

A DESCRIPTIVE ANALYSIS OF
SELECTED PERSONALITY TRAITS
OF STUDENT TEACHERS
IN PHYSICAL EDUCATION

A THESIS
PRESENTED TO THE
DEPARTMENT OF PHYSICAL EDUCATION AND SPORT
STATE UNIVERSITY OF NEW YORK
COLLEGE AT BROCKPORT
BROCKPORT, NEW YORK

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Education
[Physical Education]

By

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December, 2000

STATE UNIVERSITY OF NEW YORK

COLLEGE AT BROCKPORT

BROCKPORT, NEW YORK

DEPARTMENT OF PHYSICAL EDUCATION AND SPORT

Title of Thesis: A Descriptive Analysis of Selected Personality Traits of Student Teachers
in Physical Education.

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December 19, 2000

Accepted by the Department of Physical Education and Sport, State University of New York, College at Brockport, in partial fulfillment of the requirement for the degree of Master of Science in Education (Physical Education).

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ACKNOWLEDGEMENT

With the completion of my Master's thesis, I would like to acknowledge those people who guide me through this research project. I would like to thank Dr. Reginald Ocansey for being my thesis committee chairperson and Dr. Christopher and Dr. Cathy Houston-Wilson for serving as members of my thesis committee. Their expertise, constant assistance, insight, and suggestions were all greatly appreciated.

Special thanks go out to my parents, Xuecheng Lu and Hua Zhang, and my wife, Xiaojian Xu. Their love has always given me the strength to pursue and achieve the goals I set for myself.

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ABSTRACT

This study investigated changes in six personality traits over a course of a teaching semester. The personality traits measured included anxiety, concentration, confidence, mental preparation, motivation, and cooperation. An adapted Psychological Skills Inventory for Sport (PSIS) questionnaire was administered to student teachers before (PRE), at mid-term (MID), and immediate after (POST) a student teaching period. Repeated Measures Multivariate Analysis of Variance (rm MANOVA) and rm ANOVA and t-test of Scheffe were used to analyze differences for each the selected personality traits in terms of time (PRE, MID, and POST). The results reported significant differences in anxiety, concentration, confidence in terms of PRE, MID, and POST. It was also found that mental preparation changes significantly in terms of the time of PRE and POST. Significant differences in terms of time were not found for motivation and cooperation.

CHAPTER 1

Introduction

Avenues of investigation in teaching effectiveness have resulted in two converging developments. First, student teaching is the most important event or learning experience in the development of a beginning teacher (Trieber, 1974; Tannehill & Zakrajsek, 1988). Second, the personality of the teacher is a significant variable in teaching environment (DeBlassie, 1971). Studies indicated that significant relationship exists between personality traits and success in student teaching (National Center for Research on Teacher Education, 1991; Pfeifer, 1983). Furthermore, there is a significant relationship between personality traits and effective teaching (Goodman & McKinnon, 1975; Johnson 1969). Researchers also wonder whether particular personality traits would predict well for student teachers' success (Ducharme, E., & Ducharme, M., 1996).

There are many emotions and thoughts that fill a prospective student teacher's mind such as anticipation, anxiety, excitement, and feelings of success from knowing they had finally progressed to this point in their career (Fairley, 1995). In a day-by-day based case study, it was clearly described how a student teacher's personality affects teaching (Pitton, 1998). From this investigation, there are several points for student teachers to consider: (1) what are your fears and expectations as you approach student teaching? (2) How would you rate your confidence level? And (3) what can you do to alleviate any concerns you might have? (Pitton, 1998)

It is possible to use a cognitive-developmental theory to promote psychological growth of student teachers. The author suggested the possibility of creating "educationally meaningful programs to affect the level of psychological stage development" (Thies-

Sprinthall, 1984, p. 58). Understanding and meeting the psychological needs of teachers is an important and vital dimension of any teacher preparation program, and the necessity to investigate is increasing at a rapid rate (Thies-Sprinthall, 1984). Unfortunately, this is not fully recognized as an essential part of the professional preparatory and developmental curriculum. This phenomenon may be due to teacher educators who are not adequately trained in psychology and view psychological support as sympathetic and superficial rather than as an in-depth assessment in order to meet individual psychological needs (Gold, 1996).

To further complicated matters, specific description may impact personality. It has been reported that the personality traits of physical education majors are different from the personality traits of other majors (Espenschade, 1948). Significant difference has been identified in personality traits such as confidence between college physical education majors who are successful in student teaching with those who are less successful (Rogers, 1959). However, the author did not include personality traits such as anxiety, concentration, cooperation, mental preparation, and motivation.

Although there is no currently developed instrument to assess physical education teacher preparation directly, sport psychology research over the past twenty-five years has identified personality traits of individuals that explain and predict behavior in a sport context. Due to similarities between physical education and athletics it may be possible to adapt commonly used sport psychological instruments that measure personality traits and apply them in physical education teacher preparation. The Psychological Skills Inventory for Sport (PSIS) instrument has been frequently used to assess athletes' personality traits relevant to athletic performance. The PSIS contains six major personality traits including

anxiety management, concentration, self-confidence, mental preparation, motivation, and team emphasis (Ostrow, 1996). Using PSIS, it has been reported that it is possible to (1) discriminate among world class, national team, junior elite (Lesser & Murphy, 1988; Greenspan, Murphy, & Jowdy, 1989); (2) differentiate between collegiate male and female equestrian athletes, in which it was reported that male athletes scored higher in anxiety management and confidence but lower in motivation (Meyers et al., 1999); (3) distinguish able-bodied athletes from athletes with disabilities, in which it was reported that elite wheelchair athletes scored higher than able-bodied collegiate athletes (Cox and Davis, 1992); (4) differentiate athletes with different culture background, in which it was reported that Chinese collegiate athletes displayed higher scores than their American counterparts in confidence and motivation (Cox and Liu, 1993).

The Purpose of the Study

The purpose of this investigation was to determine if differences occur in selected personality traits including anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation over the course of a student teaching semester in physical education.

Hypothesis

The personality traits of student teachers increasingly change significantly over the course of a student teaching period in physical education.

Significance of the Study

Although many researchers have studied personality traits of student teachers in general education as above, few have investigated personality traits of student teachers in physical education. The understanding of the relationship between personality traits and student teaching in physical education can help student teachers prepare psychologically. In addition, college supervisors, cooperating teachers, and other relative professionals can learn to give student teachers the appropriate psychological training throughout the teacher preparation program, and the appropriate psychological support in the student teaching environment in physical education.

Limitations

1. The selection of subjects was restricted to student teachers in the Department of the Physical Education & Sport of State University of New York College at Brockport. The subjects chosen for the study may not have been representative of all student teachers in physical education.
2. The six personality traits of anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation were selected for the investigation. No other personal characteristics were included in this study.
1. The PSIS instrument was originally designed for the measurement of personality traits regarding success in athletic performance and has been adapted to be applied in a physical education student teaching situation.

Definitions

Anxiety: A consciously subjective and pervasive feeling of tension or stress, sometimes accompanied by physical arousal (Corsini, 1999; Anshel, et al., 1991).

Anxiety management: A technique for controlling a stressful situation (Anshel, et al., 1991).

Concentration: The ability to focus one's attention on a specific task (Bowe, 1994; Sneed, 1995).

Mental-preparation/mental-rehearsal: A pre-performance and a cognitive strategy to establish a mental set (i.e., a state of mind) (Bailey & Hortin, 1982).

Motivation: The drives, needs, or desires that regulate the direction, intensity, and persistence of behavior that is directed toward goals (Anshel, 1991).

Personality: An individual's overall, stable, and distinctive pattern of behavior in responding to people and environmental events (Mischel, 1986).

Personality traits: Distinctive and relatively stable dimensions or attributes of personality along which people vary (Baron, 1998; Pettijohn, 1989).

Self-confidence (confidence): The belief or degree of certainty about one's ability to be successful (Martens, 1987).

Stress: A state of physical or psychological strain which imposes demands for adjustment upon the individual (Corsini, 1999).

Student teaching: A realistic experience in teacher preparation in which senior majors participate through planned observation, assisting, and actual teaching for a certain period of time in an actual school situation (Roger, 1959).

Team emphasis/cooperation: The ability to interact and work with a group in order to obtain a common goal (Anshel, 1991).

Summary

This chapter provided some brief background information about the study. It identified the purpose of the study, hypothesis, significance of the study, limitations, and related definitions. It is hoped that the new knowledge to be derived from this study would help student teachers prepare psychologically and relative professionals could provide appropriate psychological training in universities and offer psychological support in student teaching period.

CHAPTER 2

Review of the Literature

The purpose of this study was to investigate if differences occur in selected personality traits over a course of a student teaching semester. This chapter is to present (1) a review of literature on the definitions and importance of personality traits, (2) personality traits and student teaching, (3) anxiety and student teaching, (4) concentration and student teaching, (5) confidence and student teaching, (6) mental preparation and teaching, (7) motivation and student teaching, (8) cooperation and student teaching, (9) and psychological support for student teaching. The chapter closes with a brief summary.

Introduction

Personality is the unique and relatively stable pattern of an individual's thinking, feeling, and acting. Interest in personality is as old as civilization (Baron, 1998). Allport (1961) reviewed almost fifty definitions of personality, and many more have been proposed since. In fact, personality forms the core of psychology (Pettijohn, 1989).

Psychologists attempt to characterize personality through the use of traits, which are distinctive and stable attributes or dimensions of personality along which people vary (Baron, 1998). Allport (1961) concluded that personality traits could be grounded in three major categories: central traits (important traits that most people have), secondary traits (least important), and cardinal traits (few people have). Cattell (1977) stated that personality traits can be classified as surface traits (the observable characteristics of a person's behavior) and source traits (trait clusters). Psychologists have continued to be

involved in discovering core traits. Currently, there is considerable interest in the "Big Five" factor model of personality traits.

Psychologists have argued that support for the five factor model is present and encouraged professionals to use the model in assessment of personality (Baron, 1998). The five factors are: agreeableness (such as cooperation, trust, straightforwardness), conscientiousness (such as ambition, organization, neatness), emotional stability (such as anxiety, worrying, nervousness), extraversion (such as sociableness, friendliness, warmth), and openness (such as imagination, independence, preference for variety). It should be noted that there are many dimensions of personality, and it is the mix of personality traits in any individual that causes the individual to be a unique person.

Griffith (1926) stated that personality traits are persistent and insistent in which they last over a period of time. However, personality traits continue to grow and change in many ways in a person's life (Shacter, 1949). Since Personality traits both guide and initiate behavior (Hergenhahn, 1980), it is reasonable to expect them to guide in student teaching.

Personality Traits and Student Teaching

The study of teacher personality has long held the interest of educational researchers in teacher education since early this century (Pigge and Marso, 1987). It has been reported that the personality of the teacher, either favorably or unfavorably, has an unconscious effect on the student; it can induce them to learn, to misbehave, to be happy, to be unhappy, to resent school, and to love school (McKenny, 1910). Many studies of personality traits have been done in the area of student teaching. Results have indicated

that there is a relationship between personality traits and student teaching (Bonfadini, 1985; Buckley and Dickman, 1969; Halpin, 1982; Hughes et al, 1982; Lehman, 1981; Manning and Payne, 1984). A number of studies have shown that personality traits correlate significantly with student teacher success (Baldwin et al., 1990; Byrd et al., 1982; ; Goodman & McKinnon, 1975; Guddemi et al., 1987; Kourilsky et al., 1993; Marso & Pigge, 1991; Pfeifer, 1983). Some researchers have also investigated the change of personality of student teachers (Bills et al., 1964; Capel, 1997; Lehman, 1981; Melograno, 1976; Pigge & Marso, 1990, 1987).

A study by Bond (1955) showed that personal qualities were more important than scholarship and professional competence in student teaching. Schorling (1956) found that the students who have equivalent knowledge, teaching techniques and command of subject matter vary widely in achieving success as student teachers or teachers. Mead (1930) stated that personality traits differ from one teaching field to another, and one might be more suitable for teaching in a particular field of specification. In an investigation by Engelhardt (1934), personality traits were listed by school administrators as one of the most important characteristics in the selection of a physical education teacher. The author quoted one of the superintendents:

Health and physical education teachers hold strategic positions. From the very nature of their work, their contacts with boys and girls are closest, the most personal, and the most intimate contact which teachers have. Therefore, opportunities are presented for molding... which does not exist for the classroom teacher. We, therefore, want in this work, men and women whose personality,

whose character, whose influence, and whose outlook upon life are wholesome, positive and unquestionable" (p. 5).

A "good" personality is essential for good teaching. However, each person has a different concept of what constitutes a good personality. In addition, many traits are not observable and can only be inferred (Eysenck, 1953). Therefore, it is difficult to determine which trait is necessary and which one is lacking. No one method can be called the best one for personality study. It has been suggested that personality trait inventory must be devised for specific occupations in order to make the inventory effective (Rogers, 1959). The method used should depend upon the situation and the purpose of the study.

There is still a need for more valid instruments for personality trait measurement and much can be learned by the use of existing instruments. However, investigations have been done on personality traits in teaching settings and in sport settings such as anxiety (Buckley & Dickman 1969; Goates & Thoresen, 1976; Pigge & Marso, 1986, 1987; Roe & Ross, 1998; Silvernail, 1980; Sinclair & Nicoll, 1981; Thompson & Ellis, 1984), concentration (Morris, et al., 1981; Nideffer, 1976; Suinn, 1986), confidence (Brookhart, 1994; Coates & Thoresen, 1976; Fuller & Bown, 1975; Kalaian & Freeman, 1987; Pigge & Marso, 1986; Ring, 1993; Vealey, 1986), mental preparation (Bailey & Hortin, 1982; Hortin, 1981), motivation (McClendon, 1996; Salisbury-Glennon & Stevens; 1999), and cooperation (Bauwens & Hourcade, 1995; Coben, Thomas, Sattler, & Morsink, 1997; Council for Exceptional Children, 1995; Dynak, Whitten, & Dynak, 1997; Englert & Tarrant, 1995; Hudson & Glomb, 1997; Idol, Paolucci-Whitcomb, & Nevin, 1986; Larson & LaFasto, 1989; Little & Robinson, 1997; National Commission on Teaching and America's

Future, 1996; Putnam, 1993; Rosenberg, O'Shea & O'Shea, 1998; Schmuck & Runkel, 1985; Young & Copenhaver, 1993).

Anxiety and Student Teaching

Anxiety is a consciously subjective, pervasive, and unpleasant feeling of tension, sometimes accompanied by physical arousal (Corsini, 1999). Anxiety management is defined as a technique for controlling a stressful situation (Anshel, et al., 1991). There are two types of anxiety--state anxiety and trait anxiety. State anxiety is characterized by subjective, consciously perceived feelings of apprehension and tension, which is accompanied by activation or arousal of the sympathetic branch of the autonomic nervous system (Spielberger, 1966). Trait anxiety is the behavioral pre-disposition to perceive a wide range of non-dangerous situations as threatening and to respond to them with varying levels of state anxiety (Spielberger, 1966). In other words, trait anxiety is a relatively stable personality trait and state anxiety is a temporary condition caused by one's current perception of the environment.

Goates and Thoresen (1976) reviewed much of the research literatures on anxiety of student teachers and concluded that both pre-service and in-service teachers report considerable anxiety. A common consequence of anxiety is stress and stress can affect student teaching performance (Roe & Ross, 1998). Generally, sources of stress that student teachers can encounter include (1) too much work for the time available, (2) unpleasant working environment, (3) a lack of teaching facilities and equipment, (4) relationships with cooperating teachers, (5) evaluation by supervisors, and (6) the job

market. The authors suggested techniques for student teachers to cope with stress such as positive response, attitude, and action.

Fuller (1969) conceptualized student teachers as through development as stages of concerns (anxiety) about becoming a teacher. Concerns within this model are viewed as perceived problems or worries about teaching. In Fuller's model, student teachers have little concern about teaching until their beginning of actual teaching, when they experience intense concerns about their own survival (self-survival concern) as a teacher. At this point, they wonder if they will ever be able to function as a teacher. In the next stage, concerns about the varied demands in the teaching situation (task concerns) such as preparation of lessons, numbers of students, and lack of time to meet pupils' demands. Task concerns are added to the future teacher's self-survival concerns. And last, student teachers begin to experience serious doubt about being able to meet the individual needs of their pupils (impact concerns). However, they are unable to act upon these impact concerns as they must address the urgent situational demands (task concerns) and their own feelings of inadequacy (self-survival concerns).

Pigge and Marso (1987) found that concerns about teaching increase prior to student teaching and decrease following student teaching while anxiety decreases. In a follow-up study, the authors found that the anxiety level of student candidates decreases from the beginning to the end of teacher preparation, and remained stable from the end of preparation through the first five years of teaching (Pigge & Marso, 1987). Thompson and Ellis (1984) reported, from a seven-year longitudinal study of the changes in anxiety about teaching through preparation and early years of teaching, that anxiety decreased from the beginning to the end of preparation, and from the end of preparation through the fifth year

of teaching. Studies by Silvernail (1980), Sinclair and Nicoll (1981), and Pigge and Marso (1986) reported that the anxiety level of pre-service teachers decreases during their student teaching experience.

Concentration and Student Teaching

Concentration is the process of focusing on specific stimuli (Pettijohn, 1989). It is the focus of attention on certain parts of an experience. This term is applied whenever several or more components of a process or theory converge, such as focusing through processes on the solution of a problem (Corsini, 1999). Concentration is associated with motivation because increased arousal directly affects a person's ability to focus attention. In a learning situation, when a person becomes pre-occupied with self-evaluation and negative possibilities, performance suffers as attention is misdirected away from the intended task (Morris, et al., 1981).

Nideffer (1976) identified two important dimensions of attention--width and direction. The width dimension refers to the number of stimuli at which a person must focus. Width of attention ranges from a narrow focus (such as reading a book) to a broad focus (such as driving a car in busy traffic). Generally, most people find it difficult to sustain either a narrow or broad focus over time. In addition, full control over the width of attention occurs only by accident or in an ideal situation. Direction of attention refers to attention directed to either external or internal stimuli. With internally directed focus of attention, an individual is involved in personal thoughts and feelings. In contrast, when an individual focuses externally, attention is given to events outside the body, which is not associated with personal thoughts and feelings.

Nideffer (1976) regards concentration and the ability of individuals to select and control the width and direction of their attention as a personality trait. That is, just as some individuals are characterized as intelligent, honest, or hostile, they can also be characterized as broad or narrow, internal or external attenders (Nideffer, 1976). To the extent that these attentional traits are present in an individual and any attempt to improve performance based on these attentional traits must include recognition of attentional style appropriate to the demands of the situation. A loss in concentration can result from stress, negative thoughts, distractions, attention drifting, or physical fatigue (Suinn, 1986). Unfortunately, None study on concentration could be found in a teaching or student teaching situation.

Confidence and Student Teaching

Confidence (self-confidence) is a self-assurance and a trust in personal abilities, capacities, and judgement (Corcini, 1999). The terms, self-confidence and self-efficacy, are often used interchangeably. Self-confidence refers to general feelings about self-esteem and performance potential; self-efficacy is concerned with transitory feelings about effectiveness (prior to specific feelings of effectiveness) regarding precise roles, capacities, and potentials of individuals' performance (Cratty, 1973). Feelings of self-confidence can arise from performance accomplishments, various experience, verbal persuasion, and emotional arousal (Bandura, 1977).

There are two types of self-confidence--trait self-confidence and state self-confidence. Trait self-confidence refers to the belief or degree of certainty individuals usually possess about their ability to be successful; state self-confidence is the belief or

degree of certainty individuals possess at one particular moment about their ability to be successful. There is a significant negative relationship between anxiety and self-confidence in sport settings (Vealey, 1986). With a high level of self-confidence about ability to perform, a person's level of anxiety will be low. However, a lack of confidence in the ability to perform results in high levels of anxiety regarding performance.

Kalaian & Freeamn (1987) indicated that the actions of teacher education are often grounded in the implicit assumption that self-confidence is a necessary condition for success in teaching. Given the common occurrence of efforts to bolster teacher candidates' self-confidence, the research literature focusing on this personality trait was surprisingly sparse (Kalaian & Freeamn, 1987; Ashton & Webb, 1986).

Some authors researching self-confidence have examined teacher candidates' anxieties or concerns about teaching (Brookhart, 1994; Coates & Thoresen, 1976; Fuller & Bown, 1975; Kalaian and Freeman, 1987; Pigge & Marso, 1986; Ring, 1993). Pigge and Marso (1986) found that self-confidence steadily increased as teacher candidates moved through successive stages of their preparation programs. Brookhart (1994) examined the relationship between self-confidence in teaching and educational beliefs before and after teacher education. The author reported that subjects with higher self-confidence had stronger beliefs in the responsibilities of teachers and in their own efficacy; subjects with low self-confidence demonstrated a more academic orientation to schooling. Brookhart (1994) also indicated that teacher education graduates differed from teacher candidates in the relationships between self-confidence and beliefs about instructional methods. Ring (1993) investigated the change of self-confidence and critical thinking skills immediately before and after student teaching experience. The findings indicated that following student

teaching experience, subjects exhibited significantly more confidence in an ability to conduct a reading activity that involved critical thinking skills.

Pigge and Marso (1986) found that changes in confidence about student teaching moved in a consistently positive direction during teacher preparation. A study by Kalaian and Freeman (1987) indicated that all student teachers gained confidence over the course of the teacher preparation program, but teacher candidates with high level of self-confidence at program completion thought in distinctly different ways about their careers in teaching than those with low self-confidence. It was suggested that enhancing self-confidence alter the ways in which teaching candidates think about their role as teachers. The authors (1990) also reported that teacher candidates with high self-confidence in their teaching ability were more likely to (1) hold teacher accountable for student learning, and (2) hold high expectations for student learning.

Mental Preparation and teaching

There are some similar terms to mental preparation such as mental rehearsal, self-image, imagination, visual thinking that have been adopted from sport settings and were first proposed first by Bailey and Hortin (1982). In a teaching situation, mental preparation is the process of using imagery or visual thinking to practice teaching prior to the actual teaching (Bailey & Hortin, 1982; Hortin, 1981). Mental rehearsal before the actual class gives teachers another alternative when attempting to improve their instruction. This type of mental preparation is similar to the type of mental preparation used by athletes. Danish and Hale (1983) found that winners are more likely to be mentally prepared, have better concentration, be more relaxed and motivated, and have more confidence in their abilities.

Basic mental preparation skills include goal setting (effective and realistic), stress management, and attention (Martens, 1987). In fact, mental rehearsal can occur at any time such as prior to the lesson, immediately after the teaching act, or at the beginning or end of the day (Bailey & Hortin, 1982). Furthermore, the frequency of mental rehearsal can vary (Bailey & Hortin, 1982). Evidently, teachers cannot spend long periods of time to mentally rehearse. However, too much mental rehearsal may negatively affect teaching effectiveness (Bailey & Hortin, 1982). Ideally, it can be an on-going daily practice. Bailey and Hortin (1982) stated that there are three types of mental rehearsal (1) Total: viewing the entire teaching session in the mind, (2) Partial: viewing specific segments of the teaching session in the mind, (3) Fragmented: viewing dimensions of the teaching session (e.g., nodding head when reinforcing students).

In addition, Bailey and Hortin (1982) explained the following seven purposes of mental rehearsal.

Relaxation

Relaxation is similar to mental rehearsal used by athletes. The process of mental rehearsal is to concentrate on physical attributes of the body that allow the teacher to achieve a relaxed and confident state.

Positive thinking

Teachers usually find that their mood during the act of teaching is influenced by how they felt prior to the actual lesson. If one feels positive about teaching, students, and the content, there is great likelihood for a successful teaching experience. With negative feelings about teaching, students, and the content, there is less likelihood for a positive teaching experience. Mental rehearsal can be used as a technique to achieve positive

feelings about events that will happen. High concentration of positive thoughts concerning self and the rewards of teaching can affect the ultimate performance of teachers.

Getting ready

This is the psychological preparation that leads to either a feeling of exhilaration or calm. It allows the person to complete the task with ease and efficiency. In this type of mental rehearsal, teachers can conjure many different thoughts that assist in developing the appropriate mental and physical readiness, which impacts on the learning situation.

Verbal and nonverbal cues

Teachers can use mental rehearsal to focus on specific verbal and nonverbal cues that are commonly used in teaching interaction. Examples of verbal cues include questioning, lecturing, direction giving, praising, and encouraging. Examples of the nonverbal cues include eye contact, gestures, mannerism, facial features, and use of time and space. If teachers are able to pinpoint specific nonverbal cues, they can mentally rehearse the quality of the behavior to perfect the use of cues in actual teaching setting.

Content emphasis

This refers to factual information that is actually being talked about by the individual teacher. It essentially encompasses four aspects that are “what”, “how much”, “sequence”, and “time allotment”.

Methods rehearsing

This refers to mentally preparing what the teacher has chosen to convey the lesson. If the teacher can visualize the teaching methods (e.g. inquiry, contracting, and gaming), they can be practiced.

Post-teaching reflection

This refers to the period of time that occurs when the teacher has finished the lesson. During this time, the teacher has the ability to focus on what “went right” as well as what “went wrong”. Teachers can replay events in an effort to better performance during the next class session. This practice can lead to significantly improve teaching practice.

Motivation and Student Teaching

Motivation is the process of initiating, sustaining, and directing psychological or physical activities (including internal factors such as drives, and desire). Motivation may operate on a conscious or unconscious level, and are frequently divided into physiological (primary or organic) and psychological (secondary or social) motives (Corsini, 1999). Myers (1998) indicated that three perspectives have been influential: instinct theory (now replaced by an evolutionary perspective), drive reduction theory (emphasizing the interaction between inner pushes and external pulls), and arousal theory (emphasizing the urge for an optimum level of stimulation).

Psychologists consider motivation as having two dimensions--direction and intensity. Direction is concerned with choosing a goal; while intensity is concerned with how much effort a person puts forth to reach that goal (Martens, 1987). The overall effect of motivation on performance is determined by the nature of task, the motives of the individual, and the incentive character of the work situation (Atkinson, 1974). McClendon (1996) yielded a profile of student teachers as using a few cognitive strategies and primarily motivated by task value interest that was found to be the best predictor of student grade. Salisburg-Glennon and Stevens (1999) used a refutational text on

motivation to address student teachers' conceptions of motivation. Participants who read the refutational text performed significantly better on posttest and demonstrated more increasingly change in knowledge.

Cooperation and Student Teaching

Cooperation can be also used as team emphasis, collaboration, or partnership. It refers to working with related people who share a common purpose to reach a common goal. To succeed mutual trust is required between all partners. A cooperative goal structure succeeds to reach goals when group members perceived that they can attain their goal if the other members with whom they are cooperatively linked also obtain their goal (Corsini, 1999). Therefore, cooperation skills are key to teacher effectiveness and teaming. Researchers of school administrative hierarchy have long believed that cooperation is critical to teaching success (Schmuck & Runkel, 1985). Cooperation advocates recognize that teaming skills must be addressed directly (Idol, Paolucci-Whitcomb, & Nevin, 1986; Larson & LaFasto, 1989).

Many teacher preparation programs may not stress collaboration and communication skills, and beginning teachers may lack skills and crucial experiences. Having a sense of how pre-service teachers might collaborate to define, design, and implement discrete structures for instruction can be particularly important in anticipating critical stages of successful student teaching and beginning teacher experiences (Coben, Thomas, Sattler, & Morsink, 1997; Dynak, Whitten, & Dynak, 1997; Little & Robinson, 1997; National Commission on Teaching and America's Future, 1996). Exposure to collaborative experiences can enable pre-service teachers to make more informed

decisions about how and when to use collaboration teaching strategies (Bauwens & Hourcade, 1995; Council for Exceptional Children, 1995; Englert & Tarrant, 1995; Hudson & Glomb, 1997; Putnam, 1993; Rosenberg, O'Shea & O'Shea, 1998). New teachers profit from preparation in collaboration methods and procedures to develop and refine supportive perspectives and attitudes, demonstrate effective nonverbal communication skills with others, and apply appropriate verbal and listening skills (Hudson & Glomb, 1997). Sheman (1988) compared teaching in cooperative and non-cooperative goal structures and found that students who experienced cooperative goal structures achieved the most, had a more positive experience, and preferred cooperative goal structures.

In student teaching context, it is crucial for student teachers to cooperate with their cooperating teachers, university supervisors, pupils, and school administrators in order to succeed in student teaching practice. Young & Copenhaver (1993) conducted quantitative and qualitative procedures to analyze the responses to a questionnaire asking cooperating teachers, student teachers, and school administrators to identify problem areas of the student teaching practice and to suggest strategies for improvement. They concluded that cooperating teachers desire to be more involved in student teachers' lesson planning and to have more input in the assignments given to student teachers (Young & Copenhaver, 1993). There was also a call for participation of the principals in the student teaching practice.

Psychological Support for Student Teaching

Psychological support is essentially a form of therapeutic guidance in teaching. It includes (1) various forms of assessing individual psychological needs, (2) setting up a

personal plan to assist the student teacher in meeting his/her needs, (3) learning how to overcome stressors and to manage stress, (4) acquiring new coping strategies to handle problems, and (5) utilizing communication skills to enhance personal growth (Gold, 1996). Giving psychological support is essential because it has been reported that there is positive value of an individual's life, particularly in the work setting when people typically receive social support (Maslach, 1982; Paine, 1982). Thus, the major issue is the type of support and the value of that support to the welfare of the student teacher.

An important phenomenon that draws attention is that many needy people do not seek help even when help is readily accessible (Gross & McMullen, 1983). In fact, individuals are often willing to refuse help even when the alternatives (e.g. tolerating problems, putting forth additional efforts) are costly (Gross & McMullen, 1983). The most important personal cost related to help seeking is the damage to self-esteem that can take place when an individual seeks assistance. Therefore, it is essential that programs of psychological help are initiated and carried out in a way that protects the individuals involved. Negative feelings associated with seeking help usually occur when people feel threatened with the loss of self-esteem, or feel indebted in some way. Therefore, it is understandable why many teachers, both new and experienced, demonstrate negative reactions to psychological support when prior experiences have not been positive. Both personal cost (self-esteem and self-concept) and social costs (interpersonal relationships and perceptions of others) must be considered.

Gold and Roth (1993) suggested that a program of psychological support include the following areas: (1) an awareness of individual needs, (2) a knowledge of how to meet these needs, (3) an understanding of specific strategies, (4) a personalized plan for

change, (5) trained support for individuals to guide and assist throughout the learning process, and (6) a commitment to the process of change. This suggests that teacher education programs can help change personality traits of student teachers positively before the student teaching practice. In a study by David and Shatterly (1969), four aspects of the personality traits (relaxed behavior, confidence, conscientiousness, and tough-mindedness) of 149 female students changed significantly in a positive way from the time they enter college until just prior to student teaching (in 36 months).

Summary

The personality traits of student teachers change over a course of a student teaching period from reviewing related literature. Personality traits of student teachers correlate significantly with their success. It is essential to provide student teachers with appropriate psychological support in order to help them be successful in student teaching experience.

CHAPTER 3

Methods and Procedures

This study intended to investigate whether there are differences in the selected personality traits (anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation) of student teacher over the course of a student teaching period in physical education. The subjects, instrument, procedure, and analysis of data were discussed with a brief summary at the end in this chapter.

Subjects

Subjects (N=53) for the study volunteered within the Department of Physical Education and Sport of State University of New York College at Brockport in the spring 2000. Each met the requirements for student teaching and was placed at respective public schools in the state of New York. Table 1 illustrates the demographic information on this subject pool.

Table 1.

Demographic information on subjects

Mean age	25.59 years
Standard Deviation of ages	1.14 years
Range of ages	22—40 years

Instrument

The adapted PSIS instrument was used to assess the personality traits of student teachers in this study. The PSIS contains 45 items and assesses anxiety management (AX), concentration (CC), self-confidence (CF), mental preparation (MP), motivation (MV), and team emphasis (TM) (Mahoney, 1988; 1989). The items are scored using a five-point Likert scale. Table 2 shows the scales and items of PSIS.

Table 2.

PSIS Scales and Items

AX	CC	CF	MP	MV	TM
6	2(-)	4	3(-)	1	5(-)
11	8	14	7	9(-)	10
15	16	18(-)	13	12	19(-)
20(-)	17(-)	23(-)	33(-)	22(-)	27
25(-)	21(-)	28(-)	35	24	43
29(-)	26(-)	30(-)	45(-)	31	
32(-)		34(-)		39	
38(-)		36(-)		42	
40		37			
41		44			
n=10	n=6	n=10	n=6	n=8	n=5

Note:

- The number represents the item in the 45-item instrument.

- “(-)” represents the same type of question asked in a reverse manner.
- “n” represents the total number of questions asked in one of the six personality traits.

The internal consistency coefficients of 0.72 (Spearman-Brown), 0.70 (Guttman-Rulon), and 0.64 (Cronbach alpha) were reported (Mahoney, 1989). Construct validity was evidenced by support of the hypothesized discrimination on the five subscales using item analyses, stepwise discriminant and regression analyses, and factor and cluster analyses (Ostrow, 1996). Content validity was established via assessment of the items for student teaching by ten professionals in the areas of teacher education, psychology, sport psychology, and sport pedagogy (personal interviews).

Procedures

Informed consent was obtained from all subjects consistent with the Institutional Review Board (IRB) standards of the State University of New York College at Brockport. All subjects were informed that their participation was voluntary and that they could refuse to participate or discontinue participation at any time without any penalty. A code number was assigned to the data that was collected and data was analyzed and reported using only the code number.

All subjects responded to the instrument prior to the start of the student teaching experience (January 2000), the mid-term of teaching when they came back for the student teaching seminar (March 2000), and immediately after completing the fourteen-week student teaching experience (May 2000).

The instrument was administered in the same quiet room that was away from distractions. The researcher and student teaching supervisor were available to explain any confusion or difficulties to ensure the test effectiveness.

Analysis of Data

Based upon the operating procedure of the PSIS, scores of negative items were transformed into positive equivalents shown in Table 3.

Table 3.

Transformation of negative items into positive equivalents

degree of agreement	strongly disagree	disagree	neutral	agree	strongly agree
item	1	2	3	4	5
value for + items	0	1	2	3	4
value for - items	4	3	2	1	0

Individual item scores were added to obtain a raw summary score for that scale (e.g., anxiety). Finally, the raw summary score was divided by 4 times of items in that scale to obtain a percentile scale score.

Repeated measures Multivariate Analysis of Variance (rm MANOVA) Post hoc and repeated measures ANOVA and t-test of Scheffe were used to identify statistical differences for each of the personality traits before (PRE), at midterm (MID), and after (POST) student teaching.

Summary

The subjects (N=53) selected for this study were students who had enrolled in the student teaching program in SUNY College at Brockport. The instrument employed in this study was adapted PSIS that assesses anxiety management, concentration, self-confidence, mental preparation, motivation, and cooperation. The PSIS was administered to student teachers before (PRE), at mid-term (MID), and immediately after (POST) a student teaching semester. Rm MANOVA Post hoc and Rm ANOVA and t-test of Scheffe were used to analyze differences for each the selected personality traits in terms of time (PRE, MID, and POST).

CHAPTER 4

Results and Discussion

The study aimed at investigating the changes of personality traits (anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation) of student teacher over the course of a student teaching semester in physical education. The results of the investigation, discussion, and a brief summary were provided in this chapter.

Results

Rm MANOVA was used to compare the six personality variables across time (PRE, MID, and POST). This global view of the data was described by a Wilks' Lambda value of 0.13 ($F(12,302) = 3.988, p = 0.000$), which indicated significant differences exist between the personality traits across time.

An eta squared (η^2) value of 0.987 indicated that 98.7% of the variance in the model was explained. With a sufficiently large effect size (η^2) and statistical power (0.999), there was high confidence that differences detected were beyond potential differences due to sampling error (type I error). Furthermore, a statistical and practical difference across time suggested that post hoc tests were appropriate. Post-hoc analysis of variance (ANOVA with Scheffe was used for univariate comparisons).

Table 4 lists the means and standard deviations of the scores of each of six dependent psychological variables (AX, CC, CF, MP, MV, and TM).

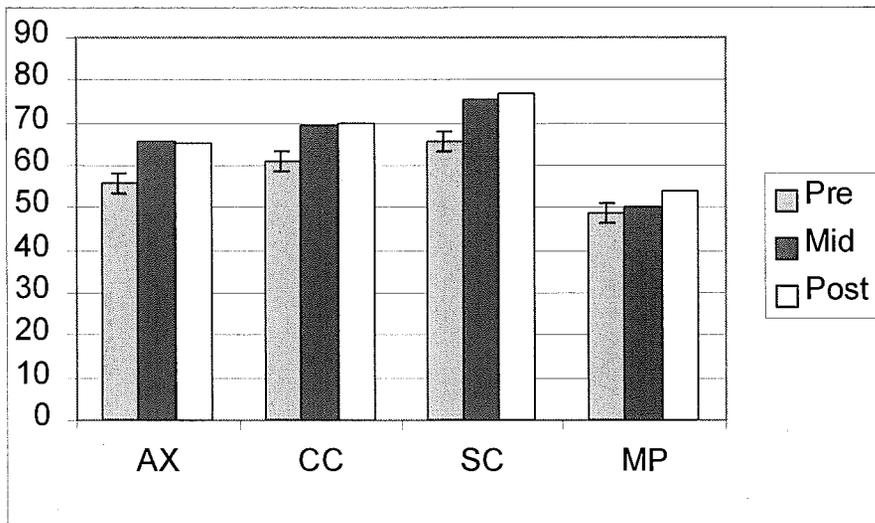
Table 4.

Means and Standard Deviations of the scores of pre-, mid-, and post-test of all the six dependent variables

	TIME	Mean	Std. Deviation	N
anxiety	pretest	55.8019	12.6697	53
	midtest	65.8491	13.3188	53
	posttest	65.3151	10.9427	53
	Total	62.3220	13.1171	159
concentration	pretest	60.8491	11.9910	53
	midtest	69.4972	17.4839	53
	posttest	69.8111	15.0875	53
	Total	66.7191	15.4984	159
self-confidence	pretest	65.7547	12.9587	53
	midtest	75.2358	15.7219	53
	posttest	76.8868	13.5865	53
	Total	72.6258	14.8856	159
mental preparation	pretest	48.6638	9.9338	53
	midtest	50.3147	9.9018	53
	posttest	53.7738	9.8147	53
	Total	50.9174	10.0504	159
motivation	pretest	74.8842	11.1496	53
	midtest	74.3536	12.6844	53
	posttest	74.6489	13.4226	53
	Total	74.6289	12.3777	159
team emphasis	pretest	79.4717	10.5148	53
	midtest	79.2453	12.3412	53
	posttest	82.1698	13.7460	53
	Total	80.2956	12.2668	159

Figure 1.

Means and standard errors of PRE, MID, and POST of the six dependent variables.



Post hoc revealed that significant differences occurred, in terms of time (PRE, MID, and POST), in AX, $F(2,50) = 11.102, p = 0.000$; CC, $F(2,50) = 6.074, p = 0.003$; CF, $F(2,50) = 9.569, p = 0.003$; MP, $F(2,50) = 3.69, p = 0.027$ (See Table 5).

Table 5.

Tests of Between-Subjects Effects

Source	Dependent Variable	df	F	Sig.	Eta Squared	Noncent. Parameter	Observed Power
TIME	anxiety	2	11.102	.000	.125	22.204	.991
TIME	concentration	2	6.074	.003	.072	12.149	.881
TIME	self-confidence	2	9.569	.000	.109	19.137	.979
TIME	mental preparation	2	3.690	.027	.045	7.379	.671
TIME	motivation	2	.024	.976	.000	.048	.054
TIME	team emphasis	2	.932	.396	.012	1.863	.209

No significant univariate results were found for motivation and team emphasis in terms of time (PRE, MID, and POST).

The post hoc analysis with the Scheffe indicated significant differences between pre-test and mid-test of anxiety management; significant difference between pre-test and post-test of anxiety management; significant difference between pre-test and mid-test of concentration; significant difference between pre-test and post-test of concentration; significant difference between pre-test and mid-test of self-confidence; significant difference between pre-test and post-test of self-confidence; significant difference between pre-test and post-test of mental preparation (See Table 6 on next page).

Table 6.

Multiple Comparisons

Scheffe

Dependent Variable	(I) TIME	(J) TIME	Mean Difference (I-J)	Std. Error	Sig.
anxiety	pretest	midtest	-10.0472	2.3993	.000
		posttest	-9.5132	2.3993	.001
	midtest	pretest	10.0472	2.3993	.000
		posttest	.5340	2.3993	.976
	posttest	pretest	9.5132	2.3993	.001
		midtest	-.5340	2.3993	.976
concentration	pretest	midtest	-8.6481	2.9184	.014
		posttest	-8.9621	2.9184	.010
	midtest	pretest	8.6481	2.9184	.014
		posttest	-.3140	2.9184	.994
	posttest	pretest	8.9621	2.9184	.010
		midtest	.3140	2.9184	.994
Self-confidence	pretest	midtest	-9.4811	2.7465	.003
		posttest	-11.1321	2.7465	.000
	midtest	pretest	9.4811	2.7465	.003
		posttest	-1.6509	2.7465	.835
	posttest	pretest	11.1321	2.7465	.000
		midtest	1.6509	2.7465	.835
mental preparation	pretest	Midtest	-1.6509	1.9200	.692
		posttest	-5.1100	1.9200	.031
	midtest	pretest	1.6509	1.9200	.692
		posttest	-3.4591	1.9200	.201
	posttest	pretest	5.1100	1.9200	.031
		midtest	3.4591	1.9200	.201
motivation	pretest	midtest	.5306	2.4195	.976
		posttest	.2353	2.4195	.995
	midtest	pretest	-.5306	2.4195	.976
		posttest	-.2953	2.4195	.993
	posttest	pretest	-.2353	2.4195	.995
		midtest	.2953	2.4195	.993
team emphasis	pretest	midtest	.2264	2.3840	.996
		posttest	-2.6981	2.3840	.528
	midtest	pretest	-.2264	2.3840	.996
		posttest	-2.9245	2.3840	.473
	posttest	pretest	2.6981	2.3840	.528
		midtest	2.9245	2.3840	.473

Discussion

The results of the study indicated that significant changes occurred in selected personality traits (anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation) of student teachers. These findings concur with the results of previous studies that reported that personality traits of anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation of student teachers change significantly over the course of student teaching period (Capel, 1997, Pigge and Marso, 1990, 1987; Lehman, 1981; Melograno, 1976, Bills, et al., 1964).

Anxiety and Anxiety Management

The results indicated that student teachers' anxiety management levels increased significantly from pre-test to mid-test. There was no significant change between mid-test and post-test. The anxiety management level of student teachers significantly increases during the first half of the student teaching experience and remains consistent during the second half of teaching period.

These findings support results reported by Silvernail (1980), Sinclair and Nicoll(1981), and Pigge and Marso (1986) who indicated that the anxiety of student teachers significantly decreases prior and immediately after the student teaching experience. This result is also supports Capel's (1997) finding which revealed that there was no difference in level of anxiety between the end of the first half student teaching period and the end of second half of student teaching period.

This may be explained in part by Fuller's model (Fuller, 1969). Student teachers have intense concerns when being first introduced to an actual teaching experience (self-survival concerns). They can manage anxiety well after the experience, in which they

learn how to deal with most problems in their teaching situation. The results suggest that they may gain more knowledge and confidence until the mid-term (mid-test), and they maintain consistently in the second half of student teaching.

Concentration

The concentration level of student teachers in the present study increased from pre-test to mid-test, and then remain consistent throughout the end of the student teaching experience. Student teachers may feel challenged as they are in the transition from a study-centered focus (learning) to teaching-centered focus. Thus, student teachers may demonstrate an effective focus as they slowly understand the direction and the width of attention in actual teaching. This may also be related to other traits such as high level anxiety, low self-confidence, and poor mental preparation that are shown in the current study (Pigge & Marso, 1986; Bailey & Hortin, 1982). Unfortunately, there is no similar study to compare with this finding.

Confidence

The confidence of student teachers in the present study increased significantly from pre-test to mid-test and remained stable throughout the end of student teaching period. This finding supports previous results by Ring (1993) and Pigge and Marso (1986) who reported the confidence of student teachers increased significantly. Pigge and Marso's investigation also supported the relations between personality traits such as a decrease in anxiety and a increase in self-confidence. However, it is uncertain how close related self-confidence and other personality traits are.

Mental Preparation

The mental preparation level of student teachers in this study increased from pre-test to post-test. This may be a result of a lack of related psychological training in teacher education programs since there is no significant improvement from pre-test to mid-test in mental preparation. The results suggest that it may take more time to allow mental preparation to change when compared with anxiety management, concentration, and self-confidence.

As previously noted, there are few sources in the literature that address this important trait in teacher education programs. Bailey and Hortin (1982) stated that mental preparation could help improve anxiety management, concentration, and self-confidence. More research, and especially more quantitative research, needs to be conducted to support their theoretical framework.

The selected personality traits of motivation and team-emphasis showed no significant changes. This may result from the student's sport-oriented situation. All subjects were pedagogy majors in physical education. Their motives, desires, and drives to become a physical education teacher may be derived from a sport-oriented background. Therefore, it may be explained that these traits will remain reasonably stable on the PSIS. However, the motivation of student teachers still can be improved (Salisbury-Glennon & Stevens, 1999). Cooperation may be one of the most stable traits that physical education majors exhibit because they participate in many cooperation-based sports may have helped develop this important personality trait. This may have resulted in no significant changes in cooperation over the course of the student teaching period. To investigate if this is correct, a comparative study is desirable. Although no related studies

were available to support the findings of the present study, professionals still recommended that students be prepared for cooperation in order to be successful in student teaching (Coben, Thomas, Sattler, & Morsink, 1997; Dynak, Whitten, & Dynak, 1997; Little & Robinson, 1997; National Commission on Teaching and America's Future, 1996).

Summary

The results of the study indicated that anxiety management, concentration, and confidence of student teachers increased significantly from PRE to MID and from PRE to POST; mental preparation increased significantly from PRE to POST. These findings support previous studies. No significant changes were found for motivation and cooperation.

The results may be due to that student teachers gained knowledge and experience and improved their anxiety management (less anxiety), concentration, confidence, and mental preparation in the student teaching period. The pedagogy concentration and sport-oriented background may result in no significant changes in motivation and cooperation.

CHAPTER 5

Summary, Conclusions, and Recommendations

The primary purpose of this study was to determine if the selected personality traits (anxiety, concentration, self-confidence, mental preparation, motivation, and cooperation) of student teachers change significantly prior to, during, and after their teaching experience. Summary, conclusion, and recommendation were provided in this chapter.

Summary

The first chapter of this study was mainly provided with introduction to the research. It presented the significance, purpose, hypothesis, and relative definitions of the study.

Chapter two was devoted a review of literature with the aspects of: (1) the definitions and importance of personality traits, (2) personality traits and student teaching, (3) anxiety and student teaching, (4) concentration and teaching, (5) confidence and student teaching, (6) mental preparation and student teaching, (7) motivation and student teaching, (8) cooperation and student teaching, (9) and psychological support for student teaching.

In chapter three, the methods and procedures of the study were presented. Sub-headings in this chapter were: subjects, instrument, procedures, and analysis of data. The subjects (N=53) were students in the Department of Physical Education and Sport of SUNY College at Brockport. The adapted PSIS was administered before, at mid-term, and immediately after a student teaching semester. Rm MANOVA Post hoc and Rm ANOVA

and t-test of Scheffe were used to analyze differences for each the selected personality traits in terms of time (PRE, MID, and POST).

The results and discussion were provided in chapter four. The findings of this investigation reported that anxiety management, concentration, and confidence of student teachers increased significantly form PRE to MID and from PRE to POST; mental preparation increased significantly from PRE to POST. These findings support precious studies. No significant changes were found for motivation and cooperation. A summary of the study, conclusion, and recommendations are presented in chapter five.

Conclusion

1. Personality traits of student teachers change significantly between pre-test and mid-test in terms of anxiety management.
2. Personality traits of student teachers change significantly between pre-test and post-test in terms of anxiety management.
3. Personality traits of student teachers change significantly between pre-test and mid-test in terms of concentration.
4. Personality traits of student teachers change significantly between pre-test and post-test in terms of concentration.
5. Personality traits of student teachers change significantly between pre-test and mid-test in terms of self-confidence.
6. Personality traits of student teachers change significantly between pre-test and post-test in terms of self-confidence.

7. Personality traits of student teachers change significantly between pre-test and post-test in terms of mental preparation.

Recommendations

The following recommendations are offered to future researchers who are interested in the area of personality traits of student teachers.

1. Investigate the relationship between student teachers' grades and their personality traits in order to establish the prediction regression equation and to discover what would be the ideal personality traits that student teachers should have (presage variables).
2. Investigate gender differences with respect to see if males and females differ in certain personality traits of student teachers.
3. Investigate the effects of different genders of university supervisors and cooperating teachers on the personality traits of student teachers.
4. Investigate age differences with respect to see if traditional college student teachers and non-traditional / adult student teachers differ in certain personality traits.
5. Compare the personality traits of student teachers when they teach at different school levels (elementary, middle and high schools) to see if significant differences exist.
6. Investigate personality traits of student teachers one month, two weeks, and one week prior to they start teaching practice to see if there are significant changes.
7. Use or design student-teaching oriented questionnaires to investigate personality traits of student teachers.

8. Compare the personality traits of physical education student teachers with the personality traits of non-physical education student teachers to see whether there are significant differences.

REFERENCES

- Allport, G.W. (1961). Patterns and growth in personality. New York: Holt, Rinehart & Winston.
- Anshel, M.H., Freedson, P., Hamill, J., Haywood, K., Horvat, M., & Plowman, S.A. (1991). Dictionary of the sport and exercise sciences. Champaign, IL: Human Kinetics.
- Ashton, P. & Webb, R. (1986). Making a difference: Teachers sense of efficacy and student achievement. New York: Longman.
- Atkinson, J.W. (1974). Strength of motivation and efficiency of performance. In J.W. Atkinson & J.O. Raynor (Eds.), Motivation and achievement (pp.193-218). Washington, DC: V.H. Winston & Sons.
- Atkinson, J.W. & Raynor, J.O. (1978). Personality, motivation, and achievement. Washington, DC: Hemisphere Publishing Corporation.
- Bailey, G.D. & Hortin, J.A. (1982). Training through mental rehearsal. Media adult learning, 4, 34-39.
- Baldwin, B., Slaton, E. Head, M. & Burns, J. (1990). Personality factors of elementary and secondary pre-service teachers. Paper presented at the Annual Meeting of Mid-South Educational Research Association. New Orleans, LA.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, 191-215.
- Baron, R.A. (1998). Psychology (4th ed.). Needham Height, MA: Allyn & Bacon.
- Bauwens, J. & Hourcade, J.J. (1995). Cooperating teaching: Rebuilding the schoolhouse for all students. Austin, TX: PRO-ED.

Bills, R.E., Macagnoni, V.M., & Elliott, R.J. (1964). Student teacher personality change as a function of the personality of supervising and cooperating teachers. Final report to U.S. Office of Education. (ERIC Document reproduction Service No. ED 003 441).

Bonfadini, J. (1985). Improving student teacher performance. Technology Teacher, 44(6), 8-10.

Bowe, W.G. (1994). A comparison of six sport specific personality factors between professional, college, and high school basketball players. Unpublished master's thesis, State University of New York College at Brockport, Brockport, New York.

Brookhart, S.M., Loadman, W.E., Miller, T.E. (1994). Relations between self-confidence and educational belief before and after teacher education. College Student Journal, 28, 57-66.

Buckley, R.D. & Dickman, L.W. (1969). Student teacher-supervising teachers: A study in personality. A report to Department of Health, Education, and Welfare. (ERIC Document reproduction Service No. ED 088 887).

Capel, S.A. (1997). Changes in students' anxieties and concerns after their first and second teaching practices. Educational Research, 39, 211-228.

Cattell, R.B. & Dreger, R.M. (Eds.) (1977). Handbook of modern personality theory. Washington, DC: Hemisphere.

Coben, S.S., Thomas, C.C., Sattle, R.O., & Morsink, C.V. (1997). Meeting the challenge of consultation and collaboration: Developing interactive teams. Journal of Learning Disabilities, 30, 427-432.

Corsini, R.J. (1999). The dictionary of psychology. Philadelphia, PA:

Brunner/Mazel.

Council for Exceptional Children (1995). What every special educator must know: the international standards for the preparation and certification of special education teachers. Reston, VA: Author.

Cox, R.H. & Davis, R. (1992). Psychological skills of elite wheelchair athletes. Palaestra, 8, 16-21.

Cox, R.H. & Liu, Z. (1993). Psychological skills: A cross culture investigation. International Journal of Sport Psychology, 4, 326-340.

Cratty, B.J. (1973). Psychology in contemporary sport: Guidelines for coaches and athletes. Englewood Cliffs, NJ: Prentice Hall, Inc.

Danish, S.J. & Hale, B.D. (1983). Teaching psychological skills to athletes and coaches. Journal of Physical Education, Recreation, and Dance, 54, 11-12.

DeBlassie, R. (1971). A comparative study of the personality structure of persistent and prospective teachers. Journal of Educational Research, 64. 331-333.

Ducharme, E.R. & Ducharme, M. K. (1996). Needed research in teacher education. In J. Sikula, T.J. Buttery, & E. Guyton (Eds.), Handbook of research on teacher education (2nd ed.) (pp. 1030-1046). New York: Macmillan Library Reference USA.

Dyank, J., Whitten, E., & Dyank, D. (1997). Refining the general education student teaching experience through the use of special collaboration teaching models. Action in Teacher Education, 19(1), 64-74.

Engelhart, N.G. (1934). What the superintendent expects of the health and physical education teacher. Journal of Health and Physical Education, 2, 3-6.

Englert, C.S. & Tarrant, K.L. (1995). Creating collaboration cultures for

educational change. Remedial and Special Education, 16, 325-336.

Espenschade, A. (1948). Selection of women major students in physical education. The Research Quarterly, 19, 70-76.

Eysenck, H.J. (1953). The structure of human personality. New York: John Wiley & Son Inc.

Fairley, L.P. (1995). A student's view. In G.A. Slick (Ed), Making the different for teachers: the field experience in actual practice (pp. 53-59). CA: Corwin Press Inc.

Fuller, F.G. (1969). Concerns of teachers: A developmental conceptualization. American Educational Research Journal, 6, 207-226.

Goates, T.J. & Thoresen, C.F. (1976). Teacher anxiety: A review with recommendations. Review of Educational Research, 46, 159-184.

Gold, Y.(1996). Beginning teacher support: attrition, mentoring, and inclusion. In J. Sikula, T.J. Buttery, & E. Guyton (Eds.), Handbook of research on teacher education (2nd ed.) (pp. 548-594). New York: Macmillan Library Reference USA.

Gold, Y. & Roth, R.A. (1993). Teachers managing stress and preventing burnout: the professional health solution. London: Falmen Press.

Goodman, G. & MiKinnon, A.J. (1975). Personality characteristics of student teachers of the emotionally disturbed. Journal of the student personnel Association for teacher education, 13(3), 107-112.

Greenspan, M., Murphy, S., Tammen, V., & Jowdy, D. (1989). Effects of athlete achievement level and test administration on the Psychological Skills Inventory for Sports (PSIS). Paper presented at the annual meeting of the Association for the advancement of Applied Sport Psychology, Nashua, NH.

Griffith, C.R. (1926). Psychology of coaching. New York: Scribner.

Gross, A.E. & McMullen, P.A. (1983) Model of the help seeking process. In A. Nacller, J.D. Fisher, & B.M. Depaul (Eds). New descriptions in helping: Helping-seeking (pp. 45-70). New York: Academic Press.

Guddemi, M., Swick, K., & Brown, M. (1987). Personality dimension of prospective teachers: A critical analysis. Teacher Educator, 22(3), 2-7.

Halpin, G., Halpin, G., & Harris, K. (1982). Personality characteristics and self-concept of pre-service teachers related to their pupil control orientation. Journal of Experimental Education, 50(4), 195-199.

Hergenhahn, B.R. (1980). An introduction to theories of personality. Englewood Cliffs, NJ: Prentice-Hall.

Hortin, J.A. (1981). Introspection and visual thinking for instructional technology. Educational Technology, 22, 18-19.

Hudson, P. & Glomb, N. (1997). If it takes two to tango, then why not teach both partners to dance? Collaboration instruction for all educators. Journal of learning Disabilities, 30, 442-448.

Hughes, R. Jr., Eriffin, G.A., Jr., & Defino, M.E. (1982). Personality factors in student teaching triad. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.

Idol, L. Paolucci-Whitcomb, P. & Nevin, A. (1986). Collaborative consultation. Austin, TX: PRO-ED.

Kalaian, H. & Freeman, D.J. (1987). Relations between teacher candidates' self-confidence and orientations to teaching. Program Evaluation Series #16. Report to U.S. Department of Education.

Kalaian, H. & Freeman, D.J. (1990). Relations between teacher candidates' self-confidence and educational belief. College Student Journal, 23, 296-303.

Kourilsky, M., Esfandiari, M., & Wittrock, M.C. (1993). Generative teaching and personality characteristics of student teachers. Paper presented at the Annual Meeting of the American Educational Research Association. Atlanta, GA.

Lehamn, K.A. (1981). Conflict: The student teacher personality. College Student Journal, 15(3), 217-222.

Larson, C.E. & LaFasto, E.J. (1989). Teamwork. Newburg Park, CA: Sage.

Lesser, M. & Murphy, S. (1988). The Psychological Skills Inventory for Sport (PSIS): Normative and reliability data. Paper presented at the annual meeting of the American Psychological Association. Atlanta, GA.

Little, M.E. & Robinson, S.M. (1997). Renovating and refurbishing the field experiences structures for novice teachers. Journal of Learning Disabilities, 30, 433-441.

Mahoney, M.J. (1988). Psychological Skills Inventory for Sport (R-5) (5th ed.). Goleta, CA: Health Science Systems.

Mahoney, M.J. (1989). Psychological predictions of elite and non-elite performance in Olympic weightlifting. International Journal of Sport Psychology, 20, 1-12.

Manning, B.H. & Payne, B.D. (1984). The relationships of student teacher competence to self-perceptions of personality. College Student Journal, 18, 204-214.

Marso, R.N. & Pigge, F.L. (1991). The identification of academic, personal, and affective predictors of student teaching performance. Paper presented at Annual Meeting of the Mid-Western Educational Research association, Chicago, IL.

Marso, R.N. & Pigge, F.L. (1998). A seven-year multivariate longitudinal study of the changes in anxiety about teaching through preparation and early years of teaching. Paper presented at Annual Meeting of the Midwestern Educational Research association, Chicago, IL.

Martens, R. (1987). Coaches' guide to sport psychology. Champaign, IL: Human Kinetics Publishing.

Maslach, C. (1982). Burnout: The cost of caring. Englewood Cliff, NJ: Prentice Hall.

McClendon, R.C. (1996). Motivation and cognition of pre-service teachers: MSLQ. Journal of Instructional Psychology, 23, 216-220.

McKenny, C. (1910). The personality of the teacher. Chicago, IL: Row, Peterson & Company.

Mead, A.R. (1930). Supervised student teaching. Richmond, Virginia: Johnson Publishing Co.

Melograno, V.J. (1976). Changes in selected teacher characteristics of pre-service teachers following variable, semi-variable, and non-variable field experience. A report to Department of Health, and Welfare. (ERIC Document reproduction Service No. ED 126 010).

Meyer, M.C., Bourgeois, A.E., & LeUnes, A. (1999). Mood and psychological skills of elite and sub-elite equestrian athletes. Journal of Sport Behavior, 22, 399-409.

Mischel, W. (1986). Introduction to personality (4th ed.). New York: Holt,

Rinehart & Winston.

Morris, L.W., Davis, M.A., & Hutching, C.H. (1981). Cognitive and emotional components of anxiety: Literature review and a revised worry-emotionality scale. Journal of Educational Psychology, 73. 541-555.

Myers, D.G. (1998). Psychology (5th ed.). Worth Publishers: New York, NY.

National Center for Research on Teacher Education (1991). Final project: The teacher education and learning to teach study. East Lansing: College of Education, Michigan State University.

National Commission on Teaching and America's Future (1996). What matters most: Teaching for America's Future. New York: Author.

Nideffer, R.M. (1976). The inner athlete: Mind plus muscle for winning. New York: Thomas Y. Crowell Co.

Ostrow, A.C. (1996). Directory of psychological test in the sport and exercise sciences (2nd ed.). Morgantown, WV: Fitness Information Technology Inc.

Paine, W.S. (1982). Job stress and burnout: Research, Theory, and intervention perspectives. Beverly Hill, CA: Sage.

Pettijohn, T.F. (1989). Psychology: a concise introduction (2nd ed.). Connecticut: The Dushkin Publishing Group Inc.

Pfeifer, J. (1983). The effects of personality on success in student teaching. Paper presented at the National Field Directors Forum of the Annual Meeting of the Association of teacher Educators. Orlando, FL.

Pigge, F.L. & Marso, R.N. (1986). Relationships between student characteristics and changes in attitudes, concerns, anxieties, and confidence about teaching during

teacher preparation. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Pigge, F.L. & Marso, R.N. (1987). Relationships between student characteristics and changes in attitudes, concerns, anxieties, and confidence about teaching during teacher preparation. Journal of Education Research, 81, 109-115.

Pigge, F.L. & Marso, R.N. (1990). The influence of personality type, locus of control, and personal attributes upon changes in anxiety, attitude, and confidence of prospective teachers during training. Paper presented at the Annual Meeting of the Mid-Western Research Association, Chicago, IL.

Pitton, D.E. (1998). Stories of student teaching: A case approach to the student teaching experience. Upper River, NJ: Prentice-Hall, Inc.

Putnam, J. (1993). Cooperative learning and strategies for inclusion. Baltimore, MD: Brookes.

Ring, T.R. (1993). Self-confidence and critical think skills: Changes during the student teaching experience. Paper presented at the Annual Meeting of the Middle South Educational Research Association. New Orleans, LA.

Roe, B.D. & Ross, E.P. (1998). Student teaching and field experiences handbook (4th ed.). Upper Saddle River, NJ: Prentice-Hall Inc.

Rogers, K. E. (1959). A comparison of personality variables of college women physical education majors who were successful in student teaching with those who were less successful. Unpublished thesis. Woman's College, University of North Carolina.

Rosenberg, M., O'Shea, L.J., & O'Shea, D.J. (1998). Student teacher to master teacher. New York: Prentice-Hall.

Salisbury-Glennon, J.D. & Stevens, R.J. (1999). Addressing pre-service teachers' conceptions of motivation. Teaching and Teacher Education, 15, 741-752.

Snead, A. (1995). A comparison of six personality factors between division I, division III, high school varsity, and junior varsity basketball officials. Unpublished synthesis project, State University of New York College at Brockport, Brockport, New York.

Schmuck, R.A. & Runkel, P.J. (1985). The handbook of organization development in school (3rd ed.). Prospect Heights, IL: Waveland Press.

Schorling, R. & Balchelder, (1956). Student teaching in secondary school (3rd ed.). New York: McGraw-Hill Book Company.

Shacter, H. (1949). How personality grows. Bloomington, IL: McKnight & McKnight.

Sheman, L.W. (1988). Cooperative strategies for undergraduate teaching: A comparative study. Paper presented at the Triennial Convention of the International Association for the Study of Cooperation in Education. Tel Aviv, Israel.

Siedentop, D. (1991). Developing teaching skills in physical education. Mountain View, CA: Mayfield Publishing Company.

Silvernail, D.L. (1980). Assessing the effectiveness of pre-service field experiences in reducing teacher anxiety and concern level. Paper presented at the Annual Conference of the New England Educational Research Organization. Lenox, MA.

Sinclair, K. & Nicoll, V. (1981). Source and experience of anxiety in practice teaching. South Pacific Journal of Teacher Education, 9, 1-18.

Sparks, W.G. (1987). The student teaching partnership: Collaboration and collegiality. Paper presented at the National Convention of American Alliance for Health, Physical Education, Recreation, and Dance. Las Vegas, NV.

Spielberger, C.D. (1966). Theory and research on anxiety. In Spielberger, C.D.(ed.), Anxiety and behavior. New York: Academic Press.

Suinn, R.M. (1986). Seven steps to peak performance. Toronto, Ontario: Hans Huber.

Tannehill, D. & Zakrajsek, D. (1988). What happening in supervision of student teachers. Journal of Teaching in Physical Education, 8, 1-2.

Thies-Sprinthall, L.M. (1984). Promoting the developmental growth of supervising teachers: Theory, research programs, and implications. Journal of Teacher Education, 35, 53-60.

Thompson, M.L. & Ellis, J.R. (1984). Identifying and comparing anxieties experienced by male and female secondary student teachers. College Student Journal, 18(3), 289-295.

Trieber, J.M. (1974). Personality matching for student teacher development. A Report to Department of Health and Welfare. (ERIC Document reproduction Service No. ED 083 175).

Vealey, R.S. (1986). Conceptualization of self-confidence and competitive orientation: Preliminary investigation and instrument development. Journal of Sport Psychology, 8, 221-246.

Young, A. & Copenhaver, R. (1993). When teachers and administrators are asked: improving teacher education through collaboration. Paper presented at the Fall Conference of the International Association of Teacher Educators. Utica, IL.

APPENDIX

AX	CC	CF	MP	MV	TM

PSYCHOLOGICAL SKILLS INVENTORY FOR TEACHING

Adapted from Form R-5 © 1987 Michael J. Mahoney

Name: _____ Date: _____

Birth Date: _____ Gender: M F Major Sport Played: _____

At which level you are going to teach: Elementary _____; Middle/Junior Secondary _____; Secondary _____

The statements below deal with various aspects of teaching performance and doing teaching. Please rate each statement according to how well it describes your own personal experience. Draw a **circle** around the number that corresponds to how strongly you agree or disagree with it. Please be sure to rate each statement.

	Strongly Disagree				Strongly Agree
1. I am very motivated to do well in teaching.	1	2	3	4	5
2. I often have trouble concentrating during teaching.	1	2	3	4	5
3. I often dream about doing teaching.	1	2	3	4	5
4. I am very self-confident about my teaching skills.	1	2	3	4	5
5. I get very frustrated when a learner is performing poorly.	1	2	3	4	5
6. I am more tense <u>before</u> I teach than I am during teaching.	1	2	3	4	5
7. I try <u>not</u> to think about my teaching performance during the 24 hours before a scheduled teaching time.	1	2	3	4	5

	Strongly Disagree					Strongly Agree
8. I experience frequent "hot streaks" when my teaching performance is unusually good.	1	2	3	4	5	
9. I sometimes lack the motivation to practice how to do teaching.	1	2	3	4	5	
10. I get along very well with students.	1	2	3	4	5	
11. I am <u>seldom</u> so tense that it interferes with my performance.	1	2	3	4	5	
12. Demonstrating effective teaching strategies is <u>very</u> important to me.	1	2	3	4	5	
13. I often "rehearse" my lessons and teaching in my head before I teach.	1	2	3	4	5	
14. In most teaching situations, I go in confident that I will do well.	1	2	3	4	5	
15. I tend to teach better when I feel more tense rather than less tense.	1	2	3	4	5	
16. When I am actually teaching, I am almost totally unaware of my supervisor or master teacher.	1	2	3	4	5	
17. When I am teaching poorly, I tend to lose my concentration.	1	2	3	4	5	
18. It doesn' t take much to shake my self-confidence.	1	2	3	4	5	
19. I concentrate more on my own teaching than on the learning of students.	1	2	3	4	5	
20. I am often panic-struck during those last few moments before I begin my teaching.	1	2	3	4	5	

	Strongly Disagree					Strongly Agree
21. When I make a mistake, I have trouble forgetting it and concentrating on my on-going teaching.	1	2	3	4	5	
22. I would like to be more motivated.	1	2	3	4	5	
23. A minor incident (i.e., student misbehavior) or a bad teaching strategy can really shake my self-confidence.	1	2	3	4	5	
24. I set goals for myself and I usually achieve them.	1	2	3	4	5	
25. I sometimes feel intense anxiety while I am actually teaching.	1	2	3	4	5	
26. During teaching, my attention seems to flip back and forth between what I am doing and other things.	1	2	3	4	5	
27. I enjoy working with pupils.	1	2	3	4	5	
28. I have frequent doubts about my teaching ability.	1	2	3	4	5	
29. I spend a lot of energy trying to stay calm before a teaching experience.	1	2	3	4	5	
30. When I begin to teach poorly, my confidence drops very quickly.	1	2	3	4	5	
31. I think self-motivation is very important.	1	2	3	4	5	
32. I worry a lot about making mistakes in an important teaching situation.	1	2	3	4	5	
33. When I mentally practice my teaching I "see" myself teaching ----just like I was watching a videotape.	1	2	3	4	5	

	Strongly Disagree				Strongly Agree
34. I can usually remain confident even through one of my poorer teaching performances.	1	2	3	4	5
35. When I am preparing to teach, I try to imagine what it would FEEL like if I were the student.	1	2	3	4	5
36. My self-confidence jumps all over the place.	1	2	3	4	5
37. When my teaching does not go well, I feel badly —no matter how well I did on individual teaching skills.	1	2	3	4	5
38. When I make an error in my teaching, I become very anxious.	1	2	3	4	5
39. Right now, the most important thing in my life is to do well in my teaching.	1	2	3	4	5
40. I am good at controlling my tension level.	1	2	3	4	5
41. My anxiety level drops rapidly as soon as I begin teaching.	1	2	3	4	5
42. Teaching is my whole life.	1	2	3	4	5
43. I have always worked well with my cooperating teacher(s) and pupils.	1	2	3	4	5
44. I have faith in myself.	1	2	3	4	5
45. When it comes down to the last hours before teaching, I often wish that I were better prepared.	1	2	3	4	5