contribution to influencing a teacher's career. Mitchell and Dickerscheid (1984) suggested that early family experience should also have an effect on preschool teachers' behavior. Katz (1972) indicated that her developmental theory included four stages through which a new teacher progresses. Experience has consistently been seen as an important factor in teaching training (Dewey, 1904; Burden, 1980). The experience of preservice teachers can be divided into two categories, prelaboratory experience and student teaching experience. In the present study, two factors, developmental stage theory and experience with children, are the main concerns.

Teachers' Characters

According to Burden (1980), personal characteristics, professional characteristics, and interaction between personal life and professional life are reciprocated and interdeveloped. Each factor can

influence and be influenced by others. Burden (1980) suggested these interdevelopments as follows.

Perceptions of Personal Characteristics

After one year of teaching, teachers increase their confidence and positive view of themselves. They become more mature, capable, considerate, and understanding. They are likely to become more broad-minded and more flexible.

Perceptions of Professional Characteristics

Entering the second year of teaching, teachers further develop their planning and organizational skills. They develop better understanding of children, school curriculum, and teaching methods. They like to try new teaching methods, seek assistance, and obtain new ideas at various times from other teachers.

Perception of Interaction between Personal Life and Professional Life

Most teachers indicated that their personal life had affected their teaching and vice versa. They found that personal life generally affected teaching in a positive and supportive way. The general quality of life, personal development, and home life were positively affected by personal professional characters.

Early Family Experience

Having compared early family experience and preschool teachers' behaviors, Mitchell and Dickerscheid (1984) found that students' academic majors were related to teaching technique. Early family experiences were related to teaching style. Rosen (1972) indicated that student teachers who had a history of close and supportive family life, a strong sense of love, and strong personality were the most effective with preschool children. Ryans (1960) concluded in the results from 25 case studies of "outstanding" elementary teachers that these outstanding teachers had family backgrounds with a great deal of activity. They reveal a strong attachment during childhood and adolescence.

Developmental Stages

Watts (1980) explained that stage theory assumes a series of steps in development. People may go up each step based on exposure and achievement at the prior stage. It is impossible for people to enter the higher stage without exposure and achievement in the previous ones. Watts also suggested that development is roughly linked to age or experience.

Katz (1972) hypothesized the four developmental stages for a new teacher as follows.

Stage 1: Survival

During the first stage, a teacher's main concern is survival. This concern lasts approximately the first full year of teaching. The questions most often expressed include: "Can I get through the day in one piece? Without losing a child? Can I really do this kind of work day after day?" During this stage, Katz (1972) suggested that a teacher needs support, understanding, encouragement, reassurance, comfort, and guidance. Thus, it becomes important for a teacher to have support and guidance from on-site instructors.

Stage 2: Consolidation

After realizing that s/he can survive, perhaps by the end of the first year, the teacher moves into stage 2, "consolidation." During this stage, the teacher usually begins to focus on individual children who have problems and troubled situations. The teacher may seek answers for such questions as: "How can I help a child who does not seem to be learning? How can I help a shy child?" Therefore, Katz (1972) suggested that it is important for trainers to help teachers construct their experience and to apply solutions for problems. Exchanging information and ideas with more experienced colleagues may also help student teachers to overcome this period.

Stage 3: Renewal

During the third or fourth year of teaching, the teacher move towards stage 3, "renewal." Katz (1972) suggested that student teachers begin to feel tired from doing the routines. Because of doing the same old things, teachers would like to search newer materials, techniques, and approaches to apply to their teaching. The "refreshing ideas" enable a teacher to conceptualize their experience from regional and national conferences and workshops (Arroyo & Sugawara, 1985). To be a member of a professional association or to participate in professional meetings becomes significantly meaningful.

Stage 4: Maturity

In terms of individual differences, Katz (1972) pointed out some teachers may reach "maturity," stage 4, within three years; others may need five years or even more. Teachers at this period have enough perspective to look for deeper and more abstract questions, such as "What are my historical and philosophical roots? What is the nature of growth and learning?" They are concerned about their personal insight, perspectives, and improving the teaching profession. As a mature teacher, one welcomes the chance to read widely and to interact with educators working on varied problem areas that relate to teaching at many different levels.

The developmental stages proposed by Katz are for the inservice teachers. Applying Katz's developmental stage theory, Arroyo and Sugawara (1989) developed a Scale of Student Teaching Concerns (SSTC) to assess the concerns of early childhood teachers in training. In the assessment, the higher score reflects greater concern with regard to that developmental area.

The SSTC was used to assess two different groups of students who were in the teacher training program. These two groups included "Level I" who were at in the beginning part and "Level II" who were in the advanced part of their teacher training. The results showed that the four areas of concern in the SSTC were similar to Katz's developmental stages. Interestingly, the group of beginning level student teachers had significantly higher survival, consolidation, renewal, and maturity concerns than the group of advanced level student teachers.

Early Field Experience

Dewey (1904) proposed that early field experience permits student teachers to liberalize their professional socialization. However, having early field experience can help student teachers to criticize the educational purposes and the instructional methods. Furthermore, because of criticism, student teachers become more thoughtful.

Benton and Osborn (1979) indicated that students who have completed experiences before doing student teaching often value these experiences positively. Scherer (1979) studied the effects of early field experiences on teachers' self-concepts and performance. She found that student teachers who had early field experience had more positive self-concepts than those who did not have this type of experience.

Marso (1971) found that students who had early field experiences perceive that they were more prepared for teaching than their peers who did not have early field experience. The same result was also demonstrated by Benton and Osborn (1979), who suggested that early field experiences did have a positive influence on the pre-service teachers' overall attitude toward teaching. Denton (1983) suggested that participating in early field experience would intensify student teachers' acquisition of learning concepts and instructional concepts and skills.

However, after studying long-term effects of pre-student teaching field experiences, Sunal (1980) found that early field experiences did not have a significant effect on student teachers' perceptions of role expectation or teacher behaviors. Scherer (1979) also indicated that early field experience had little effect on student teachers' performance.

Student Teaching Experience

Student teaching has been valued as the most beneficial experience to prospective teachers (Hopkins, 1970; Baer & Foster, 1974; Hughes, 1977). Baer and Foster (1974) used a questionnaire for program evaluation and found that the most highly valued courses and experiences were those that provided opportunities for observing and working with children. Student teaching had been considered as being of greatest value when compared to courses and other experiences. Hopkins (1970) found that most of the student teachers believed that the most beneficial courses for teacher training were the courses with practical experience such as student teaching. Students' comments are as follows:

> I think that student teaching is the most worthwhile education course offered by the university. If you could do your student teaching when you are a freshmen or sophomore, maybe you could benefit more from the other education courses. We need less education courses and more actual classroom observations and practice. I feel as if my student teaching was the most beneficial part of my college career. Courses need re-evaluation. (Hopkins, 1970, p.49)

Chase (1963) and Shawyer (1968) also found that student teachers proposed that they needed more practical applications and experiences than those which were being given to them.

Teacher Training Systems in Taiwan

In Taiwan, there are two different training systems for professionally preparing preschool teachers. One is the university/college. Most of the university/college students graduate from general senior high school. The courses provided in general senior school do not teach anything about preschool education. These students do not learn much about preschool education before entering a university/college. In a university/college, four-year courses have been provided for student teachers to learn about early childhood education.

The other approach in Taiwan focuses on junior colleges where two-year programs have been provided for students. According to students' educational background in senior high, three groups can be divided as follows: students graduating from general senior high school, vocational senior high school students with a major in preschool education, and vocational senior high school students with other majors. These courses in preschool education, which have been taught in vocational senior high school, provide basic knowledge. These courses include general preschool education, child development, designing and making teaching instruments, musical activities for young children, and student teaching.

Therefore, junior college students can be divided into two groups by using these three different

educational backgrounds in senior high school. One group includes students graduating from vocational senior high school with a major in preschool education. Another group is students who graduated from vocational senior high school with other majors and those who graduated from general senior high school. These students do not have the variety of experiences as those students who graduated from vocational senior high school with preschool education majors.

These junior colleges that provide preschool teaching programs are nominated by a "Teacher College." In Taiwan, the legal teachers must graduate from a teacher college or a normal educational university; those who do not graduate from normal educational college/university should take certain credits from a normal educational college/university to obtain their teaching license. In other words, normal educational colleges/universities are special institutions for fostering teachers who can teach in preschool, elementary, junior high, and senior high schools.

Because of having two different educational programs and two different major groups of students with different education backgrounds in senior high school, two research groups can be identified: first, junior college students who graduated from vocational senior high schools with a

preschool education major and, second, those who graduated from a general senior high school.

Summary

In summary, it appears that there are four research domains regarding preschool teacher training programs where the related theories such as developmental stage theory, early field experience, and student teaching experience have been applied. The most effective way to foster the development of preschool teachers is still unknown. In doing this research, additional questions concerning the preparation of preschool teachers is explored. This research differs from those prior investigations that were based only on the college teaching programs or focused on graduate students.

The developmental stage theory that was proposed by Katz (1972) is based on a four-year model of teaching. When applying Katz's developmental stage theory, Arroyo and Sugawara (1983) developed a scale of student teaching concerns (SSTC) to assess the concerns of early childhood teachers in training.

How do junior college students develop their maturity stages? Is a two-year training program good enough to foster the development of student teachers? Do early field experiences really have an effect on student teachers' performance? Is it true that junior college

students with a background of preschool education (which was taught in senior high schools) have better performances than those who do not? These questions can not be answered directly, but more research is needed to better understand the preparation, especially research and training of teachers of young children. The present study was carried out to, in part, address these types of central questions.

CHAPTER III

METHODOLOGY

Definition Section

To better communicate the intent of this proposal, it is necessary to clarify the terms that are used. Terms such as "developmental stage," "early field experience," "student teaching," " teachers college," "general senior high school," "vocational senior high school," "global city," and "provincial city" are defined in a variety of ways. For the purpose of this study they are operationalized as follows.

1. Developmental Stages: Developmental stages formulated by Katz(1972). They include the stage of stages, "survival," "consolidation," "renewal," and "maturity." These four stages are considered to be a continuous process.

2. Early Field Experience: Early field experience has been defined as the event of those students who graduate from vocational senior high school with a preschool education major.

3. Student Teaching: A program that allows student teachers to practice their teaching in children's classrooms.

4. Teachers College: These teachers colleges are located in Taiwan. Two year (junior college) and four

year (regular college) teaching programs are provided to train preschool teachers.

5. General Senior High School: Senior high schools provide general courses such as languages, science, and social science for preparing to enter a college.

6. Vocational Senior High School: Senior high schools provide many fields and options for students. Students can learn specific skills in one field to prepare for entering the job market.

7. Global City: Global city has been defined as a city of three million population.

8. Provincial City: Provincial city has been defined as a city of one million population.

Hypotheses

Based upon the review of literature and the objectives of this study, the following null hypotheses were formulated and tested.

Hypothesis #1

In junior college, there is no significant difference between students graduated from vocational senior high school with a major in preschool education and students graduated from general senior high school or from vocational senior high school with other majors in their concerns for each developmental stages.

Hypothesis #2

In junior colleges, there is no significant difference between freshmen and sophomores in their concerns for each developmental stages.

Hypothesis #3

There is no significant difference between junior colleges that are located in a global city and a provincial city.

This study employed a cross-sectional design. Such a design permits one to compare the differences in developmental stages that are influenced by the two training systems. The independent variable is the training program, and the dependent variable is the developmental stage.

Sample

All of the participants were selected from the whole population of students in the teacher training programs in Taiwan. The population includes three universities and eight teacher colleges. There are three universities and one teacher college that permit departments to educate undergraduate students in preschool education: Applied Science of Human Life Department at Fu-Jen Catholic University (FJCU), Junior and Child Social Welfare Department at Chinese Culture University (CCU), and Home Economics Department at National Taiwan Normal

University (NTNU). One hundred undergraduate students whose major is preschool education in those three universities were selected -- 34 students from Fu-Jen University, 33 students from Chinese Culture University, and 33 students from National Taiwan Normal University.

There are eight teacher colleges that offer the junior college program in the field of preschool education. One hundred students were selected from these colleges. Every student who wants to study in college must pass the entrance examination. Not many students who graduate from vocational senior high schools can pass the examination. Before choosing the samples from the junior colleges, the students were divided into two groups according to the educational background in senior high schools.

One hundred undergraduate students were selected from the junior colleges. Fifty students were selected from vocational senior high schools with a major in preschool education and the other 50 students were chosen who graduated from general senior high schools.

Characteristics of the Sample

In Taiwan, very few males major in preschool education. Thus there were not equal numbers of males and females. Undergraduate students' ages ranged from 18 to 25 years old. All of the participants in the study were self-selected from three colleges in Taiwan. The

three colleges were as follows: The Department of Early Childhood Education at the National Taipei Teachers College (NTTC), the Department of Early Childhood Education at the National Tai-Chung Teachers College (NTCTC), and the Department of Early Childhood Education at Taipei Municipal Teachers College (TMTC). These three colleges are located in different places in Taiwan. Both NTTC and TMTC are located in Taipei, which is in the north part of Taiwan, while NTCTC is located in Tai-Chung, which is in the middle of Taiwan.

In earlier planning, three other universities, Fu-Jen Catholic University (FJCU), Chinese Culture University (CCU), and National Taiwan Normal University (NTNU), had been chosen. However, Taiwan has recently changed its education system. Recently, preschool education in the higher education system in Taiwan has been viewed as very important. The department of Early Childhood Education at Taipei Municipal Teachers College is the first department to provide more integrated courses of learning in preschool education for undergraduate students. The department is still very young and only has a three-year history since they changed their program from a junior college to a college.

The original data were collected from two educational systems, junior college and regular college. The data on junior college and college students comes

from NTTC, NTCTC, and TMTC. The sample composition is as follows: 38 freshmen students from NTTC with a general major or other vocational major in senior high school and 33 students with preschool education major in senior high school. At NTCTC, the sample included 45 students with a general major or other vocational major in senior high school and 38 students with a preschool education major in senior high school. At TMTC the sample included 61 students with a general major in senior high school. At NTTC 39 sophomore students were included with a general major or other vocational major in senior high school and 27 students with preschool education major in senior high school. At NTCTC, 22 students were included with a general major or other vocational major in senior high school and 24 students with a preschool education major in senior high school. Finally, at TMTC 32 students were included with a general major in senior high school. There were also 15 junior students at TMTC who filled out the questionnaire and were used in the study (see Table 1).

Credits of preschool education courses that have been taken by the participants are listed below: at junior college level, freshmen 16 credits and sophomores 44 credits; at regular college level, freshmen 7 credits, sophomores 19 credits, and juniors 38 credits (see Table 2).

Ethical Considerations

This study has focused on the question of how the different training programs influence developmental stages in teaching maturity under the Chinese multiple educational system. All data collected for this study were assigned a code number to protect the anonymity of the participants.

There was no risk for undergraduate students who participated in this study. Students had the choice to participate or not participate. During the data collecting process, students could withdraw at any time from the study without any difficulty.

Table 1

Description of Sample

Group	N	%
Gender		
Male	6	2
Female	358	98
Total	364	100
College		
National Taipei Teachers College (NTTC)		
Freshmen		
General or none Preschool Education major	38	10

(table continues)

Group	N	%
Preschool Education major	33	9
Sophomore		
General or none Preschool Education major	39	11
Preschool Education major	27	7
National Tai-Chung Teachers College (NTCTC)		
Freshmen		
General or none Preschool Education major	45	12
Preschool Education major	38	10
Sophomore		
General or none Preschool Education major	22	6
Preschool Education major	24	6
Taipei Municipal Teachers College (TMTC)		
Freshmen	51	12
Sophomore	32	9
Junior	15	15
Age		
Range	17-40 years	
Mean	21 years	
Grade Average		
Range	2.60-4.0	
Mean	3.34	

(table continues)

Group	N	%
Father's Education		
No Formal Education	9	3
Elementary School	116	32
Junior High School	45	12
Senior High School	98	27
Junior College	42	12
College	44	12
Graduate	5	1
No Response	5	1
Mother's Education		
No Formal Education	37	10
Elementary School	178	49
Junior High School	46	13
Senior High School	56	15
Junior College	23	6
College	17	5
Graduate	1	0
No Response	6	2
Father's Yearly Income		
Below NT 100,000 ($4,000)	42	12
NT 100,000 - 250,000 ($4,000-10,000)	57	16
NT 250,000 - 500,000 ($10,000-20,000)	116	32
NT 500,000 - 800,000 ($20,000-32,000)	53	15
Above NT 800,000 ($32,000)	24	7

(table continues)

Group	N	%
No Response	71	20
Mother's Yearly Income		
Below NT 100,000 ($4,000)	106	29
NT 100,000 - 250,000 ($4,000-10,000)	76	21
NT 250,000 - 500,000 ($10,000-20,000)	38	10
NT 500,000 - 800,000 ($20,000-32,000)	18	5
Above NT 800,000 ($32,000)	5	1
No Response	121	33

Table 2

Credits of Preschool Education Courses Taken by Participants

School level	Grade	Credits
Junior College	Freshmen	16
	Sophomores	44
College	Freshmen	7
	Sophomores	19
	Juniors	38

Instruments & Procedures

SSTC

The Scale of Student Teaching Concerns (SSTC; Arroyo & Sugawara, 1989 see Appendices A, B, and C) was selected to measure the dependent variable. This scale includes

55 statements that are divided into four areas of concern. The first area, Survival, involves 14 statements. The second area, Consolidation, involves 16 statements. The third area, Renewal, comprises 16 statements. The fourth area, Maturity, contains 9 statements. The four areas of teaching concerns are described as follows:

1. Survival concerns. This stage indicates the degree to which a student teacher is concerned about being able to endure being a teacher.

2. Consolidation concerns. This stage indicates the degree to which a student teacher is concerned about being an effective teacher based on his/her knowledge and skill.

3. Renewal concerns. This stage indicate the degree to which a student teacher is concerned about how to use new knowledge and skills to enhance his/her teaching effectiveness.

4. Maturity concerns. This stage indicates the degree to which a student teacher is concerned with defining a personal teaching philosophy.

The 55 SSTC items are rated on a five-point Likert-type scale. A response of "extremely unimportant" was given 1 point, "unimportant" was given 2 points, "uncertain" was given 3 points, "important" was rated as 4 points, and "extremely important" was valued at 5

points. The ratings for each area of teaching concerns were added. Thus four separate scores are shown in each area.

The maximum score for the Survival Concerns Area is 70 points, Consolidation is 80 points, Renewal is 80 points, and Maturity section is 45 points. The higher the score in each of the areas, the more concern for that particular area of teaching concern.

Correlation coefficients of the teaching concerns in the SSTC were as follows: .90 for Survival, .88 for Consolidation, .92 for Renewal, and .85 for Maturity.

A brief demographic questionnaire was be used to obtain information from each respondent. Important demographic information included gender, age, class level, social economical status, educational background, and practical experiences.

Reliability

According to Arroyo and Sugawara (1989) SSTC reliable coefficient ranges are for Survival from .50 to .76; for Consolidation is from .44 to .70; for Renewal is from .59 to .79, and for Maturity is from .56 to .74. All of these coefficients are significant at $p<.01$ level.

Pilot Test

During Fall Quarter 1992 at Utah State University, eight graduate students with other majors and one

undergraduate student in the Family and Human Development Department with a preschool education major completed the instrument (see Appendix D). Bilingual questionnaires (English and Chinese) were given to each student. At a later time, an associate professor of the Department of Applied Science at Fu-Jen Catholic University, Shei-Yui Pauline Su, who actually taught preschool education in the university, provided help to further translate the work. The final questionnaire for use in Taiwan is a product of their comments, recommendations, and suggestions. This final version that had emerged from this review process reflects appropriate English to Chinese-Mandarin equivalency.

Analyses

Data were collected from undergraduate students in Taiwan. These data were analyzed by correlation and regression to determine the relationship between the educational type and developmental concerns. The *t* test was used to compare the mean score of each year of junior college and college. The *t* test was also used to compare the mean score of each of the developmental stages. A two-way ANOVA was used to analyze the interaction of the educational type and of the developmental concerns (Educational Type X Developmental Stages).

CHAPTER IV

RESULTS

Findings

The findings can be grouped into four parts. First, the senior high school educational background can be used to separate the junior college students' data, with and without preschool education background. Second, the data can also be separated by school year, freshmen and sophomores. Third, because of different geographical locations, these two junior college were compared by national city (NTTC) and urban city (NTCTC). Finally, comparisons were made using demographic information (see Table 3).

ANOVA has been used to analyze the data. The four areas of concern, survival, consolidation, renewal, and maturity, were combined into one teaching concern. These main factors are teaching, school (NTTC/NTCTC), grade (freshmen/sophomores), and background (with/without preschool education in senior high school). The factors of ANOVA include the main factors and their interaction with each other (see Table 4).

The results show that significant differences included teaching, the interaction between teaching and school, the interaction between teaching and grade, the

interaction between school and background, and the interaction between school and grade.

Table 3

The Total Comparisons for the Hypotheses of This Study

Comparison of Groups	Significant Differences of Results	Table #	Figure #
Hypothesis #1 Preschool Education Background (With/Without)			
Freshmen			
Junior College Students	Renewal Maturity	Table 5	Figure 1
NTTC	Survival Consolidation Renewal Maturity	Table 6	Figure 2
NTCTC	None		
Sophomores			
Junior College Students	Survival Consolidation Maturity	Table 7	Figure 2
NTTC	Survival Maturity	Table 8	
NTCTC	None		
Hypothesis #2 Grade (Freshmen/Sophomores)			
Total Junior College Students	Consolidation	Table 9	Figure 3
NTTC	None		
NTCTC	None		

(table continues)

Comparison of Groups	Significant Differences of Results	Table #	Figure #
Without Preschool Education Background			
Junior College Students	Survival Consolidation Renewal Maturity	Table 10	Figure 4
NTTC	Survival Consolidation Renewal Maturity	Table 11	
NTCTC	None		
With Preschool Education Background			
Junior College Students	Renewal	Table 12	Figure 5
NTTC	None		
NTCTC	Renewal	Table 13	
Hypothesis #3 School (NTTC/NTCTC)			
All Students in Each School			
Non-difference Background	Renewal	Table 14	
Without Background	Renewal	Table 15	
With Background	None		
Freshmen			
Non-difference Background	Renewal	Table 16	
Without Background	Renewal Maturity	Table 17	

(table continues)

Comparison of Groups	Significant Differences of Results	Table #	Figure #
With Background	None		
Sophomores			
Non-difference Background	None		
With Background	None		
Without Background	None		
Comparison of Demographic Information			
Age	None		
Fathers' Ed. Level	Renewal	Table 18	
Mothers' Ed. Level	Renewal	Table 19	
	Maturity	Table 20	
Fathers' Incomes	None		

Table 4

The Main Factors of ANOVA Analysis

Source of Variation	SS	DF	MS	F	Sig of F
SCHOOL	77.70	1	77.70	1.01	.316
GRADE	100.01	1	100.01	1.30	.255
BACKGR	23.64	1	23.64	.31	.580
SCHOOL BY GRADE	24.41	1	24.41	.32	.573
SCHOOL BY BACKGR	737.45	1	737.45	9.61	.002*
GRADE BY BACKGR	803.26	1	803.26	10.47	.001*
SCHOOL BY GRADE BY BACKGR	185.98	1	185.98	2.42	.122
Error A	11658.91	152	76.70		

(table continues)

Source of Variation	SS	DF	MS	F	Sig of F
TEACH	89811.97	3	29937.32	3581.13	.000**
TEACH BY SCHOOL	88.87	3	29.62	3.54	.015*
TEACH BY GRADE	108.30	3	36.10	4.32	.005**
TEACH BY BACKGR	28.65	3	9.55	1.14	.331
TEACH BY SCHOOL BY GRADE	49.18	3	16.39	1.96	.119
TEACH BY SCHOOL BY BACKGR	58.12	3	19.37	2.32	.075
TEACH BY GRADE BY BACKGR	46.25	3	15.42	1.84	.138
TEACH BY SCHOOL BY GRADE BY BACKGR	27.87	3	9.29	1.11	.344
RESIDUAL	3812.04	456	8.36		

*$p<.05$.; **$p<.01$.

Hypotheses Testing

The findings related to the first hypothesis are presented first followed by the findings as they relate to other hypotheses.

Hypothesis #1

The first hypothesis asserts that, in junior college, there were no significant differences between students who graduated from vocational senior high school with a major in preschool education and students graduating from the general senior high school or other majors of vocational senior high school (non-preschool education backgrounds in senior high school) as measured by concerns for each developmental stages.

Freshmen. In the first study year, the renewal stage and maturity stage are significantly different

between the junior college students with preschool education background and non-preschool educational background (see Table 5 and Figure 1).

All four of the stages are significantly different between those with a preschool education background as compared to the non-preschool educational background in NTTC (see Table 6), but with neither of these two groups at NTCTC.

Table 5

Comparison of Freshmen in Junior College with and without a Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	$p<$
Survival	Without	57.93	82.75	
	With	59.12	84.45	.19
Consolidation	Without	65.46	81.82	
	With	66.94	83.68	.13
Renewal	Without	65.54	81.93	
	With	68.76	85.95	.00**
Maturity	Without	36.99	82.20	
	With	38.18	84.85	.05*

*$p<.05$,; **$p<.01$.

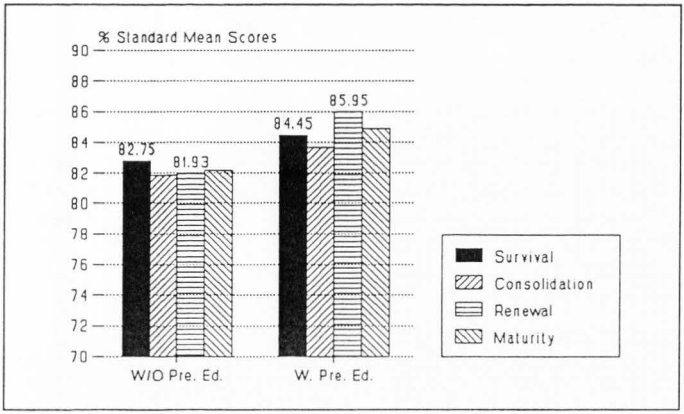

Figure 1. Profiles of mean scores for developmental teaching stages for the 2 sample groups: JC freshmen with/without background.

Table 6

A Comparison of Freshmen in NTTC with and without a Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Without	56.61	80.87	
	With	60.27	86.10	.01**
Consolidation	Without	64.00	80.00	
	With	67.85	84.81	.02*
Renewal	Without	62.79	78.71	
	With	67.82	84.78	.01**
Maturity	Without	35.89	79.76	
	With	38.09	84.64	.04*

*p<.05,; **p<.01.

Sophomores. In the second study year, the survival, consolidation, and maturity stages are significantly different between the preschool education background and non-preschool educational background in junior college (see Table 7). Two significant differences (survival and maturity) between these two groups in NTTC were also evident (see Table 8), but none in NTCTC.

Table 7

A Comparison of Junior College Sophomores with and without a Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Without	60.13	85.90	
	With	57.78	82.55	.01**
Consolidation	Without	68.69	85.86	
	With	66.25	82.82	.01**
Renewal	Without	68.03	85.04	
	With	66.20	82.75	.06
Maturity	Without	38.52	85.61	
	With	38.18	82.61	.02*

*p<.05,; **p<.01.

In the junior colleges, students who come from varied educational backgrounds manifest differences in developmental stages. These educational backgrounds can be divided into two groups. One is students with no preschool education in senior high school, and the other is students with a preschool education background in senior high school. For freshmen, students with a

preschool education background have higher scores in each stage (refer to Figure 1). In contrast, sophomore students with no-preschool education background in senior high school show higher scores in each stage (see Figure 2).

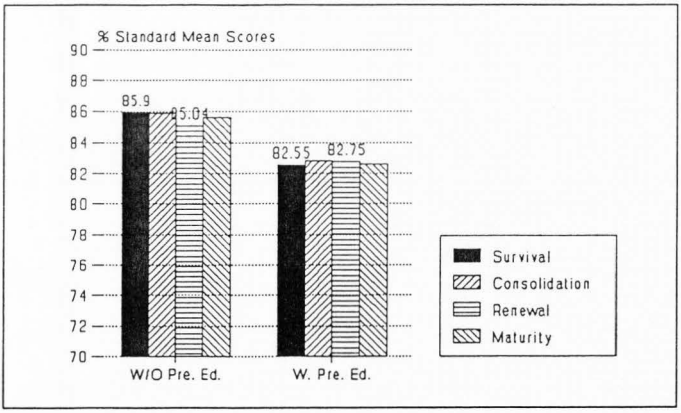

Figure 2. Profiles of mean scores for developmental teaching stages for the 2 sample groups: JC sophomores with/without background.

Table 8

A Comparison of Sophomores in NTTC with and without a Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Without	60.69	86.70	
	With	57.78	82.54	.03*
Consolidation	Without	68.69	85.86	
	With	66.15	82.69	.07
Renewal	Without	67.85	84.81	
	With	66.37	82.96	.25
Maturity	Without	38.41	85.36	
	With	37.00	82.22	.04*

*p<.05.

Hypothesis #2

The second hypothesis asserts that in junior colleges, there is no significant difference between freshmen and sophomores in their concerns for each developmental stage.

Total Students. When comparing the two different years in junior college, there is only one (consolidation) significant difference between the freshmen and sophomores (see Table 9 and Figure 3). For all of the junior college students, no significant differences were found in NTTC and in NTCTC. The junior college students with different senior high school education backgrounds can be separated into two aspects.

Without Preschool Education Background. First, there is a comparison of the groups with no preschool education background in senior high. All four of the areas were significantly different between freshmen and sophomores in junior college (see Table 10). In NTTC all four of the stages were significantly different (see Table 11), but none at NTCTC.

With Preschool Education Background. Secondly, one can compare the groups with preschool education background in senior high. There is only one significant difference (renewal) between freshmen and sophomores in junior college (see Table 12). In NTCTC, only one significant difference was found (renewal) (see Table 13), but none at NTTC.

Interestingly, in junior college, students who do not have preschool education backgrounds in senior high school manifest a difference in their mean scores (see Figure 4). The sophomores show higher scores than the freshmen do in this group.

In junior college, students who graduated from vocational senior high school with a major of preschool in senior high school revealed little change each between the two study years (see to Figure 5).

Table 9

A Comparison of the Differences between Freshmen and Sophomores in Junior College

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Freshmen	58.47	83.53	
	Sophomore	59.06	84.38	.37
Consolidation	Freshmen	66.14	82.68	
	Sophomore	67.58	84.48	.04*
Renewal	Freshmen	67.03	83.78	
	Sophomore	67.20	84.00	.81
Maturity	Freshmen	37.54	83.42	
	Sophomore	37.91	84.25	.37

*p<.05.

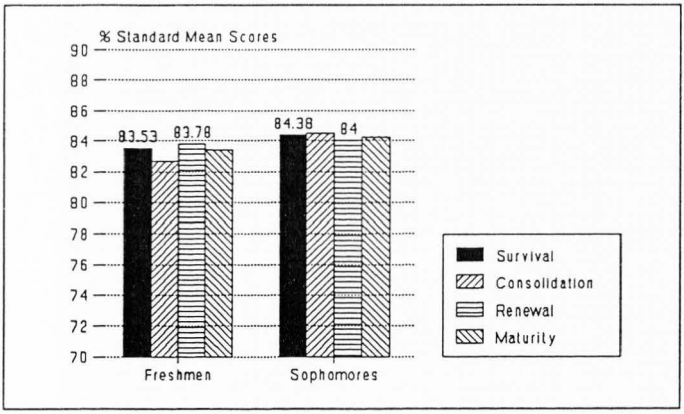

Figure 3. Profiles of mean scores for developmental teaching stages for the 2 sample groups: JC freshmen and sophomores.

Table 10

A Comparison between Freshmen and Sophomores in Junior College with No Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Freshmen	57.93	82.75	
	Sophomore	60.13	85.90	.01**
Consolidation	Freshmen	65.46	81.82	
	Sophomore	68.69	85.86	.00**
Renewal	Freshmen	65.54	81.93	
	Sophomore	68.03	85.04	.01**
Maturity	Freshmen	36.99	82.20	
	Sophomore	38.52	85.61	.01**

**p<.01.

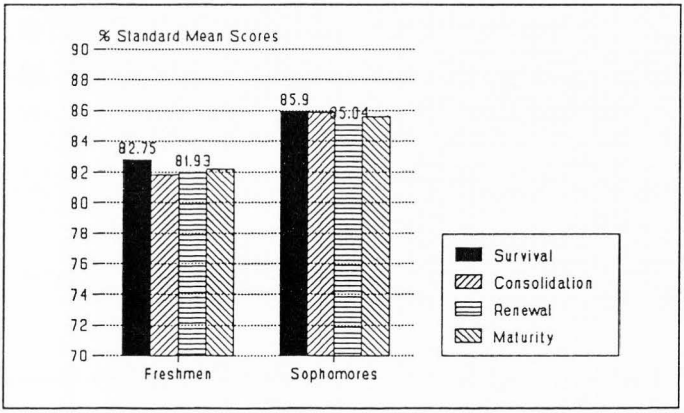

Figure 4. Profiles of mean scores for developmental teaching stages for the 2 sample groups: JC freshmen and sophomores without preschool education background.

Table 11

A Comparison between Freshmen and Sophomores in NTTC with No Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Freshmen	56.61	80.86	
	Sophomore	60.69	86.70	.00**
Consolidation	Freshmen	64.00	80.00	
	Sophomore	68.69	85.87	.00**
Renewal	Freshmen	62.79	78.49	
	Sophomore	67.85	84.81	.00**
Maturity	Freshmen	35.89	79.77	
	Sophomore	38.41	85.36	.01**

**p<.01.

Table 12

A Comparison between Freshmen and Sophomores in Junior College with Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Freshmen	59.11	84.45	
	Sophomore	57.78	82.55	.17
Consolidation	Freshmen	66.94	83.68	
	Sophomore	66.25	82.82	.51
Renewal	Freshmen	68.76	85.95	
	Sophomore	66.20	82.75	.01**
Maturity	Freshmen	38.18	84.85	
	Sophomore	37.18	82.61	.10

**p<.01.

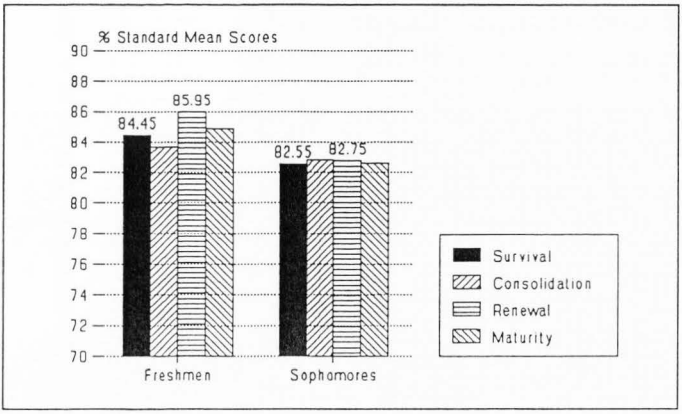

Figure 5. Profiles of mean scores for developmental teaching stages for the sample groups: JC freshmen and sophomores with background.

Table 13

A Comparison between Freshmen and Sophomores in NTCTC with Preschool Education Background in Senior High

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	Freshmen	58.11	83.01	
	Sophomore	57.80	82.56	.81
Consolidation	Freshmen	66.16	82.70	
	Sophomore	66.38	82.97	.88
Renewal	Freshmen	69.58	86.97	
	Sophomore	66.00	82.50	.01**
Maturity	Freshmen	38.26	85.03	
	Sophomore	37.38	83.06	.35

**p<.01.

Hypothesis #3

The third hypothesis asserts that there is no significant difference between junior colleges located in a global city and a provincial city.

The geographical location has been considered to divide into two parts, national and urban cities. NTTC is located in Taipei city in the north part of Taiwan. It is a global city. NTCTC, located in Tai-Chung city, is in the middle of Taiwan. Tai-Chung is a provincial city. It is not as big as Taipei.

All students in each school. The data show only one (renewal) significant difference with all students between NTTC and NTCTC (see Table 14). This significant difference between these two groups with non-preschool education in senior high school was also evident (see Table 15), but none in groups with preschool education in senior high school.

Freshmen. The data show only one (renewal) significant difference with freshmen between NTTC and NTCTC (see Table 16). When comparing the different senior high school education backgrounds, the renewal concern and maturity concern are significantly different between NTTC and NTCTC freshmen with non-preschool education background in senior high school (see Table 17), but no significant difference was found in freshmen

with a preschool education major in vocational senior high school between these two junior colleges.

Sophomores. There were no significant differences between these two junior colleges on the three comparisons; sophomores of junior college and freshmen with/without preschool education background.

Table 14

A Comparison of Total Students at NTTC and NTCTC

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	NTTC	58.88	84.11	
	NTCTC	58.55	83.64	.61
Consolidation	NTTC	66.69	83.36	
	NTCTC	66.81	83.51	.86
Renewal	NTTC	65.15	81.44	
	NTCTC	68.11	85.14	.01**
Maturity	NTTC	36.36	80.80	
	NTCTC	38.05	84.56	.10

**p< .01.

Table 15

A Comparison of All Students at NTTC and NTCTC with No Preschool Education in Senior High School

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	NTTC	58.68	83.83	
	NTCTC	59.07	84.39	.66
Consolidation	NTTC	66.38	82.98	
	NTCTC	67.34	84.18	.31
Renewal	NTTC	65.35	81.69	
	NTCTC	68.03	85.04	.01**
Maturity	NTTC	36.17	81.56	
	NTCTC	38.18	84.84	.08

**p< .01.

Table 16

A Comparison of Freshmen at NTTC and NTCTC

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	NTTC	58.31	83.30	
	NTCTC	58.61	83.74	.74
Consolidation	NTTC	65.79	82.24	
	NTCTC	66.45	83.06	.52
Renewal	NTTC	65.13	81.41	
	NTCTC	68.65	85.81	.01**
Maturity	NTTC	36.92	82.03	
	NTCTC	38.07	84.61	.07

**p< .01.

Table 17

A Comparison of Freshmen at NTTC and NTCTC with No Preschool Education Background

Area of Concern	Group	Actual Mean	Standardized Mean	p<
Survival	NTTC	56.61	80.86	
	NTCTC	59.04	84.35	.06
Consolidation	NTTC	64.00	80.00	
	NTCTC	66.69	83.36	.06
Renewal	NTTC	62.79	78.49	
	NTCTC	67.87	84.83	.00**
Maturity	NTTC	35.89	79.77	
	NTCTC	37.91	84.25	.02*

*p<.05.; **p<.01.

Comparison of Demographic Information

A comparison of demographic information includes the participants' ages, their fathers' and mothers' education levels, and fathers' yearly income. First, age was categorized into two groups. One is ages 18, 19, 20 and the other is 21 and 22, because in Taiwan college students are usually concentrated in certain ages. Second, fathers' educational levels were divided into three groups, low education level (no formal school or elementary school), middle education level (junior or senior high school), and high education (junior college, college, or graduate). Third, mothers' educational level was also divided into the three levels. Finally, fathers' yearly income was the only comparison between

parents' income because there was a lot of missing data (33%) in mothers' yearly income. Thus, fathers' yearly income was designed as low income (below $10,000), middle income (from $10,000 to $20,000), and high income (above $20,000). A two-way ANOVA test was run for the four developmental stages by these four factors.

The results show the significant differences in both fathers' education levels and mothers' education levels, but none in the factors of age and fathers' yearly income (see Tables 18, 19, and 20).

In Taiwan, if students want to enter junior college/college to study, they need to pass the entrance examination. If people fail the test the first time, they may spend one more year to prepare for the entrance examination. Although the study age tends to be concentrated in certain ages, the two-way ANOVA test did not show any significant difference.

Fathers' Educational Level

When using fathers' educational level as a factor in a two-way ANOVA, in the renewal stage, level 1 and level 3 are significantly different; level 2 and level 3 were also evident (refer to Table 18).

Mothers' Educational Level

Using two-way ANOVA analysis of mothers' educational level, in renewal stage, two significant differences were found between level 1 and level 3 and between level 2 and level 3 (refer to Table 19). In maturity stage, level 1 and level 3 are significant difference (refer to Table 20).

Table 18

A Comparison of Fathers' Education Level for Entire Sample in the Renewal Stage

Mean	Group	Group 3	Group 2	Group 1
65.2698	Group 3			
67.4865	Group 2	*		
67.8977	Group 1	*		

Note. (*) Denotes pairs of groups significantly different at $p<.05$.

Table 19

A Comparison of Mothers' Education Level for Entire Sample in the Renewal Stage

Mean	Group	Group 3	Group 2	Group 1
64.7742	Group 3			
66.8732	Group 2			
67.6164	Group 1	*		

Note. (*) Denotes pairs of groups significantly different at $p<.05$.

Table 20

A Comparison of Mothers' Education Level for Entire Sample in the Maturity Stage

Mean	Group	Group 3	Group 2	Group 1
36.5161	Group 3			
37.6197	Group 2			
37.9308	Group 1	*		

Note. (*) Denotes pairs of groups significantly different at $p<.05$.

CHAPTER 5

SUMMARY AND DISCUSSION

How to stimulate the development of teaching competency with those who work with young children has been an important goal for some time. A primary approach to the assessment of experience are the four teacher developmental stages formulated by Katz in 1972: survival, consolidation, renewal, and maturity. Applying these developmental stages, Arroyo and Sugawara (1989) created a scale of student teaching concerns (SSTC) and sought to use the scale to assess the teaching concerns of students who were enrolled in a preschool teacher training program.

The main purpose of this study was to assess early field experiences as related to developmental stages in preschool teacher training programs in the Republic of China (Taiwan). More specifically, objectives included (a) evaluating the influence of early field experiences on junior college students; (b) distinguishing the differences in developmental stages between freshmen and sophomores who are in the preschool teacher training program; and (c) comparing the differences in developmental stages between students in teacher training programs and preservice preschool teachers.

This study was cross-sectional in nature. The data originally were collected from junior college and regular

college. It included 364 respondents from two junior colleges and one college in Taiwan. Ninety-eight percent of the participants were female, 2% male. The sample included 266 junior college students and 98 college students. Ages of the respondents ranged from 17 to 40 years, with a mean age of 21. In this study, the investigator only used the data on the junior college student.

A two-part questionnaire was completed by each participant. Demographic information was contained in the first section. The information obtained from this part of the instrument revealed that most participants come from low to middle SES levels.

The second part of the instrument contained the scale of student teaching concerns (SSTC) to measure an individual's response to developmental concerns. The investigator hypothesized that differences would exist between the designated groups. Comparisons were made between different age groups, between preschool education and non-preschool education majors in terms of senior high school educational backgrounds, between and within junior college study year, between SES groups, and between parents' education level.

The 55-item scale was divided into four areas: 14 items for the survival concern, 16 items in the consolidation concern, 16 items dealing with the renewal

concern, and 9 items measuring the maturity concern. The score on each area of concern was determined by adding all of the items that were designed to assess that concern area. Higher scores translated into greater concern for a given developmental stage.

When the mean scores from these groups were analyzed, several differences emerged. Comparing the mean scores with other groups and within the same group but in a different study year, the groups that had a preschool education background showed higher scores in the first study year, but less in the second study year. The mean scores for both study years of junior college students with preschool education background were very close to each other. In the two years, the mean scores of junior college students with preschool education background showed little change.

Freshmen and sophomores from junior colleges did not show any specific difference in the four stages. Overall, the premise from developmental stage theory can be applied to this sample.

Junior college students without a preschool education background in senior high showed higher mean scores in the second year than in the first year. Those freshmen did show most concern on the survival stage. For this group, there is only a two-year period to receive a formal preschool education. Since junior

college provides preschool education courses, it tends to be more intensive. This group of students have to learn and digest the knowledge of preschool education within a two-year period. This intensive period of study may cause these sophomores to have higher mean scores than another group. Before entering junior college and studying preschool education, students with a preschool education major in their senior high school spent three years to learn basic knowledge concerning preschool education. This early field experience did appear to influence them when they began their study in junior college. At the first study year in junior college, they show higher concerns in both the renewal stage and maturity stages, but no specific concern area in the second study year.

However, the early field experience appears to have greater effect on the training of teachers at both the first and second years in junior college. Katz's developmental stage theory would lend support to this finding in the current study.

Furthermore, school seems not to have much influence on the students' developmental stages. The different locations, global city and provincial city, did not dramatically influence the scores of these junior college students.

Discussion

While attempting to interpret all the results, some findings are stronger than others in regard to the hypotheses. However, the early field experience did show a rather dramatic effect on junior college students' concerns. Students with early field experience appear to be in different developmental stages.

Students without preschool education training who enter junior college to start the preschool teacher training have only two years to develop their teaching background. The courses provided by junior college tend to be more intensive. Training a teacher may be problematic in a short period. People need time to absorb knowledge, accumulate experience, and create their teaching background. This could be the reason that sophomores in this group have the highest mean scores. This question needs to have additional research.

Students' developmental stages show significant differences among fathers' and mothers' educational levels. Are these important factors to influence students' developmental concern? This question needs to be explored further.

Students with a preschool education background show higher and steadily increasing mean scores. Is it possible that a mature teacher may substantially modify his or her teaching by using an entirely new view? A

mature teacher may cover general issues as well as any specific questions. Thus, these students may have more experience, more education, and know more about what one needs to be concerned about instead of any one concern area.

Limitations

This study, like most formal research endeavors, has certain limitations. Perhaps the foremost limitation of this study has do with the nature of the sample. A cross-sectional research design was used on a nonrandom population of junior college students in the nation of Taiwan. The sample was almost entirely female, thus obvious restrictions exist in using these findings across gender. Also, the sample was limited in terms of having the most desirable sample size at various grade levels. Thus, the findings from this study should be seen as having primary relevance for females in Taiwan who are aspiring to become preschool educators.

It is a always a methodological challenge to take a research instrument that has been developed in a specific cultural setting, in this case the United States, and apply it in another nation. Even though the investigator was detailed in translation of English to Chinese, there is always the possibility that some of the ideas and

assumptions may not be fully interpretable or understandable in another culture and language system.

Recommendations for Future Research

Considering previous research, and the findings of the present study, the investigator suggests several areas for future study to address theorical issues as well as training programs for future preschool teachers:

1. A replication of the present study using a sample of vocational senior high school students with majors in preschool education would provide an initial way to investigate their development stage. This is another way to understand the developmental process by which students in junior college are influenced by a preschool education background in senior high school.

2. A replication of the present study utilizing a sample of new preschool teachers would provide additional insight in regard to the development of teaching.

3. A similar study utilizing a longitudinal research design would provide more in-depth information from a sample around a specified time.

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APPENDICES

Appendix A

The Scale of Students Teaching Concern (English)

INFORMATION FOR SCORING SSTC TEST ITEMS
Scale of Student Teaching Concerns

Rating Scale Coding System

EI	= Extremely Important	5 points
I	= Important	4 points
U	= Uncertain	3 points
UI	= Unimportant	2 points
EU	= Extremely Unimportant	1 point

Concern/Factor Subscales	Test Item Numbers	Range of Total Points
Survival Concerns	2,3,6,9,14,18, 26,27,32,34,39, 48,50,51	14-70 points
Consolidation Concerns	1,4,5,8,12,20 23,31,33,37,38, 43,46,47,54,55	16-80 points
Renewal Concerns	7,10,15,17,21, 24,28,29,30,35, 36,40,41,42,45,	16-80 points
Maturity Concerns	11,13,16,19,22, 25,49,52,53	9-45 points

Name of student_____ Date_____

School/College_____ Major Field_____

Course _____ Instructor _____

SCALE OF STUDENT TEACHING CONCERNS

Directions:

The following questions represent a variety of concerns that student teachers often ask throughout their teacher training experiences. Please read each question carefully, and use the scale which follows to rate the degree of importance of unimportant that the concern has for you at the **PRESENT TIME.**

Do not answer the questions on the basis of what has passed or what you might feel about them in the future, but on the basis of how you feel about them at the **PRESENT TIME.** There are no right or wrong answers to the questions. your honest appraisal and first impressions about each question will be greatly appreciated.

Thank you!

Rating Scale Coding

EI = Extremely Important
I = Important
U = Uncertain
UI = Unimportant
EU = Extremely Unimportant

Now, practice rating the following questions using the rating scales coding described above. Circle the alphabet(s) corresponding to your rating for each question.

(1)	How much responsibility will I have as a student teacher in the program?	EI	I	U	UI	EU
(2)	When two children begin to squabble, what should I do?	EI	I	U	UI	EU
(3)	What kinds of activities will be doing with children in the program?	EI	I	U	UI	EU
(4)	How will I cope with the different philosophies of teaching?	EI	I	U	UI	EU
(5)	How do I hold a conversation with a parent?	EI	I	U	UI	EU

After you have practiced rating the following questions, **Stop! Now,** do you have any questions about rating the questions? If you do, please fell free to ask your teacher or researcher before you continue. **Thank you very much! Go to the next page and continue your ratings.**

Extremely Important	Important	Uncertain	Unimportant			Extremely Unimportant	
EI	I	U	UI			EU	
1. If a child pushes another child, What should I do?			EI	I	U	UI	EU
2. How many children will I be interaction with in the program?			EI	I	U	UI	EU
3. What exactly will I be going in my student teaching experience?			EI	I	U	UI	EU
4. What should I do when a child wants me to accompany him/her to an activity, but I'm busy with another activity?			EI	I	U	UI	EU
5. Should I encourage a child to finish a project that s/he has started?			EI	I	U	UI	EU
6. Will I be able to work with the children in the program?			EI	I	U	UI	EU
7. How do different programs organize their parent meetings?			EI	I	U	UI	EU
8. Why do some children cry when their parents leave them at school?			EI	I	U	UI	EU
9. How is the daily schedule organized?			EI	I	U	UI	EU
10. What can be done to accomplish the program objectives in new and different ways?			EI	I	U	UI	EU
11. What aspects of the teacher training experience will be useful in my interaction with others?			EI	I	U	UI	EU
12. How can I communicate with a parent about their child, When the child has encountered many problems during the school day?			EI	I	U	UI	EU
13. How is this student teaching experience going to help me?			EI	I	U	UI	E U
14. How do I plan activities for the children?			EI	I	U	UI	EU

15. What are the different early childhood education models available?	EI	I	U	UI	EU
16. Is there an ethical or philosophical basis upon which to disallow a child from participating in a program?	EI	I	U	UI	EU
17. How do different programs incorporate various theories of development into their curriculum?	EI	I	U	UI	EU
18. Will there be enough time to fulfill all of the requirements for this teacher training experience?	EI	I	U	UI	EU
19. What is the nature of growing and learning among children?	EI	I	U	UI	EU
20. If a child starts to cry, what should I do?	EI	I	U	UI	EU
21. Where and how often are early childhood conferences held?	EI	I	U	UI	E U
22. How can I adapt from one teaching philosophy to another?	EI	I	U	UI	EU
23. How can I avoid favoritism when certain children are more appealing than others?	EI	I	U	UI	EU
24. Will I be reading articles taken from a variety of early childhood education journals?	EI	I	U	UI	EU
25.What is the underlying philosophy of this program?	EI	I	U	UI	EU
26. How closely will I be observed during my teacher training experience?	EI	I	U	UI	EU
27. Exactly how is a lesson plan written?	EI	I	U	UI	EU
28. How can I design a research project?	EI	I	U	UI	EU
29. Will there be an opportunity for me to observe other programs?	EI	I	U	UI	EU
30. Are there science experiments appropriate for children 1 to 3 years of age?	EI	I	U	UI	EU
31. Will I be able to work with children whose first language is not English?	EI	I	U	UI	EU

32. Will the children listen to the instructions I give to them?	EI	I	U	UI	EU
33. What should I say to a child who says that s/he doesn't want to be at school?	EI	I	U	UI	EU
34. What exactly can children at the ages I will be working with be expected to do?	EI	I	U	UI	EU
35. Are field trips appropriate for the children I'll be working with?	EI	I	U	UI	EU
36. Will I be able to participate in early childhood education conferences?	EI	I	U	UI	EU
37. How should I handle challenging children?	EI	I	U	UI	EU
38. How can I deal with my concern for the child's self concept?	EI	I	U	UI	EU
39. Am I educated enough to undertake this student teaching experience?	EI	I	U	UI	EU
40. Where do I obtain information about what other program are like?	EI	I	U	UI	EU
41.What is the difference between our program and other early childhood education programs?	EI	I	U	UI	EU
42. Will I be relating class lecture information to my learning experiences in the teacher training program?	EI	I	U	UI	EU
43. How should I handle children's aggression toward other children ?	EI	I	U	UI	EU
44. How can I apply the information I read from research to my student teaching experience?	EI	I	U	UI	EU
45. What are the names of some of the journals in the field of early childhood education?	EI	I	U	UI	EU
46. How can I actively become involved in the research projects of the program?	EI	I	U	UI	EU
47. When should I intervene in a conflict between two children?	EI	I	U	UI	EU
48. How old are the children in the program?	EI	I	U	UI	EU

49. To what extent should research projects be allowed to interfere with children's daily activities?	EI	I	U	UI	EU
50. Is it possible to spend too much time with one child in the program?	EI	I	U	UI	EU
51. How do I hold a conversation with the parents?	EI	I	U	UI	E U
52. How can I use positive statements while interaction with children throughout the whole day?	EI	I	U	UI	EU
53. What are the rights of children in any research project?	EI	I	U	UI	EU
54. Will I learn how to work with children having special needs?	EI	I	U	UI	EU
55. Should a child with an illness, such as the common cold, be allow to continue to participate in the program?	EI	I	U	UI	EU

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DEMOGRAPHIC CHARACTERISTICS
(please fill in)

(1) Class (Check one) ___Freshmen ___Sophomore ___Junior ___Senior

___Graduate ___ Other, please specify _____

(2) Gender (check one)___ Male ___ Female

(3) Birthdate (fill in) ___Moth ___Day ___Year

(4) Marital Status (check one) Single ___Married

____Other, please specify _____

(5) Do you have any children? (check one) ___Yes ___No

if Yes, indicate their ages and sex ____ ____ ____ ____ ___

(6) Personal Income Level (check one)

_____$0-5,999 Yearly
_____$6,000-11,999
_____$12,000-17,999
_____$18,000-26,999
_____$27,000-35,000
_____$More than $35,000

(7) Grade Point Average (GPA: Please fill in an approximate estimate using a 4 point scale) _____

(8) Please list as many of the courses related to child development and early childhood education you have taken in your college (include in this such courses form psychology, sociology, education, children development, home economics, etc.)

(9) Please use the chart below to describe briefly all practical experiences you have had working with young children during the last four years. Two examples are provided.

Experience Description	Position	Number of Hours PerWeek	Length of time
Led a troop of 15 8-year-olds	Girl Scout Leader	5 hours	2 years
Student in an early childhood education class	Student Teacher	4 hours	1 quarter

(10) Please describe your parents' education, income level and occupation.

(a) Education Level Completed:

Mother (check one)		Father (check one)
_____	6-12 years of school	_____
_____	1-2 years of college	_____
_____	3-4 years of college	_____
_____	post-gradate	_____

(b) Income level

Mother (check one)		Father (check one)
_____	$0-5,999 Yearly	_____
_____	$6,000-11,999	_____
_____	$12,000-17,999	_____
_____	$18,000-26,999	_____
_____	$27,000-35,000	_____
_____	$More than $35,000	_____

(c) Occupation:

Mother (fill in)_____

Father (fill in)_____

Are there any comments that you would like to make about this questionnaire? If you do, please feel free to do so on the backside of this questionnaire.

Thank you very for your time and effort!

Appendix B

The Scale of Students Teaching Concern (Chinese)

親愛的同學

您好。我是美國猶他州立大學家庭及人類發展學系碩士班的研究生，我的碩士論文主題是有關幼教老師養成教育的研究。希望透過這份研究的成果，瞭解國內培養幼教師資的現況並比較現有幼教師資養成制度間的差異，以提供國內幼教老師養成教育的參考，及增進現有培養幼教老師課程的效率。因此我很需要您的幫助，能否請您填寫這份問卷？非常感激您的協助！

祝　新年快樂

林欣慧 敬啓

個人資料篇

1. 就讀學校 _____ 科系 _____
2. 年級 □1 □2 □3 □4 其它 _____
3. 高中就讀於 □普通高中 □高職幼保科 □高職其它科 或其它 _____
4. 性別 □男 □女
5. 生日 民國 _____年 _____月 _____日
6. 學期總平均 _____
7. 請描述您父母親的教育程度、年收入及職業

(a)教育程度

父親		母親
_____	未受過正式學校教育	_____
_____	國小	_____
_____	國中	_____
_____	高中	_____
_____	大專	_____
_____	大學	_____
_____	研究所以上	_____

(b)年收入

父親		母親
_____	10萬以下	_____
_____	10萬至25萬	_____
_____	25萬至50萬	_____
_____	50萬至80萬	_____
_____	80萬以上	_____

(c)職業

父親 _____ 母親 _____

8. 請列舉您在大學或幼二專所修過有關兒童發展或幼兒教育的課程名稱（包括一些相關的課程）。

9. 請利用下列的圖表簡短的描述您最近四年與兒童相處的經驗。

	經驗的描述	職位	每週工作時數	年資
例如	1. 幼教實習課	實習老師	8 小時	一學年
	2. 校外實習	幼教老師	42小時	暑假

這份問卷的題目是針對培養幼教老師的過程中，同學們可能會關心的一些問題。請您逐項閱讀，並在適當的地方打圈。每一題並沒有正確或對不對的答案，而您的答案僅表示您對該題重要程度的感覺而已。

(1) 非常不重要　(2) 不重要　(3) 無意見　(4) 重要　(5) 非常重要

例如

課程的設計應配合兒童的發展？　1　2　3　4　⑤

1.	如果兒童推擠別的兒童，我該如何處理？	1	2	3	4	5
2.	我計劃將與我互動的兒童人數有多少？	1	2	3	4	5
3.	實習時，我確實要做些什麼？	1	2	3	4	5
4.	當我正忙著一項活動時，有兒童要我陪他(她)參與另一項活動時，我該怎麼辦？	1	2	3	4	5
5.	我是否該鼓勵兒童完成一項他(她)已經開始從事的工作？	1	2	3	4	5
6.	實習時，我是否能夠與兒童一起進行各項活動？	1	2	3	4	5
7.	在不同的教學計劃中，要怎樣組織他們的家長會議？	1	2	3	4	5
8.	為什麼有些兒童會因家長離開學校而哭泣？	1	2	3	4	5
9.	每日坐息表是如何安排？	1	2	3	4	5
10.	如何運用新的或不同的方式，去達成教學目標？	1	2	3	4	5
11.	教師訓練的經驗，有那些方面有助於我與別人的互動？	1	2	3	4	5
12.	當某兒童在校遭遇許多問題時，我應如何與該家長溝通？	1	2	3	4	5
13.	教師訓練的經驗對我有何助益？	1	2	3	4	5
14.	我該如何計劃兒童的活動？	1	2	3	4	5
15.	現存有那些不同的幼兒教育模式？	1	2	3	4	5

16.	是否有某種倫理道德或思想觀念上的因素，不允許兒童參加某項教學活動？	1	2	3	4	5
17.	各類教學計劃是如何融入各種發展理論於課程中？	1	2	3	4	5
18.	在實習中，我是否有足夠的時間完成實習所規定的項目？	1	2	3	4	5
19.	在兒童群體中，成長與學習的天性是什麼？	1	2	3	4	5
20.	如果一個兒童開始哭泣，我該怎麼辦？	1	2	3	4	5
21.	有那些地方經常舉辦幼教研討（習）會，舉辦次數有多少？	1	2	3	4	5
22.	我該如何將一項教學理念，運用在另一項上？	1	2	3	4	5
23.	我該如何避免編受那些較有人緣的兒童？	1	2	3	4	5
24.	我會閱讀多種幼教期刊上的文章嗎？	1	2	3	4	5
25.	教師訓練的主要教育理念為何？	1	2	3	4	5
26.	在實習時，我會如何被密切的觀察？	1	2	3	4	5
27.	如何設計一份教學課程？	1	2	3	4	5
28.	我如何設計一項研究計劃？	1	2	3	4	5
29.	是否有機會請我觀摩別的教學活動？	1	2	3	4	5
30.	是否有適當的科學實驗適合 1 至 3 歲的兒童？	1	2	3	4	5
31.	我是否能配合一個不是以國語為母語的兒童？	1	2	3	4	5
32.	兒童會聽從我給他（她）們的指導嗎？	1	2	3	4	5
33.	當兒童跟我說他（她）不要上學時，我該跟他（她）怎麼說？	1	2	3	4	5
34.	在我實習對象的兒童年齡層中，對他們應有的期許為何？	1	2	3	4	5
35.	戶外教學活動對我所實習的兒童是否適合？	1	2	3	4	5
36.	我是否能參加幼教的研討（習）會？	1	2	3	4	5
37.	我該如何處理具有挑戰性的兒童？	1	2	3	4	5
38.	我該如何處理自己對"兒童自我概念"的關切？	1	2	3	4	5
39.	我是否已具有足夠的教育背景去修實習課？	1	2	3	4	5
40.	我可以在那些地方取得與我教學計劃內容相似的資訊？	1	2	3	4	5
41.	我們自己的和別人的幼教課程有何不同？	1	2	3	4	5
42.	我會把課堂裏學到的資訊和實習串聯在一起嗎？	1	2	3	4	5
43.	我該如何處理兒童對別的兒童的攻擊？	1	2	3	4	5
44.	我該如何將從研究報告中所讀的資料應用在試教上？	1	2	3	4	5
45.	關於幼兒教育的期刊有那些？	1	2	3	4	5
46.	我如何能積極的投入實習中的研究計劃？	1	2	3	4	5
47.	對於兩個兒童間的爭執，我該於何時介入調停？	1	2	3	4	5
48.	我可以在那些地方取得有關發展的最新資訊？	1	2	3	4	5
49.	在什麼樣的程度內，可以容許研究計劃影響兒童的日常活動？	1	2	3	4	5
50.	實習時，是否可能花太多時間在同一個兒童身上？	1	2	3	4	5
51.	我該如何和家長們對談？	1	2	3	4	5
52.	整天跟兒童互動時，我應如何使用正面的話語？	1	2	3	4	5
53.	在各種的研究計劃中，兒童有哪些基本人權是應受到保障的？	1	2	3	4	5
54.	我是否能學習到如何配合一個有特殊需求的兒童？	1	2	3	4	5
55.	如果兒童生病（如感冒），是否應被容許離園參與教學活動？	1	2	3	4	5

謝謝您的合作!!

Appendix C

Permission for Using the SSTC

Dear Hsin-Hui Lin -

Thank you for informing me about using the SSTC. I'm glad that you could use it in your research. My best wishes in your endeavors. Say hello to Dr. Sundeen and Dr. Schiavenveldt.

Would be happy to know what you found.

Happy New Year of the Rooster.

Sincerely,

Alan J. Sugawara

Appendix D

Pilot Test

	Name	Department
1	Cheng, Jui-Fen	Biology / Chemistry
2	Chiu, Fang-Yi	Molecular Biology
3	Fang, Jiann-Shyong	Mechanical Engineering
4	Feng, Jui	Instructional Technology
5	Ho, Kun-Yaw	Biology
6	Jan, Huei-Guang	Business Information Systems and Education
7	Lin, Hsiu-Hwa	Business Information Systems and Education
8	Siaa, Gay-Hang	Electrical Engineering
9	Sung, Ling-Jen	Family an Human Development (undergraduate)