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DEVELOPMENTAL CHANGES IN PREDICTORS OF JOB SATISFACTION
FOR FEMALE ELEMENTARY SCHOOL TEACHERS

by

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B.S. 1983, Old Dominion University
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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY IN URBAN SERVICES

OLD DOMINION UNIVERSITY
April, 1992

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ACKNOWLEDGMENTS

I would like to express my sincere appreciation to the many people who helped in this endeavor. Particular acknowledgment is directed to my dissertation committee members. Dr. Wolfgang Pindur, chairman of my committee, has provided scholarly expertise and invaluable personal support throughout my doctoral study years. I have also learned a great deal from Dr. Leonard Ruchleman about addressing and solving urban problems utilizing a cooperative, prospective framework. Dr. Pan Kim's technical expertise has been very valuable in addressing the methodological and statistical areas of my dissertation. Dr. Elaine Justice's knowledge of developmental psychology and scientific research has provided guidance throughout my work on both my master's and doctoral theses. I have great admiration and respect for all of my committee members on both academic and personal levels.

I am very grateful to the public school system who allowed me to conduct this research. Thanks go to Dr. Cowden for his genuine interest and constructive

suggestions during the data collection phase. I am also indebted to the school principals who allowed this research in their schools. I sincerely appreciate the willingness of all of the teachers who took time from their busy schedules to help me complete my graduate work. Special thanks is due my fellow colleagues who served as data collectors for this project. I am particularly grateful to my supervisor, Jo Ann, for her continuous moral support and friendship over the years.

A special thanks is extended to my family and friends for their constant love and support. Most of all, I appreciate the understanding, encouragement, and support that I have always had from my husband, Larry and children, Corrie, Stephen and Ryan.

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ABSTRACT

DEVELOPMENTAL CHANGES IN PREDICTORS OF JOB SATISFACTION FOR FEMALE ELEMENTARY SCHOOL TEACHERS

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Old Dominion University, 1992
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The purpose of this study is to examine predictors of job satisfaction for female elementary school teachers. Specifically, how do personal variables and career variables affect job satisfaction at various age levels?

The subjects in this study were 386 females who teach kindergarten through sixth grade in an urban public school system. A survey was used to collect information about age, personal variables, career variables, and current level of job satisfaction. Personal variables included marital status, number of children and educational level. Career variables included number of years in the teaching profession, number of positions held during the teaching career and grade level currently teaching. Job satisfaction was assessed by the Job Descriptive Index which measures satisfaction on six dimensions (work, supervision, pay, promotion, coworkers, and job in general).

Analysis of covariance (ANCOVA) was computed to determine if there were significant differences in job satisfaction scores among four age ranges (21-30, 31-40, 41-50, and over 50). Personal and career variables were treated as covariates to control for their effects on the six job satisfaction scores. The results showed that teachers in their twenties and thirties were more satisfied with supervision and their jobs in general than teachers in their forties and fifties.

Stepwise multiple regression analyses showed which personal and career variables were significant predictors for each of the four age categories. For twenty year old teachers, marriage was a positive predictor of job satisfaction. For the thirty year old teachers, number of positions was a negative predictor while having an advanced degree was a positive predictor. For forty and fifty year old teachers, negative predictors included teaching in upper elementary grades, having an advanced degree and marriage. Number of positions and having children were positive predictors of some job satisfaction dimensions and negative predictors of others.

CHAPTER I

THE RESEARCH PROBLEM

Statement of the Problem

Research on job satisfaction for public school teachers has not kept pace with other fields (Lester, 1987; Raschke, Dedrick, Strathe, & Hawkes, 1985). There is a need for more rigorous, objective research to examine the relationship between adult developmental life stages and job satisfaction for teachers (Christensen et al., 1983). Satisfaction with one's teaching career has been considered a major contributing factor to excellence and commitment in the teaching profession. Thus, knowledge about the relationship between adult development and job satisfaction should provide valuable information to educational systems in their quest to retain quality career teachers. Currently, there is a need to establish methods of assessing how personal and career factors are related to satisfaction with teaching positions (Bloom & Jorde-Bloom, 1987). Therefore, the purpose of this study

is to determine which personal and career variables predict job satisfaction for female elementary school teachers at various age ranges.

Background and Significance

Job satisfaction has been an important area of investigation in industry, government, and private organizations in terms of policy making and humanitarian issues. All public agencies need to learn how to create effective organizations that are also humane (Bailey, 1987). A primary task facing contemporary public administration today appears to be developing the great potential of our human resources (Schott, 1986). As teachers share many of the same work conditions as other human service occupations, any information on job satisfaction for teachers should provide insights for all areas of the public sector (Lowther, 1985).

A serious teaching crisis in the United States may jeopardize this nation's ability to conduct its own public affairs through the workings of an informed electorate. It could endanger the nation's capacity to compete effectively in a world where technological skills and inventiveness determine leadership (Raschke, 1985). Since

1983 there has been renewed interest in education along with renewed public criticism. There are many publicized reports finding schools deficient in standards for public performance, depth and rigor of curriculum, and quality of teachers (Furey & Lauroesch, 1986). Virtually every national and state report issued over the past few years analyzing the teaching profession has focused on both the quality and quantity of teachers in the profession. Some of these reports have forecast critical teacher shortages unless the profession is made more attractive.

Assuming excellence in education is largely dependent on the vitality, competence and commitment of teachers, it is important to look at factors that affect satisfaction with teaching (Furey & Lauroesch, 1986). The concern that dedicated, quality teachers will leave the profession has very important implications for public education on local, state and national levels (Farber & Miller, 1981; VEA News, 9/89). If the teaching profession is to attract the most promising candidates and retain those who are exemplary in practice, it is imperative that teachers' personal needs be attended throughout their professional careers (Bloom & Jorde-Bloom, 1987). Boards of education need to know how to spend money wisely to keep good

teachers. They are often tempted to simply increase "hygiene" factors to attract and keep teachers instead of looking at the real determinants of job satisfaction (Kaiser, 1981-82). Consequently, there is danger of rushing to implement solutions that do not address the real causes of the problems (Furey & Lauroesch, 1986; Ruchleman, 1985).

Today's society has produced an ever increasing number of stressors on American families. The public school system is called on to solve more and more problems related to family issues. Teachers can best help families by helping the children in the families become productive, well adjusted individuals. Teachers can best meet this challenge when they feel fulfilled in their own careers. Therefore, it is important that the public school system be sensitive to the needs of their teachers as well as to the needs of the students it serves.

This research is important for understanding how a teacher's personal life and career history affect satisfaction with their profession at different ages. The approach used in this study combines methodologies and instruments used in management and psychology disciplines to study issues that need to be addressed in education.

It is hoped that this study will provide information that will be helpful to teachers in understanding how their personal and career lives affect the way they feel about their profession. Examining the relationship between adult developmental life stages and job satisfaction should also provide insights for urban school systems as they attempt to attract and retain quality career teachers.

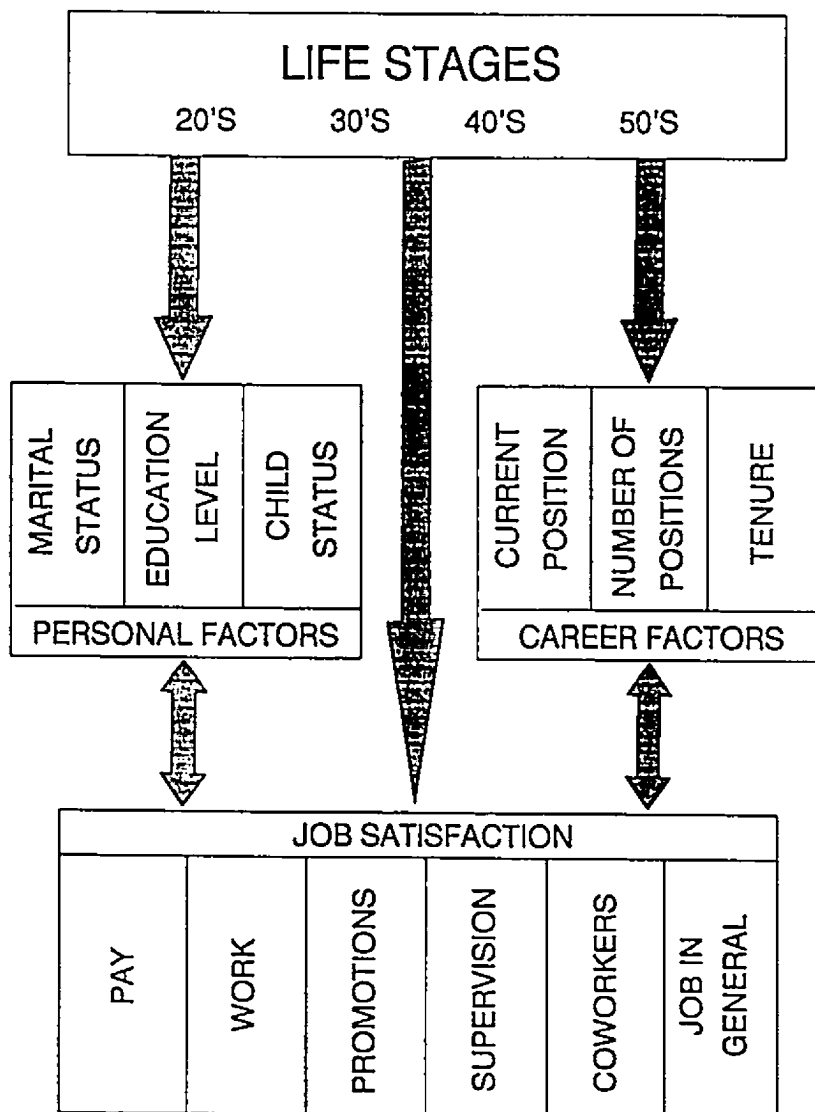
Hypotheses

This study was designed to determine what aspects of a teacher's personal life and career life are related to job satisfaction. Three general hypotheses are proposed for the current study:

1. There are differences in levels of job satisfaction across developmental life stages.
2. Job satisfaction can be predicted by age, personal variables, and career variables.
3. Various aspects of job satisfaction are affected differently by developmental stages, personal variables and career variables.

Figure 1 provides a conceptual model for conducting research to address these three hypotheses.

FIGURE 1
 CONCEPTUAL MODEL
 FOR
 PREDICTORS OF TEACHER JOB SATISFACTION



Overview of Chapters

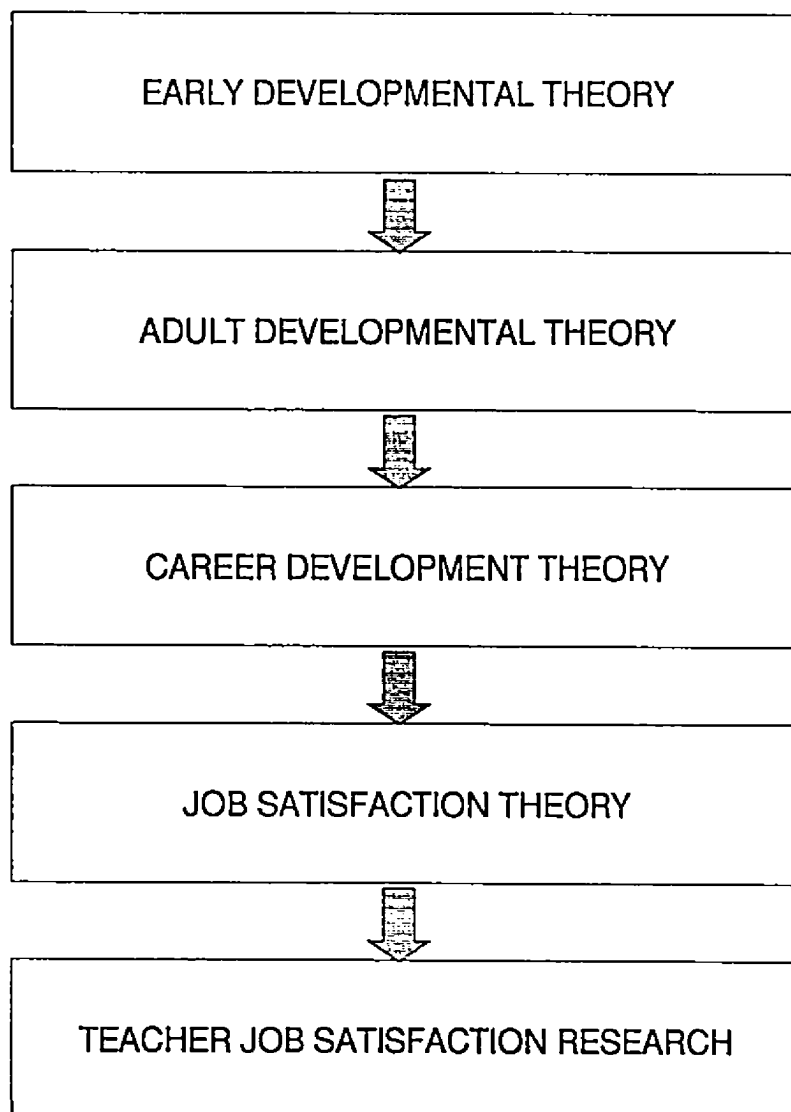
Chapter two reviews the literature related to developmental psychology, career development, and job satisfaction. Chapter three details the methodology for the study and chapter four presents the results and analysis of the research. Chapter five provides conclusions of the study and suggestions for future research in this area.

CHAPTER II

REVIEW OF THE LITERATURE

This section reviews literature that is pertinent to the study of developmental predictors of job satisfaction for female elementary school teachers. First, early developmental theory will be reviewed, beginning with the first works on children. Next, major contributions to adult developmental theory will be examined to see how it has evolved from an extension of child development research to a separate area of study. Third, a review of research on career development will provide insight into adult working life. Fourth, studies on job satisfaction will be reviewed for the general population and teachers in particular. Lastly, conclusions about existing research will be provided in light of the need for the present study. Figure 2 provides the theoretical framework for this study.

FIGURE 2
THEORETICAL MODEL
FOR
STUDY OF TEACHER JOB SATISFACTION



Early Developmental Theory

Early work on child development set the framework for the lifespan research that exists today. Early researchers wrestled with issues concerning whether development was biologically or environmentally based and whether one had to successfully pass through one stage in order to get to the next. Also, methodological issues in early childhood research involved criticisms about the nearly exclusive use of observational, qualitative data and the absence of objective, scientific study.

Some of the earliest work in developmental psychology was conducted by Arnold Gesell. Gesell's approach was a biological one in that development was seen as the unfolding of innate capacities that are independent of learning (Bornstein & Lamb, 1984; Craig, 1976). Gesell concluded that growth is an orderly process which allows one to predict with relative accuracy how and when developmental changes will occur. Each individual is unique, but each one passes through an orderly sequence of experiences. Gesell's approach differed from his contemporaries who were focusing on learning theory at the time. His extensive research employing both cross-sectional and longitudinal studies was often criticized because of its descriptive nature. Gesell maintained that

if development was the product of an innate, genetic code then the researcher's task was simply to provide precise descriptions of new behaviors as they unfold. Thus, Gesell stressed the need for systematic cataloging of growth norms and developed scales to measure children's development in the first years of life (Craig, 1976).

Piaget's work from the 1920's through the 1960's emphasized cognitive development. His work was initially dismissed by many researchers in the United States because of his qualitative, nonstatistical style of data collection and analysis. However, his theories became a major influence in the 1960's, particularly in the field of education (Bornstein & Lamb, 1984). Piaget believed that intelligent behavior involved a continuing pattern of interaction that included adaptive coping with the environment (accommodation) and modification of one's internal structure as a result of this interaction (Kimble & Garnezy, 1968).

From the 1930's through the 1960's there was increased emphasis on the development of theories in lieu of merely collecting data to establish norms. These early theories were developed largely through observation and case studies. Freud's work beginning in the late 1800's emphasized emotional or personality development through

successive psycho-sexual stages. He believed that one must successfully resolve conflicts at each stage in order to develop into a normal adult. He saw adulthood as a time when early unconscious conflicts were re-enacted, rather than a time of further development (Okun, 1984). Freud's work focused on adult disorders, but his theory dealt with their developmental origins inferred largely from adult recollections of childhood. Developmental change was viewed as qualitative, proceeding through tension resolved from one stage to the next (Bornstein & Lamb, 1984).

The issues raised by early child development theorists are relevant today. Lifespan theorists are still questioning whether development is innate or learned. Tasks to be accomplished at each stage of development and the resolution of conflicts are areas that remain under investigation. It appears, as early studies explained, that there are basic stages through which one passes based on age, but there are also individual differences based on personal experience that cannot be ignored.

Adult Development Theory

While the early theorists looked at development from birth through adolescence, others began to extend developmental stages beyond childhood. Maslow, a major founder of the humanistic school, identified six basic needs that must be satisfied in sequence. The lower needs, physiological and safety, are present at birth. The needs for belongingness and love are middle-level needs that arise in infancy, and the need for esteem develops in childhood. Higher level needs for self-actualization arise as maturation occurs. Maslow saw mature adults as persons who are able to concentrate on the essential problems of life because they accept their inner selves (Okun, 1984).

The beginnings of modern adult psychology may actually be traced to Jung's interest in the psychological development of individuals in the second half of life (Schott, 1984). A former student of Freud, Jung felt that Freud too narrowly focused on childhood development and its influence on adult problems in addition to overemphasizing psychopathologies (Levinson, 1978). Jung saw individual development as a two-stage process. Life

before forty was seen as the "expansion" years, while life after forty was seen as the "years of constriction" (Bornstein & Lamb, 1984; Troll, 1982). Jung saw the goal of development as the emergence of the self (Bornstein & Lamb, 1980).

Charlotte Buehler collected hundreds of cases of life-span histories during the 1930's to examine the parallels between life stages and biological phases. She identified life stages during which familial and occupational goals were set, established and evaluated. She saw the first twenty years of life as a period for the establishment of goals and the next period (adulthood) for fulfilling them. In middle age, some people re-examine and set new goals while others opt for stability and retirement. Buehler was very interested in studying the turning point of the middle age period (Troll, 1982). Robert White used Buehler's case study approach in exploring the biological roots of personality, the influence of social forces, and the psychodynamics of individuals from infancy to their early forties (Schott, 1986).

Other developmentalists began to look at tasks to be accomplished or crises to be resolved during adulthood. In Erik Erikson's book entitled Childhood and Society, he proposed that development evolved through progressive

mastery of psychological tasks with each task dominating during a certain period of life. According to Erikson, the resolution of a crisis at each stage created a new sense of balance between the individual and the social world. If the crisis is not resolved, it makes resolution of the next crisis at a later stage of development more difficult (Bornstein & Lamb, 1984; Coon, 1980; Okun, 1984; Schott, 1986;). Peck (cited in Troll, 1982) modified Erikson's life stages by subdividing the stages of middle age and old age. He, like Erikson, stressed that in later stages of life people come to understand their own mortality and their own contribution to humanity.

Robert Havighurst pioneered what later became known as "lifespan research". He believed that the human life cycle was characterized by certain issues or developmental tasks to be accomplished in various stages. He was also one of the earliest researchers to note that the study of career changes would enrich lifespan personality research (Staude, 1981). Vaillant's study of men at Harvard University led him to the conclusion that "the life cycle is more than an invariant sequence of stages with single predictable outcomes" (Okun, 1984, 26). Neugarten's studies emphasized the variability of social rather than biological aspects of development (Okun, 1986). She found

that personality traits identified in middle age tend to remain constant through old age. Her work is considered one of the most comprehensive male/female older age samples every studied longitudinally. Gould's research was based on questionnaires answered by male and female adults and group therapy observations of a large number of out-patients (Okun, 1986). His work was a theoretical discussion illustrated by selected case studies. Gould saw adult development as phases of maturation involving the rejection of assumptions about the world developed in childhood (Okun, 1986). Levinson (1978) found a definite pattern to the evolution of adult life. He defined a series of nine stable periods in which one's life structure was molded by five transitional periods and then modified to enable the individual to pass to the next period. Both Gould and Levinson felt that around the age of thirty, individuals began to reconsider their chosen life structure and occupational choice, seeking to alter it while there is still time left. This midlife transition period has been a subject of many studies (Golembiewski, 1978; Ket de Vries, 1978).

Gail Sheehy's (1976; 1981) research on adult development was based largely on Erikson's theories and was heavily influenced by Levinson, Gould, Neugarten and

Vaillant. She acknowledged that men and women continued growing throughout adulthood and that there are predictable crises at each stage of life. The stages were the same for men and women, but the developmental rhythms were not. Understanding the stages and rhythms can help individuals and their partners reach their full potential instead of holding each other responsible for failures and disappointments in life.

Early literature on adult development reflected the idea that there are predictable changes that occur over the lifespan. However, individuals' personal histories also affect the way they develop in adulthood. Also, there seemed to be some recognition by many researchers that the mid-life stage was a very significant time in the lifespan.

Recent Theory on Adult Development

In the 1980's several researchers analyzed early adult development theory and provided somewhat new theoretical models. Stewart (1982) offered an alternative to models proposed by Gould, Levinson and Vaillant that simply added new stages after adolescence. Through her study of college students, she developed a methodology that allowed analysis of the person-versus-situation

dilemmas in research. Her approach recognized the possibility of new adult development as well as the differences and similarities in how adults develop. Weick (1983) stated that human growth during adulthood was cyclical and more related to the reworking of growth tasks than the assumption of new roles. She maintained that men and women are affected differently by transition periods in life because of different social roles. The basic premise for her alternative theoretical model is that all human beings have an inherent "push for growth" or a common life force. They will strive for developmental change based on innate curiosity, need for stimulation and desire for fulfillment. Individuals are continuously experiencing growth while trying to maintain balance in their lives. Roles enhance the opportunity for change by presenting challenges to develop new facets of the personality or to broaden coping skills. On the other hand, roles may inhibit growth if individuals view themselves only within the confines of their social roles. Weick felt the notion of growth tasks adapts itself to a universal model of human behavior and may provide a powerful method for helping adults cope with change.

Hedlund and Ebersole (1983) tested a primary component of Levinson's mid-life transition stage which is

re-evaluation of "the Dream" or meaning in life. The results of their investigation showed that there was no significant difference in the re-evaluation of meaning of life in pre, mid and post mid-life males. They did find, however, that life events were related to such a re-evaluation (e.g. marriage, divorce, death, attainment of educational goals). These authors recommended caution in using popular views about midlife transition that are simply age-based. Braun and Sweet (1983-84) examined four large surveys of adult development research to establish the existence of "passages". They found that passages did exist over the life span, but they were the result of generational or cohort influences, not developmental stages. They also found that adult stages were not the same across cultures.

Bova and Phillips (1988) also cautioned against basing the concept of adulthood solely on age. In their study of individuals between the ages of twenty-two and seventy-six, they found that people's definitions and perceptions of becoming an adult generally involve the use of responsibilities and the use of social roles. They also found that men and women were prepared differently for their roles as adults. For example, men were encouraged as children to take risks, while women had to

learn this skill as an adult. Men challenged authority much earlier in life than did females. Men typically saw work as the central focus of their adult lives, while women had difficulty coming to terms with the multiple roles they had to play. Sources of conflict for men were more individually oriented, while women's conflicts focused on their relationships with others. Finally, Hancock (1988) emphasized unique developmental patterns for women and the importance of the family life cycle and relationships in research. In order to move forward in adult development studies, Hancock suggested that one must consider the individual, their age, and their experiences.

In Whitbourne and Weinstock's (1986) book, adult development is viewed in terms of "identity processes" which index adult development by describing the individual's current stage of change relative to stability. In true Piagetian tradition, it was proposed that the identity process accounting for change in adulthood is called "identity accommodation". The identity process responsible for stability is called "identity assimilation". The individual's state of change relative to stability can be summarized by describing the degree of equilibrium or balance between these two processes. Whitbourne & Weinstock's model takes

into consideration the individual's sensory process, cognitive process, physical characteristics and functioning, personality traits, motives and values, social roles, family roles, and work roles. Adults have conceptions of their own identities, must interpret new experiences in terms of their existing identities (assimilation), and then make changes in their identities in response to these experiences (accommodation).

This review of recent adult development theory begins to set the stage for the current study. Researchers in this area recognized the importance of examining patterns for females. Also, personal and environmental factors were seen as vital aspects of adult development research that needed further investigation.

Career Development Research

Researchers in fields other than developmental psychology such as management, public administration and vocational planning, have become interested in examining the relationship between adult developmental life stages and career development. This research has often employed objective, statistical methods rather than purely descriptive and intuitive analysis found in early developmental research. In a very broad sense of the

word, work is "a search for daily meaning as well as for daily bread" (Troll, 1982, 173). Jobs may be challenging or dull and people may remain in one occupation for their entire adult lives or change many times. While a job may simply be "employment", a career is related to previous training and previous jobs. It is difficult to conceptualize development in work, but it is obvious that jobs affect most aspects of a person's life. Some define career development as systematic changes with age or directional movement along a career path (Neugarten, 1968). Generally, there is a progressive decrease in job mobility and a progressive increase in stated job satisfaction. People either look for and find the kind of job to which they are best suited or make the best of their situation.

Earliest studies on occupational development focused almost exclusively on men while recent attention has turned to women. Lillian Troll's (1982) book entitled Continuations offers a chapter on the work and achievement of women. The number of women in the laborforce has increased since the 1950's, but the age profile of women's employment histories differs from that of men. While patterns are continuing to change, the majority of women tend to withdraw from the labor market during the early

years of their children's lives and return as they get older. Furthermore, while men do not generally see themselves as having alternative choices, women are confronted with three possibilities: (1) remaining unmarried or at least childless; (2) taking on marriage, motherhood and career simultaneously; or (3) taking on marriage and motherhood first and career later or career first and motherhood later.

Women's decisions to participate in the labor force has been largely related to their child bearing plans (Sweet, 1973; Mallier & Rosser, 1987). The decision to have a child is an expensive one. If a mother works, she must pay for child care; if she stays home, she forfeits potential income. Women with no children or older children are more likely to work outside the home. In today's society, the age of a mother is not as directly related to employment, due to many women waiting until their thirties and forties to begin their families. Marital stability is also a factor in labor force participation. If either spouse has been married more than once, it is more likely that the wife will work outside the home (Sweet, 1973). There has also been an increase in single parent homes with the rising divorce rates in today's world (Russell, 1982). It has been noted

that women do not seem to achieve as high levels of job satisfaction as men and generally consider their jobs second to families in priority. The job of homemaker has been neglected in career research with only one major American and one British study being published in the 1970's (Troll, 1982).

A variety of approaches are used to study the work behavior of adults. The fields of occupational psychology and occupational sociology are concerned with discovering factors that lead to optimal adjustment to or satisfaction with a job. It is assumed that individuals who are satisfied with their work will be more productive in their job performance. On the other hand, vocational development is directed at uncovering the factors that lead to the choice of an occupation. The rationale behind vocational development is that people will be optimally satisfied with their jobs if they make initially appropriate choices (Whitbourne & Weinstock, 1986).

The most basic dimension underlying the different meanings of work for adults concerns intrinsic (the work itself) and extrinsic (rewards and environment) factors (Whitbourne & Weinstock, 1986). Herzberg's two factor theory states that satisfaction with work could only be achieved by people who had a positive attitude toward the

intrinsic features of their work. Extrinsic factors were hypothesized to be insufficient for the development of positive work motivation because they cannot serve as a strong enough incentive or reward to motivate people toward work. Ewen's (1964) test of Herzberg's theory resulted in a lack of support for this theory beyond a specific work situation. Ewen suggested that a wide variety of jobs should be studied in addition to different aspects of job attitudes.

Super's Self Concept Theory (Whitbourne & Weinstock, 1986) has been a major contribution to the field of vocational development. According to Super, the individual's vocational self concept is what determines the initial choice of an occupation. Throughout later development, the individual continues to attempt to realize his or her self concept through finding work that allows the self concept to be expressed. Super used Buehler's concept of life stages to characterize five age periods. During these periods there are similar sets of vocational activities organized around the dominant self concept at that point in life. Ralph (1987) studied the relationship between Super's Career stages and personality and demographic variables. It was found that a high self concept, internal locus of control and positive feelings

of self worth were important to career development. Support was found for Super's theory and it was concluded that age was not the major factor in determining which career stage one will be in at any given time.

Super's stage approach to vocational development suffers from the same flaws as does any age-stage theory of adulthood. A trait-factor approach used in Holland's Person-Environment Congruence Theory uses the logic that optimal vocational adjustment will occur when there is a match between the individual's traits (interests, personality and preferences) and the factors of a particular occupation (the traits of the people in that occupation already). Holland's theory has potential relevance for understanding the vocational choice process, but it has not been consistently supported by empirical tests of its predictions (Whitbourne & Weinstock, 1986). Problems arise due to the individual's perceptions of his or her own vocational aptitudes and interests. Also, Holland's theory is unable to account for the differences between intrinsic and extrinsic motivation on the part of the worker. For example, people who are working primarily for extrinsic reasons do not fit into the congruence model since they will remain on the job as long as pay is sufficient. These authors recommended further research on

the effect work has on family life. They felt there were no inherent differences between the processes operating on men and women, but that differences may exist due to differences in socializations for the sexes.

Ornstein and colleagues (1989) compared Levinson's life stage development model and Super's career stage model to determine which was more applicable for career decisions and attitudes. They found that Levinson's model was more appropriate for individual career decisions (promotions, aspirations, willingness to leave job), while Super's model held best for career attitudes (job involvement, job satisfaction). These researchers suggested that managers may need to focus on the individual early in their careers in addition to looking at how the organization affects the individual. Also, future research should examine the effects of intervening and moderating variables influencing attitudes and behaviors during specific career stages.

Mid-life or mid-career transition has been a very popular area of research in which attempts have been made to integrate adult development and career development research (Perosa & Perosa, 1984-85). Ket de Vries (1978) studied the mid career transitions of managers. He discussed four basic styles of managers and how they

generally dealt with this time in their lives. Ket de Vries recommended that organizations use counseling (in-house or consultants), prevent obsolescence of managers by keeping their skills up-to-date, and allow for the possibility that some managers may be better off finding an alternative career. Golembiewski (1978) also challenged organizations to begin to make changes that will help their employees through mid-life transition. For example, organizations need to educate themselves about the organizationally relevant features of these transitions as it applies to all employees. By knowing what to expect, they can better deal with issues as they arise.

The existing literature on career development provides information that is relevant to the study of job satisfaction for teachers. It is clear that a career, like teaching, is seen as qualitatively different from a job. Also, there seems to be stages in careers that may or may not be related to age. The increasing number of women in the work force supports the need for more research concerning patterns of career development for women. Both intrinsic and extrinsic factors of job satisfaction also need to be considered. Lastly, there is a need for organizations to be informed about the

relationship between adult development and career development in order to help individuals and the organization as a whole.

Job Satisfaction Studies

There has been quite a lot of research on factors associated with job satisfaction and dissatisfaction. A study by John Wanous (1976) compared the transitional stages of MBA students and telephone operators. MBA students showed a decline from naive expectations to lower, realistic beliefs for intrinsic factors associated with their work (abstract, organizational factors), but not for the extrinsic factors (concrete, job related factors). The telephone operators showed the same pattern, but it was not as strong a relationship. This finding is significant in that intrinsic factors seemed to be more relevant to job satisfaction. Better pre-employment counseling would result in less discrepancy between expectations and reality. The effects of a shorter work week were examined in Ivancevich's (1974) study of both managerial and operational employees. They found that those individuals on a four day, forty hour week were more satisfied with personal worth, social affiliation, job security and pay; experienced less

anxiety-stress; and performed better with regard to productivity than their five day, forty hour counterparts. Ivancevich (1974) noted that more research was needed to examine the effects of possible intervening variables on job satisfaction.

Hamner and Tosi (1974) examined the relationship between: (1) role conflict, role ambiguity and job satisfaction; and (2) levels of job participation, anxiety and perceived threat for high level managers. Role conflict was negatively related to the amount of influence the manager felt he/she had within the organization, but positively related to the amount of perceived threat and anxiety. Role ambiguity was negatively correlated with job satisfaction and influence, but positively related to job threat and anxiety. The major conclusion was that researchers must consider the organizational level of the employee when studying the relationship between role stress factors and job involvement measures.

A variety of studies have examined the relationship between age and job satisfaction. Hulin and Smith (1965) looked at the effects of age, tenure on the job, tenure with the company, job level, salary, and desired salary on five separate areas of job satisfaction measured by the Job Descriptive Index (Smith, Kendall, & Hulin, 1975).

For male workers they found a linear model of job satisfaction predicted work and pay satisfaction. None of the other dependent variables for the male or female workers could be predicted. Hulin and Smith cautioned researchers to make sure their independent variables were truly "independent". Hunt and Saul's (1975) survey of white collar workers revealed that there was a linear relationship between: (1) age and job satisfaction; and (2) tenure and job satisfaction. Six aspects of job satisfaction were assessed. However, their research showed the need to consider personality variables such as attitudes, needs, expectations and situational variables in order to get a true picture of these relationships. They also found differences to exist in the patterns for males and females. Gibson and Klein (1970) found that for blue collar workers, there was a positive linear relationship between employee satisfaction and age, but a negative linear relationship between employee satisfaction and length of service. They postulated that a u-shaped relationship results when the effects of age and tenure are not assessed separately. Janson and Martin (1982) wanted to know whether higher levels of job satisfaction for older employees was either the result of generational differences in education and value systems (a cohort

explanation), or simply a function of older workers moving into better jobs across their careers (a life cycle explanation). Evidence was lacking for both of these explanations suggesting that further research regarding this relationship was needed.

Ket de Vries, Miller, Toulouse, Friesen, Boisvert, and Theiriault (1984) conducted a very important study examining the effect of developmental life stages on job and organizational satisfaction for managerial employees. They controlled for variables such as sex, education, job experience, level in hierarchy and upward mobility. The instrument they used to measure job satisfaction assessed satisfaction with the job itself and satisfaction with the organization. In order to explain their findings, career stages were taken into consideration after data collection. They concluded that satisfaction with one's job and one's organization varies over the lifespan and career span. Therefore, employers should be knowledgeable about life cycle stages in order to help employees through difficult developmental periods in addition to providing the best staff development. These investigators noted that further research was needed on cultural and life style influences, assessing determinants of job satisfaction at different stages of the life cycle, and

looking at effects of career factors and personal factors on job satisfaction. In The Neurotic Organization, Ket de Vries and Miller (1984) have stressed the importance of considering nonwork conditions that can vitally influence reactions to the job and organization.

Research on job satisfaction has generally focused on changes in satisfaction over age and tenure. Researchers in this field have determined that the relationship between age and job satisfaction is a complex one and that personal and career variables must be considered when assessing levels of satisfaction for any occupation.

Teacher Job Satisfaction

Excellence in education has been considered largely dependent on the vitality, competence and commitment of teachers (Furey & Lauroesch, 1986). Therefore, satisfaction with one's teaching position should be of utmost concern to our educational system (VEA News, 9/89). There have been numerous studies looking at the factors associated with teaching satisfaction. For the most part, these studies have been descriptive in nature. The Teacher Job Satisfaction Questionnaire (Lester, 1987) was developed in an attempt to assess nine different aspects of job satisfaction (supervision, colleagues,

working conditions, responsibilities, work, security, recognition, advancement, and pay). Schaer and Trentham (1986) conducted a study of public school teachers to determine the relationship between self-concept and job attitudes. They concluded that a teacher's self concept has more to do with job satisfaction than salary, facilities, the principal, or rapport with the teachers. An important part of their research included the cross validation of the Tennessee Self-Concept Scale and the Purdue Teacher Opinionnaire. The researchers felt that these two widely used instruments might be helpful in administrative or counseling services for teachers.

Farber and Miller (1981) examined reasons for teachers leaving their profession and proposed strategies that school systems can use to keep quality teachers from leaving. They concluded that the way to combat teacher burnout is to develop a sense of community which is conducive to the needs of the teachers, other helping professionals and the students. They also emphasized that burnout does not have to be inevitable in a teaching career and can often be prevented with good planning. Teacher stress has been considered a significant factor in teacher burnout. One study surveyed elementary school teachers about their attitudes toward teaching, job stress

and job satisfaction (Raschke, Dedrick, Strathe, & Hawkes, 1985). Elementary school teachers felt that public respect for education has been declining, students were not as enthusiastic about learning, and collective bargaining has placed a strain on teacher-administrator relationships. However, they still felt that the teaching profession was one to which young people should aspire. They did not seem as concerned about decreasing teaching dedication or burnout. Stress appeared to be related to a lack of time, disruptive students and non-teaching responsibilities. Teachers also indicated that they derived their primary job satisfaction from working with the children. These authors concluded that school systems must develop plans which maximize teachers' opportunities to work with their students, unencumbered by non-teaching duties. Kaiser's (1981) investigation of teacher burnout revealed that a teacher's level of motivation was dependent on both individual needs and factors specific to the job of teaching. Boards of education must not settle for "bandaid" approaches that improve physical environments of schools. They must look at methods to motivate teachers through enriched job responsibility, chance for advancement, recognition for excellence in performance and an increased sense of achievement.

Several educational researchers have suggested that adult development should be considered as an important factor in keeping teachers satisfied with their profession. In MacPhail-Wilcox and Hyler's (1985) review of motivation theories, they asserted that the interaction of individual factors and environmental factors was responsible for the level of teacher satisfaction. They suggested that school systems assess the individual needs of each teacher within the context of their environment in order to determine how they may promote teaching satisfaction. Lowther, Gill, and Coppard (1985) investigated the determinants of job satisfaction in teachers at various age levels. They found that job satisfaction increased with age, job values remained constant over time, and job rewards increased over time. It was also found that the determinants of job satisfaction differed for younger and older teachers. Younger teachers (under thirty-five) reported that intrinsic aspects of their work such as teaching or instructional activities determined job satisfaction. Older teachers (thirty-five and older) reported that extrinsic aspects of their job such as pay are more important to job satisfaction. This research offers important implications for school administrators in

designing staff development needs for their teachers. Furey and Lauroesch (1986) studied the relationship between life-cycle theory and dissatisfaction with teaching at midlife. They interviewed individuals who left teaching as well as those who remained in teaching. It was found that male teachers in their thirties were much more dissatisfied than male teachers in their forties. No conclusive patterns for female teachers were noted. These researchers asserted that in order to attract and retain the best possible teachers, our educational system must address both universal dissatisfiers and individual needs.

Studies on teacher job satisfaction have indicated that school systems need to address both the personal and career needs of their teachers. It also appears that predictors of job satisfaction may vary at different age levels. Many researchers feel that teacher burnout can be prevented through effective planning.

Conclusions About Existing Research

There appears to be several major topics covered in the literature review that are particularly relevant to the study of job satisfaction for female elementary teachers. The first area involves the great variety of

conceptual models offered to describe adult developmental life stages. Though lifespan theorists may differ over the names and number of developmental stages, they share considerable agreement as to the specific issues that are associated with phases of adult psychological growth. It is generally agreed that stages of development occur throughout adulthood and individuals continue to grow and change from birth to death. Early Adulthood is viewed as a search for personal intimacy with others, making mature friendships and establishing economic independence. Middle Adulthood is a mid-life transition which is often a period of crisis. It is usually a shift from focus on the external world to the internal world. The task at this point is to develop the neglected aspects of the personality. Late Adulthood is a time for reflection on one's life and the people who played a part in it (Schott, 1986). Both early and modern developmental theorists recognized that there may be similarities in patterns of development, but there are important individual differences as well.

A second area concerns the fact that age categories in developmental research should be used with caution. In order to obtain a true picture of adult development, one should consider a systems approach which includes the

individual, family, and career (Bova, 1985; Hancock, 1988; Okun, 1984; Ralph et al., 1987; Whitbourne & Weinstock, 1986). Some researchers feel that all adults are faced with basically the same issues as they age, while others feel that life events (marriage, divorce, death, children, education) are more responsible for one's development (Hedlund & Ebersole, 1983). Some view adult development as similar across cultures and time, while others feel that it is unique to each culture and each cohort group (Braun, 1984). It appears that differences in personal life events and career events must also be considered when researching adult development.

A third issue raised in past research is the lack of data on the career development of females. Earliest developmental research ignored females, therefore biasing much of adult behavior research. Some have stated that men and women develop quite differently (Weick, 1983), while others feel that they develop basically the same way (Whitbourne & Weinstock, 1986). It has been hypothesized that men and women view their work differently with men putting job first and women putting family first (Troll, 1982). It appears that there is much existing data on the development of men during adulthood. More extensive research is needed to address the personal and career development patterns of females (Okun, 1984).

Fourth, job satisfaction is often considered an important area of study in adult career development research. It has been shown that people usually enter organizations with naive expectations about their job satisfaction, but end up with more realistic expectations in time (Wanous, 1976). Authors of past studies have stressed the need to look at both personal and career variables when investigating what makes people satisfied with their jobs (Gibson & Klein, 1970; Hamner & Tosi, 1974; Hulin & Smith, 1965; Janson & Martin, 1982; and Ket de Vries, 1984).

It is apparent that school systems need to examine ways to keep teachers satisfied with their profession. Professional needs, family issues, organizational factors, and the teaching job itself all play a role in how satisfied teachers are with their positions (Lowther, 1985; Shaer, 1986). Many are beginning to feel that personal and professional growth for teachers follows from successful resolution of life cycle transitions (Furey & Lauroesch, 1986). Therefore, life cycles must be considered in any investigation of teacher job satisfaction. Also, multiple aspects of job satisfaction needs to be assessed instead of one unitary measure.

Lastly, the methods used to study adult development are varied. Some have argued that only longitudinal studies will provide the needed information (Gould, 1972), while others feel that cross sectional data (looking at individuals from the same culture at a given point in time) will provide the best results (Marini, 1984). Some of the research has been of a qualitative, clinical nature, while other research has been experimental and scientific. It is clear, however, that the study of adult development should be a multidisciplinary endeavor and that many variables need to be considered when assessing job satisfaction for teachers (Levinson, 1986).

Need For Research in this Area

This review of existing literature reveals that further research is needed in the following areas. First, educational research on teachers' job satisfaction has not kept pace with other fields (Lester, 1987; Raschke, Dedrick, Strathe, & Hawkes, 1985). Just as the literature in other fields has indicated that adult developmental life stages are an important consideration in job satisfaction, more research is needed for teachers in this area. Therefore, the current study examines levels of job satisfaction across age ranges (20's, 30's, 40's and 50's).

Second, most of the previous educational studies have been descriptive, qualitative or simply theoretical conjecture. Particularly lacking are rigorous, objective, quantitative research designs linking developmental life stages to job satisfaction (Christensen et al., 1983). The current study uses the Job Descriptive Index (JDI) which provides quantitative measures for six different aspects of job satisfaction. The JDI has been used in over fifty percent of the studies on job satisfaction and can be used for any occupation (Yeager, 1981).

Third, since most developmental research has been based on males, more information is needed on female adult development (Hancock, 1988; Perosa & Perosa, 1984-85). The current research examines patterns of job satisfaction for females holding elementary teaching positions.

Fourth, more information is needed concerning the effects of various personal life variables and career variables on job satisfaction (Ket de Vries, 1984; Ralph et al., 1987; Solo, 1984-85). The current study looks at the effects of age range, personal variables (marital status, child status, educational level), and career variables (current position, number of positions, years in teaching) on job satisfaction for female elementary school teachers.

Lastly, educational research needs to examine various aspects of teachers' job satisfaction to determine whether developmental life stages have differential effects on these different aspects (Lowther, Gill, & Coppard, 1985). The Job Descriptive Index used in the current study provides quantitative measures of six aspects of job satisfaction (pay, work, promotions, coworkers, supervision, and job in general). In summary, there needs to be an attempt to integrate adult developmental theory and career development theory in order to better understand what produces satisfaction for women in the teaching profession (Levinson, 1986). A review of Figure 2 (page 9) shows the bodies of theory that are related to the current study while Figure 1 (page 6) provides the conceptual model linking age range, personal variables and career variables to six aspects of job satisfaction.

CHAPTER III

METHODOLOGY

This study examined developmental predictors of job satisfaction for female elementary school teachers. The purpose of the study was to determine which aspects of a teacher's personal and career development are related to job satisfaction at various age levels. Though it is recognized that there may be many other factors involved in job satisfaction for teachers, this research focused specifically on personal and career predictors. Several sources of information were needed to answer this research question. First, it was necessary to obtain personal and career information on the study participants. Second, the data needed to be analyzed to determine how to code and categorize variables for the statistical analyses. Lastly, statistical analyses would test the hypotheses proposed by this study. Specifically, are there differences in levels of job satisfaction for different age categories or are personal and career variables the

major factors involved in teacher job satisfaction? Also, are different aspects of job satisfaction affected differently by age, personal variables and career variables? Finally, what is the best model for predicting teacher job satisfaction from personal and career development factors? The following sections describe how these questions were answered.

Study Design

A quantitative research methodology was used to investigate the research questions. More specifically, a combination of ex post facto and correlational designs was employed. These general approaches are described as "Data Analysis Designs" because the independent variables (age, personal and career variables) are not subject to experimental control. Analysis of covariance and multiple regression analysis are considered to be useful methods for matching on pre-treatment attributes (Campbell & Stanley, 1963).

Several previous studies on job satisfaction employed methodologies similar to those used in the current study. It has been generally agreed that multiple measures of job

satisfaction are preferred to a unitary measure. While some studies simply looked at intrinsic and extrinsic aspects of job satisfaction (Ket de Vries, 1984; Lowther, 1985), others included satisfaction with supervision, colleagues, work conditions, responsibilities, advancement, security, recognition, pay, as well as overall satisfaction (Hulin & Smith, 1965; Hunt & Saul, 1975; Lester, 1987). The independent variables used in these research studies always included age. Some of the studies also used career variables such as tenure, years in their profession, level of hierarchy in their current organization, salary, and attitudes about work values and work rewards. None of the studies actually used personal life variables, other than age, as independent variables. However, interpretations were often made in light of the existing literature on adult developmental theory. These studies all included males and females, but specific conclusions about the patterns of job satisfaction for females was lacking.

The statistical methods of these similar studies used multiple regression analyses (Hulin & Smith, 1965; Hunt & Saul, 1975; Ket de Vries, 1984; Lowther, 1985;). Low R-Square values were very common in these studies, thus indicating that important predictors of job satisfaction had not been identified. Analysis of covariance was used in one study to determine whether significant differences existed among the same age ranges identified in the present study (Ket de Vries, Miller, Toulouse, Friesen, Boisvert, & Theiriault, 1984). It was determined that multiple regression analysis for separate age ranges was a more effective way to study developmental changes in job satisfaction.

Setting for the Study

An urban public school system in Virginia was selected as the setting for this study. The city this school system serves has a population of 160,000 with a median age of thirty years. There are 55,070 households in the city and the median household income is \$35,000. The school budget receives 45.4 percent of its funds from

the locality, 53.4 percent from the state and 1.2 percent from the federal government. The per pupil expenditure is \$3,947 per year.

This school system serves approximately 30,300 students. Sixty-five percent of the students are white, thirty-three percent are black, and two percent represent other minorities. Special education students comprise 9.1 percent of the total student population. Approximately 0.1 percent of the students have limited English capabilities. Twenty-three percent of the students receive free or reduced price lunches.

There are 2,167 professionals employed by the school system, 1,900 of whom are teachers. Seventy-one percent of the teachers are white, 22.5 percent are black and 1.5 percent represent other minorities. The teachers have an average of thirteen years teaching experience. The average teacher salary is \$31,104 for a ten month contract.

Study Population

The target population for this study was female elementary school teachers who teach regular education classes in kindergarten through sixth grade. Special education teachers and resource teachers were not included. There are twenty-six elementary schools in the system for educating children in kindergarten through sixth grade. One elementary school did not participate in the study because permission was not given by the school's principal. Of the twenty-five remaining schools, there were 576 possible participants. Of the 576 possible participants, 392 surveys were returned for an initial response rate of 68 percent. Six of the surveys could not be used due to incomplete responses. Therefore, there were a total of 386 usable surveys for a final response rate of 67 percent.

Instruments

A Teacher Survey was used to collect information concerning each subject's age, personal history, career history and current level of job satisfaction. The

personal history section of the questionnaire asked for the following information: age, marital status, number of children, and educational background. The career history section included number of years in the teaching profession, number of positions held during their teaching career, and grade level they currently teach (Appendix A).

Job satisfaction was assessed by the Job Descriptive Index (JDI; Smith, Kendall & Hulin, 1969; Appendix B). This index measures satisfaction on six dimensions (pay, work, promotions, supervision, co-workers and satisfaction with job in general). Each subscale is composed of adjectives and short phrases, ranging from 9 items (Pay and Promotion) to 18 items (Work, Supervision, and Co-workers, Job in General) for a total of 90 items. Each subscale has a score range of zero to fifty-four points. The authors of the JDI do not recommend adding the first five subscores to obtain an overall job satisfaction score. The subscales are discriminably different, have loaded on separate group factors with no general factor in repeated factor analytic studies, and do not

intercorrelate highly despite their high reliabilities (Smith, Kendall, & Hulin, 1975). The authors developed the sixth subscale, "Satisfaction with Job in General", to provide a separate measure of how the employee feels generally about his or her job.

The JDI index was selected because it has been used in over fifty percent of the studies assessing job satisfaction (Yeager, 1981). With respect to reliability, the JDI is reported to have an average corrected reliability coefficient for the five scales of .79 for split-half estimates of internal consistency. Higher internal consistency reliabilities were found for each of the subscales: work (.84), pay (.80), promotion (.86), supervision (.87), and co-workers (.88). Test-retest reliability over brief periods (two and six weeks) was fairly high (Schriesheim & Tsui, 1981). Longer term tests of reliability have shown low to moderate reliability. However, such tests are not deemed appropriate as job satisfaction scores should change over time (Smith, Kendall, & Hulin, 1975). Evidence from a review of JDI research by Schriesheim and Kinicki (1984) indicated good predictive, construct, convergent and discriminant validity.

Procedure

One month prior to the distribution of the Teacher Surveys, the proposed study was reviewed and approved by the school system's administrator in charge of research. It was recommended that the name of the school system not be included in the study in order to increase the approval rate from the school principals. Two weeks before distribution of the surveys, a letter was sent to each school principal describing the project and asking for their cooperation (Appendix C). The surveys were placed in the teachers' mailboxes along with a cover letter explaining the general purpose of the research and assurance of confidentiality (Appendix D). They were informed that the purpose of this research was to examine patterns among groups and not information about individuals. The participants were asked to return the questionnaires to a box in their respective offices. Teachers checked their names on a list indicating that they had returned the questionnaire. A follow-up postcard

was delivered one week after the initial contact, asking teachers to return their questionnaires if they had not done so (Appendix E). Teacher Surveys were collected from the schools within three weeks of the initial dispersal. The principals and teachers were informed that a summary of the study's findings would be forwarded to each school office.

Data Analysis

Descriptive Statistics

Computer assisted data analysis was done using the SAS software system. Analysis of the Teacher Surveys provided the response rate along with demographic statistics for the study population. Means and standard deviations were computed for the quantitative variables (age in years, number of children, total years in teaching, and number of teaching positions). Frequencies and percentages were computed for the categorical variables (age category, marital status, child status, degree status and grade level taught).

Initial statistical analyses were performed to help classify and code variables used in the other statistical analyses. In addition to age, personal variables included marital status, child status, and educational level. Career variables included total years in the teaching profession, number of positions held during teaching career, and grade level currently teaching. "Age in years" was used as an independent variable in some of the multiple regression analyses while "age category" was used in other analyses. The actual number of positions was used in all of the analyses. Total years in the teaching profession was eliminated from the analyses because of its multicollinearity with age ($r = .79$). Table 1 illustrates how categorical variables were coded for the statistical analyses.

T-tests were computed to determine if there were significant differences between the job satisfaction scores of married and unmarried teachers; those who have children and those who do not have children; those with bachelor degrees and those with advanced degrees; and those who teach primary grades and those who teach elementary grades. Analyses were conducted to examine the

TABLE 1
CODE VALUES FOR THE CATEGORICAL VARIABLES

AGE CATEGORY:	2 = 21-30 years 3 = 31-40 years 4 = 41-50 years 5 = 51 & over
MARITAL STATUS:	0 = not married 1 = married
NUMBER OF CHILDREN:	0 = no children 1 = have children
EDUCATIONAL LEVEL:	0 = bachelor degree 1 = advanced degree
GRADE LEVEL TAUGHT:	0 = primary (K through 3) 1 = elementary (4 through 6)

strength of relationships between age and the other personal and career variables. Pearson Product Moment Correlations were computed for the quantitative variables and Chi Squares were computed for the categorical variables.

Inferential Statistics

The first major statistical analysis evaluated how the entire sample of teachers rated the six aspects of job satisfaction assessed in this study (pay, work, promotions, supervision, coworkers, and job in general). Paired-comparison t-tests were performed between all possible combinations of the six job satisfaction scores. This analysis was expected to show with which aspect of their jobs the the teachers were most satisfied, least satisfied, etc.

Second, an analysis of covariance (ANCOVA) was computed for each of the six job satisfaction scores. Analysis of Covariance represents a blending of analysis of variance and regression analysis (Hayes, 1981). Age was considered to be the independent variable of interest. Initially, the following five age ranges were

used: 21-30 years; 31-40 years; 41-50 years; 51-60 years; and over 60 years. These developmental stages were chosen because they encompass the age levels of most adult developmental stage models and seems to be fairly consistent with general stages of adult development described in the literature (Ket de Vries et al., 1984; Levinson, 1978; Troll, 1982; Whitbourne & Weinstock, 1986). The last two age categories were combined into one group (over 50) because of the small number of teachers in these two groups. Therefore, there were four age categories used in the data analyses. The personal life variables and career variables identified in the survey were considered to be covariates. The effect of these covariates needed to be removed in order to determine whether differences in job satisfaction existed among the four age categories. Comparison of the least square means determined where significant differences existed in levels of job satisfaction among the four age ranges.

The third analysis involved multiple regression performed on the data in order to examine the relationship between the dependent or criterion variables (six job

satisfaction scores) and the independent or predictor variables (all personal history and career history variables identified in the questionnaire). This method determined which personal and career variables were significant predictors for the six job satisfaction scores. This analysis was first performed for the entire sample of teachers to determine how age and the other personal and career variables affected job satisfaction scores. Additional regression analyses were performed for each of the separate age categories to determine which personal and career variables were significant for the individual age ranges.

CHAPTER IV

RESULTS

This chapter presents the results and interpretation of the study's statistical analyses. Demographic data are presented first to provide a description of the teachers who participated in this study. Next, the results of the preliminary statistics used to code and categorize variables will be presented. Lastly, the statistical analyses conducted to answer the study's research questions will be presented and interpreted in light of existing theory.

Descriptive Statistics

Characteristics of the Study Population

The information obtained from the Teacher Surveys provided preliminary data on the teachers' personal and career histories. Tables 2 and 3 summarize the sample characteristics for the 386 teachers participating in the

TABLE 2
STATISTICS FOR QUANTITATIVE PERSONAL AND CAREER VARIABLES

<u>VARIABLE</u>	<u>MEAN</u>	<u>RANGE</u>	<u>STANDARD DEVIATION</u>
Age in Years	38.72	22-62	8.68
Number of Children	1.35	0-5	1.12
Total Years Teaching	13.09	1-39	7.55
<u>Number of Teaching Positions</u>	<u>2.82</u>	<u>1-9</u>	<u>1.67</u>

n = 386

TABLE 3
STATISTICS FOR CATEGORICAL PERSONAL AND CAREER VARIABLES

VARIABLE	STATUS	FREQUENCY	PERCENTAGE
Age Category	21-30 yrs.	66	17.10
	31-40 yrs.	134	34.72
	41-50 yrs.	144	37.31
	over 51 yrs.	42	10.87
Marital Status	Married	287	74.35
	Not Married	99	25.65
Child Status	Have Children	265	68.65
	No Children	121	31.35
Degree Status	Bachelor	227	58.81
	Advanced	159	41.19
Grade Teach	Primary (K-3)	254	65.80
	Elementary (4-6)	132	34.20

n = 386

study. The teachers had a mean age of 38.7 years with over 72 percent falling within the 31 to 50 year age range. Due to the small number of sixty year old respondents, the fifty and sixty year old groups were combined. Approximately 74 percent of the teachers were married and 68 percent had children. Approximately 41 percent of the teachers had degrees beyond the bachelor level. The teachers had a mean of 13 years in the teaching profession with a mean of 2.8 teaching positions held during their careers. Over 65 percent of the respondents taught in the primary level grades (kindergarten through third grade).

Differences in Satisfaction Scores for Independent Variables

Statistical tests were performed to provide preliminary information about job satisfaction scores. T-tests determined if there were significant differences between the job satisfaction scores of (1) married and unmarried teachers; (2) teachers who have children and those who do not; (3) teachers who have bachelor degrees and those with advanced degrees; and (4) those who teach primary grades and those who teach elementary grades. Results of these t-tests are presented in Table 4. The

TABLE 4
T-TESTS FOR DIFFERENCES BETWEEN CATEGORIES OF INDEPENDENT VARIABLES

	<u>T-Values</u>					
	Pay	Work	Promo	Superv	Cowork	Job Gen
Married	1.4	.8	-1.1	-1.0	1.3	.2
Unmarried						
Children	1.1	.5	1.2	-.8	-1.0	.1
No Children						
Bachelor Degree	-.2	-1.2	-2.5*	.5	.3	-.6
Advanced Degree						
Primary Grades	-.6	-2.7*	-1.1	-.2	-2.7*	-3.2*
<u>Elementary Grades</u>						

n = 386

* significant at the .01 level

t-tests revealed no significant differences between the satisfaction scores of married and unmarried teachers or between those who had children and did not have children ($p > .05$). Satisfaction with promotion scores for teachers holding bachelor degrees were significantly higher than those with advanced degrees, $t(384) = -2.49$, $p < .01$. Those who taught in primary grades had higher satisfaction scores for work, coworkers and job in general than their colleagues in the elementary grades, $t(384) = -2.65$, -2.70 , and -3.23 respectively, $p < .01$.

Relationships Between Variables

Due to the fact that this study examined patterns of job satisfaction across age levels, it was necessary to evaluate the relationships between age and personal and career variables. Table 5 shows the Pearson Product Moment correlation values for the quantitative variables. Table 6 shows the Chi Square values establishing the strength of the relationship between the nominal variables and the four age categories used as independent variables in this research. The results indicate that all variables are significantly related to age or age category except the grade level that is currently being taught. It might be expected that the probability of being married, having

TABLE 5
CORRELATIONS BETWEEN AGE AND PERSONAL/CAREER VARIABLES

<u>Relationship</u>	<u>Pearson's r Value</u>	<u>Significance Level</u>
Age and Number of Children	.454	.01
Age and Number of Positions	.327	.01
<u>Age and Total Years in Teaching</u>	<u>.792</u>	<u>.01</u>

n = 386

TABLE 6
 CHI SQUARE VALUES FOR AGE CATEGORIES
 AND PERSONAL/CAREER VARIABLES

<u>Relationship</u>	<u>Chi Square</u>	<u>df</u>	<u>Significance Level</u>
Age and Marital Status	20.51	3	.01
Age and Child Status	97.82	3	.01
Age and Degree Status	23.18	3	.01
Age and Grade Level	.98	3	.80

n = 386

children, having an advanced degree and number of positions held would increase with age. There is no reason to believe that grade level taught would be related to age. The .79 correlation between age and total years in teaching indicates multicollinearity, thus making the use of both variables in the analyses questionable (Welch & Comer, 1988). Therefore, age was chosen to be used in the statistical analyses due to the fact that changes across age were the focus of the research.

Summary of Descriptive Statistics

The results of these preliminary analyses provided information important to the selection and coding of variables to be used in the later statistical analyses. Some of the variables were related to age (marital status, child status, educational level, number of positions) while others showed that there were differences in satisfaction scores between levels of the variables (grade level and educational level). Thus, the use of these variables as covariates was substantiated.

Inferential Statistics

Levels of Six Satisfaction Scores for the Study Population

Six areas of job satisfaction for teachers were assessed: (1) pay, (2) work, (3) promotions, (4) supervision, (5) coworkers, and (6) job in general. Possible satisfaction scores for all six areas ranged from 0 to 54. Table 7 gives the mean values for each of the six job satisfaction scores along with the t-values for the paired-comparisons. There were significant differences between all of the scores except between supervision and coworkers scores. These results indicate that the teachers in this school system gave the highest ratings for satisfaction with jobs in general. However, when separate aspects of job satisfaction were assessed, different patterns appeared. Teachers in this school system were most satisfied with coworkers and supervision. Interpersonal relationships have been found to be a very important aspect of jobs for women (Troll, 1982). Interaction with teachers and supervisors appears to be a very satisfactory part of jobs for teachers in this particular school system.

Teachers gave the third highest ratings for satisfaction with their work. A study by Schaer and

TABLE 7
 PAIRED COMPARISON T-TESTS FOR JOB SATISFACTION SCORES

VARIABLE	MEAN	SD	T-VALUE	Significance Level		
Job in General	42.26	10.9	}	}		
Coworkers	39.80	9.2			7.37	.01
Supervision	39.61	13.7			.25	.80
Work	34.63	13.5			7.26	.01
Pay	22.87	13.5			16.13	.01
Promotions	17.99	10.9			5.54	.01

n = 386

Trentham (1986) revealed that teachers derive great emotional satisfaction from interaction with their students. Similar findings by Raschke, Dedrick, Strathe, and Hawkes (1985) indicated that teachers reported that they derive their primary satisfaction from the work they do with students. While the teachers in this study have fairly high levels of satisfaction from the work they do with students, it is somewhat surprising that this area was third on the list. Individuals have traditionally gone into the field of education in order to work with children and not for pay or prestige. The increasing number of problems experienced in today's school systems may be affecting the sense of satisfaction teachers derive from working with the children.

Teachers were least satisfied with pay and promotions. While dissatisfaction with pay scales has long been an area of contention for educators, this school system did not receive pay increases for the 1991-92 school year and may not receive increases for the 1992-93 school year. Thus, it is not surprising that satisfaction with pay was so low. The promotion issue was very interesting. While these scores were generally low, some of the respondents indicated that they were not interested in promotions to administrative positions or did not want to further their educational levels in order to be

considered for such promotions. Figure 3 provides a graphic representation of how the teachers rated various aspects of their job satisfaction.

Differences in Job Satisfaction Scores For Age Categories

The main research problem proposed in this study was to determine if there were differences in job satisfaction across age categories and if personal and career variables were major factors involved in satisfaction. The statistical analyses indicated that there were several differences in job satisfaction scores among age categories. Age category was treated the major independent variable of interest in a one-way analysis of variance (ANOVA). Due to the small number of sixty year olds in the study, the fifty and sixty year olds were combined into one group. Therefore, four age intervals were used in the analysis (21-30; 31-40; 41-50; and over 50). For simplicity, these four age categories will be referenced as the "twenty, thirty, forty and fifty year old groups". It was determined through preliminary analysis of the data that the personal and career variables differed across age categories. Table 8 shows the frequencies and percentages of teachers represented in each level of the covariates across the four age

FIGURE 3
COMPARISON OF MEANS FOR
SIX JOB SATISFACTION SCORES

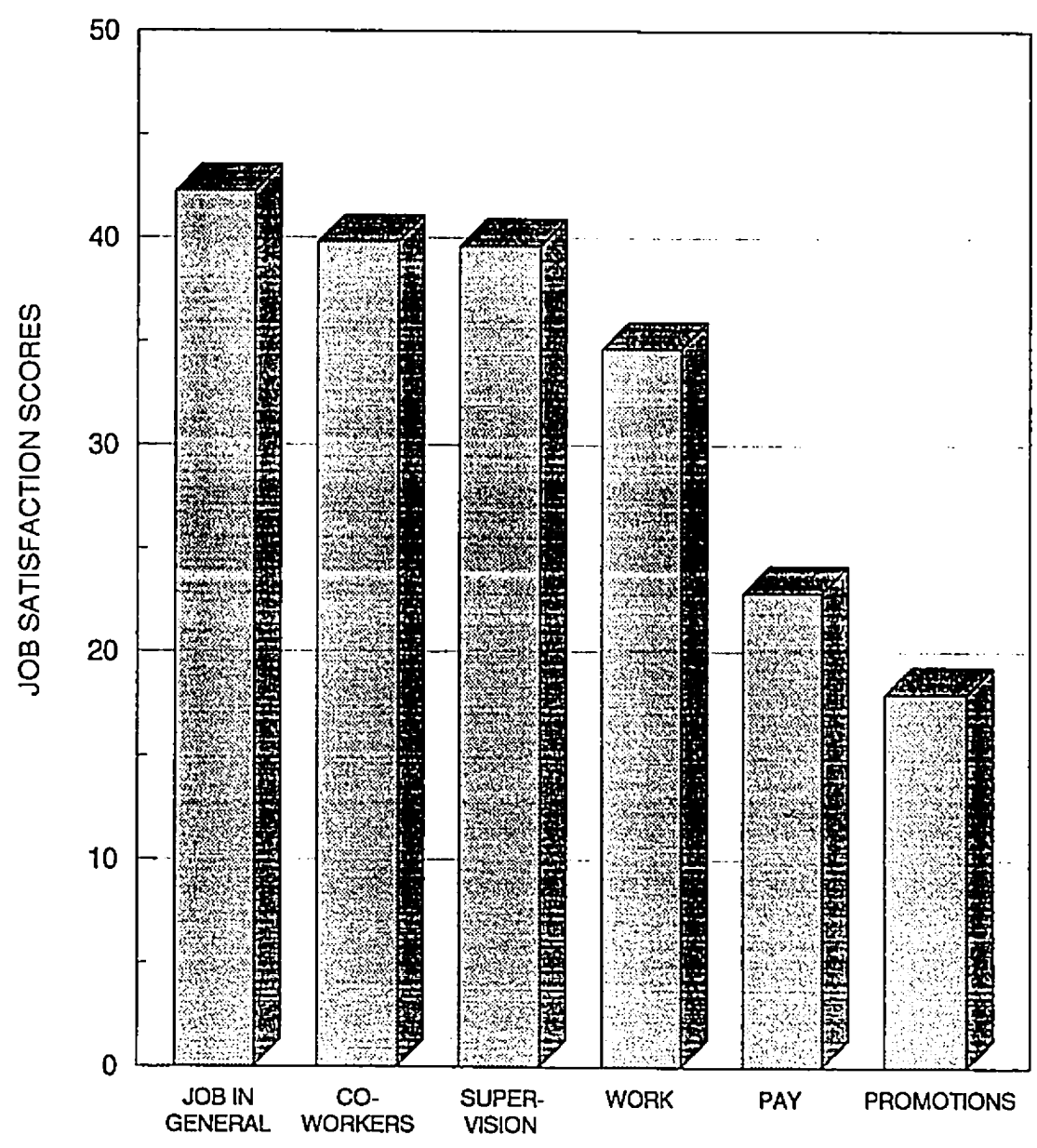


TABLE 8
DISTRIBUTION OF COVARIATE LEVELS ACROSS AGE CATEGORIES

COVARIATE	AGE CATEGORY				
	20-30	31-40	41-50	OVER 51	
Marital Status					
Married	35 (53%)	110 (82%)	111 (77%)	31 (74%)	
Not Married	31 (47%)	24 (18%)	33 (23%)	11 (26%)	
Child Status					
Have Children	12 (18%)	99 (74%)	117 (81%)	37 (88%)	
No Children	54 (82%)	35 (26%)	27 (19%)	5 (12%)	
Degree Status					
Advanced	10 (15%)	62 (46%)	70 (49%)	17 (40%)	
Bachelor	56 (85%)	72 (54%)	74 (51%)	25 (60%)	
Grade Level					
Elementary	26 (39%)	89 (66%)	87 (68%)	28 (67%)	
Primary	40 (61%)	45 (34%)	47 (32%)	14 (33%)	
Mean Number Positions (standard deviation)	1.5 (.69)	2.8 (1.8)	3.3 (1.6)	3.3 (1.6)	3.3 (1.6)

n = 386

categories. The personal and career variables identified in the survey were added as covariates in order to control for their effects on job satisfaction (marital status, child status, number of teaching positions held during career, degree level, and current grade level taught). An analysis of covariance (ANCOVA) was performed for each of the six job satisfaction scores. The means for the six job satisfaction scores across the four age categories are presented in Table 9. Figure 4 shows the trend of the levels of job satisfaction across the four age categories. Significant differences between age categories were only found for supervision and job in general scores. Table 10 provides results of the F-tests for the main effect of age in the ANCOVA's. Explanations for these findings follow.

For satisfaction with supervision scores, the ANCOVA revealed a significant main effect for age category, $F(3, 381)=2.92, p < .03$. There were significant differences between the least square means for the twenty and fifty year old teachers ($p < .03$), between the thirty and forty year old teachers ($p < .05$), and between the thirty and fifty year old teachers ($p < .01$). The younger teachers had higher satisfaction with supervision scores than the

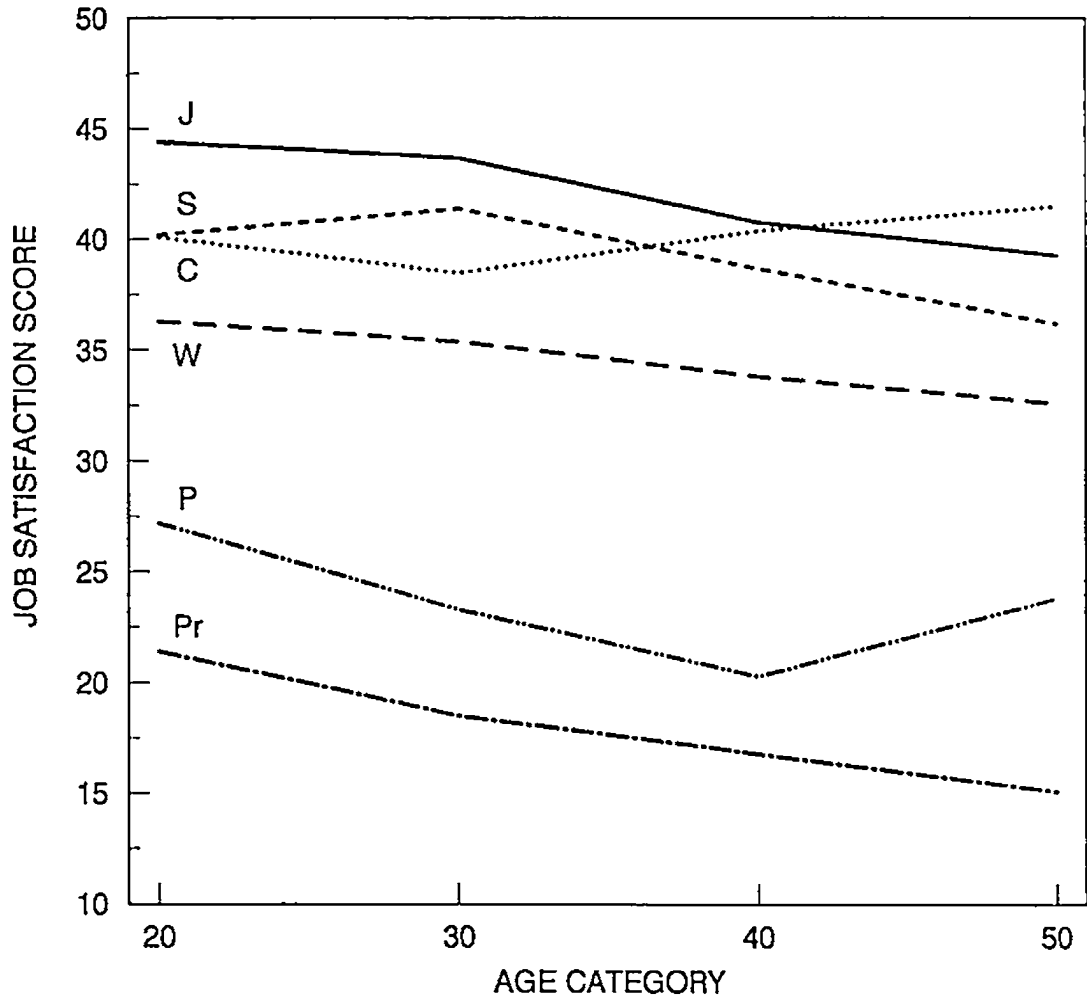
TABLE 9
 MEANS AND STANDARD DEVIATIONS FOR THE SIX JOB SATISFACTION
 SCORES ACROSS FOUR AGE CATEGORIES

SATISFACTION SCORE	AGE CATEGORY			
	<u>20-30</u>	<u>31-40</u>	<u>41-50</u>	<u>OVER 50</u>
Pay	27.18 (12.5)	23.27 (13.4)	20.26 (13.7)	23.76 (13.8)
Work	36.29 (8.3)	35.35 (8.9)	33.80 (9.6)	32.62 (10.4)
Promotions	21.42 (13.4)	18.49 (13.4)	16.78 (14.6)	15.12 (10.9)
Supervision	40.15 (14.1)	41.37 (12.9)	38.72 (13.7)	36.17 (13.4)
Coworkers	40.12 (13.8)	38.49 (14.3)	40.38 (13.2)	41.52 (11.5)
Job in General	44.36 (9.6)	43.73 (9.6)	40.80 (11.9)	39.31 (12.4)

n = 386

() denotes standard deviation

FIGURE 4
COMPARISON OF SIX JOB SATISFACTION SCORES
ACROSS AGE CATEGORIES



J=JOB IN GENERAL S=SUPERVISION C=COWORKERS
 W=WORK P=PAY Pr=PROMOTIONS

TABLE 10
 F-VALUES FOR MAIN EFFECTS OF AGE CATEGORY
 ON SIX JOB SATISFACTION SCORES

Job Satisfaction Score	df	F	Significance Level
Pay	3, 381	2.19	.09
Work	3, 381	1.42	.24
Promotions	3, 381	1.24	.29
Supervision	3, 381	2.92	.03
Coworkers	3, 381	.98	.40
<u>Job in General</u>	<u>3, 381</u>	<u>3.15</u>	<u>.03</u>

n = 386

older teachers. This may be due to the fact that more attention is given to newer teachers or that more experienced teachers feel that school administrators have little to offer them. Schott (1986) has stated that individuals in their twenties and thirties are anxious to prove themselves to their organizations. Thus, exhibiting a high level of enthusiasm for the supervisor/employee relationship may be very important to younger teachers.

For satisfaction with job in general scores, the ANCOVA revealed a significant main effect for age category, $F(3, 381) = 3.15$, $p < .03$. There were significant differences between the least square means for the twenty and forty year olds ($p < .05$), for the twenty and fifty year olds ($p < .03$), for the thirty and forty year olds ($p < .03$), and for the thirty and fifty year olds ($p < .02$). Again, the job in general scores were higher for the younger teachers. These findings are in contrast to previous research showing that job satisfaction generally increases with age (Hunt and Saul, 1979; Lowther, Gill, Coppard, 1985; Whitbourne & Weinstock, 1979). Furey and Lauroesch (1986) found that male teachers in their thirties are much less satisfied with their teaching careers than those in their forties. This dissatisfaction with teaching often results in younger teachers leaving

the profession. The average age of public school teachers went from thirty-six in 1976 to thirty-nine in 1981.

While patterns of satisfaction/dissatisfaction seem to be basically the same for males and females, males seem to be more dissatisfied, particularly in the thirty age group. Furey and Lauroesch (1986) reported that the scarcity of life-cycle research on females made a conclusive investigation on female teacher job satisfaction impossible.

The current study findings of decreasing teacher job satisfaction over the lifespan may be explained in several ways. The teaching profession suffers from the same problems of many other public sector occupations in the sense that it is seen as a "flat" or early plateau career (Lowther, Gill, & Coppard, 1985). While new teachers possess great enthusiasm and energy for their work, older teachers may become less enthusiastic simply because opportunities in the teaching profession are limited. It may also be that school systems are simply not addressing developmental needs of older teachers that are important to maintaining satisfaction and fulfillment with their work (Kaiser, 1981-82). Years of stress experienced by elementary school teachers also appear to affect levels of overall job satisfaction. Lack of time, disruptive

students and a general disinterest in learning on the part of students seem to contribute to the decrease in the levels of job satisfaction teachers experience (Raschke, Dedrick, Strathe, & Hawkes, 1985).

Prediction of Job Satisfaction Scores

The second part of the main research problem was to determine if job satisfaction was really determined by a combination of age level, personal variables and career variables. Stepwise regression analyses were performed for the entire sample of teachers to examine the relationships between the dependent or criterion variables (six job satisfaction scores) and the independent or predictor variables (age, marital status, child status, number of positions, degree level and grade level). The predictor variables were regressed on the six job satisfaction scores:

$$y_1 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + e;$$

where, y_1 = job satisfaction score

a = constant

b = regression coefficient

x_1 = age

x_2 = marital status

x_3 = child status

x_4 = degree level

x_5 = number of positions

x_6 = grade currently teach

e = error

These analyses provided significant predictors of job satisfaction for the entire group of teachers. The stepwise regression analyses included the best predictors for job satisfaction scores up to the .10 significance level. Table 11 lists significant predictors for the six job satisfaction scores. A low R-square for the overall models shows that there is considerable random fluctuation around the model by the regression equation. (Log linear analyses were also performed, but there was no improvement in R-Square values). Previous researchers have also reported low R-square values which indicates that a small proportion of the variance in job satisfaction scores can be accounted for by independent variables identified in studies (Hunt & Saul, 1975; Ket de Vries, 1984). The focus of the current research was to identify personal and career factors that affected teacher job satisfaction. It is obvious, however, from this research and past research that there may be other important variables that also affect satisfaction with one's chosen profession.

The results of the regression analyses indicated that several personal and career variables were significant predictors of job satisfaction for teachers. Age was a significant, negative predictor of satisfaction with work, promotions, supervision and job in general. In other

TABLE 11
SIGNIFICANT PREDICTORS OF THE SIX JOB SATISFACTION SCORES

CRITERION VARIABLE	PREDICTOR VARIABLES	PARTIAL R-SQUARE	b	SE	F	Significance Level
Pay	# Positions	.0358	-1.5783	.407	15.02	.0001
Work	Grade Level	.0209	-2.9405	.978	9.03	.0028
	Age	.0163	-0.1362	.054	6.47	.0114
Promotions	Degree Status	.0160	-3.2601	1.415	5.31	.0217
	Age	.0098	-0.1623	0.080	4.09	.0437*
Supervision	Age	.0084	-.2166	0.087	6.19	.0133
	Child Status	.0074	4.1880	1.831	5.23	.0227
	Marital Status	.0071	-2.9802	1.783	2.79	.0954
Coworkers	Grade Level	.0189	-3.9459	1.438	7.53	.0063
	# Positions	.0070	-0.6777	0.409	2.74	.0987
Job in General	Grade Level	.0306	-4.2020	1.145	13.46	.0003
	Age	.0236	-0.1935	0.063	9.54	.0022

n = 386

words, older ages were related to lower job satisfaction scores. Again, these findings are in direct contrast to previous research showing that job satisfaction generally increases with age (Hunt and Saul, 1979; Lowther, Gill, & Coppard, 1985; Whitbourne & Weinstock, 1979). Being married was related to lower satisfaction with supervision and having children was related to higher supervision scores. Perhaps, married teachers are less tolerant of the compromise required in a supervisor/employee situation because of stress they feel from supervisor demands and family demands. On the other hand, having to supervise children may make one more accepting of a supervisor's role in the work place. An advanced degree was associated with lower satisfaction with promotion scores. This is consistent with earlier research showing that women with higher education levels are more interested in independence and recognition by others than less educated women (Troll, 1982). Those teaching in primary grade levels were more likely to be satisfied with work, coworkers and their jobs in general than elementary level teachers. An explanation for this finding may be that primary grade classes have more teaching assistants. Also, the older children may represent greater discipline problems for teachers Raschke, (Dedrick, Strathe, &

Hawkes, 1985). In summary, age was seen to be a significant predictor for four out of six job satisfaction scores.

It was hypothesized that there would be differences in the predictors of job satisfaction across age categories. Therefore, separate stepwise regressions were performed for each of the four age categories to determine which of the personal and career variables were the best predictors for the six job satisfaction scores:

$$Y_1 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + e;$$

where, y_1 = job satisfaction score

a = constant

b = regression coefficient

x_1 = marital status

x_2 = child status

x_3 = degree level

x_4 = number of positions

x_5 = grade currently teach

e = error

The results of the separate regressions indicated that significant predictors of job satisfaction varied across age categories (Tables 12: A-D). Profile analyses of the predictors of job satisfaction for each of the four age categories follows.

TABLE 12-A
SIGNIFICANT PREDICTORS OF JOB SATISFACTION FOR TWENTY YEAR CATEGORY

CRITERION VARIABLE	PREDICTOR VARIABLES	PARTIAL R-SQUARE	b	SE	F	Significance Level
Coworkers	Marital Status	.0444	5.7641	3.34	2.97	.0894

n = 66

TABLE 12-B
SIGNIFICANT PREDICTORS OF JOB SATISFACTION FOR THIRTY YEAR CATEGORY

CRITERION VARIABLE	PREDICTOR VARIABLES	PARTIAL R-SQUARE	b	SE	F	Significance Level
Pay	# Positions	.0130	-1.3430	.6537	4.22	.0419
Work	# Positions	.0357	-0.9380	.4308	4.74	.0312
Promotions	# Positions	.0408	-1.5408	.6516	5.59	.0195
Supervision	Degree Status	.0178	4.0912	2.2553	3.29	.0720
Coworkers	# Positions	.0201	-1.1610	.7057	2.71	.1023

n = 134

TABLE 12-C
SIGNIFICANT PREDICTORS OF JOB SATISFACTION FOR FORTY YEAR AGE CATEGORY

CRITERION VARIABLE	PREDICTOR VARIABLES	PARTIAL R-SQUARE	b	SE	F	Significance Level
Work	Grade Level	.0344	-3.7756	1.6786	5.06	.0260
Promotions	Child Status	.0172	-5.4020	3.0944	3.05	.0830
	Degree Status	.0188	-4.0024	2.4165	2.74	.0999
Supervision	Grade Level	.0266	-4.7991	2.3733	4.09	.0451
	Child Status	.0206	7.0666	3.0201	5.47	.0207
	Marital Status	.0276	-5.7358	2.8044	4.18	.0427
Coworkers	Grade Level	.0513	-6.7262	2.2671	8.80	.0035
	Child Status	.0230	5.2649	2.7202	3.75	.0550
	# Positions	.0198	-1.1636	.6659	3.05	.0828
<u>Job in General</u>	<u>Grade Level</u>	<u>.1070</u>	<u>-8.2924</u>	<u>2.0106</u>	<u>17.01</u>	<u>.0001</u>

n = 144

TABLE 12-D
 PREDICTORS OF JOB SATISFACTION SCORES FOR FIFTY YEAR AGE CATEGORY

CRITERION VARIABLE	PREDICTOR VARIABLES	PARTIAL R-SQUARE	B	SE	F	Significance Level
Pay	Grade Level	.2066	-11.2378	3.9494	8.10	.0070
	# Positions	.0968	- 2.6672	1.1453	5.42	.0252
Work	Child Status	.0953	8.1695	4.7755	2.93	.0951
Promotions	# Positions	.1137	2.5046	.0965	6.73	.0134
	Grade Level	.0733	-6.0791	3.3229	3.35	.0752
Coworkers	Child Status	.0751	9.6757	5.3707	3.25	.0792
Job in General	Child Status	.0928	11.4757	5.6743	4.09	.0499

n = 42

Twenty Year Old Teachers (21-30 years)

Satisfaction with teaching jobs for the twenty year olds could not be predicted with much success in the current study. It is clear that factors associated with job satisfaction for younger teachers were not identified in this study. Similarities in the standard deviations of job satisfaction scores of all of the age ranges suggest that there is variability in job satisfaction for the twenty year olds. However, the sources of this variability were not identified by the current study. Only satisfaction with coworkers was positively and significantly related to being married. This period of life is characterized by linking oneself to adult society through the forming of mature friendships and/or a mate in their personal lives and mentors in the workplace (Levinson, 1978). Young married teachers may look to colleagues in the work place for socialization since they have likely reduced social activities since becoming married. They probably enjoy sharing experiences of managing a household, family and career and find much support from their peers in doing so. Unmarried teachers in this same age category may have very active outside social lives and do not need the companionship of fellow

workers as much as married teachers do. It may also be that the younger, unmarried teachers feel less compatible with the majority of teachers in the system. Most of the teachers were married and the likelihood of being married increased with age. The overall pattern found in this study is that younger teachers were generally more satisfied with most aspects of their jobs than older teachers. Younger teachers frequently articulate their needs more than older teachers (Lowther, 1985). Also, their needs may be fewer because of fewer financial and family obligations during these early years of their careers (Whitbourne and Weinstock, 1986). Also, for those who have decided that teaching was the right career choice, the twenty to thirty age range can be the happiest time in the teaching profession (Cruickshank, 1985-86).

Thirty Year Old Teachers (31-40 years)

For the thirty year old teachers, job satisfaction was best predicted by the number of job changes that had occurred during their teaching career. Number of positions held thus far during a teacher's career was significantly and negatively related to satisfaction with pay, work and promotions for the thirty year olds. The

more positions held up to that point in their career, the lower the satisfaction scores. This seems to indicate that people who are dissatisfied with their jobs change positions more than satisfied people (Cruickshank, 1985-86; Golembiewski, 1978). Feelings of dissatisfaction may result in requests for changes in grade level assignments or even to specialty teaching areas. Administrators may look at the number of changes in teaching positions among teachers in this age range as indicators of dissatisfaction and then devise individual plans to help the teachers. Another interesting predictor of job satisfaction for thirty year olds was degree status. Having an advanced degree was significantly and positively related to satisfaction with supervision. It may be that advanced degree holders feel more "equal" to their supervisors or at least better understand the demands of supervisory positions due to their additional training. These advanced degree holders may also be more sympathetic and understanding because they are seeking advancement to such positions themselves. On the other hand, advanced degree holders may actually be treated better by administrators. Self-concept issues addressed in earlier studies could partially explain these findings (Ralph et al., 1987; Schaer & Trentham, 1986). There were no significant predictors of job in general scores for thirty year old teachers.

Forty Year Old Teachers (41-50 years)

For the forty year old teachers, personal variables became increasingly important in the prediction of job satisfaction. Being married was significantly and negatively related to satisfaction with supervision in their schools. As stated previously, this may be due to the fact that married teachers feel less tolerant of the supervisor/employee relationship than unmarried teachers because of the stress of supervisor demands and family demands. Also, teachers in the forty age range may feel they have less to learn from administrators or less to prove to them at this stage in their careers (Lowther, Gill, & Coppard, 1985). Having children was also a significant predictor of satisfaction with promotions, supervision and coworkers. Teachers who had children were more likely to be dissatisfied with promotion opportunities. This is very logical due to the fact that more money is required to raise teenage children and to prepare for the college years. Also, it has been found in previous research that as workers pass forty years of age, the ones who received promotions worked toward advancement, while those who did not looked forward to retirement (Fagan & Ayers, 1983). During this stage, some teachers feel they would like to leave the profession, but

do not because of time invested (Cruickshank, 1985-86). On the other hand, having children was positively related to satisfaction with supervision and coworkers. It is likely that teachers are more sympathetic to the supervisory role of their administrators and appreciate the support they get from coworkers during this stage of life. They may have more time to invest in friendships and social activities with fellow workers. As mentioned previously, having an advanced degree was related to dissatisfaction with promotion opportunities.

While all of these personal variables play an important role in predicting job satisfaction for teachers in their forties, there are also two important career variables that are predictors. Teaching in elementary grades (fourth through sixth) is associated with lower scores for satisfaction with work, supervision, coworkers and job in general. It appears that teachers in those grade levels are less satisfied with support they receive from supervisors and coworkers. They are less satisfied with promotions and may feel that they are not recognized sufficiently for the work they do with the older elementary students. Also, the number of positions held thus far during a forty year old teacher's career predicted satisfaction with her coworkers. It appears

that frequent changes in teaching positions reflected dissatisfaction with peers during this age period.

Fifty Year Old Teachers (over 50 years)

Both personal and career variables were important in the prediction of job satisfaction for fifty year old teachers. Having children was positively related to satisfaction with work, coworkers and job in general. Teachers in this age range typically have children in their late teens to adulthood. At this stage of parenthood, teachers are generally less physically involved in their children's activities (for example, driving them to lessons, games, etc.) and have basically completed their jobs in raising them (Havighurst, 1981). Teachers in this age range may be able to enjoy their work more because of the time and energy they are able to devote to it. They may also derive a sense of enjoyment from the "mothering" role involved in teaching the children and this may help compensate for the "empty nest" syndrome. Again, like teachers in their forties, fifty year old teachers who have children seem to derive great satisfaction from coworkers. They seem happy with the choices they have made, are happy that they made teaching their life-long career, and are looking forward to the

retirement years. Thus, having children has a positive effect on overall job satisfaction for fifty year old teachers.

Number of positions held was found to be a significant predictor of satisfaction for pay and promotions. As demonstrated in previous analyses, the higher the number of positions held, the lower was the satisfaction with pay. However, number of positions was positively related to satisfaction with promotions. There are several possible explanations for this positive effect. It may be that younger teachers in their twenties, thirties and forties who have changed teaching positions frequently have left the teaching position. Also, there may be others who have moved on to administrative positions. On the other hand, teachers in their fifties may have become reconciled with the position they currently hold. They feel justified in the choices they have made regarding their teaching positions. This seem to be in line with the theory of "accommodation and assimilation" espoused by Whitbourne and Weinstock (1986). Also, veteran teachers may become bored with the same work, but may also experience greater opportunity to mold their job to personal interests (Whitbourne and Weinstock, 1986). Grade level taught was also a

significant predictor of satisfaction with pay and promotions. Once again, teachers in the primary grades were more satisfied than teachers in elementary grades.

CHAPTER V

CONCLUSIONS AND POLICY RECOMMENDATIONS

The answers to the research questions proposed in this study provided important information regarding job satisfaction for female elementary school teachers. These questions were related to determining whether levels of job satisfaction differed across age ranges; whether age, career variables, and personal variables could predict job satisfaction; and whether various aspects of job satisfaction were affected differently by age, personal variables and career variables.

Patterns of job satisfaction across the four age categories revealed that younger teachers in their twenties and thirties were more satisfied with jobs in general and supervision than teachers in their forties and fifties. This finding was in contrast to previous studies showing that job satisfaction generally increases with age (Hunt & Saul, 1979; Lowther, Gill, & Coppard, 1985; Whitbourne & Weinstock, 1979). There are several possible reasons for finding this pattern in the teaching profession. While new teachers are enthusiastic about making a real difference in the lives of children, older teachers may become discouraged about the lack of

immediate results they see. In fact, teachers may never know the impact they have made on a student's life. This lack of positive feedback is likely to result in lower job satisfaction over a teacher's career span. Lowther (1985) has suggested that intrinsic rewards of the work itself are most important to younger teachers, while job rewards such as pay become more important as teachers get older.

The study findings also indicated that teachers become less satisfied with supervision as they get older. This may be because supervisors give more attention to newer teachers or because more experienced teachers feel that their supervisors have little to offer them. This seems to be a fairly common pattern in any occupation. It is expected that newer, younger employees would benefit from and desire mentoring from older, more experienced professionals. Furthermore, during the later stages of their careers, veteran employees receive more satisfaction from mentoring others (Dalton, Thompson, & Price, 1977; Levinson, 1978). While it appears that the teaching profession shares many similarities with other organizations, there seem to be some patterns that are specific to public sector occupations. Henderson (1985) found that mentoring in the public sector generally ended after the fifth year of service, while private sector

mentoring often continued through the fifteenth to twentieth year. Lipsky (1980) has speculated that the teaching profession shares many of the same work conditions as other human service professions. These conditions include limited resources, vague or conflicting work goals, non-volunteer clients, and single salary schedules.

The second research question asked if job satisfaction can be predicted by age, personal variables, and career variables. Increasing age was a significant and negative predictor of satisfaction with work, promotions, supervision and job in general. As previously stated in the discussion of job satisfaction patterns across age ranges, it appears that younger teachers have great enthusiasm for their daily work and for their careers in general. Older teachers seem to become discouraged due to the lack of positive feedback received for their work.

Is the pattern of decreasing satisfaction with promotion opportunities unique to the teaching career? It seems that the teaching profession suffers from similar problems found in other public sector careers in that it is seen as a "flat" or early plateau career (Lowther, Gill, & Coppard, 1985). Lortie (1975) has indicated that

teachers have limited control over salaries, but can predict their future salaries. Also, dedicated service seldom results in promotion or in merit salary increases. There are not many upward career moves available to those individuals who want to remain classroom teachers. While peers in the private sector are experiencing promotions and advancement, teachers generally remain in the same career level. Also, continuous criticism from the public about education and lack of respect for the teaching profession contribute to low feelings of accomplishment for career teachers.

Satisfaction with supervision was also negatively related to age. It appears that younger teachers feel that they receive much encouragement and support from administrators while older teachers do not feel they gain much from this relationship. This decreasing satisfaction with supervision may also be related to the changing roles associated with having a mentor at younger ages and being a mentor at older ages (Levinson, 1978). In general, this study shows that age was a significant, negative predictor of job satisfaction. While these findings are in contrast to previous research showing increasing levels of satisfaction across age levels, this may be fairly common in other public sector careers (Lowther, Gill, & Coppard, 1985).

Personal variables (marital status, child status and degree level) and career variables (number of positions and grade level taught) were also found to be significant predictors. It was found that marriage was related to lower supervision scores, while having children was related to higher supervision scores. It may be that married teachers have more difficulty dealing with the supervisor/employee relationship because of stress they feel from supervisor and family demands. However, having children of one's own may somehow make teachers more sympathetic to the supervisor's role in the workplace. Having an advanced degree was associated with lower satisfaction with promotion scores. As indicated in prior research, women with higher education levels are more interested in independence and recognition from others (Troll, 1982). Lastly, teaching in elementary grade levels (fourth through sixth grade) had a negative effect on satisfaction with work, coworkers and job in general scores. Teachers of older elementary students do not have the benefit of teaching assistants. Also, older children generally represent more discipline problems than younger children.

The third research question involved examining patterns within each age range to determine whether

various aspects of job satisfaction are affected differently by personal variables and career variables. The following profiles of teacher satisfaction for each age group provide some interesting information regarding the kinds of personal and career variables which seem to be related to job satisfaction at different age levels.

The one significant predictor for the twenty year old group was marital status. Being married was positively related to satisfaction with coworkers. This period of life is characterized by the formation of mature friendships in both personal and career arenas. The young married teachers appear to benefit from the socialization they receive with others in the work place. It may be that the unmarried teachers in this age category feel less compatible with the married teachers in the system who represent the majority. This feeling of incompatibility may result in teachers leaving the profession or may disappear when they marry in later years. It is clear that more research is needed to determine what predicts job satisfaction for teachers in the twenty year age range.

There was very little else that could be predicted about job satisfaction for the twenty year old teachers in this study. The standard deviations for the job

satisfaction scores of the twenty year olds were similar to those of the other three age groups, thus indicating that variability did exist for twenty year old teachers. However, it was obvious that factors associated with job satisfaction for twenty year olds were not successfully identified by this study design. Certainly, all who enter the teaching profession at early ages do not remain in teaching. There are probably important factors involved in the decision to remain or leave that are interacting with the personal and career variables identified in this research. Also, younger teachers were likely to have less variability in the identified personal and career variables. For example, they were less likely to be married, have children, have advanced degrees and had fewer opportunities for changing teaching positions. It may be that there are other variables that are better predictors of job satisfaction for twenty year old teachers. Perhaps, the difference between what a teacher expected from teaching and what she actually experienced is an important predictor during these early years (Ket de Vries, Miller, Toulouse, Friesen, Boisvert, & Theiriault, 1984). Also, self-concept, locus of control and ability to adapt oneself to the work environment may be more important in predicting job satisfaction for twenty year

olds than the personal and career variables identified in the current study (Ralph et al., 1987).

For the thirty year old group, the number of positions held during their careers is the most powerful predictor of job satisfaction. Number of positions was negatively related to satisfaction with pay, work, promotions, and coworkers. That is not to say that changing teaching positions decreases satisfaction, but perhaps is simply an indication that dissatisfaction exists. People in their thirties are often re-examining progress they have made in their careers as well as in their personal lives. Feelings of dissatisfaction may result in requests for different educational positions or sometimes in changes to other careers. This may also be related to the dissatisfaction that teachers with advanced degrees feel toward supervisors. Their search for more meaningful career choices often leads them to further education. While they anticipate that higher educational levels will result in increased job rewards, they are often disappointed by the lack of response they receive from those in supervisory positions. It seems that more needs to be done to help teachers in this age range to feel rewarded and appreciated for their work and for their efforts to obtain advanced training and education.

For the forty year age category, personal variables begin to play an important role in job satisfaction. Being married and having an advanced degree were related to negative supervision and promotion scores. Family stressors during the forties may very well affect the relationship between teachers and their supervisors. Mid-life marital issues and concerns of teenage children all contribute to stress felt by forty year old teachers. They may feel that their supervisors do not understand the complexities of their personal lives. Also, teachers may not want to deal with the employee/supervisor relationship during this period of their lives. Those teachers with advanced degrees may feel that the time and expense invested in these pursuits have been wasted due to limited opportunities for promotion. Number of positions and grade level taught also are significant predictors for the forty-one and over teachers. Like the thirty year old teachers, dissatisfaction with coworkers appears to be reflected by the number of teaching positions they have had during their careers. Teaching in elementary grade levels was once again associated with lower satisfaction scores in four out of six categories. Having children was a very interesting predictor for the forty year old teachers. As expected, it was associated with lower

satisfaction with promotion scores due to increased expenses of teenage and college students during this phase of family life. However, having children was associated with higher scores for supervision and coworkers. It appears that teachers in this age range who have children need and enjoy the support and encouragement they receive from fellow workers.

The pattern of job satisfaction for fifty year old teachers was somewhat different. While most of the relationships between personal and career variables were negative ones during the earlier years, there were more positive predictors found for the fifty year old group. Having children was the most powerful predictor of satisfaction for this age category and was positively related to work, coworkers and job in general scores. Parents in this age range typically have older children who require less physical energy from them. Teachers seem to feel a renewed sense of satisfaction in working with their students and their peers. These women may compensate for the "empty nest" syndrome by helping other young people and by mentoring younger teachers.

It was interesting that the number of positions held during one's career was positively related to satisfaction

with promotions for the fifty year old teachers. There are several possible explanations for this finding. Changing positions during their careers may have led these teachers to their current, more desirable positions. Other teachers who have had a large number of position changes may have moved on to other jobs. On the other hand, teachers in their fifties may simply view their past moves in a favorable light in order to feel justified about the choices they have made. However, the number of positions held still reflected dissatisfaction with pay levels. As found among other age categories, teachers in the elementary grades were less satisfied with pay and promotions.

Reference to the conceptual model on page six is appropriate at this time. It is clear from this research that adult developmental stages affect one's personal and career life. For example, the probability of being married, having children, and having an advanced degree increases with age. Also, longer tenure levels are only possible at older ages and the number of position changes is likely to be higher at older ages. While the grade level currently taught is not directly related to age, the teacher has reached her current position as a result of choices made along her career path. The statistical

analyses conducted in this study revealed that age, personal variables, and career variables affect how satisfied a teacher is with different aspects of her job. Conversely, it makes sense that job satisfaction levels would affect the quality of a teacher's personal and career life.

Implication of Study Findings for Theory Development

The present study contributes to the existing body of theory on lifespan research in the areas of personal and career development. There is support for the view that there are certain issues and tasks that are important at various adult developmental life stages (Stewart, 1982). Lifespan research has shown that developmental change in adulthood is a much more complex process than the sequential, physiologically based changes that occur in childhood. While some feel that life events are the most critical aspects of adult development, it seems logical to view adult development as a process which involves age-related physiology, social changes, personal life events and career choices. Restricting adult development research to normative conceptions like those in childhood would only inhibit research in this area (Marini, 1984;

Whitbourne & Weinstock, 1986). From a developmental perspective, it appears that there are basic stages through which one passes based on age; but there are also individual differences based on personal experience and career choices that cannot be ignored.

Clearly, Early Adulthood is a time for establishing intimate relationships, social contacts and a career. This period is characterized by preoccupation with one's personal life (Levinson, 1986; Schott, 1986). Decisions about marriage, beginning a family and establishing personal and career goals are being made during this phase of adult life. The current study shows that for twenty year old teachers, marriage is a significant predictor of satisfaction with coworkers. Previous studies have revealed dissatisfaction with jobs during this early career phase because young, idealistic beliefs are not realized when one enters the real world of work (Schott, 1986). The higher satisfaction scores for the twenty year old teachers in the current study may be because younger teachers feel they can really make a difference in the lives of children and they also receive much support and encouragement from their supervisors. Also, dissatisfied young teachers may have already left the teaching profession during their twenties.

Middle Adulthood usually involves some re-evaluation of personal and career goals while dealing with every day problems of family life. Up until the age of thirty, there is little evidence of physical decline. People have usually established families and are hard at work on the career aspects of their lives. It is also a time of reconsideration of one's chosen life structure while there is still time to make changes (Schott, 1986). The current study reflects this time of reconsideration in that the best predictor of job satisfaction for thirty year old teachers is the number of teaching positions they have had. Higher number of positions were associated with lower job satisfaction scores.

The mid-life transition experienced in the forties is a time when many individuals still have their youthful aspirations while faced with the reality that they are not likely to achieve them. Marital discord and family problems associated with raising older children are apparent. The current study shows that both personal and career variables are important indicators of job satisfaction for the forty year old teachers.

Later Adulthood is a time of reflection on one's life and acceptance of the choices one has made. Often there is the need to accomplish something important during the

years remaining (Havighurst, 1981). During the fifties and sixties, there are generally less negative feelings than in the forties. Relationships with family and friends are better and people are more content with their lives (Troll, 1982). The current study confirms this notion due to the fact that there are positive predictors of job satisfaction during this stage of life that are related to family variables.

This study's findings are relevant for lifespan theory and career development theory. A person's job occupies much of a person's time and energy. Not only does an individual's personal life affect his/her job, but the way a person feels about their job affects relationships with family and friends. Therefore, career research is very important for society as a whole. Job satisfaction studies make assessments of how individuals feel about their careers and their lives. Past research has generally focused on changes in job satisfaction over age and/or tenure. Though this study was originally intended to examine the effects of both age and tenure, the high correlation between the two variables prevented it. For all practical purposes, age and tenure represented the same variable in this study. Age was chosen over tenure because the study's purpose was to

examine patterns of job satisfaction across age. Using tenure as an independent variable in the analyses of variance would be impossible because the twenty year olds do not have a wide range of total years in teaching. It appears that the relationship between age and levels of job satisfaction is a very complex one and that both personal variables and career variables must be considered in such research. The current study provided much more information about job satisfaction when these additional variables were considered.

Another contribution this study makes to adult development theory is that it provides data on females which is lacking in the current literature. With the increasing number of women in the work force, it is extremely important to assess factors associated with job satisfaction for women as well as for men. Much of the research on men has portrayed growth as a linear equation and fixes development to coordinates of work and age (Levinson, 1978; Vaillant, 1977). Levinson (1986) has indicated that there are stable periods and transitions for both men and women, but he also recognizes that differences exist within that framework. Perosa and Perosa (1984-85) found no differences in the mid career crises of males and females. It was noted, however, that

the females in the study were non-traditional. Weick (1983) has reported that traditional social roles have affected how well men and women develop in their personal and career lives. Bova and Phillips (1988) saw differences in risk taking, challenging authority, single-mindedness of work, and sources of conflict for men and women. Hunt and Saul (1975) found age to be a positive predictor of job satisfaction for males, while tenure was a positive predictor for females. This may be explained by the fact that age and tenure for males is probably more highly correlated than for females. While men generally have uninterrupted careers, women often leave the work force during child bearing years or may enter the work force at a later age after their children are older. Thus, tenure may be a more important factor in job satisfaction for females than for males. Furey and Lauroesch (1986) reported that male teachers in their thirties were more dissatisfied with their jobs than males in their forties. Krupp (1986), one of the few researchers who accounts for differences between male and female teachers, advises that young female teachers may feel unsure toward or actually fear their administrators.

While there seem to be many similarities in the issues that are important for men and women during each

stage of the lifespan, the current study provides an interesting look at lifespan patterns for females. Hulin and Smith (1965) had more difficulty predicting job satisfaction for women than for men. Hancock (1988) reported that the psychology of female development cannot be derived from that of males. She has also stated that for females, the course of relationships is more important to development than chronological age. Because the teaching profession is dominated by females at the elementary level, it is difficult to say whether the same patterns would exist for male elementary teachers. The current study revealed significant predictors of job satisfaction, but the predictors did not account for a large proportion of the variance in job satisfaction scores. While studies of job satisfaction have typically shown limited predictive ability, it may be that predicting job satisfaction for females is even a more complicated process than for males.

There are several methodological contributions this study makes to the area of adult development. It was demonstrated that examining patterns for different aspects of job satisfaction was much more informative than simply obtaining an overall measure (Ket de Vries, 1984). The teachers participating in this research appeared to be

fairly satisfied with their jobs in general. However, when separate aspects of job satisfaction were assessed, different patterns appeared. Also, overall job satisfaction was not predicted well by age, personal variables and career variables. It seems that people are better able to assess specific aspects of their jobs than simply providing a global measure of how they feel about it. The Job Descriptive Index (JDI) proved to be a very useful instrument in this research. It encompassed the major areas of job satisfaction that need to be assessed for teaching careers (Lester, 1987) and was easy and quick to complete. This general type of instrument for assessing job satisfaction makes comparison of satisfaction levels between different occupations possible.

The second methodological contribution involves the interaction that appears to exist between age and the personal and career variables. It is clear that there are some differences in levels of job satisfaction that are related to age. However, these differences are not as informative as those found by looking at which personal and career variables contribute to satisfaction at different age ranges. Thus, this study offers evidence that predictors of satisfaction vary for different

developmental life stages and that different aspects of job satisfaction are affected differently by age, personal variables and career variables. For example, the relationship between number of positions and job satisfaction was opposite for thirty and fifty year old teachers. It may be that during the thirties, changes in positions result in some teachers leaving the profession. The positive effect that number of positions produces during the fifties may be because teachers have finally found a position with which they are happy or may simply be reconciled with the choices they have made.

In sum, the present study contributes to both lifespan research and career development theory in addition to research methodology used in these two areas. All three aspects of research are important to understanding factors associated with job satisfaction for female elementary school teachers.

Implications of Study Findings for School Systems

Professional development for teachers can be accomplished on two different levels. One level is concerned with the institutional aspects of teaching and the other is concerned with the personal welfare of the teachers (Solo, 1984-85). In recent years, life cycle

theory has been examined in its relationship to staff development for teachers (Duncan & McCombs, 1982). The timing and content of professional development programs should be planned with sensitivity to the evolution of teachers' needs and concerns (Christensen et al., 1983). "The school must become a place for the personal and professional growth of the adults who work there, in order for them to achieve their primary purpose of helping children learn" (Solo, 1984-85, 334).

It appears from the current study that different age ranges require different staff development programs. For example, teachers in their twenties appear to be fairly satisfied with their new careers. These beginning teachers need structured programs emphasizing clear directions of what is expected of them. There seems to be much support and encouragement given to new teachers from other teachers and from their administrators. They simply need opportunities to socialize, share with other teachers, and to continue to gain knowledge from professional development programs. Also, younger teachers may be less "needy" because of fewer financial and family obligations during this stage of life (Whitbourne & Weinstock, 1986).

However, public school systems should be aware that dissatisfaction may begin in the twenties. Effective career counseling in the twenties may be helpful in keeping teachers satisfied in their thirties. Perhaps some teachers should be counseled to leave the teaching profession or to go into other support personnel positions. Also, inservices should include information about life issues that are pertinent to twenty year olds such as balancing roles of wife, mother and teacher. This early career stage is a good place to begin to educate teachers about what they can expect in their personal and career lives over the various adult developmental stages.

Mid-career teachers may best be served by programs that encourage inquiry and exploration while addressing mid-life problems (Christensen et al., 1983). Teachers in their thirties may begin to show signs of dissatisfaction. The best indicator of dissatisfaction for the thirty year olds appears to be the number of teaching positions they have held during their careers. Career counseling could be very effective in helping teachers in this age range to make choices that will result in satisfaction with their profession (Ket de Vries, 1978). Teachers with advanced degrees are likely candidates to work with supervisors during this age span.

This would be a good time to reinforce administrator/staff relationships before satisfaction with supervision declines in the forties. During the forties, attempts need to be made to re-establish these relationships. Furthermore, support services would be valuable in helping teachers face increasing expenses of older teens and college students.

Teachers in late career stages benefit from programs that are developed and organized by the teachers themselves (Christensen et al., 1983). Teachers in their fifties seem to have a renewed sense of satisfaction from working with students and fellow workers. They may enjoy increased time working with students or mentoring newer teachers. Again, more support is needed for teachers in the elementary grade levels (grades four through six). Teachers in their forties and fifties seem to be particularly dissatisfied with their professions if they teach these upper elementary grade levels. Rotations to other teaching positions may be most appropriate for teachers in these upper elementary grades.

It is clear that public school systems need to do more to meet the needs of its veteran teachers in order to keep them satisfied and fulfilled in their chosen profession. Systems are faced with the very difficult

task of improving or at least maintaining teacher job satisfaction in a time of economic decline which provides little or no increase in salaries for its employees. School systems may want to re-structure their pay scales from the current incremental step increases to greater increases at the ten to fifteen year service point. Organizations have ethical and economic reasons to consider the costs/benefits of aiding their members through these life stages (Bloom & Jorde-Bloom, 1987; Golembiewski, 1978).

The teaching profession is frequently described as a "flat or early plateau career" with few horizontal or vertical opportunities. Teachers also seem to possess little control over their work schedules and have few choices about the "clients" they serve (Lowther, 1985). Mentoring programs, supervisory positions for grade levels, and coordinator positions for special programs would be ways of showing teachers that they are admired and appreciated for their excellent work in the field of education (Dalton, 1977; Henderson, 1985; Levinson, 1978). However, these responsibilities should not be given in addition to existing duties, but as replacement duties. Job rotations may also be ways of re-vitalizing teachers and giving them new experiences. Administrators

should seek the advise and expertise of veteran teachers. This would probably improve the satisfaction veteran teachers feel for the supervision in their schools. It is also very clear that more support is needed for elementary teachers in grades four through six.

The task of providing nurturance, support and social interaction can best be developed within an environment responsive to human welfare and dedicated to the notion that the physical and mental well-being of all people is a proper social goal (Burke et al., 1984; Weick, 1983). Staff development needs to address both organizational and personal needs of employees (Kaiser, 1981-82; Krupp, 1986; Solo, 1985).

Implications for Future Research

While the current study has provided many insights for adult development theory and for school systems in their quest to keep job satisfaction high, there are a number of areas where further research would be helpful. The Job Descriptive Index (JDI) can be used for any occupation. Therefore, comparisons of job satisfaction could be made across different professions. Within the school system, patterns of regular classroom teachers could be compared with those of specialty teachers,

administrators, middle school teachers, or high school teachers. Also, comparing satisfaction scores of teachers in urban and non-urban settings would be helpful to school systems in terms of where they need to allocate their resources for staff development (VEA News, 1989). The Job Descriptive Index also affords the opportunity to compare job satisfaction levels of teachers with other professionals in both public and private sector organizations. It seems that management in general can benefit from examining how personal and career variables affect job satisfaction levels for teachers at various age ranges.

Another area that needs further investigation is the comparison of job satisfaction patterns for male and female elementary teachers. The small number of male elementary teachers makes this comparison difficult, therefore the participation of multiple school systems would be required. Patterns for male and female teachers could also be compared across elementary, middle school and high school levels. Also, comparisons of job satisfaction for teachers of different races should provide valuable information to school systems. Of particular interest would be the differences in satisfaction with pay, promotions and supervision. It

might be expected that male teachers would be less satisfied with pay and promotions than female teachers since men are still considered to be the major wage earners in families. Minorities might be more satisfied with teaching pay scales due to the fact that they have lower wage levels in the general population. Minority satisfaction with promotions would be difficult to predict. This would probably be related to the strength of affirmative action policies within the school system.

Also, study is needed to look at differences in job satisfaction levels of teachers who begin their careers later in life with those of traditional career patterns. For example, are teachers in their forties and fifties more satisfied with their jobs if they begin their teaching careers later in life? This would allow the examination of the age/tenure issue in career development research. To conduct such a study, a preliminary survey would be needed to identify the age and tenure of teachers. Subject selections would be made so that teachers of high and low tenure within the same age category could be compared. Naturally, it would be impossible to conduct such an analysis on twenty year old teachers because of the limited tenure possibilities. If longer tenure is associated with lower job satisfaction

scores, then it would be expected that older teachers who start their careers later in life might have similar satisfaction levels to younger teachers with the similar tenure levels. It is still expected, however, that personal and career variables would still be important considerations in levels of job satisfaction.

Further research is needed to study whether the sex of one's supervisor makes a difference in levels of job satisfaction for teachers. The supervisor subscale of the Job Descriptive Index makes this analysis quite convenient. This would provide interesting data on the impact of same sex versus different sex mentoring on job satisfaction. In terms of satisfaction with supervision, it would be expected that same sex mentors would be preferred.

Follow-up studies would be helpful in determining the effectiveness of interventions that have been implemented in school systems to improve the job satisfaction of its teaching personnel. The Job Descriptive Index provides a fast, effective way to assess teacher job satisfaction in six different areas.

Lastly, longitudinal study is unquestionably the best method of conducting developmental research (Gould, 1972 and Levinson, 1986). This type of research would provide

answers to questions concerning who leaves the teaching profession, why they do so, and at what point in their careers they make this decision. School systems could follow teachers' careers from their entry into the system. Comparisons could be made for job satisfaction levels at five year intervals to examine changes in patterns of satisfaction over time. This would also allow comparison of teachers in different age ranges who have similar tenure levels. Researchers interested in this field of study will need to be resourceful and creative in obtaining necessary funding that such long term, expensive research requires.

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APPENDIX A
TEACHER SURVEY: PART I

TEACHER SURVEY: PART I

DEMOGRAPHIC INFORMATION

SEX: M ___ F ___ AGE: _____

MARITAL STATUS HISTORY: _____ never married
(please check one) _____ engaged
 _____ married (# years _____)
 _____ separated
 _____ divorced
 _____ widowed

NUMBER OF CHILDREN: _____ AGE OF EACH CHILD _____

EDUCATION: _____ Bachelor's Degree
(please check one) _____ Master's Degree
 _____ Certificate of Advanced Study
 _____ Doctorate

Additional course work beyond current degree level: _____ credit hours

TEACHING HISTORY

Please circle the grade level you currently teach:
K 1 2 3 4 5 6

Number of years you have held current teaching position: _____ years

Please circle all the other grade levels you have taught in the past:
K 1 2 3 4 5 6 7 8 9 10 11 12

Please list all specialized teaching positions you have held in the past
(example: special education, resource positions, etc.)

Total number of years you have taught: _____ years

ADDITIONAL COMMENTS: _____

APPENDIX B-1
TEACHER SURVEY: PART II

TEACHER SURVEY: PART II

Think of **THE RIX YOU GET NOW**. How well does each of the following words or phrases describe your present pay? In the blank beside each word below, write
 Y ___ for "Yes" if it describes your pay
 N ___ for "No" if it does NOT describe it
 ? ___ if you cannot decide

PRESENT PAY

- ___ Income adequate for normal expenses
- ___ Fair
- ___ Barely live on income
- ___ Bad
- ___ Income provides luxuries
- ___ Insecure
- ___ Less than I deserve
- ___ Well paid
- ___ Underpaid

Think of **THE WAY YOU GET PROMOTED**. How well does each of the following words or phrases describe your work? In the blank beside each word below, write
 Y ___ for "Yes" if it describes your work
 N ___ for "No" if it does NOT describe it
 ? ___ if you cannot decide

WORK ON PRESENT JOB

- ___ Fascinating
- ___ Routine
- ___ Satisfying
- ___ Boring
- ___ Good
- ___ Creative
- ___ Respected
- ___ Uncomfortable
- ___ Pleasant
- ___ Useful
- ___ Tiring
- ___ Healthful
- ___ Challenging
- ___ Too much to do
- ___ Frustrating
- ___ Simple
- ___ Repulsive
- ___ Gives sense of accomplishment

Think of **THE OPPORTUNITIES FOR PROMOTION THAT EXIST AT THE RIX**. How well does each of the following words or phrases describe these? In the blank beside each word below, write
 Y ___ for "Yes" if it describes your opportunities for promotion
 N ___ for "No" if it does NOT describe them
 ? ___ if you cannot decide

OPPORTUNITIES FOR PROMOTION

- ___ Good opportunities for promotion
- ___ Opportunities somewhat limited
- ___ Promotion on ability
- ___ Dead-end job
- ___ Good chance for promotion
- ___ Unfair promotion policy
- ___ Inrequent promotions
- ___ Regular promotions
- ___ Fairly good chance for promotion

APPENDIX B-2
TEACHER SURVEY: PART II (cont)

TEACHER SURVEY: PART II (cont)

Think of the kind of supervision that you get on your job. How well does each of the following words or phrases describe this? In the blank beside each word below, write

- Y for "Yes" if it describes the supervision you get on your job
- N for "No" if it does NOT describe it
- ? if you cannot decide

SUPERVISION

- Asks my advice
- Hard to please
- Impolite
- Praises good work
- Tactful
- Influential
- Up-to-date
- Doesn't supervise enough
- Has favorites
- Tells me where I stand
- Annoying
- Stubborn
- Knows job well
- Bad
- Intelligent
- Poor planner
- Around when needed
- Lazy

Think of the majority of the people that you work with now or the people you met in connection with your job. How well does each of the following words or phrases describe these people? In the blank beside each word below, write

- Y for "Yes" if it describes the people you work with
- N for "No" if it does NOT describe them
- ? if you cannot decide

COWORKERS

- Stimulating
- Boring
- Slow
- Helpful
- Stupid
- Responsible
- Fast
- Intelligent
- Easy to make enemies
- Talk too much
- Smart
- Lazy
- Unpleasant
- Gossipy
- Active
- Narrow interests
- Loyal
- Stubborn

Think of your job in general. At the end, what is the most of the time? In the blank beside each word below, write

- Y for "Yes" if it describes your job
- N for "No" if it does NOT describe it
- ? if you cannot decide

JOB IN GENERAL

- Pleasant
- Bad
- Ideal
- Waste of time
- Good
- Undesirable
- Worthwhile
- Worse than most
- Acceptable
- Superior
- Better than most
- Disagreeable
- Makes me content
- Inadequate
- Excellent
- Roller
- Enjoyable
- Poor

APPENDIX C

COVER LETTER TO PRINCIPALS

Principal's Name
Elementary School
Address
City, State

Dear _____:

I am a school psychologist with _____ Public Schools and a doctoral candidate at Old Dominion University. My dissertation research involves the study of the relationship between adult developmental life stages and job satisfaction for elementary school teachers. Enclosed please find a copy of Dr. _____'s letter granting approval to conduct this research in Chesapeake Schools.

I have also enclosed a copy of the Teacher Survey that I will be using for my study along with the cover letter that will be given to the teachers. The surveys will be distributed and collected by your school's psychological services representative. No additional help is needed from your administrative personnel. The surveys will be distributed during the week of May 13, 1991. Reminder post cards will be delivered during the following two weeks.

Please call me if you have questions or concerns about this research. You may reach me at the numbers below. I will send you a summary of my findings upon completion of the data analysis. Thank you for your cooperation in helping me complete my graduate work.

Sincerely,

Donna Collier
Home:
Work:

APPENDIX D

COVER LETTER TO TEACHERS

Dear Fellow Educator:

I am a school psychologist for _____ Schools and a doctoral candidate at Old Dominion University. For my dissertation research, I have chosen to study the relationship between adult developmental life stages and attitudes of elementary school teachers. Your participation in this study is greatly needed and sincerely appreciated.

Participation in this study is completely voluntary. All information will be kept confidential and identified by number only. Please do not put your name on any part of the questionnaire. As this study is designed to look at general patterns across age levels, no information will be available on individuals or specific schools. A summary of the results will be forwarded to your school office.

This questionnaire will take about five minutes of your time. Please seal it in the envelope, place it in the "TEACHER SURVEY" box in your office and cross your name off the list attached to the box. I will be very happy to talk to you about this project. You may reach me at the numbers below. Thank you in advance for taking the time to help me complete my graduate work.

Donna Collier
Home:
Work:

APPENDIX E
FOLLOW-UP POSTCARD TO TEACHERS

RE: TEACHER SURVEY

This is just a reminder that I have not received your survey. Please turn it into your school office if you haven't done so. Please call me if you need another survey form.

Please accept my sincere thanks and appreciation.

Donna O. Collier
Doctoral Candidate
Old Dominion University
Home:
Office:

AUTOBIOGRAPHICAL STATEMENT

Donna Lee Owens Collier was born February 27, 1951 in Norfolk, Virginia. She received a bachelor of science degree in Psychology from Old Dominion University in 1983 and a master's degree in Psychology from Old Dominion University in 1986.

She is currently a member of Phi Kappa Phi National Honor Society, Pi Alpha Alpha National Honor Society, Golden Key National Honor Society, and Delta Kappa Gamma International Society of Women Educators. She received the 1990-91 Outstanding Doctoral Level Student award from the College of Business and Public Administration at Old Dominion University.

Ms. Collier is a School Psychologist with the Chesapeake Public School System in Virginia.