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Developmental Stages of Preschool Teachers in Selected Arab Gulf Countries

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DEVELOPMENTAL STAGES OF PRESCHOOL TEACHERS IN SELECTED ARAB GULF COUNTRIES

by

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ABSTRACT

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The current study focused on examining the developmental stages of preschool teachers in the Arab Gulf region. Specifically, the needs and concerns of teachers were investigated using a pretest/posttest (12-month interval) design. Participants included two groups of preschool teachers, trained (n = 35) and untrained (n = 122).

Contrary to expectations, the sequential nature of development stages of teachers did not emerge. Instead, the results showed that teachers become less concerned about teaching as they progress in their careers.

When data from the present study were factor-analyzed, they yielded only two areas of concerns that seemed applicable cross-culturally. When data were subjected to analysis of variance, results revealed that training had a

significant main effect on teaching concerns while teaching experience did not. Further exploration of the category experience showed that, for Factor II, the trained group of teachers had a larger drop in their level of teaching concerns than the untrained group. This was especially evident with two subgroups, low (1 to 3) years of teaching experience and high (8 to 16) years of teaching experience. The trained group with medium (4 to 7) years of teaching experience maintained a consistently low score on both pretest and posttest. Teaching experience for Factor II appears to have a main effect in reducing the level of concerns of teachers over their teaching. This was especially evident between pretest and posttest for the low- and high-experience trained teachers.

(135 pages)

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INTRODUCTION

The intent of this research was to empirically assess the effectiveness of preschool teachers' training programs in the Arab Gulf region. Recently, several Arab Gulf countries launched an extensive national program to begin training all of their inservice preschool teachers. It is believed that training programs can be strengthened and improved if they are tailored to meet the needs and concerns of learners.

In the United States, one of the approaches used to identify the needs of teachers has been the exploration of the notion of developmental stages of teachers. Several educators and scholars have posited how teachers pass through developmental stages as they gain experience in the field of teaching (Watts, 1980; Katz, 1994). By knowing the characteristics of each stage, educators can become more attuned to the demands of teachers and can tailor training programs to respond to individual needs of learners. This is a strategic time to explore this notion in the Arab Gulf countries, given the current pioneering efforts of governments who have extended training to all their inservice teachers. Therefore, the purpose of this study was to investigate the idea of developmental stages of preschool teachers in the Arab Gulf region.

Historically, educators have generally agreed that teacher training is a major determinant of program effectiveness. Teacher training is strongly linked to the quality of programs offered for young children (Berliner, 1986). With increased attention to training in early childhood, the quality of young children's programs can be improved (Berliner, 1984; Logue, Eheart, & Leavitt, 1986). The second most frequent response in a Gallup poll on what the public thinks schools could do to earn an "A" grade was improving teacher quality (Gallup, 1978).

Although there is agreement that teacher training is positively associated with quality programs, the exact kind of training and the characteristics that promote professional performance are not clear (Katz, 1984). "We still do not understand a great deal about how teachers develop, their implicit theories of education or the impact of these theories on practice" (Spodek, 1988, p. 170). After reviewing literature on effective early childhood teachers, Feeney and Chun (1985) concluded that within the field of early childhood education there is no general consensus about what comprises a good teacher of young children. "The education of preprimary teachers suffers from an absence of agreed upon criteria of effectiveness" (Katz & Cain, 1987, p. 779).

In addition to the uncertainty among educators of what constitutes effective teaching, empirical research pertaining to preschool teacher preparation is rare. A dearth of research in early childhood education focuses on teacher effectiveness. Early childhood education, being a field of various forms, may be more difficult to study than elementary and secondary education (Feeney & Chun, 1985). Katz and Cain (1987) are more specific. They reported, "Virtually no research on the preparation and education of [early childhood] teachers has been accumulated, even though a few projects designed to improve teacher performance has been reported" (p. 777). Additionally, Arroyo and Sugawara (1983) pointed out that "research focused on assessing the needs and concerns of teachers in training is sparce [sic]" (p. 12). There is agreement that preschool teacher preparation is an area in immense need of further exploration and investigation (Katz & Raths, 1992).

Two factors that warrant the attention of teacher educators are the examination of the growth of professionalism in early childhood education (Spodek & Saracho, 1988) and the identification of the developmental stages through which teachers move as they gain experience in the field of teaching (Katz, 1977). The theoretical framework that guides and directs the premise of this research-study is Piaget's theory of developmental stages.

As Piaget (1976, p. 22) asserted, "We must . . . conclude there exist stages of development." Piaget characterized his stages under two conditions: a constant order of succession where one stage follows another in an invariant sequence, and development into stages that allows for progressive construction of knowledge where individuals gradually evolve and ultimately maintain equilibrium with their environment (Piaget, 1976).

Piaget recognized that growth is continuous with breaks in the process. This means that subjects at each stage complete one phase of development to begin another. Thomas (1985) wrote that Piaget identified periods of development and each period is divided into subperiods designated as stages. As individuals interact with their environment, they construct their own knowledge by acting mentally and physically on things. As a result of this construction of knowledge, individuals' behavior changes and they progress into a new stage. Similarly, Katz (1972) has explained that teachers themselves may be thought of as having developmental growth in their professional lives.

> Preschool teachers can generally be counted on to talk about developmental needs and stages when they discuss children. It may also be meaningful to think of teachers themselves as having developmental segments in their professional growth. (p. 50)

Of particular interest is Katz's (1972, 1978, 1994; Katz & Cain, 1987) hypothesis of developmental stages of preschool teachers. Katz is the seminal scholar who described in most detail the stages through which a preschool teacher progresses. Furthermore, she has alerted teacher educators to respond to the needs and concerns of each developmental stage. Interestingly, in 1989, Arroyo and Sugawara generated The Scale of Student Teachers' Concerns (SSTC) specifically to measure four areas of concern that are in agreement with Katz's ideas.

Arriving at a reliable measurement to assess preschool teachers' needs is essential in Arab Gulf countries. Governments assumed the responsibility of preschool education as recently as the 1970s and 1980s. Although the history of preschool education in this region is young, the rise in preschool enrollment is rapid. For example, Shattawi (as cited in Miladi & El Din, 1989) reported an annual increase of 30% in preschool attendance. The increase is expected to accelerate due to a high annual growth of 3.97% (United Nations Department of International Economics and Social Affairs, 1990). Great efforts are needed to match quality teachers with the quantity of established preschool programs. To meet the challenge of securing the quantity and quality of teachers who are responsible for the development of the young generation,

Saudi Arabia in 1988, Bahrain in 1990, and United Arab Emirates in 1992 launched a national inservice program to train all employed preschool teachers.

If teachers' developmental stages were identified, then national training programs in these countries could develop strategies that are more sensitive to individual differences as teachers advance in their profession. For instance, designers of training programs might group participants according to the needs and concerns that are reflected in their respective developmental stages. If a group of teachers were in a stage where they needed support and coaching, then the training program might be formulated to meet this particular need. If a group of teachers were in a stage in which they were individually searching for their philosophy of education, then perhaps training workshops would focus on fulfilling this goal. Each group of participants might be exposed to different types of training experiences, experiences that specifically match the particular demands they face.

Improving the quality of education for young children is a major goal in child development and early childhood education. This is a major challenge for nations throughout the world. The quality of teacher preparation programs emerges as a determinant factor in the quality of early childhood programs (Spodek & Davis, 1982). This study

concentrated its attention on investigating this one facet: the professional development of preschool teachers as they progress to become more effective in teaching young children. Based on Katz's (1972) hypothesis of developmental stages of teachers and using the SSTC generated by Arroyo and Sugawara in 1989, the study explored the developmental stages through which preschool teachers progress as they gain experience and training in their profession. Specifically, the study examined the areas of concern as expressed by trained and untrained Arab Gulf preschool teachers with varying years of teaching experience.

LITERATURE REVIEW

Of all the factors that contribute to the social environment in which children are educated, the teacher is by far the most critical (Peters & Deiner, 1987; Howes, Matheson, & Hamilton, 1984). As Brown (1984-85) noted, "If a program is housed in a perfect facility, but has an incompetent staff, the quality of care will more likely be inferior" (p. 21). Berliner (1986), a specialist in the study of teaching and teacher education, adds, "Competence of staff is strongly linked to the quality of programs being offered in the field of early childhood education" (p. 12). A significant factor in generating a competent staff is teacher training. Because teachers are the crucial factor in educational settings, scholars have attempted to identify elements that lead to effectiveness.

This review of literature focuses on five areas related to the improvement of the practice of teaching with a specific emphasis on the preschool teacher:

1. Research on effective teachers.
2. Assessing teachers' competence.
3. Teachers' developmental stages.
4. Katz's hypothesis of teachers' developmental stages.

5. Measuring Katz's hypothesized developmental stages of teachers.

This general review is followed by a discussion of preschool teaching and teacher training in Arab Gulf countries.

Research on Effective Teachers

A significant factor in preparing effective teachers is teacher training (Berliner, 1986; Logue, et al., 1986; Darling-Hammond, Wise, & Pease, 1983). The importance of the teacher in affecting children's development, regardless of age or grade, cannot be overstated (Peters & Deiner, 1987). Reynolds (1992) defined a teacher's effectiveness as the relationship between teacher actions and student outcomes. She added that "research tells us little about the nature of the relationship between performing effective teaching tasks and student achievement" (p. 2).

There are educators who believe that student achievement and test scores are the only true indicators of teacher effectiveness (Darling-Hammond et al., 1983). Kamii (1985) has warned early childhood teachers against this, noting that elementary and secondary school teachers are being pressured because they are expected to produce high test scores. This pressure has trickled downward, even reaching into some 4-year-old classrooms. In achievement tests, she said, all that counts is correct answers. More

correct answers are interpreted to mean more knowledge. By having goals of education focus on achievement tests and IQ tests, educators are adopting the behaviorist view of quantifying knowledge. They are missing out on assessing the qualitative aspects of having children themselves act upon and construct their own knowledge. Clearly, teachers' true effectiveness is not measured by producing higher scores on standardized tests (Kamii, 1985).

Ross and Ragan (1993) elaborated on this point by saying "effectiveness is defined by a credible model of mature performance rather than by a checklist of atomized behavior" (p. 92). Ross and Ragan considered professional development to be a change in understandings, effects, and actions; it is unlike many training approaches in which training goals are about displaying specific target behaviors. They described mature performance to be derived from qualitative research that focuses "on cognition rather than behaviors, uses images of growth rather than change, celebrates introspection, highlights the interaction of persons within contexts and emphasizes learner control of professional development processes" (p. 91). Instead of being interested in isolated skills and behaviors, training becomes more effective when it is blended with understandings, effects, and actions.

The terms teaching effectiveness, competence, and performance are terms that have been used interchangeably in the literature. The three terms refer to the teachers' excellence and improved teaching. Darling-Hammond et al. (1983) defined each term and differentiated among the three descriptions.

> Some seek to address the quality of the teacher [teacher competence] others seek to assess the quality of teaching [teacher performance]. Other approaches claim to assess a teacher's teaching by reference to student [behavioral] outcomes [teacher effectiveness]. (p. 286)

Performance refers to what teachers do on the job rather than what they can do; performance is specific to the job situation.

In her "review of reviews" of effective teaching, Reynolds (1992) reminded readers that little empirical research has focused on assessing teachers by associating effectiveness with student outcome. Researchers have tended to focus on relatively discrete and isolated aspects of teachers' thoughts and actions rather than on the whole process of teaching (Reynolds, 1992).

The following review describes major findings in the study of effective teachers:

1. Effective classroom atmosphere
2. Experiences of effective teachers
3. Effectiveness and self-reflection.

Effective Classroom Atmosphere

An effective classroom atmosphere is characterized by connectedness, both within groups and between students and teachers. The atmosphere in classrooms of effective teachers is described by positive expressive qualities, which include withitness, rapport, empathy, and personal intuition between teacher and students. Competent teachers strive to understand the students in their classes in order to create and sustain a learning community (Reynolds, 1992).

Effective teachers keep consistent, accessible records of children's progress and describe interventions used to improve their learning. Effective teachers monitor children's work, give specific and timely feedback, and keep track of children's learning (Reynolds, 1992). In conclusion, the effective teacher's main focus is the child.

Experiences of Effective Teachers

To demonstrate teacher effectiveness, two case studies (Rogers, Waller, & Perrin, 1987; Cryns & Johnston, 1993) are described. These studies have examined individual early childhood teachers over a prolonged period. Both stem from one base: a genuine interest of the teacher to create connectedness with the group of children.

In the first study, Cathy, a teacher at a university child care center, was regarded by parents and colleagues as

a competent teacher. But no one, including herself, could identify what made her a good teacher. A 9-month team project was undertaken to discover Cathy's attributes (Rogers et al., 1987). One of her discovered strengths was being able to engage in extended conversation with children. Observers noticed that children reacted to her questioning with prolonged verbal expression. Data were collected through hours of observation and videotape sessions. Cathy participated in interpreting the data.

Rogers et al. (1987) reported that Cathy asked children questions characterized by curiosity, which "allowed the child to redirect the conversation or engage in fantasy or respond playfully rather than factually" (p. 36). Cathy's conversation with children was described as "natural, spontaneous, sensitive and individualized" (p. 37).

Cathy's actions created an acceptable outcome in children. She was effective in making children produce extended conversation. She related herself to each child by confidently letting the child lead the situation and by maintaining equality in their relationship. She was considered an effective teacher.

The second study examined Theresa's reflective thinking and how it influenced her classroom practice over a 2-year period. During this time she was working towards her master's degree in education (Cryns & Johnston, 1993). The

quality and content of Theresa's reflective thoughts developed over time, providing richness out of which new ideas and teaching practices grew. Theresa became more articulate and sophisticated in discussing new ideas and practices. As a result of reflective thinking, she demonstrated a clearer, more in-depth understanding of her beliefs by articulating what learning entailed. Her understanding moved from a personal to a professional perspective.

Theresa moved from a teacher focusing on self-beliefs, feelings, and experiences, from a teacher interested in limited classroom work, to one who considered learning to be influenced by a broader context (Cryns & Johnston, 1993). She started becoming aware of the dispositions and duties of the profession, and of the social and the historical factors in the environment that have bearing on learning and teaching. Her attitude of curiosity coupled with reflective thinking provided an improved teaching practice. By the end of the program, she had begun to consider her beliefs in a broader historical, socio-political context. The change in Theresa and in her students was noticeable; her supervisors began considering her an effective teacher.

In conclusion, one can sense that Cathy's questioning attitude brought about qualitative responses from children that were demonstrated in extended verbal language. Her

actions produced an effective outcome. The second case study points out how reflective thinking moved the teacher from one concerned with her own person to a teacher who has become aware of the context and environments affecting the learning of children. Both experiences have been characterized by effectiveness because of the teacher's genuine interest to create connectedness with the group of children.

Effectiveness and Self-Reflection

Ross and Ragan (1993) described self-reflection as the act occurring between master educator and learner. Dialogue takes place between them to "relive" (reflect) a teaching situation for the purpose of examining and improving it. An example of self-reflection is when the learner and the master educator try to restructure the teaching situation they have encountered that day. Together the student teacher and the educator try to recollect past images and recapture the situation to become aware of teaching strategies employed and become conscious of the feelings exhibited. Reflection, then, becomes an appraisal of the situation, generating recommendations for improvement. Reflection produces an awareness of the strategies, theories, and feelings that underlie one's professional

problem solving, and creates an awareness of judgments about performance (Ross & Ragan, 1993).

Two studies indicate that self-reflection is a crucial factor in creating change in outcome. The first study reported by Ross and Ragan (1993) was undertaken in two school districts in Ontario, Canada, with two separate groups of teachers over a period of 2 years. The purpose was to identify the activities in which supervisors participated to produce effective change in teachers. The interviews and meetings between supervisors and teachers were videotaped, coded, and analyzed. Findings suggested that a reflective approach to supervision was the identifying factor that brought an effective change to teaching.

The second study, reported by Spodek, Nir-Javiv, and Saracho (1987), examined a supervisory process that emphasized reflective thinking. For three consecutive years, inservice teacher training was conducted in Israel in the form of on-the-job supervision. Self-report questionnaires were collected from three different groups of teachers at the end of each year. There were 250 kindergarten teachers the first year, 400 the second year, and 450 the third year. The conclusion was that the form of inservice education provided had an impact on the relationship between teachers and their supervisors. Again,

results showed that reflective thinking was a crucial factor in bringing about effectiveness. "This form of clinical supervision with its emphasis on reflective thinking motivated participants and contributed to their professional growth as evidenced by their responses" (Spodek et al., 1987, p. 41).

One can conclude from the review of this work that research is still exploring the field of effective teaching with a focus on isolated features of teachers' effectiveness. Researchers and educators continue the search to further examine the components of effective teaching.

Assessing Teachers' Competence

The previous section described research findings in the area of effective teachers and effective teaching. But how is a competent teacher identified? How is competent teaching assessed? An account of the history of early childhood preparation programs identified three categories found to be indicators of competence: "personal characteristics, behaviors, and cognitive processes" (Spodek & Saracho, 1988, p. 67).

Personal Characteristics

Personal characteristics such as patience and understanding were identified by Leeper, Dales, Skipper, and Witherspoon in 1969 as characteristics of a "good teacher." "Throughout the years, love of children, has been recognized as basic to successful work with them (children) . . . patience and understanding . . . a warm, outgoing, but not dominating individual can work well with children and parents" (Leeper et al., 1969, pp. 105-106). According to Spodek and Saracho, while such characteristics are important, they remain personal virtues rather than professional qualities. The problem with such personal characteristics is that their assessment is highly subjective.

Behaviors

In the late 1960s and early 1970s, there was an increased interest in teachers' assessment that used competency evaluation as a measure of effectiveness. Competency evaluation assumes that the attributes of a good teacher are demonstrated in an observable behavior. One such competency-based assessment instrument is used by the Child Development Associate (CDA) credentialing program (Peters, 1988). "The basic concept behind the CDA credentialing system is viable if and only if the level of

competency--the configuration of the behaviors observed--is the correct one" (Peters, 1988, p. 98). Teachers in the CDA program are assessed according to six competency areas:

1. Establishing and maintaining a safe and healthy learning environment.

2. Advancing physical and intellectual competence.

3. Building a positive self-concept and individual strength.

4. Promoting positive functioning of children and adults in a group environment.

5. Bringing about optimal coordination of home and center child-rearing practices and expectations.

6. Carrying out supplementary responsibilities related to the children's programs.

Under the heading of each competency area there is a description of behaviors, for example, "Organize space into functional areas recognizable by the children, such as block building area, library, etc." (National Credential Program, 1989, p. 98). Teachers in training are assessed according to the presence or absence of such observed behavior. The more behaviors that are observed, it is believed, the stronger the teacher's competency.

Clearly, CDA competencies represent what a broad team of experts found to be important behaviors for early childhood personnel (Peters, 1988). Peters specified that

more than 20,000 CDA credentials have been awarded thus far. There is no evidence, however, to suggest that granting credentials raises the competence of teachers. In fact, Howey, Yager, and Joyce (1978 in Spodek & Saracho, 1988) commented on the CDA procedure by saying that the improvement in teacher training was not due to the competency-based assessment. "While the competency movement led to a restatement of goals, teacher education programs did not focus to any great degree on how the behavior of teachers contributed to the goals' implementation" (Spodek & Saracho, 1988, p. 68).

The major function of the CDA assessment is to ensure availability of behavioral standards for credentialing purposes. Its function ends with certification. This is called summative evaluation; once the teacher is licensed or certified, the function of the assessment is completed. Such assessment devices, when used as the only measure of competency, do not ensure further growth.

Cognitive Processes

Educators have also discussed another approach for assessing teachers' effectiveness. This approach goes beyond behavior assessment and focuses on the teacher's cognitive processes (Combs, 1965; Spodek, 1988; Saracho, 1988; Katz & Raths, 1985). According to these educators,

there is a need to become concerned with thoughts, beliefs, and dispositions of teachers rather than just the observable behavior. It is those thoughts, beliefs, and dispositions that allow teachers to create new situations and generate innovative ways to cope with learning and to connect with individual children. Understanding observable behavior is not enough to clarify the concepts that drive teachers' actions. Combs expressed his ideas by saying, "Behavior is only a symptom of internal states of feeling, seeing, believing and understanding. . . . Instead of focusing attention on what students do, (educators) must learn to concentrate on how student-teachers feel, think, believe. . ." (p. 106).

Similarly, Spodek (1988), when discussing the professional behavior of teachers, emphasized the importance of examining the driving force behind teachers' behavior.

> There is more to teaching than observable actions however. . . . Even when teachers are visibly inactive, they may be functioning as teachers. . . . One must understand not only the behavior of teachers observed but also the teachers' thought processes regarding teaching and the concepts that drive these processes (pp. 161, 162).

In addition, Saracho (1988) explicitly asserted that preparation programs need to deal with the teachers' cognitive processes in order to achieve improvement in the practice of teaching.

Katz and Raths (1985), in an article entitled "Dispositions as Goals for Teacher Training," proposed dispositions be added to the goals of teacher education. Dispositions were defined as trends in behavior, "habits of the mind" (p. 303), which described how the statement is said, not what is said. The authors use as an example a teacher who has demonstrated competency in skills performed in the classroom. But when a student asks further, the teacher responds with a disposition. The question may be answered with warmth and acceptance, thus, demonstrating a positive disposition. Or, the teacher may not answer the question and instead reprimand the student because the question has already been answered, thus demonstrating a negative disposition.

Other characteristics of a disposition are intensity and frequency (Katz & Raths, 1985). Intensity of a disposition is the strength of a reaction, the extent of warmth carried with the disposition. The frequency of the disposition is the number of efforts the teacher is said to reflect in reaction to children's learning, such as posing extra questions and creating new activities.

Observing a skill occasionally is not sufficient to judge competency, whereas the discussion on disposition alerts teacher educators to introduce the concepts surrounding disposition into the goals of teacher

preparation programs. Examples of desirable dispositions are "to understand the feelings of students; to use a variety of teaching methods and models; to make judgements with a minimum of personal bias" (Katz & Raths, 1985, p. 306). Desirable dispositions with adequate intensity and frequency can become part of the goals of teacher training. Trainers could encourage teachers to respond with warmth to a child's question as many times as necessary. Moreover, trainers can stimulate teachers to accept happily the atmosphere of curiosity that may be prevailing among children in the classrooms, and to encourage them to create extra situations to satisfy this inquisitiveness.

When educators discuss teachers' effectiveness, "good" or "bad" teachers, they usually describe them in terms of their dispositions (Katz & Raths, 1985). Katz and Raths surveyed instructors, asking them to list essential attributes of competent teachers. The instructors listed such dispositions as being accepting, stimulating, and encouraging. They did not list skills or knowledge. The data suggest that these instructors consider dispositions to be a more effective description of competent teachers than behavioral skills. Katz and Raths believe that if dispositions as goals are added to teacher education programs, they will have an enduring impact upon the candidates.

To be useful, assessments based on cognitive processes and/or dispositions need to be transformed into measuring devices. Spodek (1988) said, "The study of teachers' thought processes is relatively new. We still do not know how all teachers think about all aspects of professional practice. . . . But what we have learned already suggests that this would be a fruitful area of study" (p. 170).

Expert and Novice Teachers

Over the last decade, there has been an increased interest in assessing effective teachers by examining differences between novice and expert teachers (Berliner, 1986; Fogarty, Wang, & Creek, 1983; Carter, Sabres, Cushing, Pinnegar, & Berliner, 1987; Westerman, 1991; Touchon & Munby, 1993; Rich, 1993). In particular, researchers have focused on differences between novices (beginning teachers) who have not had a record of success in the classroom, and experts (experienced teachers) who have demonstrated professional success (Rich, 1993). There is a need to identify the concepts experience, expertise, and effectiveness before one applies findings to the field (Reynolds, 1992). Berliner (1986) was more specific; he described experience and expertise as confounding factors.

> Experience changes people without necessarily turning them into experts. . . . Thus, the terms "experienced" and "expert" are used throughout this discussion as if they are interchangeable.

> We know they are not, but cannot yet untangle them. (p. 9)

Likewise, the terms beginner and novice will be used here interchangeably. Also, it has been observed that when educators and researchers describe expert and competent teachers, they are usually referring to an effective teacher. It is as if the three terms overlap.

Berliner (1986) has found the search for the expert pedagogue to be important in improving education. The information accumulated about the experts' tasks and behavior can become part of teacher education programs. "Another reason to study experts is that they sometimes provide exemplary performances from which we can learn" (Berliner, 1986, p. 6).

Differences between novice and expert teachers are discussed under three broad domains:

1. Planning tasks
2. Tasks needed during actual instruction
3. Reflection tasks.

Planning tasks. Findings from Reynold's (1992) "review of reviews" of effective teaching showed that expert teachers planned lessons with the purpose of enabling students to link what they already know to new information. Experts knew their students in ways that allowed them to tailor the subject matter and instructional activities to

each student's level. Berliner (1986) added that expert teachers were skillful in planning and using time sensibly. Experienced teachers were better able to anticipate situations likely to be encountered, consequently making plans based on these possibilities.

"Experts' enhanced understanding was assumed to stem from their highly developed schemata, an-abstract knowledge structure that summarized relationships among many particular cases" (Rich, 1993, p. 137). This enabled experts to comprehend, analyze, and see relationships in a more complex and elaborate manner than did novices.

Reynolds (1992) added that beginning teachers appeared to understand the need for creating lessons that are appropriate for the subject matter and for students, but they seemed to accomplish the task in a superficial way. They often did not know their subject matter in a way that allowed them to clearly explain it to students. They were often unable to tailor materials and instruction to individual students.

Tasks needed during actual instruction. As Reynolds (1992) noted, competent teachers created classrooms where empathy, rapport, and personal interactions prevailed. They maximized time spent engaging in worthwhile experiences and minimized time spent waiting for activities to get started. Competent teachers found ways to establish and maintain

rules and routines that were fair and appropriate to students.

Similarly, Fogarty et al. (1983) described experienced teachers as those who create links between specific categories of instructional actions to categories of student performance. The novices failed to implement a large variety of instructional actions, while experts were able to attend to a number of kinds of classroom cues. The novices had less tendency to consider prior knowledge about subject matter, content, student's history, and pedagogical principles during ongoing instruction (Fogarty et al., 1983). While the novice might have seen little in a situation, the expert used powerful analytical tools for interpreting situations to adapt appropriate actions. Experts, much more than novices, took contextual variations into consideration (Touchon & Munby, 1993).

Reflection tasks. Competent teachers evaluated their own effectiveness by reflecting on their own actions as well as reflecting on the student responses in order to improve their practice. Beginning teachers did not develop schemata to aid in organizing the enormous quantities of information gathered during classroom experiences. Moreover, the questions they raised to elicit reflective answers were inappropriate. Reflection might have helped the beginning teacher develop schemata for making meaning out of classroom

experience (Reynolds, 1992). Master teachers reframed experiences through a reflective approach, an approach that has not been demonstrated by the novices (Ross & Ragan, 1993).

The experts' thought processes were deeper, richer, and more related to student than to self. Experts had superior ability to encode and elaborate information in their working memory (Carter et al., 1987). Beginning teachers did reflect on their practice, but their reflections appeared to be less focused than those of experienced teachers (Reynolds, 1992).

Differences between the novice and the expert have been demonstrated in three domains: (a) planning tasks, (b) tasks needed during actual instruction, and (c) reflection tasks. However, the questions remain: Does the novice over time change to become an expert? Is expertise a stable trait? Will the beginning teacher become a competent teacher?

In their endeavor to improve educational practice, researchers have tried to answer these questions by studying the expert and the novice, and examining differences between them. Arriving at reliable assessment procedures for identifying the true competencies of effective teachers will aid educators in improving their training process. This can be done by choosing the most relevant body of knowledge and

experiences necessary to be included in teacher preparation programs.

Teachers' Developmental Stages

A growing body of research and literature has addressed the stages through which teachers pass as they gain experience in the field of teaching. While some scholars have identified differences between the expert and the novice as discussed in the previous section, others (Oja & Ham, 1984; Watts, 1980; Feimen-Nemse, 1982; Katz, 1972, 1977; Arroyo, 1985; Arroyo & Sugawara, 1989) have studied change in teachers based on hypotheses of stage theorists.

The study of teachers' developmental stages here is based on the interpretation of the ideas of Katz (1972, 1977; Katz & Cain, 1987), Oja and Ham (1984), and Watts (1980). The core paradigm is Katz's detailed description of the needs and concerns of early childhood teachers as they progress in their teaching experience. "Teachers are usually asked to study children's development according to stages. It may also be meaningful to study teachers' professional development in segments as they gradually grow in stages" (Katz, 1972).

The research by Oja and Ham (1984) establishes the link to a stage theoretical foundation that is congruent with Piaget's definition of developmental stages, "Development is

an active construction process, in which learners through their own activities build increasingly differentiated and comprehensive cognitive structures" (Crain, 1992, p. 103). Crain added that Piaget recognized that individuals pass through his stages at different rates and they move through the stages in an invariant sequence. According to Oja (1980), "Development moves with increasing differentiation and integration. Subsequent stages incorporate and transform previous ones." Watts (1980) reinforced Katz's (1972) description of teachers' developmental stages and elaborates on the training needs. She described specific ways educators may help respond to teachers in each developmental stage.

The assumption that individuals change at a different pace implies that a teacher's growth varies between one phase and another, and also varies between one teacher and another. Because new learning and change are conceptualized differently at different stages of development, there is an increasing probability that successful responses to these changes will be made when the developmental stage is identified. Higher stages are thought to provide better frameworks for managing complex issues (Oja, 1980). Evidence from research shows that teachers are more effective when they are concerned with complex stages of conceptual functioning. Oja also suggested that goals of

teacher preparation programs should be adapted to include activities that increase teacher's conceptual, ego, and moral maturity.

Based on developmental stage theories, Oja (1980) described a framework for an inservice training program which was used to promote teachers' growth. She said that professional development was not assumed to unfold automatically. If professional development were to occur, then a teacher "needs both a challenging learning task and intensive personal support for the requisite risk-taking" (p. 32). Because the learning tasks and the personal support needed to differ from one stage to another, teacher educators must be sensitive to stage differences among teachers. Hence, educators must design programs that reflect individualized differences to promote further development.

Developmental stage theories provide a logical framework for understanding teachers' professional change. Identifying developmental stages with the appropriate responses to each stage is a major force in improving teacher preparation programs, thus improving the education process in the field of teaching.

Cognitive-Developmental Stage Approach

A unique study in the cognitive-developmental approach was undertaken by teachers and researchers in the University of New Hampshire (Oja & Ham, 1984). The criteria used to select teachers to join a research team depended on the professional developmental stage through which the teacher was moving. The developmental stages of teachers were identified as a result of information gathered from three empirical measures: The Rest-Defining Issues Test of Moral Judgment, The Loevinger Sentence Completion Test of Ego Development, and The Hunt Paragraph Completion Test of Conceptual Complexity (Oja & Ham, 1984).

In this investigation, the characteristics of teachers were matched with characteristics of several stage theorists: Kohlberg's moral reasoning, Piaget's cognitive and thought patterns, Hunt's conceptual levels, and Loevinger's ego maturity. Hence, a comprehensive framework was formed for the study of teachers' developmental stages.

Teachers representing the various developmental stages were selected to join the research team. While the research team was meeting to achieve its goal, there was another ongoing internal study. The teachers, selected to represent various stages of development, were themselves under observation, their behavior videotaped, and their verbal expression recorded. The purpose was to examine individual

teacher participation in a group discussion and their perception of issues related to research. For 2 years, with one meeting a week, information and documents were gathered and analyzed. Based on the stage theorists, the data produced features of four developmental stages: (a) conventional teachers, (b) transitional teachers, (c) goal-oriented teachers, and (d) self-defining teachers. The findings provided additional understanding on how teachers changed and moved into higher stages of development (Oja & Ham, 1984). A basic conclusion drawn from this study is that stage theorists with varying frameworks agree that the change through which individuals progress is "from simpler to more complex differentiated modes of functioning" (p. 172).

Watts's Developmental Stages

Watts's (1980) theory described three developmental stages in the professional life of teachers. The survival stage or a beginning teacher stage, a middle stage characterized by more ease and comfort, and the mastery stage characterized by an assured feeling of confidence. Moreover, Watts associated the developmental stages with stage theorists Piaget and Erikson, who also saw a pattern in human growth. "Stage theory answers a series of steps in

development. You go up each step, and each is impossible without the preceding one" (p. 3).

Watts's (1980) contribution to a better understanding of teachers' developmental stages is evident not only in her analysis of stages, but in her suggestions of how educators can respond appropriately to the different stages. Her suggestions have significant implication for teacher preparation programs. She suggested several general strategies that may help teachers advance from one stage to another:

1. To have teachers associate with people whose thinking about teaching is a little wider and broader.

2. To have teachers self-experience the situation.

3. To help teachers look back on the experience to reflect and express (Watts, 1980).

Describing the specific ways educators may respond to teachers in each developmental stage, Watts's (1980) ideas were reinforcing Katz's (1972) paradigm of developmental stages. Watts (1980) said, "Experience indicates that the formal and traditional forms of inservice programs decrease in value as teachers increase in mastery" (p. 9). Many of the inservice workshops are organized as hands-on experiences and how-to courses. These are valuable to most first and second stage teachers, but for third stage teachers, the value of these workshops is very meager.

Teachers' concerns in this stage vary. They may need to take courses that will enable them to rise in the academic ladder, or they may take theoretical courses in subjects such as learning theories and philosophy of education. "Inservice programs should be specific to the needs of individuals" (Watts, 1980, p. 10).

In describing her hypothesis of developmental stages of teachers, Feiman-Nemse (1982) highlighted a basic issue in training. She said that inservice teachers can advance along the continuum of development, first, when peer learning is practiced, and second, when teaching is considered a collective effort. One of the powerful norms that helps teachers continue learning and developing is the "norm of collegiality" (p. 17). This refers to the expectation that improving one's teaching is a collective undertaking.

Katz's Hypothesis of Developmental Stages of Teachers

Prior to Oja and Ham (1984) and Watts (1980), it was Lilian Katz (1972) who first described in detail the developmental stages through which preschool teachers move. Based on her extensive work with teachers, she identified four developmental stages and described the particular demands that teachers face at each stage. She suggested

that preschool teachers, most of whom had little training, need assistance to develop as they gain experience in the field of teaching (Katz & Cain, 1987). Four stages of preschool teacher development were hypothesized. The length of time in each stage was thought to vary among individuals. However, the sequence in which stages occur did not change, thus agreeing with Piaget's definition of invariant stages in development.

Stage I: Survival

The first of the four hypothesized stages is called survival. This is characterized by the teacher being preoccupied with keeping the children busy, having them accept her authority, and having them come to like her. The teachers' main concern during this first full year is whether or not she can survive. The teacher is anxious; questions of inadequacy and success are her common worries. The teacher in the survival stage often asks, "Can I get through the day? . . . Can I make it until the end of the week?" (Katz, 1977, pp. 7, 8). Years later, Watts (1980) quoted Katz's (1972) theory when she described her developmental stages, naming the first stage survival after Katz's.

The needs of teachers in this first stage, as expressed by both Katz (1972, 1977) and Watts (1980), are similar.

Both stated the teachers' need for assurance, support, and guidance. Katz (1977) emphasized the need of providing on-site trainers. Training, she said, must be available from someone who is acquainted with the new teacher and with her teaching capacity. Watts (1980) emphasized the teachers' need for support in every new activity they undertake. Teachers in the survival stage, she said, need extended time for planning, implementing, and evaluating.

Stage II: Consolidation

The second stage, consolidation, is the stage when the teacher becomes comfortable with discipline behavior and begins to think of meeting needs of individual children. She may be looking for answers to such questions as "How can I help a clinging child?" (Katz, 1977, p. 9). In this stage, the teacher starts to identify individual needs of children and begins to meet them more adequately. Katz suggested that teachers in the consolidation stage continue to need onsite training. They need to explore demands of individual children and how best to meet them in cooperation with onsite trainers. Katz added that it is also helpful at this stage for teachers to share their feelings with other teachers in the same stage; it helps reduce the feelings of frustration and inadequacies experienced at this stage.

Stage III: Renewal

Katz's (1972) third stage, renewal, usually begins after four or more years of teaching, when the teacher becomes tired of the routine and begins to inquire and explore new dimensions. She starts looking for new ideas, new techniques, and new materials. This is the stage where the teacher experiences the need for renewal and refreshment (Katz, 1977). During this stage, teachers find it rewarding to meet teachers from different programs and backgrounds and to visit schools with various educational systems. Teachers in this stage benefit from attending regional conferences and seminars and exchanging views with colleagues. They are extending their circle of knowledge and interest to encompass a wide variety of ideas.

Watts (1980) combined both stages identified by Katz (1972) as consolidation and renewal into one stage which she called middle stage (see Table 1). However, her description remains in line with Katz's. She emphasized the need of teachers at this stage to be concerned with discipline problems and with finding new and challenging activities.

Stage IV: Maturity

The fourth stage is called maturity, characterized by deeper and broader questions about the nature of learning.

Table 1

Katz's (1972) and Watts's (1980) Developmental Stages of Teachers

Katz	Watts
Survival	Survival
Consolidation	
Renewal	Middle
Maturity	Mastery

The teacher becomes concerned with philosophical and ethical issues in the area of early childhood education. She starts asking deeper and more abstract questions, such as "What is the nature of growth and learning? And what are the historical and philosophical roots" (Katz, 1977, p. 11). In this mature level of professionalism, teachers need to interact with specialists in the field, to read widely, and perhaps to work toward a higher degree.

Watts (1980) called her last stage the mastery stage, which is characterized by confidence. In this stage, teachers begin to ask why questions, rather than what. She said they may benefit from acting as mentors and coaches to new teachers and by becoming involved with decision making.

Watts's suggestions were consistent with Katz's (1972) hypothesis of developmental stages of teachers.

Katz and Cain (1987) proposed that teacher education classes be designed to respond to the needs of each stage. Teachers in the survival stage need survival skills and broad resources to know "how to do" aspects of teaching. Teachers in the maturity stage need theoretical subjects in the areas of history and philosophy. Teachers' developmental stages assume that the demands facing teachers at each stage may need to change. This means that hands-on classes are needed in the survival stage, while a more theoretical direction is needed in the maturity stage (Katz & Cain, 1987; Watts, 1980). Identifying developmental stages of preschool teachers implies that inservice training programs need to reorganize their workshops and courses to meet the demands of teachers in each developmental stage.

Measuring Katz's Hypothesis of Developmental Stages of Teachers

Arroyo (1985) developed an instrument designed to measure the developmental stages of teachers as proposed by Katz (1972). To create such an assessment, Arroyo and Sugawara (1989) started by generating student teaching concerns from 104 early childhood teachers in training, their trainers, and an extensive review of the literature.

This produced 167 student teaching concerns later used in the development of the instrument. Then these student teaching concerns were administered to 107 teacher-trainees enrolled in seven similar early childhood teacher training programs found in Montana, Utah, and Oregon. This produced the final emergence of four major areas (factors) of teaching concerns similar to Katz's theoretical ideas. The measurement device was entitled The Scale of Student Teachers' Concerns (SSTC) (Arroyo & Sugawara, 1983).

The SSTC has been used with student teachers. Arroyo and Sugawara (1989) undertook the study using a sample of student teachers in early childhood education from three colleges in the United States. Results obtained verified the emergence of four factors that matched the developmental stages as described by Katz. However, the sequential appearance of stages did not emerge.

Arroyo and Sugawara (1989) reported that according to the theoretical ideas, it was expected, for example, for beginning student teachers to have significantly higher survival concerns than the advanced student teachers. It was also expected that advanced student teachers would have significantly higher maturity concerns than beginning student teachers. "Findings suggested that student teachers at the beginning and advanced levels all had concerns associated with the four areas of teaching concerns, only in

different intensities" (Arroyo & Sugawara, 1989, p. 43). This means that instead of beginning teachers having a predominance of survival concerns, they may have a variety of concerns at all four developmental stages.

Preschool-Teacher Training in Arab Gulf Countries

As noted earlier, preschool education is a new venture in the Arab Gulf countries and preschool teacher training has just begun. The majority of preschool teachers have gained experience from the field without prior preparation or training. Hence, this group of teachers constitutes a worthwhile group of subjects for the nature of the study. Comparison between a trained and an untrained group of teachers with varying years of experience becomes possible. The following describes three areas pertaining to the field of preschool education in Arab Gulf countries: (a) establishing training centers, (b) teacher training programs, and (c) preschool programs.

Establishing Training Centers

Training centers have been established in three Arab Gulf countries (Saudi Arabia, Bahrain, and United Arab Emirates) to meet the urgent need to improve the quality of preschool education. The region has witnessed a vast

increase in preschool children's enrollment in the last decade. Chanawi and Alahmar in 1983 reported the annual increase to have reached 33.76% between 1979 and 1986 (Shattawi, as cited in Miladi & El Din, 1989). In spite of the huge increase in enrollment, the number of attending children ranges from only 6% to 52% in the Arab countries (Shattawi, as cited in Miladi & El Din, 1989). The increase in demand for preschools is expected to continue due to a high "annual population growth, estimated at 3.97% (United Nations Department of Internal Economics and Social Affairs, 1990, p. 294). In addition, the number of working women is rising.

The increased preschool enrollment could not be matched by a similar increase in the improvement of the quality of preschool teacher education. The preschool profession is young, indeed, and preschool education is new in the region. The majority of preschool teachers have limited experience, with no formal training. According to Shattawi (as cited in Miladi & El Din, 1989), in a documented report presented at a conference organized for specialized preschool professionals, 60% of preschool teachers in the Arab World are unqualified. This figure is probably higher in Arab Gulf countries where preschool teacher preparation has just begun.

In their efforts to raise the quality of preschool education, the government of Saudi Arabia was the first to cooperate with an Arab Regional Funding Agency (AGFUND), adopting an innovative approach called Self-Learning Training (SLT). This program was specifically generated to raise the quality of services in preschools in Arab Gulf countries. Saudi Arabia started two centers in 1989, one in Jeddah and another in Riyadh. Bahrain established a center between 1991 and 1993. In January 1994, teacher training started in Dubai. The program has attracted the attention of government officials and community leaders who became interested in expanding the educational opportunities for teachers. Presently, a third center is being established in Saudi Arabia. Three neighboring countries, Tunisia, Oman, and Lebanon, have submitted requests to replicate the SLT approach.

Each training center is situated in an independent building with two major wings. The children's wing is equipped with observation booths to aid in teacher training and parent education programs. The teacher's wing includes the workshop area, a meeting room, and a resource library consisting of both books and toys.

Teacher Training Program

The teacher training program prepares a team of women to become highly competent and professionally mature in the area of preschool education. The team members, after completing training, become their country's only specialized practitioners in the field of early childhood education. The training results in teachers attaining a high level of performance in guiding, directing, and organizing workshops for other inservice preschool teachers.

The training program is the core component of the project; its duration is a total of nine months of actual training (see Appendix A). The rationale of this training is to prepare individuals who will continue to grow professionally even after the training is over. Such a rationale requires self-learning strategies built within the training program, such as self-reflection, self-evaluation, and a strong support team.

The staff learns to think about the education of children from the perspective of developmental needs. Emphasis is placed on experience-based learning. An extensive and detailed description of each encounter with each individual child is discussed and analyzed. Teacher observing teacher is a learning experience for both the observed and the observer. Field work begins early before any member is qualified to lead a class independently.

However, diligent and persistent learning, coupled with team support and an attitude of experimentation, directs teachers to develop skills in interacting with children and guiding their behavior. Each member unfolds her own talents and capabilities and develops her own unique style of working and teaching.

Academic study is combined with extensive experience in field work. Teachers run the preschool program as required, and, at the end of the school day, each undertakes group reflection, self-evaluation, and professional enhancement. Such self-study tasks have demonstrated effectiveness and created interest among trainees. Moreover, each teacher is asked to follow one issue in depth, theoretically and practically. She completes the task by reviewing the literature available, but more importantly she gathers information from her experience and observation as it actually takes place in the classroom. She reflects on the issue for a period of time, then develops her own conclusions and recommendations.

A major means of achieving individualization and development in training is the program of individual conferences. Individual conferences between the teacher and the teacher-learner are common practice. These help teachers assess situations encountered that same morning, directly followed by suggestions for improvement. This

allows for opportunities for self-development, demonstrating the basic philosophy of the SLT.

Preschool Program

The preschool program in the training center is a program service for children of working mothers in the community surrounding the center. Moreover, it is a laboratory for training staff members and organizing educational sessions for parents. Children 3, 4, and 5 years of age are eligible for enrollment with a daily schedule of three hours only. Staff members spend the rest of the working day in preparing activities for the children and/or conducting workshops for parents and other teachers in the community.

Mothers entrust their children to the preschool program; the staff members accept the responsibility to stimulate children to develop to their maximum potential. Teachers facilitate learning and development. They support, but do not dictate; they motivate, but do not instruct; they question, but do not impart knowledge. Classrooms are not regarded as settings of restraint and passive learning, but places in which children are engaged in work of intrinsic interest. Children explore, experiment, research, and discover.

The rooms are arranged to include a variety of interest centers, with ample space for storage so that children have easy access to material. Teachers learn to use multiple methods of responding to children's thought processes. They learn to be attuned to the level of development of each child, thus discovering each child's unique attributes, abilities, and capabilities.

Summary

On the basis of the preceding review of literature, one can conclude that assessing teachers' effectiveness has occurred in several phases over the last few decades. With each phase, the knowledge available has become more refined and differentiated. Moreover, investigating teachers' developmental stages in Arab Gulf countries is a worthwhile opportunity. It contributes to the identification of stages of teachers' professional development by using subjects who have varying years of experience in the field of teaching.

Originally, educators attempted to identify elements that led to effectiveness by studying the physical attributes of teachers. Others were interested in observable behavior, while still others started inquiring about the teacher's cognitive processes. Some, such as Katz and Cain, later described dispositions as important elements to be added to the goals of teacher training.

Researchers have studied effectiveness by examining differences between the novice and the expert teacher. One of the most crucial findings in several of these studies is that self-reflection characterizes the expert teacher. Introducing self-reflection into training programs may help teachers move from beginner/novice teachers to experienced/expert teachers. Another trait that is exhibited in most of these studies on the expert and novice teacher is the genuine interest of the teacher to connect with children. This was demonstrated by describing the teacher as a caring, responsive person.

Scholars have started identifying differences among teachers based on stages of development similar to developmental stages in human growth. Several have hypothesized the change, describing it generally, but few have evidence to empirically quantify it. However, it was Katz's (1972) paradigm that described developmental stages of preschool teachers, with Arroyo and Sugawara (1989), generating a measuring device to quantify changes that occur in teachers as they move through their teaching experience.

Furthermore, one can conclude from the preceding discussion that experimental research in the field of effective teaching in early childhood is rare indeed. Reynolds (1992), in her review of literature of effective teaching, cited problems that confront learners when

interpreting bodies of research. She said, "There are few empirically demonstrated relationships between student outcomes and teacher actions. What empirical evidence is available does not necessarily generalize across subject matter, grade level, students or classroom culture" (p. 1). Later, she added that documented research about relationships between teachers and students are mainly from descriptive and correlational studies. "Descriptions are not necessarily grounds for prescriptions" (Reynolds, 1992, p. 3).

The research studies retrieved and included in this review of literature were mostly descriptive in nature. The majority involve one or few subjects who were studied extensively over a period of one year or more (Oja & Ham, 1984; Rogers et al., 1987; Carter et al., 1987; Westerman, 1991; Cryns & Johnston, 1993; Ross & Ragan, 1993). One of the few attempts to quantify and measure effective teaching in the early childhood education field was undertaken by Arroyo and Sugawara (1989) when they generated a measuring instrument (SSTC) to identify the developmental stages of teachers. The research undertaken in the Arab Gulf countries is worthwhile because it replicates the study of developmental stages in yet another culture. Moreover, it investigates the concerns and needs of yet another population, the preschool inservice teachers with varying

years of teaching experience, and compares them to a recently trained group.

Therefore, in an effort to investigate the developmental stages of preschool teachers and explore relationships between teacher training and teaching experience in the Arab Gulf countries, this research was undertaken with specific measurable objectives:

1. To compare two groups of preschool teachers, trained and untrained, with varying years of experience, and examine the pattern of change of their concerns.

2. To study whether teachers' concerns and needs change over time.

3. To identify the developmental stages of preschool teachers and examine whether they are consistent with Katz's (1972) four stages.

4. To compare results of this study with findings from Arroyo and Sugawara's (1989) study, A Scale of Student Teaching Concerns for Use with Early Childhood Education Trainees.

METHODOLOGY

Research Questions and Hypotheses

Based on Katz's (1972) hypothesis, this research was undertaken with preschool teachers in the Arab Gulf region using the Scale of Student Teacher Concerns (SSTC) (Arroyo & Sugawara, 1989). Bearing in mind the objectives and goals of the present research, the following questions and hypotheses were formulated:

Question 1: Do the concerns of teachers change over a 12-month time period?

Null Hypothesis 1: Concerns expressed by teachers at posttest are not different from concerns of teachers expressed at the pretest.

Question 2: Does the pattern of change in concerns differ between the trained and the untrained groups of teachers?

Null Hypothesis 2a: Pretest concerns of untrained teachers in each of the four areas are not different from pretest concerns of trained teachers.

Null Hypothesis 2b: Posttest concerns of untrained teachers in each of the four areas are not different from posttest concerns of trained teachers.

Question 3a: Do concerns of untrained teachers change depending on varying years of experience?

Null hypothesis 3a: Concerns of untrained teachers, when teachers are subgrouped according to number of years of experience, do not differ.

Question 3b: Do concerns of trained teachers change depending on varying years of experience?

Null Hypothesis 3b: Concerns of trained teachers, when teachers are subgrouped according to number of years of experience, do not differ.

The independent variables are training and experience. Training is not separate from experience after training: those who have been trained have gained experience since training. Each group of teachers in each location received training in different years. Therefore, the variable training is not completely isolated, except possibly in a few cases. However, the variable experience with no training is a variable that has been isolated. The effect of demographic variables such as age and educational background of parents were expected to contribute to a clearer understanding of results.

The dependent variables were operationalized by the scores of the four factors that signify the developmental

stages, as measured by the SSTC. They are (a) survival, (b) consolidation, (c) renewal, and (d) maturity.

Definitions

In order to place the study in a conceptual framework, definitions of particular terms are necessary. These terms are (a) preschool teacher, (b) training, (c) experience, and (d) developmental stages.

Preschool Teacher

A preschool teacher in the Arab Gulf is a female. She teaches children whose ages range from 3 to 5 years. Some schools may have teacher aides who divide their time among several classes. In some schools, selected staff members may assist in the children's daily program. Preschool teachers selected for this study were full-time classroom teachers.

Training

Training in this study refers to the Self-Learning Training (SLT), a specific design of preschool teacher training that has been implemented in Arab Gulf countries (see p. 44). Training is sponsored by the country's government and is undertaken in training centers especially founded for this purpose. The training is on-the-job; it combines a total of 9 months of education and practice. In

this study, a trained preschool teacher means a teacher who is receiving or has received this particular type of training.

Experience

Experience refers to the length of the activity of teaching preschool children and is measured by the number of school years completed. Each school year begins in October and ends the following June. A beginning teacher who has not completed one school year of experience is considered to have no experience.

Developmental Stages

A stage is defined by the Dictionary of Psychology (Reber, 1985) as "an identifiable period, in an extended, ongoing process, specifically one that appears to have its own internal coherence and so stands out from other similarly identifiable periods" (p. 203). It differs from level, which is reserved for a particular point on a continuum. It also differs from phase, which implies a cycle of events. In this study, the term stage is more like Piaget's and Kohlberg's stages: development takes place in an invariant sequence of qualitative changes, one leading to another. Developmental stages are considered to describe sequential steps in professional growth, as hypothesized by

Katz and measured by the SSTC. They are (a) survival, (b) consolidation, (c) renewal, and (d) maturity.

Subjects

Preschool teachers in three Arab Gulf countries, Saudi Arabia, Bahrain, and the United Arab Emirates, were the target population from which subjects were selected for the study (see Table 2). The subjects belonged to two groups.

Table 2

Description of Subjects

Subjects	N	%
Females	157	100
Site		
Jeddah	7	4.5
Riyadh	12	7.6
Bahrain	87	55.4
Dubai	51	32.5
Age: 20 to 25	38	24.1
26 to 30	51	32.4
31 to 35	38	24.1
36 to 40	17	10.8
41+	7	4.4
No response	6	3.8
Range: 21 to 50		
Mean: 30.90		
Median: 30.00		

(table continues)

Subjects	N	%
Number of siblings reared with:		
1 to 3 siblings	18	11.4
4 to 6 siblings	43	27.3
7 to 13 siblings	79	50.3
No response	17	10.8
Range: 1 to 13		
Mean: 6.66		
Median: 7.00		
Education of father		
No formal education	39	24.8
Literacy classes	15	9.5
Elementary School	32	20.3
High school and/or college	13	8.2
No response	58	36.9
Education of mother		
No formal education	58	36.9
Literacy classes	17	10.8
Elementary School	35	22.2
High school	5	3.1
No response	42	26.2
Educational level of subject		
High school	71	45.2
Two-year college degree	42	26.7
Four-year university	33	21.0
Graduate studies	1	.0
No response	10	6.3
Marital status		
Unmarried	93	59.2
Married	60	38.2
No response	4	2.5
Own children		
No	85	54.1
Yes	65	41.4
No response	7	4.4

(table continues)

Subjects	N	%
Teaching title		
Teacher	144	91.7
Other[a]	12	7.6
No response	1	.6
Number of years working with preschool children		
Less than one year	6	3.8
1 to 3 years	57	36.3
4 to 6 years	41	26.1
7 to 9 years	33	21.0
10 to 16 years	15	9.5
No response	5	3.1
Range: 0 to 16		
Mean: 5.00		
Median: 5.00		
Mode: 3		
Number of days in attendance at other informal workshops		
No participation	50	31.8
2 to 36 days	81	51.5
90 to 100 days	10	6.3
No response	16	10.1

[a]Includes teachers who undertake part-time administrative tasks.

Group I: Trained Teachers

All teachers who received the SLT were encouraged to participate in this group. The 35 trained preschool teachers out of a population of 35 comprised the trained group of teachers. This group was purposefully selected because it was the first group of teachers to be trained in the SLT. Governments eager to develop their preschool

education system have allocated large funds for training. The minimum cost per teacher equaled the sum of the teachers' salaries for 12 months plus the cost of training, making the cost per teacher per year approximately $29,000 U.S. The trained group of teachers in the Gulf countries is a valuable sample. The results obtained from this study will be important to future teachers who will be selected for similar training in the countries where training is being extended. It was both practical and appropriate to select this sample of teachers to represent Group I, the trained group of teachers.

When candidates were chosen to participate in the SLT program, three criteria were used: (a) an educational qualification equal to at least two years of university study; (b) subjective agreement among the teachers' colleagues and supervisor that she is an outstanding teacher; (c) a commitment from the teacher candidate that she can provide extra hours for training and preparation that can exceed the normal daily schedule.

The total number of trained preschool teachers include 7 from Jeddah, 12 from Riyadh, 4 from Bahrain, and 12 from Dubai. Although each location had a relatively small sample, this group represented the total population of trained preschool teachers in SLT.

Group II: Untrained Teachers

The untrained group of teachers was randomly selected from only two sites: Bahrain and Dubai. (Saudi Arabia was excluded due to the inability to have access to its inservice preschool teachers.) This was the group of inservice preschool teachers who have not been formally trained, but have had varying years of experience in the field of teaching preschool.

According to lists provided by the government officials, there were 435 preschool teachers in Bahrain and 64 in Dubai (see Table 3). A random sample was selected from among the untrained group of teachers in Bahrain constituting 20% of the teachers. Actually, only 83 subjects responded, reducing the percentage to 19%. In Dubai, 60% of the teachers were selected (n = 39), thus bringing the random sample of Group II to 122 subjects. When selecting the number in the sample in Group II, care was taken to have 30 participants and/or 20% of the total population.

Possibly, due to less professional investment, the untrained teachers felt less committed to the profession, thus explaining the high attrition rate among them. Researchers have estimated 20% attrition per year (Borg &

Table 3

Number of Trained and Untrained Teachers According to Site, Year of Training, and Data Collection Dates

Training	Site	n/N[a]	% Pop	Year '90-'91	'91-'92	'92-'93	'93-'94	Pre-test	'94-'95	Post-test
Trained										
	Jeddah	7/7	100	Training	Teaching	Teaching	Teaching	7	Teaching	7
	Riyadh	12/12	100		Training	Teaching	Teaching	12	Teaching	12
	Bahrain	4/4	100				Training	4	Teaching	4
	Dubai	12/12	100					12	Training	12
Untrained										
	Bahrain	83/435	19	Varying years of teaching experience				83	Teaching	53
	Dubai	39/64	60	Varying years of teaching experience				39	Teaching	34

[a]Number of subjects in proportion to the population

Gall, 1989). The sample in this study was reduced from 157 in the pretest to 122 subjects in the posttest, or 22% attrition during a 12-month period.

Research Design

Data were collected twice from the same subjects, with a pretest at Time I, and a posttest at Time II, 12 months later. The trained group had several subgroups. Each had varying years of experience between the training and the pretest, depending on the year each group obtained their training.

Using symbolic notation (Miller, 1986), the research design used for the study is described. In this design, P_1 and P_2 represent pretest and posttest, respectively. X indicates teaching experience of one school year, and T indicates that subjects have participated in SLT for one school year. Based on Table 3, the research design is summarized in Figure 1.

In Figure 1, the symbols on the same line are applied to the same persons, left to right, and indicate time frame. Symbols in one column occur simultaneously.

Trained:							
Jeddah	T	X	X	X	P_1	X	P_2
Riyadh		T	X	X	P_1	X	P_2
Bahrain				T	P_1	X	P_2
Dubai					P_1	T	P_2
Untrained:							
Bahrain					P_1	X	P_2
Dubai					P_1	X	P_2

Figure 1. Research design summary.

Measurement

The Scale of Student Teacher Concerns (SSTC) (see Appendix B) was developed by Arroyo and Sugawara (1989) to assess the concerns of early childhood teachers in training. These teaching concerns were hypothesized to describe the stages through which a trainee moves to become a teacher, based on Katz's (1972) theoretical suppositions about teachers' developmental stages. The SSTC consists of 55 statements, each being associated with a concern within one of four hypothesized stages of teacher development.

Survival concerns refer to the degree to which a teacher is concerned about being able to endure being a teacher. For example, "Will I be able to work with the children in the program?"

Consolidation concerns refer to the degree to which a teacher is concerned with the knowledge and skills necessary to respond to needs of individual children. For example, "If a child pushes another child, what should I do?"

Renewal concerns refer to the degree to which a teacher is concerned with new knowledge and skills available to enhance effectiveness. For example, "What should I say to a child who says that she/he doesn't want to be at school?"

Maturity concerns refer to the degree to which a teacher is concerned with defining a personal philosophy of teaching. For example, "Will there be an opportunity for me to observe other programs?"

Scoring SSTC items is done by rating each statement associated with each of the areas of teaching concerns on a 5-point Likert-type scale: extremely important (5), important (4), uncertain (3), unimportant (2), and extremely unimportant (1). The ratings that teachers give each statement are summed, yielding four separate scores for each subject, one score for each area of teaching concern. The highest possible total is 275 points, and the highest possible subtotal for each of the stages is as follows: The survival stage is made up of 14 statements at 5 points each, for a subtotal of 70 points; consolidation and renewal are both made up of 16 statements at 5 points each, for a

subtotal in each stage of 80 points; maturity is made up of 9 statements at 5 points each, for a subtotal of 45 points.

To complete the measurement process, a set of demographic questions was added. These data about subjects were added to enable the construction of subgroups and explanation of factors. The questions included were (a) level of education of subject's parents, (b) age of subjects, (c) years of experience in teaching preschool children, (d) level of education, (e) prior preparation in preschool education (both formal and informal), (f) marital status, and (g) number of own children.

In search of ways to assess effectively the developmental stages of preschool teachers in the Arab Gulf countries, the SSTC was chosen because it was the only instrument found to assess preschool teachers' developmental stages. Moreover, "both reliability and validity data obtained for the instrument suggest that supervisors and trainers can use SSTC to identify needs and concerns of their trainees" (Arroyo, 1985, p. 45). The SSTC reliability estimates for the item-total score correlation coefficient were reported to range for the items in each area of concern as follows: .50 to .76 for survival, .44 to .70 for consolidation, .59 to .79 for renewal, and .56 to .74 for maturity. All of these coefficients were significant at

$p < .01$ (Arroyo & Sugawara, 1989). The Cronbach's alpha coefficients calculated for each of the four areas of teaching concerns were as follows: .90 for survival, .88 for consolidation, .92 for renewal, and .85 for maturity. All of these coefficients were significant at $p < .0001$ (Arroyo & Sugawara, 1989).

Procedures

The mode of data collection is described in two steps: preliminary preparations and data collection.

Preliminary Preparations

Preliminary preparations began with translating the SSTC into Arabic. The SSTC, with its 55 statements, was translated into Arabic by the researcher (Appendix C). Agreement of four Arab persons to the translation was obtained. To ensure accuracy, a back translation to English was sought from a credible professional. The persons selected to evaluate the translation were specialists in the field of early childhood education and childhood development. They had an excellent command of English demonstrated by the universities from which they have graduated. The approved translation of the scale was checked with six teachers, both trained and untrained. Revisions were made accordingly before a satisfactory

acceptance of the Arabic SSTC was finally made. A pilot study with another group of six teachers was then carried out. This gave an opportunity to try out research procedures and to examine the comprehension of the questionnaire. Problems identified in this pilot study were corrected immediately.

Because data were collected at the same time in four localities, arrangements were made to assign an assistant in each locality to act as the coordinator and liaison person. In this preliminary preparation stage, contact was made with the directors of the training centers to explain the procedure and to seek their agreement in carrying out the data collection. Written instruction and verbal communication were made with the coordinators to ensure consistency in data collection across groups and to ethically consider and respect the rights of subjects.

Data Collection

Data collection was completed by the coordinators. Because Group I was made up of subjects known personally by the researcher, their cooperation was expected to be higher. Each subject from both groups was handed a personal letter with the SSTC questionnaire enclosed. The personal letter discussed the importance of their response in advancing scientific research aimed at improving preschool education

and training in their country. Also, confidentiality was assured, pointing to the need for researching empirical results and not individual opinions. There was an implicit consent when the teacher filled out the questionnaire and handed it back to the coordinator. Those not consenting would simply not respond.

Group II was made up of a sample of teachers from various schools in two localities, Bahrain and Dubai. To ensure cooperation and a purely self-reporting response, subjects, after being identified, were invited by name to attend a meeting with the purpose stated. (A meeting during office hours is usually welcomed by teachers, relieving them of classroom duties.) The local assistant ran the meeting, informing teachers of the benefits of the research and the importance of having their opinions expressed. The rights of teachers were protected; teachers not willing to participate or those not wishing to answer particular questions were respected. The SSTC statements are not private or confidential issues; they are statements where teachers express their opinions about professional concerns. Therefore, it was assumed it would appeal to the teachers and that the majority would respond gladly. Both groups were tested twice, pretest and posttest, over a period of 12 months. One year was a period assumed to allow changes to occur within the subjects.

To lessen the effect of the researcher's bias, data were collected by the coordinators in the four locations. It happened that the researcher was present during data collection of the pretest in Bahrain and the posttest in Dubai. Consideration was given to keep contact with subjects to a minimum, hopefully limiting any confounding factors. To ensure truthfulness of results, both the coordinators and the subjects were blind to the actual purpose of the study. To eliminate any threats of validity that might have come through the subjects' environments, the researcher was careful to collect data during the same period and in the same manner for the four locations.

Data collected at Time I and at Time II from subjects in the Arab Gulf region had to be transformed to English left-to-right format before they were coded and processed. Two major sets of statistical analyses were used, one as a consequence of the other. One set of procedures was conducted for the four SSTC subscales of teaching concerns. Another set was conducted for the two subscales (factors) that emerged from the first analyses. Statistical analyses consisted mainly of _t_ tests, factor analyses, and analyses of variance.

RESULTS

Results are presented in two sections. The first describes statistical procedures used to analyze the four SSTC subscales: survival, consolidation, renewal, and maturity. Statistical procedures used to examine variables and analyze data consisted mainly of correlation coefficient tests, descriptive tests, *t* tests, and factor analyses. The second part describes statistical procedures used to analyze the two factors (Factor I and Factor II) that emerged from the factor analysis. Another set of procedures was used to verify data; it consisted mainly of descriptive statistic, *t* tests, and analyses of variance.

Analyses of SSTC Four Areas of Concern

Preliminary Analyses

Pearson product-moment correlation coefficients were calculated to estimate the strength and direction of the relationship between subjects' scores on the pretest and the posttest. Table 4 compares the correlation coefficients between pretests and posttests for the four SSTC subscales. The remaining values did not seem necessary and were omitted for the sake of clarity. All relationships were statistically significant and positive; no unusual

Table 4

Correlation Coefficients Between the Four SSTC Subscales of Concern

	Posttest			
Pretest	Survival	Consolidation	Renewal	Maturity
Survival	.64**			
Consolidation		.58**		
Renewal			.59**	
Maturity				.52**

**$p < .01$.

association was found. It is not surprising to note that the strongest correlation was between the pretest and posttest survival subscale ($r = .64$, $p < .01$). This is the initial stage, which holds basic issues of concern about the surviving self in the profession of teaching children. Arab Gulf teachers would find the issues essential because this is probably the first time they have been asked to respond to basic survival concerns.

In addition to correlation coefficients, other preliminary analyses were conducted. Table 5 presents an overview of the means and standard deviations for the subscales representing each area of concern, in both the pretest and posttest. Means (M) were calculated by

Table 5

Pretest and Posttest Means and Standard Deviations for Four SSTC Subscales of Teaching Concern

Area of Concern	N	M	SD	M %	SD %
Pretest					
Survival	157	56.58	10.27	80.82	14.67
Consolidation	157	63.84	11.26	79.80	14.07
Renewal	157	61.90	10.10	77.37	12.62
Maturity	157	34.36	5.88	76.35	13.07
Posttest					
Survival	116	53.06	13.88	75.80	19.82
Consolidation	116	59.92	15.68	74.90	17.60
Renewal	116	58.69	11.51	73.36	14.03
Maturity	116	31.78	7.66	70.62	17.02

Note. M is computed by summing the scores of individual questions within each subscale, then dividing by the number of subjects.

following Arroyo and Sugawara's (1985) example, summing the score items before computing the mean. These calculations allow meaningful comparisons to the results of Arroyo and Sugawara (1989). However, the four subscales are not proportional; they include uneven numbers of questions. For example, consolidation includes 16 statements while maturity includes only 9. Therefore, the mean percent (M %) and standard deviation percent (SD %) were calculated and added to Table 5 in order to allow a precise verification of

associations and differences between the subscales themselves.

In studying the pattern of scores in Table 5, and comparing them with results reported by Arroyo and Sugawara (1989), a similar pattern in mean scores appear. In Arroyo and Sugawara's (1989) study, the mean scores for the four areas of concern ranged from $\underline{M}$ = 83.0 for survival to $\underline{M}$ = 68.0 for renewal. In the present study, means ranged from $\underline{M}$ = 80.82 for survival to $\underline{M}$ = 70.62 for maturity. Three other observations are made about the pattern of scores:

1. In the present study, pretest scores on all four areas of concern are higher than the respective posttest scores.

2. There is a gradual decrease in percent scores from survival to maturity in both pretest and posttest. In the pretest the percent mean score for survival is 80.82 and decreases to 76.35 for maturity. Likewise, the percent mean score for posttest survival is 75.80 and gradually decreases to 70.62 for maturity.

3. The posttest percent standard deviation is higher than is the pretest for all subscales, suggesting higher variability of scores than for the pretest. While pretest scores are higher, the variability is lower.

To determine the pattern of significant mean differences between the trained and the untrained group of teachers for the four SSTC subscales, another t-test analysis was undertaken. Table 6 presents t-test results and shows significant differences in means in all subscales at both pretest and posttest, with the exception of the subscale maturity at the pretest. A significant difference in means is especially evident at the posttest. Effect size (ES) has been computed for each subscale and added to Table 6. ES shows the magnitude of the difference in means between the two groups, the trained and the untrained teachers for each of the four subscales.

To determine the pattern of significant mean differences between pretest and posttest for the four SSTC subscales, another t-test analysis was undertaken. Table 7 presents t-test results and shows significant differences in means with trained group only at two subscales, the renewal and maturity. Effect size (ES) has been computed for each subscale and added to Table 7. ES shows the magnitude of the difference in means between the pretest and posttest for each of the subscales.

Based on mean scores in Tables 6 and 7, Figures 2 and 3 present the differences in the four subscales of teaching concerns between the trained and the untrained groups. The scores of all four areas were consistently higher for the

Table 6

t Tests for Four SSTC Subscales of Teaching Concerns by Training

Subscale/Training	N	M	SD	df	t	ES
Pretest						
Survival						
Untrained	121	4.23	.47	37	3.80**	.65
Trained	35	3.52	1.08			
Consolidation						
Untrained	121	4.16	.43	37	3.48**	.59
Trained	35	3.52	1.08			
Renewal						
Untrained	121	3.99	.56	48	2.67*	.50
Trained	35	3.65	.68			
Maturity						
Untrained	121	3.91	.59	45	1.83	.32
Trained	35	3.65	.80			
Posttest						
Survival						
Untrained	81	4.11	.67	41	4.25***	.76
Trained	34	3.14	1.26			
Consolidation						
Untrained	81	4.03	.67	40	3.84***	.69
Trained	34	3.13	1.30			
Renewal						
Untrained	81	3.92	.52	44	4.64***	.89
Trained	34	3.20	.83			
Maturity						
Untrained	81	3.79	.61	42	3.98***	.72
Trained	34	3.01	1.07			

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 7

t Tests for Four SSTC Subscales of Teaching Concerns by Test

Subscale/Test	N	M	SD	DF	t	ES
Untrained						
Survival						
Pretest	81	4.20	.47	80	1.56	.01
Posttest	81	4.11	.67			
Consolidation						
Pretest	81	4.15	.44	80	1.79	.17
Posttest	81	4.03	.67			
Renewal						
Pretest	81	3.97	.54	80	.98	.09
Posttest	81	3.92	.52			
Maturity						
Pretest	81	3.86	.58	80	.28	.11
Posttest	81	3.79	.61			
Trained						
Survival						
Pretest	34	3.50	1.09	33	1.98	.28
Posttest	34	3.13	1.26			
Consolidation						
Pretest	34	3.49	1.09	33	1.78	.27
Posttest	34	3.13	1.29			
Renewal						
Pretest	34	3.66	.69	33	4.17***	.55
Posttest	34	3.20	.83			
Maturity						
Pretest	34	3.66	.80	33	4.41***	.60
Posttest	34	3.01	1.07			

***$p = < .001$.

untrained than the trained group in both the pretest and the posttest. Figures 2 and 3 demonstrate that the greater decrease in scores, from pretest to posttest, was for the trained group in all subscales.

Lastly, Cronbach's alpha reliability analyses were run to examine the consistency of responses. In both pretest and posttest, these analyses yielded high reliability: alpha = .95 at the pretest and alpha = .96 to .97 at the posttest.

After examining the variables and screening the data, the next step was to subject the scores to factor analysis. This was used to determine the pattern in which items congregate together when the SSTC is applied to a new population cross-culturally and to compare results to factors generated by Arroyo and Sugawara's (1989) study.

Factor Analysis

After scores were computed for each of the 55 questions on a 5-point Likert-type scale for both the pretest and posttest, questions were factor analyzed using the SPSS package. Factor analysis was administered using principal component solution, varimax, and oblique rotation. Neither the pretest nor the posttest scores loaded on four factors. This means the four areas of teaching concerns identified by

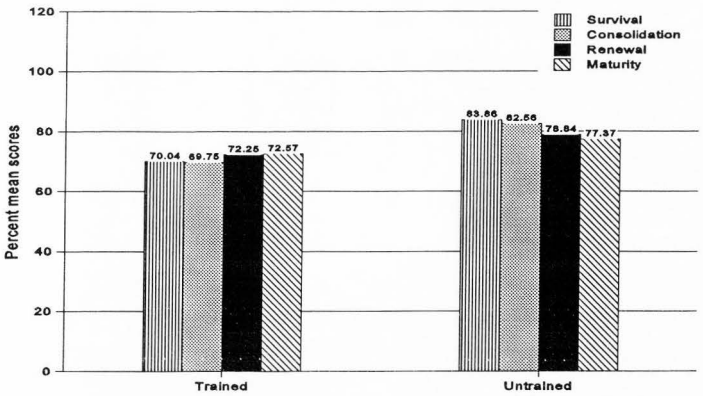

Figure 2. Pretest scores for the four SSTC subscales by level of training.

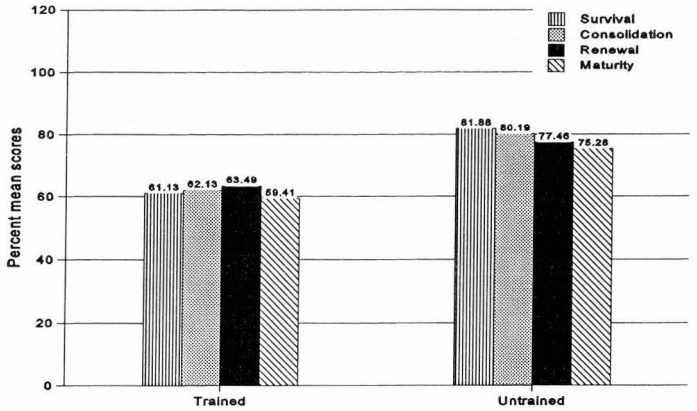

Figure 3. Posttest scores for the four SSTC subscales by level of training.

the SSTC did not congregate together and, therefore, did not naturally emerge. Even when forced into four factors, the corresponding questions to each of the four concerns still did not load in a meaningful way.

Further statistical examination of the four subscales and further investigation of individual questions revealed the need to eliminate the questions relevant to the most advanced area of teaching concern, maturity. Maturity, the fourth and last developmental teaching stage, is made up of nine questions. This is the stage in which the teacher matures in her teaching. Her circle of interest widens and deepens to embrace contexts outside the classroom and the school. This is the stage where she becomes concerned about abstract questions, such as "What are my historical and philosophical roots? How do different curricula apply to different education philosophies?" The concerns included in the maturity stage seemed to be the least applicable to the teachers in the Arab Gulf culture. The maturity questions did not cluster together, showing the least meaningful loadings. The maturity questions do not seem to be meaningful to the population of this study mainly because the preschool teaching profession is very young in Arab Gulf countries. Few teachers were expected to have actually reached the maturity stage of teaching. Therefore, the maturity area of concern was eliminated and the remaining

questions, when factor analyzed, fell into a two-factor solution.

A two-factor solution was accepted for the oblique rotation and produced a substantive pattern. It is evident that questions related to consolidation and survival areas of concern clustered together in Factor I and that questions related to the renewal area of concern clustered together as Factor II. Appendix D and E list the number of the item associated with the 46 questions and their loadings. Any loading less than .3 was omitted for the sake of clarity. Appendix D shows that questions 42 and 48 cross-loaded with approximate similar ratings on both factors. By conceptually examining statements 42 and 48, it became apparent that both are dissimilar to the concerns of inservice teachers; they are more related to concerns of student teachers. Item 42 is a concern about associating lecture classwork with training field experiences. This did not seem to apply to inservice teachers with no formal preparation. Item 48 is a concern about development. This statement is confusing without identifying "development," child development, teacher development, or curriculum development. Therefore, after studying these two items and examining their loadings, they were omitted. All other items were retained; they either did not cross-load or they loaded well on one test.

Factor I in both pretest and posttest includes two questionnaire items originally belonging to the renewal stage. These items are 10 and 35. They were retained in Factor I because subjects cross-culturally may have an explanation for grouping them with the first developmental stage, survival. Accomplishing program objectives (item 10) and accompanying children on field trips (item 35) may be considered by an Arab Gulf teacher an overwhelming concern and a heavy responsibility. As survival is characterized by a teacher's anxiety and worry over her adequacy as a teacher, an Arab Gulf teacher could consider these two items survival questions. Therefore, Factor I includes 30 questions combining the questions originally found in the first and second areas of concern, survival and consolidation, plus questions 10 and 35.

Factor II is comprised of 14 items, all of which (except 46) have been originally included in the renewal area of concern. Item 46, which was originally grouped with consolidation, is a concern about getting involved with research. In the Arab Gulf region, research in the preschool setting is an extremely rare practice. Whenever research has been attempted, it has been in association with a study program or a specialized workshop. Therefore, it seems meaningful to have Arab Gulf teachers cluster the issue of research with the renewal questions. They may

consider it an advancement into new ideas and new techniques; they may see it as a new dimension, widening the circle of interests and knowledge.

Factor analysis indicates that the emerging two factors, Factor I and Factor II, have an eigenvalue >1 in both the pretest and posttest. This accounts for a combined explained variance that exceeds 50% in the posttest. Cronbach's alphas are also high. Table 8 reports the explained variance and the alpha values for Factor I and II, for both the pretest and the posttest.

The two factors are considered to be the areas of concern expressed by preschool teachers in the Arab Gulf region. The 30 statements in Factor I are viewed as first-level concerns; they are the concerns of beginning teachers.

Table 8

Explained Variance and Alpha Values for Factor I and Factor II

Test	Explained Variance	Cronbach's Alpha
Pretest		
Factor I	33.30	.94
Factor II	8.00	.87
Posttest		
Factor I	43.50	.96
Factor II	8.40	

When teachers progress in their profession they advance to another level, to Factor II, which includes 14 statements of concerns.

For the purpose of clarity, Appendix F has been added. It lists, in sequence, the question number, the corresponding statement, and loadings for both Factor I and Factor II.

Analyses of Factor I and Factor II: Areas of Concern

The two factors that emerged from factor analysis replaced the four SSTC subscales (areas of concern) that were originally considered the dependent variables.

Analysis of Factor I and II

To determine the pattern of mean differences between the trained and untrained groups scores for Factor I and II, *t*-test analyses were performed. Table 9 presents *t*-test results. These results reveal significant differences in pretest and posttest concerns between the trained and the untrained groups. A significant difference in means is especially evident in the posttest, Factor I $t(40) = 4.17$, $p = .000$; Factor II $t(46) = 4.29$, $p = .000$. Clearly, the untrained group had significantly higher differences in mean

Table 9

t Tests for Factor I and Factor II by Training

Factor/Training	N	M	SD	df	t	ES
Pretest						
Factor I						
Untrained	121	4.22	.41	37[a]	3.78**	.66
Trained	35	3.50	1.07			
Factor II						
Untrained	121	3.90	.61	154	2.36*	.42
Trained	35	3.60	.70			
Posttest						
Factor I						
Untrained	81	4.11	.63	40[a]	4.17***	.75
Trained	34	3.16	1.26			
Factor II						
Untrained	81	3.80	.58	46[a]	4.29***	.80
Trained	34	3.12	.84			

Note. M is the mean score of questions.

[a]Values taken from separate variance estimates.

*p < .05. **p < .01. ***p < .001.

scores for Factors I and II in both the pretest and the posttest. Effect sizes (ES) were computed and included in Table 9. They showed the magnitude of difference in mean scores between the trained and the untrained groups for each findings for Factor I and Factor II (see Table 6). Both factor at pretest and posttest. The results from t-test analyses of the four SSTC subscales are consistent with tests show a decrease in scores with the progress of teachers. The trained group has lower scores than the

untrained and the posttest scores are lower than the pretest.

Analysis of Variance

Before subjecting data to ANOVA, preliminary procedures were undertaken to prepare data for analysis by conducting tests of correlation, homogeneity, and normality, setting the significance level at .05.

Variables. One of the two independent variables in the analyses was training. It was treated as a dichotomous variable with subjects being classified as either trained or untrained. The second independent variable was experience, that is, years of teaching experience. Experience, being a continuous variable, was divided into categories before introducing it as a factor in the ANOVA. After examining its cell sizes, experience was categorized into three levels: 1 = low (1 to 3 years of teaching experience); 2 = medium (4 to 7 years of teaching experience); and 3 = high (8 to 16 years of teaching experience). Tables 10 and 11 present an overview of descriptives for Factor I and Factor II, respectively, for the 111 subjects who completed both the pretest and posttest. Means, standard deviations, and population numbers by training and test according to the three categories of experience are shown.

Table 10

Factor I: Means, Standard Deviations, and Population Numbers by Training, and Categories of Teaching Experience

Categories of Teaching Experience	Pretest		Posttest	
	Untrained	Trained	Untrained	Trained
	M	M	M	M
	(SD)	(SD)	(SD)	(SD)
	n	n	n	n
	4.04	3.88	3.90	3.33
Low	(.49)	(.89)	(.88)	(1.21)
	23	13	23	13
	4.22	3.01	4.10	3.07
Medium	(.43)	(1.43)	(.55)	(1.54)
	33	8	33	8
	4.31	3.55	4.30	2.93
High	(.33)	(1.10)	(.34)	(1.33)
	25	9	25	9

Tests of correlation, homogeneity and normality. First, the Pearson product-moment correlation coefficient was calculated to estimate the strength and the direction of the relationship between pretest and posttest scores. This yielded a positive and moderately high correlation, r = .645, p = .000. It is pertinent to mention that this overall correlation coefficient is in relative agreement

Table 11

Factor II: Means, Standard Deviations, and Population Numbers by Training, and Categories of Teaching Experience

Categories of Teaching Experience	Pretest		Posttest	
	Untrained M (SD) n	Trained M (SD) n	Untrained M (SD) n	Trained M (SD) n
Low	3.90 (.53) 23	3.79 (.75) 13	3.92 (.63) 23	3.22 (.98) 13
Medium	3.95 (.53) 33	3.51 (.71) 8	3.77 (.56) 33	3.46 (.62) 8
High	3.76 (.75) 25	3.54 (.89) 9	3.75 (.58) 25	2.94 (.88) 9

with the correlation coefficients of the original four areas of concern (see Table 4).

Second, normality was examined by running normal probability plots for the overall scores of pretest and posttest for subjects who repeated the test. This yielded two plots, one each for the pretest and the posttest. Each plot showed that most of the points cluster around a straight line except for some curvatures. The line for the pretest scores appears to have more curvatures than the posttest.

Third, tests of homogeneity of variance were performed for both the pretest and posttest. This yielded

significance, indicating reasons to suspect the homogeneity assumption. Therefore, caution must be practiced when interpreting results. Fortunately, ANOVA is considered a robust measure that can withstand the violation of the assumption of homogeneity.

ANOVA and Hypotheses Testing

For this research, 2 (time: pretest vs posttest) x 2 (training: trained vs untrained) x 3 (experience: low, medium, high) repeated measure ANOVAs at pretest and posttest were employed with Factor I and Factor II as dependent variables.

Question 1. Do the concerns of teachers change over 12-month time period?

Null Hypothesis 1. Concerns expressed by teachers at posttest are not different from concerns of teachers expressed at pretest.

The results of the ANOVAs for Factor I (see Table 12) and for Factor II (see Table 13) both show a significant main effect for time, Factor I $F(1,105) = 8.87$, $p = .004$; Factor II $F(1,105) = 13.26$, $p = .000$). Thus, the null hypothesis that there is no difference in concerns between pretest and posttest is rejected. Consistent with this finding is the significant difference in means between scores of subjects at pretest and posttest as presented

Table 12

Analysis of Variance for Teaching Concern Factor I

Source of Variation	df	SS	MS	F
Between Subjects				
Training	1	30.73	30.73	32.34***
Experience	2	1.18	.59	0.62
Training by Experience	2	5.44	2.72	2.86
Error	105	99.79	.95	
Within Subjects				
Time	1	2.22	2.22	8.87***
Training by Time	1	.78	.78	3.11
Experience by Time	2	.83	.41	1.65
Training by Time by Experience	2	1.09	.54	2.17
Error	105	26.31	.25	

***$p < .001$.

earlier (see Table 5 and Table 9). Even when subjects were grouped according to varying years of teaching experience(see Tables 10 and 11), the pretest mean scores were still higher than the posttest for all categories. This suggests that subjects are expressing less concern and worry over their teaching 12 months later.

Question 2. Does the pattern of change in concerns differ between the trained and the untrained group of teachers?

Table 13

Analysis of Variance for Teaching Concern Factor II

Source of Variation	df	SS	MS	F
Between Subjects				
Training	1	7.78	7.78	10.93**
Experience	2	1.45	.73	1.02
Training by Experience	2	.15	.07	0.1
Error	105	74.77	.71	
Within Subjects				
Time	1	2.27	2.27	13.26***
Training by Time	1	1.27	1.27	7.45**
Experience by Time	2	.25	.13	0.74
Training by Time by Experience	2	1.17	.59	3.43*
Error	105	17.97	.17	

*$p < .05$. **$p < .01$. ***$p < .001$.

Null Hypothesis 2a. Pretest concerns of untrained teachers in each of the areas of concern are not different than the pretest concerns of trained teachers?

Null Hypothesis 2b. Posttest concerns of untrained teachers in each of the areas of concern are not different that posttest concerns of trained teachers.

As shown in Tables 12 and 13, results indicate a significant main effect of training with both factors, Factor I $F(1,105) = 32.34$, $p = .000$; Factor II $F(1,105) = 10.93$, $p = .001$; thus the null hypotheses is rejected. The

ANOVAs demonstrate that there is a significant difference in concerns between trained and untrained teachers for both Factor I and Factor II. T-test findings (see Table 9) are consistent with these results and show that the untrained teachers have significantly higher scores for Factor I and Factor II. Untrained teachers gave higher scores to the statements, expressing more concern and worry about their teaching than did the trained teachers.

Results of the two ANOVAs are inconsistent regarding the interaction between time and training for Factor I and Factor II. The interaction did not reach significance for Factor I, $F(1,105) = 3.11$, $p = .081$, although it reached significance for Factor II, $F(1,105) = 7.45$, $p = .007$.

Perhaps the significance observed with one factor is a chance finding. Therefore, results indicating interaction between training and time are neither rejected nor accepted. Follow-up investigation and further evidence is needed. A visual representation is displayed in Figure 4 to show the interaction effect for Factor II at the pretest and posttest by level of training. Pretest scores for the untrained and the trained groups are almost identical, whereas the posttest scores are more differentiated.

Question 3a: Do concerns of untrained teachers change depending on varying years of experience?

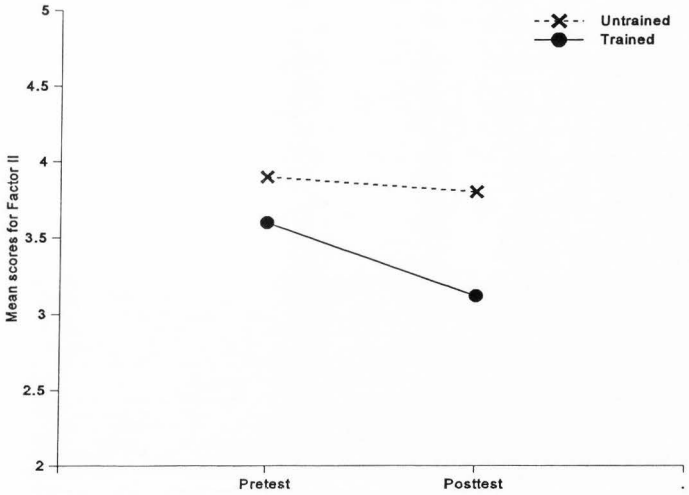

Figure 4. Mean scores for teaching concerns Factor II at pretest and posttest by level of training.

Null Hypothesis 3a: Concerns of untrained teachers when teachers are subgrouped according to number of years of experience do not differ.

Question 3b: Do concerns of trained teachers change depending on varying years of experience?

Null Hypothesis 3b: Concerns of trained teachers when teachers are subgrouped according to number of years of experience, do not differ.

As shown in Tables 12 and 13, results show a nonsignificant main effect for experience for both factors, Factor I $F(2,105) = .62$, $p = .538$ and Factor II $F(2,105) = .10$, $p = .901$. The ANOVAs have shown that teaching concerns expressed by subjects in this study do not seem related to varying years of experience in the field.

Results of the two ANOVAs (Tables 12 and 13) also did not show an interaction effect between experience and training for either factor, Factor I $F(2,105) = 2.86$, $p = .062$ and Factor II $F(2,105) = .10$, $p = .901$. Thus, the null hypothesis that concerns of untrained teachers, when teachers are subgrouped according to number of years of experience, was not rejected. The null hypothesis that concerns of trained teachers when teachers are subgrouped according to number of years of experience was also not rejected. This implies that concerns of teachers (trained and untrained) do not change according to the number of years of teaching experience.

In addition, Tables 12 and 13 show a three-way interaction among training, time, and experience. The significance revealed for Factor I and Factor II is also contradicting. It is nonsignificant for Factor I, $F(2,105) = 2.17$, $p = .119$, but significant for Factor II, $F(2,105) = 3.43$, $p = .036$. Because of the problematic nature of

interpreting three-way interaction, further investigation of this is necessary.

Therefore, a visual image of the significant interaction for Factor II was represented based on mean scores from Table 11. As Figure 5 shows, the untrained group had higher levels of concern on both the pretest and posttest than did the trained group. The untrained group of teachers with low and high experience had almost similar levels of concern on both the pretest and posttest, while those with medium experience had higher levels of concern on

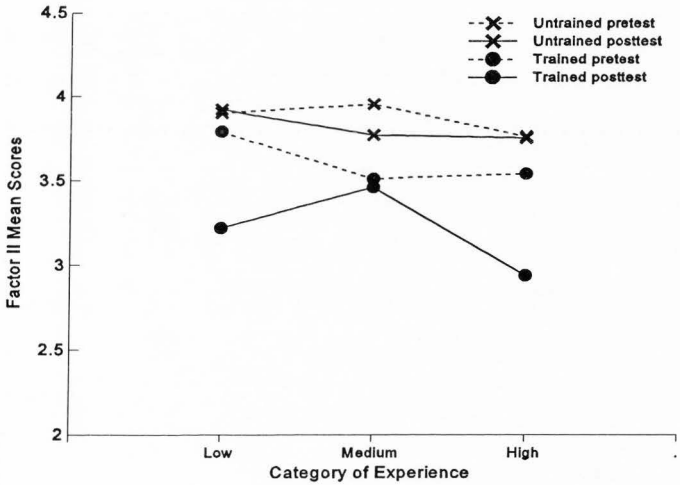

Figure 5. Mean scores for teaching concerns Factor II by test, level of training, and category of experience.

the pretest than the posttest. In contrast, the trained group with low and high experience had higher levels of concern on the pretest, while the medium experience group's concerns were almost identical for the pretest and posttest. The highest magnitude of difference between pretest and posttest was for the low and high experience trained teachers.

Conclusions from the ANOVA designs resulted in rejecting the first two null hypotheses and not rejecting the third. The two alternative hypotheses, indicating differences between pretest and posttest and between trained and untrained groups, were retained. The third alternative hypothesis, indicating a difference in teaching concerns between trained and untrained subjects of varying years of experience, was rejected. Briefly, training appears to have a significant effect on teaching concerns while experience in general does not. However, a significant interaction, time by training by experience, appeared for Factor II teaching concerns. Investigation of the different categories of experience led to the observation that experience had an effect on teaching concerns especially for the trained groups with low and high experience.

DISCUSSION

The issue of effective teaching has attracted the attention of scholars for many decades. Different researchers have explored it from different perspectives: Some have studied effectiveness by investigating the personal characteristics of teachers; others have probed the matter by inquiring about teachers' cognitive processes. Still others have examined differences between the novice and the expert teacher.

The present study focused on the issue from yet another perspective, assessing the change in needs and concerns of preschool teachers as they progress through training and gain experience teaching young children. This research, based on Katz's (1972, 1977) premise of developmental stages of teachers and using the SSTC generated by Arroyo and Sugawara (1989), was undertaken with preschool teachers in the Arab gulf region for four reasons:

1. It replicated, cross-culturally, results gained from a similar study in the United States (Arroyo & Sugawara, 1983).

2. It used the SSTC measuring instrument with a new population: teachers who are already in the field and have varying years of teaching experience.

3. It further explored the notion of developmental stages of teachers.

4. It investigated the needs and concerns that preschool teachers in the Arab Gulf region express as they progress in their teaching.

The research was conducted with 157 preschool teachers in three countries: Saudi Arabia, Bahrain, and United Arab Emirates. There were two groups of teachers, the trained (n = 35) and the untrained (n = 122). Data were gathered twice, with a 12-month interval. Statistical analyses of data revealed, first, that teaching concerns expressed by untrained teachers at posttest are significantly different than concerns expressed by untrained teachers at pretest. Second, teaching concerns expressed by trained teachers are significantly different than concerns expressed by untrained teachers; thus, the first and second null hypotheses were rejected. Third, teaching concerns of teachers (trained or untrained) do not differ when teachers are subgrouped according to number of years of experience; thus, the third null hypothesis was not rejected.

The following is a discussion and interpretation of the four major findings:

1. Present Findings Compared to Previous Research Results

2. Developmental Stages of Teachers

3. Teaching Concerns of Arab Gulf Region Preschool Teachers

4. Training and Experience.

Present Findings Compared to Previous Research Results

Comparing scores of subjects in the present study to scores in the study undertaken with student teachers by Arroyo and Sugawara in 1983 shows two similarities. In their study, Arroyo and Sugawara also found that beginning student teachers have higher scores than advanced student teachers. "On all of the areas of teaching concerns TTLI [beginning student teachers] had significantly higher concern scores than TTLII [advanced student teachers]" (Arroyo & Sugawara 1983, p. 15). Likewise, results from this study indicated that the untrained group of teachers obtained higher scores on all four areas of teaching concerns. Both the trained and untrained groups obtained lower scores on the posttest.

Another similarity in scores was observed between findings from Arroyo and Sugawara's (1983) study and findings from the untrained group in this study. In both studies, the pattern of differences in the mean scores pertaining to the four SSTC subscales of teaching concern gradually decreased from one stage to the other. Arroyo and

Sugawara reported a drop in scores for their beginning group of student teachers: 83.0 for survival, 82.3 for consolidation, and 73.6 for renewal. They reported a similar drop in scores for the advanced group of student teachers. Correspondingly, the present study shows a gradual decrease in scores for the untrained group of teachers in both the pretest and posttest. Arroyo and Sugawara (1983) explained that the fashion in which the scores drop indicates a different kind of change than anticipated. "Trainees at all levels have concerns associated with all areas of teacher development, only in different intensities" (p. 19).

An alternate explanation for this phenomenon is that the decrease in scores may be a decrease in anxiety and a reduction in the rate of worry about becoming the perfect teacher. It is interesting to note that Katz and Raths (1985) used the quality of intensity to describe effective teaching when they suggested dispositions be added to teacher training programs. They differentiated between the intensity of a disposition and its frequency, suggesting that effectiveness be assessed by the intensity of the disposition. Findings from this study replicated findings of the Arroyo and Sugawara (1989) study: As teachers progress into teaching and become less absorbed with their

concerns over becoming perfect teachers, their concerns are described as less intense in nature.

Teachers' Developmental Stages

The findings from the present study support the conclusions drawn by Arroyo and Sugawara (1989) that areas of teaching concerns, when measured by the SSTC, did not appear in the form of developmental stages as would have been predicted by Katz's (1972) premise. In spite of the fact that this research study, as well as Arroyo and Sugawara's study, was able to identify areas of concern and was able to factor analyze them into meaningful loadings, the developmental nature of teaching concerns did not appear.

It was expected, for example, that advanced teachers (trained) would obtain higher scores on the two advanced stages and that beginning teachers would obtain scores on the first and second stages. Findings were contrary to expectations. Katz's (1972) premise that it is "meaningful to think of teachers . . . as having developmental segments in their professional growth" (p. 50) did not appear. One may hastily conclude from the replicated findings that teaching concerns do not change in a stage-like form. However, there might be other explanations. One is related to the scoring style. Scoring based on a Likert-type scale

instigates subjects to obtain continuity in scoring rather than obtaining a cut-off (yes or no) score. A cut-off procedure allows researchers to assign a developmental stage or a specific area of concern to each subject based on the accumulation of subscale scores. If another scoring procedure were developed where a stage is assigned to each subject, then perhaps advancement into and through stages might be more clearly observed.

It is worthwhile to mention that differences of another nature appeared between the trained and the untrained groups regarding varying years of teaching experience. Figure 3 reveals a noticeable difference in scores for the trained between the pretest and posttest. This indicates a striking difference from the untrained group of teachers and, perhaps, a professional growth. Scores between pretest and posttest for the untrained group do not show similar striking differentiation. In other words, teaching experience was associated with changes in teaching concerns with the trained group only.

Teaching Concerns of Arab Gulf Region Preschool Teachers

When data gathered from preschool teachers in the Arab Gulf region were factor analyzed, two factors were produced instead of the original four SSTC subscales representing the

areas of concern. The first and second subscales of concern clustered together meaningfully into one factor. The items from the third subscale grouped well together after omitting the fourth subscale. A possible explanation for having items related to the first two areas of teaching concerns, survival and consolidation, congregate together into one factor has a cultural foundation. When applying the stages cross-culturally, a thorough understanding of these two stages becomes important.

The first stage, survival, is the stage in which a beginning teacher is concerned with issues related to herself and her survival as a preschool teacher. In the second stage, consolidation, the teacher becomes confident with herself, shifting her concerns to the children at hand. She becomes concerned not only with her own survival but with the survival of others, namely the individual children and their needs and capabilities. Therefore, the progress from one developmental stage to another is actually the teacher developing the autonomous self in order to care and respond to others; in this case, respond to the needs of children.

In addition, a review of the characteristics of preschool teachers in Arab Gulf countries, gathered from the set of demographic questions posed during data collection, sheds light on a similar dimension. The majority of

teachers have been reared in homes where one or both parents have never attended school. Fifty percent of the subjects have fathers with only elementary or lower school years and 47% have mothers who have never attended a formal school. However, some of the parents joined adult literacy classes. Being reared in a home with limited educational resources may contribute to further restriction of the development of the autonomous self.

Although teachers are adults, based upon chronological age, being females they continue to be sheltered by family members and societal norms. The development of the self and the formation of the identity may be taking a different route and pace. Because the occupation of teaching children is a female-dominated occupation, teaching may be the only culturally acceptable career. A protected female who finds herself in the only culturally acceptable and accessible job may still be limited in her search for autonomy and self. This is especially true in a profession known traditionally to be selfless, the closest profession to motherhood.

In such a cultural environment, a teacher may find her own survival issues connected to the children's needs. Her ability to respond to the children's needs (others) becomes linked to her survival. Therefore, based on cultural norms, it is a possible explanation that preschool teachers in Arab Gulf countries see their own surviving self and the caring

for children as one united factor. Thus, the combining of the stages survival and consolidation becomes meaningful.

Training and Experience

Training and experience were the two independent variables used in this present study. Analyses indicated that training had a significant effect on teaching concerns while varying years of experience did not. One possible explanation for this analysis may lie with the use of the measuring instrument SSTC, which was originally designed to be applied with student teachers (preservice) who have completed or who have just started their student teaching experience. However, Katz's (1972) developmental stages were hypothesized for inservice teachers. Applying the instrument to another population, the inservice teachers, may have lessened the effect of the instrument and decreased its strength.

Another explanation may be the inconsistency in findings between Arroyo and Sugawara's (1989) study and this present study. This may result from differences in the meaning of experience. Arroyo and Sugawara found a significant effect for experience with student teachers at the beginning level of their teaching experience and at the advanced level. ANOVAs in the present study did not show a

significant main effect for teaching experience with inservice teachers.

Caution must be taken when experience is measured. The actual definition of a teaching experience may vary from one context to another: A student teaching experience may be quite different from an inservice teaching experience. Also, the experience may vary culturally, depending on the conditions and regulations applied in each region. Moreover, the quality of the experience may differ from one preschool to another. A teaching experience under the supervision of a trained team and a professional director may bring about a quality experience that is quite different from an experience of a novice teacher who begins her teaching career in a center under the direction of untrained and inexperienced staff.

In the present study, another finding was revealed with regard to the meaning of experience and its significant effect on teaching concerns. Teaching experience appears to have a main effect in reducing the level of concern about teaching among the trained group of teachers. This was significant for Factor II teaching concerns. Figure 4 shows that the reduction in levels of concern was especially evident for trained/low experience and trained/high experience.

Limitations

Although great caution was exercised to reduce the effect of confounding variables, like any other research there are limitations to the generalizability of the findings. Due to the nature of the groups studied, the following factors may have obscured the perceptions of concerns expressed by subjects.

Because the subjects come from three neighboring countries in four different localities, each group may have experienced a different ecological condition that could have clouded the perception of concerns expressed. As preschool teachers in the Arab Gulf region are rarely exposed to questionnaires where their opinion is required, the pretest may have created a novelty effect. It might have also alerted subjects to issues they were not aware of, acting as an experimental treatment. Subjects may have become sensitive to the issues presented in the pretest, which may have shown up in their responses at the posttest, thus obscuring the truthfulness of results. Moreover, the limitation of having an unequal number of trained and untrained subjects may be related to some of the inconsistencies in the findings.

Implications and Conclusions

Early childhood education in Arab Gulf countries is an area with immense room for improvement. The number of preschoolers enrolled in early childhood programs is rising rapidly and the number of potential preschool teachers is minimal. The results of this study can provide additional input to strengthen inservice training programs recently launched by national governments to improve their preschool education programs.

The implications of this study are two-fold: implications for the preschool education personnel in the Arab Gulf region and implications for the researchers. For the personnel in the Arab Gulf region, the SSTC, with its two factors (Factors I and II), can be used by trainers to identify concerns of inservice teachers before recruiting them for training. The instrument can also be used by supervisors as an initial step before starting a program for guiding and coaching teachers.

Responding to the needs and concerns of learners would be effective in developing the teacher to a professional level. Vygotsky (1987) wrote about a similar development instigated by the teacher to help a child progress. He said that when verbal communication takes place, learners pass through new paths of thought by first shaping the thought

and then putting meaning to the words. Such progress, known as zone of proximal development, has been recently attracting the attention of educators. Under adult guidance learners can progress to a higher level of potential development within this zone (Wertsch & Tulviste, 1992). Identifying needs and concerns of preschool teachers by using the SSTC Factors I and II can provide additional input to create an appropriate environment for professional development. This strengthens inservice training programs recently launched by Arab Gulf governments to improve their preschool education programs.

The congregation of the two SSTC subscales, survival and consolidation, into one factor when used with Arab Gulf teachers implies that professional growth and progress are associated with their overall personal development. Therefore, trainers may need to include components of personal development in their training programs, especially for preschool teachers who express concerns that match the Factor I area of concern.

Researchers using the SSTC would interpret the scores in a similar fashion to the replicated findings revealed by Arroyo and Sugawara's (1989) study and this study. Scores reflect the amount of anxiety and worry a teacher has about teaching. With higher scores, there is a higher intensity

of concerns; with lower scores, there is a lower intensity of concerns.

Regarding the meaning of teaching experience, this study may have contributed its share to a renewed interest in understanding the quality of teaching experience. Berliner (1986), regarding the effectiveness of teachers, wrote that experience and expertise are confounding factors that educators have not been able to untangle. This study provides initial findings that aid in instigating further research to untangle the confusion around experience. A teacher's level of concern appears to be related to whether she has had teaching experience combined with training or teaching experience without training.

Suggestions for Using the SSTC and for Further Research

In considering the findings from previous research and from the present study, the first suggestion with regard to the SSTC would be to explore other scoring alternatives such as the cut-off method. Such methods can be designed with the purpose of letting stages emerge. A second direction would be to collect data at several points in time by conducting longitudinal research that follow teachers over time, which may be more conducive to the observation of developmental stages. A third suggestion would be to

acquire a large and homogeneous sample of teachers and study them cross-sectionally. A large sample would permit subgroups in different developmental stages to be identified.

The final suggestion is related to the use of the SSTC. Designers of training programs can make use of the SSTC instrument by identifying concerns of teachers at recruitment time. Then, program implementers can make use of the information by generating strategies that respond to the needs and concerns of learners. Training programs could tailor goals and objectives of training to the particular area of concern through which learners are passing. For example, if learners are in their first years of teaching, then designers of programs could build learning components to relieve teachers of the anxiety syndrome and create experiences where confidence in their teaching is realized. If learners were experienced and trained and had expressed concerns over topics that fall withing the renewal stage, then training programs could be arranged to offer new knowledge by exposing them to different curriculum possibilities and acquaint them with teaching methods of master teachers in the field.

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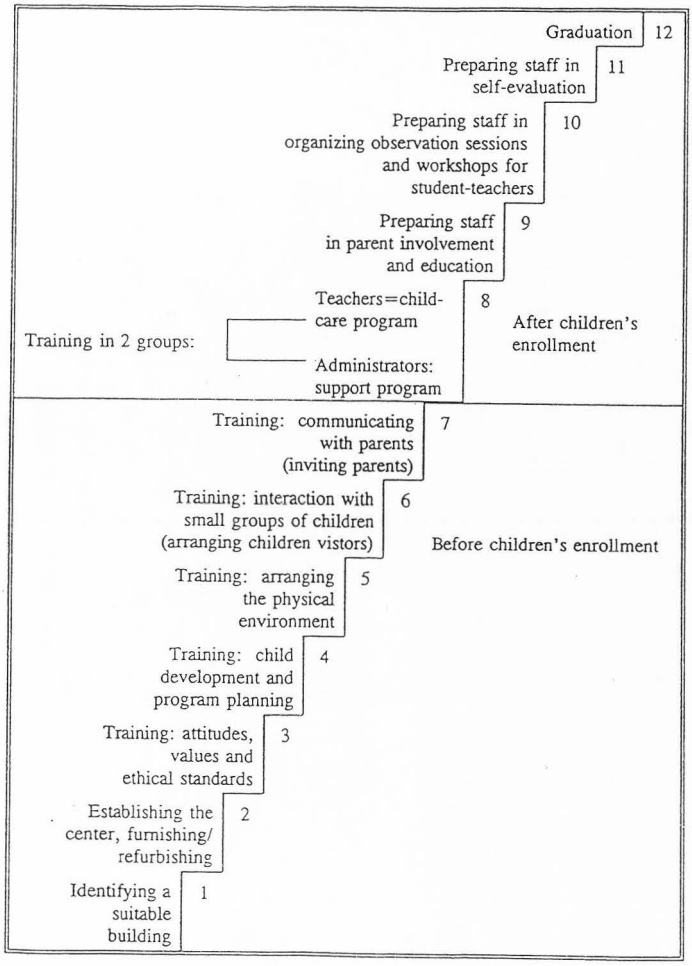
APPENDICES

Appendix A

Steps in Self-Learning Training in Arab Gulf Region



Appendix B

Scale of Student Teaching Concerns

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, 36,40,41,44, 42,45	16-80 points
Maturity Concerns	11,13,16,19,22, 25,49,52,53	9-45 points

Appendix B (continued)

Scale of Student Teaching Concerns

Dear

Welcome; your participation in answering the attached Scale is highly appreciated. As you know AGFUND (Arab Gulf Programme For The United Nations Development Organizations) is very interested in the effectiveness of teacher training and have cooperated with national governments for the purpose of maximizing efforts in achieving quality programs.

Presently, I am (as an AGFUND staff) carrying an empirical research as part of the requirements of my Ph.D. program of studies. I hope you'll share with me your opinions about your feelings and professional concerns in relationship to the teaching responsibilities you are carrying in your preschool.

Answering the attached questionnaire takes around 40 minutes. However, findings will bring a tremendous amount of benefit to the training efforts. Your answers will remain confidential and research findings will be revealed only in a cumulative statistical manner. You have the right to discontinue your participation with us at any time; there is no penalty of any kind for doing so.

Thank you for your cooperation. Hoping the information you present will have a direct effect on the preschool teacher. If you have any inquiries about this Scale, please contact me at this address:

Box 830
Manama Bahrain

Sincerely yours

Najwa Mounla

Appendix B (continued)

Scale of Student Teaching Concerns

	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 interacting with in the program?	EI	I	U	UI EU
(3)	What exactly will I be doing 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 the student teaching experience going to help me?	EI	I	U	UI EU
(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

Appendix B (continued)

Scale of Student Teaching Concerns

	Extremely Important	Important	Uncertain	Unimportant	Extremely Unimportant
	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 of this teacher training experience?	EI	I	U	UI	EU
(19)	What is the nature of growth 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	EU
(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 student teaching 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 one to three years of age?	EI	I	U	UI	EU

Appendix B (continued)

Scale of Student Teaching Concerns

	Extremely Important	Important	Uncertain	Unimportant	Extremely Unimportant
	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 them?	EI	I	U	UI	EU
(33)	What should I say to child who says the 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 programs 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

Appendix B (continued)

Scale of Student Teaching Concerns

	Extremely Important	Important	Uncertain	Unimportant	Extremely Unimportant
	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)	Where can I obtain information concerning development?	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 parents?	EI	I	U	UI	EU
(52)	How can I use positive statements while interacting 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 allowed to continue to participate in the program?	EI	I	U	UI	EU

Authors' address: Aline A. Arroyo and Alan I. Sugawara, Department of Human Development and Family Studies, Oregon State University, Corvallis, OR 97331.

Appendix C

Scale of Student Teaching Concerns Translated into Arabic

عزيزتي

يسعدني أن أرحب بك للاشتراك معنا في الاجابة على المقياس المرفق.

كما تعلمين فان منظمة "أجفند" تهتم اهتماما كبيرا بمتابعة تدريب معلمات رياض الأطفال وقد تعاونت مع الوزارة/الرئاسة بهذا الشأن. ومن أجل التوصل الى الفعالية القصوى أقوم ببحث علمي كجزء من متطلبات دراستي نحو الدكتوراة. أرغب أن تشاركيني رأيك في مشاعرك واهتماماتك المهنية الخاصة ببرامج الروضة عامة وبتحضير المعلمات خاصة.

ان اجابتك على هذا المقياس تستغرق حوالي 40 دقيقة ولكن النتائج التي ستعود على برامج التدريب كبيرة جدا لا تضاهى. اجابتك تبقى سرية ونتائج البحث سيتم عرضها على شكل احصاءات جماعية. لك الحق بالتخلف عن الاشتراك في أي وقت وليس هناك أي عقوبة من جراء ذلك.

أشكرك جزيل الشكر لتعاونك معي بهذا البحث وآمل بأن المعلومات التي تقدمينها ستعود بالفائدة الأكيدة على معلمة الروضة وتدريبها. اذا كان لديك أية استفسارات حول هذا المقياس فالرجاء الاتصال بي على العنوان التالي: ص.ب 830 المنامة - البحرين.

شكرا لتعاونك ودمت،،

نجوى منلا

Appendix C (continued)

Scale of Student Teaching Concerns
Translated into Arabic

مقياس لاهتمامات معلمة الروضة

1 - ماذا أفعل عندما يدفع طفل طفلا آخر؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

2 - ما عدد الأطفال الذين سأتفاعل معهم في الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

3 - ماذا سأفعل بالتحديد خلال فترة عملي؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

4 - ماذا أفعل عندما يريدني طفل أن أرافقه الى أحد الأنشطة بينما أنا مشغولة بنشاط آخر؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

5 - هل يتوجب علي أن أشجع طفلا على انهاء نشاط كان قد بدأه؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

6 - هل سأكون قادرة على العمل مع الأطفال في الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

7 - كيف يتم تنظيم اجتماعات الأهالي في برامج روضات أخرى؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

8 - لماذا يبكي بعض الأطفال عندما يتركهم ذووهم في الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

9 - كيف يتم تنظيم الجدول اليومي في الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

10- ماذا يمكن عمله لتحقيق أهداف برنامج الروضة بطرق مستحدثة ومختلفة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

11- ما هي نواحي العمل التي تفيدني في مجال تفاعلي مع الآخرين؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

Appendix C (continued)

Scale of Student Teaching Concerns
Translated into Arabic

12- كيف يمكنني التفاهم مع أهل طفل كان قد واجه مشاكل عديدة في الروضة ذلك اليوم؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

13- كيف سيفيدني العمل مع الأطفال؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

14- كيف أقوم بتخطيط نشاطات الأطفال؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

15- ما هي النماذج المختلفة المتوفرة في مجال تربية طفل المرحلة المبكرة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

16- هل توجد أسس فلسفية أو اخلاقية يتم بناء عليها منع طفل من الاشتراك ببرنامج الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

17- كيف تقوم برامج الأطفال المختلفة بدمج نظريات النمو المتنوعة في مناهجها التربوية؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

18- هل ستكون الفترة المخصصة للتحضير كافية لتحقيق جميع متطلبات هذا العمل؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

19- ما هي طبيعة النمو والتعلم عند الأطفال؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

20- اذا بدأ أحد الأطفال في البكاء فماذا أفعل؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

21- أين يتم عقد مؤتمرات الطفولة المبكرة؟ وكم عددها خلال العام الواحد؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

22- كيف أستطيع التوفيق بين فلسفة تربوية وأخرى؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

Appendix C (continued)

Scale of Student Teaching Concerns
Translated into Arabic

23- كيف أتفادى التمييز بين الأطفال عندما يكون بعضهم أكثر جاذبية من غيرهم؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

24- هل سأقوم بقراءة مقالات من مجلات متنوعة في مجال تربية طفل المرحلة المبكرة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

25- ما هي الأسس الفلسفية التي يعتمد عليها برنامج الروضة هذا؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

26- الى أي مدى سأخضع لمراقبة دقيقة خلال فترة عملي مع الأطفال؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

27- كيف يتم بالتحديد كتابة خطة درس؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

28- كيف أقوم بتصميم مشروع بحث؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

29- هل ستسنح لي فرصة لمراقبة برامج روضات أخرى؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

30- هل تتوفر تجارب علمية مناسبة لأطفال في عمر 1-3 سنوات؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

31- هل يمكنني التعامل مع أطفال لغتهم الأم ليست اللغة العربية؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

32- هل سيستجيب الأطفال لتعليماتي؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

33- ماذا أجيب طفلا يقول بأنه لا يريد البقاء في الروضة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

Appendix C (continued)

Scale of Student Teaching Concerns
Translated into Arabic

34- ما هي بالتحديد الأعمال المتوقعة من فئة الأطفال الذين سأتعامل معهم؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

35- هل الرحلات مناسبة لمجموعة الأطفال التي سأعمل معها؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

36- هل سيكون باستطاعتي الاشتراك بمؤتمرات خاصة بتربية طفل المرحلة المبكرة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

37- كيف أتعامل مع الأطفال الذين يمتلكون قدرات متميزة؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

38- كيف سأوجه اهتمامي لتحقيق ذات الطفل؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

39- هل عندي مستوى تعليم كاف لكي أقوم بهذا العمل؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

40- أين أستطيع الحصول على معلومات عن برامج أخرى لرياض الأطفال ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

41- ما هو وجه الاختلاف بين برامجنا وبرامج أخرى في تربية طفل المرحلة المبكرة ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

42- هل سأتمكن من الربط ما بين المعلومات الناتجة عن المحاضرات والخبرة العملية التي اكتسبها؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

43- كيف أتعامل مع السلوك العدواني بين الأطفال ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

44- كيف يمكنني تطبيق المعلومات التي أقرأها من الأبحاث في خبرتي العملية ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

Appendix C (continued)

Scale of Student Teaching Concerns
Translated into Arabic

45- ما هي أسماء بعض المجلات المتخصصة بتربية طفل المرحلة المبكرة ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

46- كيف يمكنني أن أساهم بفعالية بأبحاث تقوم بها الروضة ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

47- عندما أرى منازعة بين طفلين، متى أتدخل ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

48- من أين أستطيع الحصول على معلومات خاصة بنمو الطفل ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

49- الى أي مدى يمكن السماح لمشاريع الأبحاث التدخل في النشاط اليومي للأطفال ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

50- هل يحدث في برنامج الروضة أن نقضي فترة زمنية أطول من اللازم مع طفل واحد فقط؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

51- كيف أقوم باجراء حوار مع أهالي الأطفال ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

52- كيف أستطيع طيلة نهار كامل استخدام جمل ايجابية مع الأطفال ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

53- ما هي حقوق الطفل التي يجب مراعاتها عند اجراء أي بحث علمي ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

54- هل سأتعلم عن كيفية التعامل مع أطفال لديهم حاجات خاصة ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

55- هل يسمح لطفل مريض – مصاب بالزكام مثلا – الاستمرار بحضور برنامج الروضة ؟
☐ مهم جدا ☐ مهم ☐ مهم بعض الشيئ وغير مهم البعض الآخر ☐ غير مهم ☐ غير مهم أبدا

Appendix D

Pretest Factor Loadings and Matching Area of Concern

Question	Factor 1	Factor 2	Area of Teaching Concern
47	.84407		Consolidation
37	.83211		Consolidation
43	.82063		Consolidation
35	.78417		Renewal
32	.77704		Survival
33	.77581		Consolidation
6	.76862		Survival
20	.76178		Consolidation
27	.67628		Survival
18	.67174		Survival
1	.66293		Consolidation
5	.65085		Consolidation
23	.65074		Consolidation
9	.65014		Survival
4	.64925		Consolidation
2	.63069		Survival
12	.61939		Consolidation
34	.60273		Survival
3	.59632		Survival
38	.59605		Consolidation
14	.57998		Survival
51	.56916		Survival
10	.56463		Renewal
8	.55479		Consolidation
54	.49722		Consolidation
26	.48882		Survival
39	.48817		Survival
50	.47486		Survival
31	.38686		Consolidation
55	.34537		Consolidation
21		.77419	Renewal
17		.77068	Renewal
41		.69053	Renewal
36		.64973	Renewal
45		.64034	Renewal
28		.55234	Renewal
40		.51051	Renewal
46		.49935	Consolidation
7		.49823	Renewal
29		.49822	Renewal
44		.48313	Renewal
30		.48275	Renewal
15		.44838	Renewal
24		.36627	Renewal
42	.34335	.35657	Renewal
48	.32930	.34775	Survival

Appendix E

Posttest Factor Loadings and Matching Area of Concern

Question	Factor 1	Factor 2	Area of Teaching Concern
43	.92323		Consolidation
20	.90332		Consolidation
47	.87892		Consolidation
33	.87096		Consolidation
37	.38598		Consolidation
32	.81922		Survival
6	.81650		Survival
1	.81446		Consolidation
38	.78649		Consolidation
8	.78178		Consolidation
5	.77529		Consolidation
12	.77417		Consolidation
14	.77417		Survival
23	.76049		Consolidation
34	.73624		Survival
51	.72999		Survival
3	.70823		Survival
35	.67684		Renewal
4	.63720		Consolidation
55	.63150		Consolidation
2	.62391		Survival
9	.61628		Survival
27	.58793		Survival
48	.55170		Survival
54	.53098		Consolidation
10	.48796		Renewal
50	.48737		Survival
39	.48258	.36861	Survival
26	.46355		Survival
18	.42825	.39787	Survival
31	.38405	.30864	Consolidation
21	-.31605	.79949	Renewal
36		.78158	Renewal
17		.76815	Renewal
40		.69731	Renewal
41		.63554	Renewal
30		.60555	Renewal
7		.59522	Renewal
28		.58040	Renewal
29		.55340	Renewal
15		.52684	Renewal
44	.31535	.47966	Renewal
46		.45986	Consolidation
42	.40283	.43975	Renewal
24		.43975	Renewal
45		.40008	Renewal

Appendix F

Factors of Teaching Concerns and Their Factor Loadings for Pretest and Posttest

Factors and Questions		Loadings	
		Pretest	Posttest
Factor I:			
1.	If a child pushes another child, what should I do?	.66	.81
2.	How many children will I be interacting with in the program?	.63	.62
3.	What exactly will I be doing in my student teaching experience?	.59	.70
4.	What should I do when a child wants me to accompany him/her to an activity, but I'm busy with another activity?	.64	.63
5.	Should I encourage a child to finish a project that s/he has started?	.65	.77
6.	Will I be able to work with the children in the program?	.76	.81
8.	Why do some children cry when their parents leave them at school?	.55	.76
9.	How is the daily schedule organized?	.65	.61
10.	What can be done to accomplish the program objectives in new and different ways?	.56	.48
12.	How can I communicate with a parent about their child, when the child has encountered many problems during the school day?	.61	.77
14.	How do I plan activities for the children?	.57	.77

(table continues)

Appendix F (continued)

Factors of Teaching Concerns and Their Factor Loadings for Pretest and Posttest

Factors and Questions		Loadings	
		Pretest	Posttest
Factor I			
18.	Will there be enough time to fulfill all of the requirements of this teacher training experience?	.67	.42
20.	If a child starts to cry, what should I do?	.76	.90
23.	How can I avoid favoritism when certain children are more appealing than others?	.65	.76
26.	How closely will I be observed During my student teaching experience?	.48	.46
27.	Exactly how is a lesson plan written?	.67	.58
31.	Will I be able to work with children whose first language is not English?	.38	.38
32.	Will the children listen to the instructions I give them?	.77	.81
33.	What should I say to child who says the s/he doesn't want to be at school?	.77	.87
34.	What exactly can children at the ages I will be working with be expected to do?	.60	.73
35.	Are field trips appropriate for the children I'll be working with?	.78	.67
37.	How should I handle challenging children?	.83	.83

(table continues)

Appendix F (continued)

Factors of Teaching Concerns and Their Factor Loadings for Pretest and Posttest

Factors and Questions		Loadings	
		Pretest	Posttest
Factor I			
38.	How can I deal with my concern for the child's self-concept?	.59	.78
39.	Am I educated enough to undertake this student teaching experience?	.48	.48
43.	How should I handle children's aggression toward other children?	.82	.92
47.	When should I intervene in a conflict between two children?	.84	.87
50.	Is it possible to spend too much time with one child in the program?	.47	.48
51.	How do I hold a conversation with parents?	.56	.72
54.	Will I learn how to work with children having special needs?	.49	.53
55.	Should a child with an illness such as the common cold, be allowed to continue to participate in the program?	.34	.63
Factor II			
7.	How do different programs organize their parent meetings?	.49	.59
15.	What are the different early child hood education models available?	.44	.52
17.	How do different programs incorporate various theories of development into their curriculum?	.77	.79
21.	Where and how often are early childhood conferences held?	.77	.79

(table continues)

Appendix F (continued)

Factors of Teaching Concerns and Their Factor Loadings for Pretest and Posttest

Factors and Questions		Loadings	
		Pretest	Posttest
24.	Will I be reading articles taken from a variety of early childhood education journals?	.36	.40
28.	How can I design a research project?	.55	.58
29.	Will there be an opportunity for me to observe other programs?	.49	.55
30.	Are there science experiments appropriate for children one to three years of age?	.48	.60
36.	Will I be able to participate in early childhood education conferences?	.64	.78
40.	Where do I obtain information about what other programs are like?	.51	.69
41.	What is the difference between our program and other early childhood education programs?	.69	.63
44.	How can I apply the information I read from research to my student teaching experience?	.48	.47
45.	What are the names of some of the journals in the field of early childhood education?	.64	*
46.	How can I actively become involved in the research projects of the program?	.49	.45

* The loading is less than .3.