To the Graduate Council:

I am submitting herewith a dissertation written by Melanie Thomas Hodgson entitled "The Relationship Between Attitudes of Public School Physical Education Teachers (K-12) Toward Students with Disabilities at Different Grade Levels and Selected Teacher Attributes.." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements of the degree of Doctor of Education with a major in Education.

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Dean of The Graduate School

THE RELATIONSHIP BETWEEN ATTITUDES OF PUBLIC SCHOOL PHYSICAL EDUCATION TEACHERS (K-12) TOWARD STUDENTS WITH DISABILITIES AT DIFFERENT GRADE LEVELS AND SELECTED TEACHER ATTRIBUTES

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ABSTRACT

The purpose of this study was to examine the relationship between attitudes of public school physical education teachers (K-12) toward students with disabilities at different grade levels and selected teacher attributes. The study was designed to answer three research questions. First, what are the attitudes of physical education teachers toward working with disabled students in regular classes, and do teachers' attitudes vary according to the disabling condition. Second, Do attitudes of physical education teachers' toward working with disabled students in regular classes vary according to different grade levels (K-5 or 6-12)? Last, do attitudes of physical education teachers toward working with disabled students in regular classes vary in relation to different teacher attributes? Physical education teachers from five east Tennessee counties were surveyed with the PEATID-III (Physical Educators' Attitude Toward Teaching the Handicapped-III). Forty-three females and fifty-three males provided responses to twelve belief statements about working with five different disabilities in regular classes: learning disabled (LD), mild-moderate mentally impaired (MMR), moderate-severe mentally impaired (SMR), emotional/behavioral disordered (BD), and physically impaired (PI).

The information generated by the PEATID-III indicated that public school physical education teachers (K-12) had slightly favorable attitudes toward LD and MMR students, slightly undecided attitudes toward PI students, and slightly

unfavorable attitudes toward working with SMR and BD students in regular classes. Physical education teachers' attitudes toward working with disabled students in regular classes varied according to the disabling condition, but not significantly.

The information generated by the PEATID-III also indicated that attitudes of physical education teachers toward working with disabled students varied only slightly according to the grade level (K-5 or 6-12) of disabled students. Physical education teachers of elementary disabled students had slightly favorable attitudes towards LD, MMR, and PI students and slightly unfavorable attitudes toward SMR and BD students. Physical education teachers of secondary disabled students also had slightly favorable attitudes toward LD students and slightly unfavorable attitudes toward SMR and BD students. The difference in grade level of disabled students occurred for MMR and PI students, with teachers of secondary students having slightly undecided attitudes toward working with PI and MMR students.

Information generated by the PEATID-III also indicated that four teacher attributes significantly affected the attitudes of physical education teachers toward working with disabled students in regular classes. First support services affected the attitudes of teachers toward working with LD, MMR, and PI students. Second the number of general special education courses for disabled students taken outside of physical education by the teacher affected the attitudes of teachers toward LD and PI students. Third, the number of years

teaching physical education inversely affected the attitudes toward working with LD students. Last, age inversely affected the attitudes of physical education teachers toward working with MMR student. Seven teacher attributes had no significant affect on physical education teachers' attitudes toward working with disabled students in regular classes: gender, highest degree earned, number of professional preparation courses completed in physical education for disabled students, number of years teaching disabled students in physical education, number of M-team meetings attended, perceived quality of teaching experience, and perceived competence toward working with disabled students in regular class.

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CHAPTER 1

INTRODUCTION

Over the past twenty-five years, there has been an increase in the number of disabled students receiving physical education (PE) in regular classes with their non-disabled peers. The passing of a federal law and the organization of an educational movement have brought about this major change for disabled students in public schools today.

Public Law 94-142, The Education for All Handicapped Children Act (revised in 1990 as the Individuals with Disabilities Education Act) was enacted in 1975 and implemented in 1977. This law (IDEA) provided the first mandated PE for disabled students and required that all certified disabled students receive PE, specially designed if needed, in a free, appropriate and least restrictive environment (Sherrill, 1998).

PE would be offered at no cost to the student and individualized so that the student would benefit educationally from the instruction. PE would be provided to the maximum extent possible with non-disabled students in a regular education environment (mainstream). Students would receive PE in a segregated setting (with other disabled students) only if the regular environment could not provide instruction in a safe and satisfactory manner with the use of supplementary aids and services. This decision would be made by the multiple

disciplinary team (M-team) and specified in the student's individual education plan (IEP), based on the student's present levels of performance, goals, and objectives. The law stressed that placement, integrated or segregated, would be based on the individual student's needs, not on the basis of the student's type or severity of disability (Block and Krebs, 1992). The student's least restrictive environment (LRE) would also be determined by the student's needs. The LRE would range on a scale from least restrictive (regular PE class in his/her home school) to the most restrictive (adapted PE offered in a hospital, special school, or home).

The Regular Education Initiative (REI), an educational movement, brought about further changes in the teaching of disabled students in regular classes. In 1985, Madeleine C. Will, who was the current assistant secretary for the Office of Special Education and Rehabilitation Services, gave a speech before a group of educators in Racine, Wisconsin. In her speech, later published in the 1986 journal Exceptional Children, Will expressed a belief that segregated special education programs were failing to meet the educational needs of students with learning problems. She stated that labeling students and placing them in separate programs was stigmatizing, which resulted in lowered educational expectations. Will said that placing disabled students in separate programs caused teachers to focus on failure, not on prevention (Coates, 1989).

Will, along with several special educators such as M.C. Wang, M.C. Reynolds, and H.J. Walberg, endorsed rudimentary changes in the educational process for

the disabled. They believed in educating a greater number of disabled students in regular classes (with non-disabled students, taught by regular teachers) instead of segregated settings (Bacon and Schulz, 1991). Instead of a placement, special education would serve as a system of supports provided to help address the needs of disabled students within regular education. In a successful inclusive school, disabled students, regardless of the severity, would not lose services or support. They would gain an opportunity to have full membership in a regular class with their non-disabled peers (Scruggs, Thomas, and Mastopieri, 1996).

Advocates of inclusion stressed that PE would be offered in age-appropriate, regular classes, not in special education classes taught by adapted physical education specialists. A school offering an inclusive PE program would be responsible for bringing directly into the regular PE class any special service or supplementary aid needed by the disabled child to succeed. The disabled students within the regular PE class, alongside their non-disabled peers, would be provided the following: adapted equipment, individualized instruction, peer tutoring, services by physical therapists, adapted PE teachers, and special education teachers or teaching assistants (Stein, 1994). Since inclusive education was not mandated by law and did not come with detailed regulations on how the concept should be implemented, the decision to accept inclusion and steps for implementation would be left up to school officials of individual states and counties (Kelly, 1994).

At the present time, public schools across the nation are practicing mainstreaming or inclusion to serve disabled students in regular PE programs. Regular physical education teachers are working in gymnasiums that are scattered and sometimes packed with students who were formerly taught by specially trained teachers in separate classes (Bullough, 1995). Meeting the educational needs of disabled students in these regular physical education classes cannot be achieved simply by making a decision to accept an inclusion model. Schools need to provide conditions that facilitate and foster inclusion, and the process will need to be supported by all of the individuals asked to implement the teaching of disabled students in regular classes (Hart, 1998).

Problem

The enactment of IDEA, the federal law mandating physical education for disabled students, has placed all or most disabled students in regular physical education classes taught by regular teachers. Parish and Boyd (1995, p. 116) described disabled students as "children that, for whatever reason, have to go through life with the understanding that they have a disability or condition that sets them apart from other children." They stated that regular teachers in inclusive schools play an important role in helping disabled students to understand and benefit from the circumstances they find themselves in. To fulfill this role, the authors suggested that teachers examine the following areas about themselves when interacting with disabled students in their regular classes:

expectations of students, values, beliefs, and prejudices about disabilities, and actions toward students. Based on the teacher's response to these areas, disabled students have an opportunity to believe that they are inferior because they are different, or believe that they are as successful as their non-disabled peers.

McLeskey and Waldron (1996) offered several points that supported Parish and Boyd's recommendations for regular classroom teachers. McLeskey and Waldron suggested three stages that schools should go through to provide appropriate education for disabled students in regular classes. The first stage was to address teachers' beliefs and values for serving disabled students in their regular classes. They found that beliefs and values of regular teachers toward working with disabled students were critical factors that influenced the success of the students. The second stage in developing a quality inclusion program was planning. McLeskey and Waldron (1996) stated that planning should include staff development, group discussions with teachers on curricula modifications, and visits to successful inclusion sites. The third stage was the actual implementation and maintenance of an inclusion program. Role and function changes that were required of regular teachers would make stage three the most difficult.

The extent to which regular physical education teachers assume the responsibility of including disabled students in their classes is dependent upon many of the following factors mentioned in the articles by McLeskey and Waldron

(1996) and Parish and Boyd (1995). Are regular physical educators making necessary changes in their programs so that disabled students can receive instruction to meet their physical, emotional and mental needs in a safe environment? Are there teacher attributes and student attributes that affect how teachers modify instruction for disabled students in their regular classes? Do teachers have high expectations for disabled students, do teachers value the worth of the disabled students and believe they belong in regular classes, or do they have prejudices about students with disabilities? Do teachers' actions toward disabled students make the students feel accepted? Do regular physical education teachers feel disabled students can develop efficient movement skills and gain knowledge and understanding related to physical activity in regular physical education classes? Are regular physical education teachers participating in staff development needed for successful inclusion programs? Are they making necessary changes in their roles and functions to provide disabled students the opportunity to meet their optimum potential level?

Disabled students will be successfully included in regular physical education classes when teachers provide individualized instruction for each and every student, regardless of the student's type of disability. Physical education teachers' attitudes toward disabled students and their feelings about inclusion may affect teachers' willingness to carry out this task of educating disabled students in their regular classes. Therefore, the current study was designed to examine attitudes of physical education teachers toward different disabilities and

teacher attributes that might affect teacher attitudes toward elementary and secondary disabled students.

Purpose of the Study

This purpose of the study was to examine the relationship between teacher attitudes and selected teacher attributes of public school physical education teachers (K-12) in five East Tennessee counties toward students with disabilities at different grade levels. The study was designed to answer the following research questions:

1. What are the attitudes of physical education teachers toward working with disabled students in regular classes, and do these attitudes vary according to the disabling condition?
2. Do attitudes of physical education teachers' toward working with disabled students vary according to grade level (K-5 or 6-12)?
3. Do attitudes of physical education teachers toward working with disabled students in regular classes vary in relation to the following:
   a. gender of the physical education teacher;
   b. age of the physical education teacher;
   c. highest degree earned by the physical education teacher;
   d. number of professional preparation courses completed in physical education for disabled students;
   e. number of professional preparation courses completed in general special education for disabled students;

f. number of years teaching physical education;

g. number of years teaching disabled students in physical education;

h. number of M-team meetings attended;

i. amount of support services received by the physical education teacher;

j. perceived quality of teaching experience of the physical education teacher for working with disabled students

and,

k. perceived competence of the physical education teacher toward working with disabled students in the regular class?

Importance / Need of the Study

Olson, Chalmers, and Hoover (1997) and York-Barr, Schultz, Doyle, Kronberg, and Crossett (1996) stated that attitudes and beliefs of general education teachers toward teaching disabled students were among the most important variables affecting the collaborative efforts between special and general educators (Olson, Chalmers, & Hoover, 1997). Vaughn, Schumm, Jallad, Slusher, and Saumell (1996) said that the views of regular education teachers on teaching the disabled were often missing from the literature. They argued that regular education teachers' perspectives were critical for anticipating possible problems in preparing for successful inclusion of disabled students into regular classes. The perspectives of physical education teachers should be part of the research process since physical education is required by law for every certified disabled student in the public school

setting. Every effort should be made to assist physical education teachers in planning and implementing appropriate programming for disabled students in public schools. This study will examine attitudes of physical education teachers that may provide information on teacher attributes that positively affect teachers' attitudes toward working with disabled students. Information from the current study and other studies conducted in the future may lead to successful inclusion of disabled students in regular physical education classes.

Assumptions

In conducting this study, the underlying assumptions were made:

1. Regular physical education teachers surveyed were teaching all or most of the disabled students in their schools in their regular classes.
2. The direction and extent of the attitudes expressed by physical education teachers on the research instrument reflected their true feelings toward working with disabled students in their regular classes.
3. Physical education teachers would answer the survey honestly, and they would have an understanding of all of the questions.
4. Physical education teachers in the study had experience working with specific learning disabled, emotional/behavioral disordered, mildly-moderate mentally impaired, moderate-severe mentally impaired, and physically impaired in their regular physical education classes.
4. The PEATID-III survey instrument used in this study offered a valid and reliable

means of assessing teacher attitudes toward disabled students.

Limitations

The study's limitations related primarily to the sampling of teachers in the participating schools. The sample of physical education teachers included men and women who taught public school (K-12) physical education in five East Tennessee counties. The study was limited in the following ways:

1. The number of physical education teachers who worked in the five east Tennessee counties (n=230).
2. Whether or not surveys were distributed to physical education teachers by the designated person in each school.
3. The extent to which physical education teachers read and understood the statements on the PEATID-III survey research instrument.
4. The extent to which physical education teachers gave honest responses to the twelve belief statements for each disability on the PEATID-III survey research instrument.

Deliminations

The study was restricted to five East Tennessee counties that represented a suburban/rural population. The survey research instrument was distributed to 230

regular education teachers who taught physical education (K-12) in public schools, by a designated person in each county.

Definition of Terms

The following section includes terms that were theoretically and operationally defined for the purpose of this study.

Adapted Physical Education:

Modification of traditional physical education that enables disabled students to have the opportunity to participate safely, successfully, and with satisfaction (Sherrill, 1998).

Adapted Physical Education Course:

A methods course that prepares future teachers to work with disabled students in regular physical education classes.

Adapted Physical Education Teacher:

A person with an undergraduate or graduate degree that certifies him/her to teach adapted physical education. He/she usually has a master's degree or a doctorate with an emphasis in motor problem solving.

Attitudes:

A set of beliefs charged with emotions that incline a person to certain types of behaviors. Attitudes often involve feelings about people, especially those who are different, and possibly how they should be treated and/or educated (Sherrill, 1998). For the current study, attitudes refer to a physical education teacher's favorable or unfavorable response to statements about teaching disabled students in regular classes.

Emotional/Behavioral Disorder:

"The term refers to a condition characterized by one or more of the following behavior clusters: severely deviant disruptive, aggressive or impulsive behaviors, withdrawn or anxious, general pervasive unhappiness, depressed or wide mood swings, hyperactivity, social maladjustment, hypersensitivity. It is usually serviced with a behavior management program" (Rizzo, 1993).

IEP:

An individualized education program that is a written document, required by law, to certify that a student meets guidelines for one of several disability categories that receive federally funded special services. The IEP is based on multidisciplinary testing, parent permission, and it mandates services that a student must receive in all school subjects in which he or she is determined disabled (Sherrill, 1998).

Inclusion:

The full-time placement of students with disabilities in regular education classrooms, where disabled students are the shared responsibility of the classroom teacher and other support personnel (Sanacore, 1996).

Mainstreaming:

Disabled students are placed in regular classes based on their individual abilities and needs.

M-Team:

A group of people, including parents and school officials, who meet annually or more often if needed, to design an Individual Educational Program for a disabled student.

Mental Retardation:

"Refers to significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period. Sub-average intellectual functioning refers to an IQ level that falls at least two standard deviations below the average IQ (score of 100). Deficits in adaptive behavior refer to the student's ability to mature personally and socially with age. Maturity for adaptive behavior is measured by the student's ability to communicate, take care of himself/herself, and learn academic, vocational, and

socialization skills and the developmental period is birth to age 18"(Winnick, 1990, p. 153).

Mild-Moderate Mentally Impaired:

"This student would be considered to have an IQ score in the range of 50-80 on standardized intellectual tests. The student will probably develop communication skills and social skills but lag behind his/her peers. The student usually can learn vocational and daily skills but may need guidance and/or assistance in these areas. This student may have difficulty in performing motor skills, and exhibit a short attention span" (Rizzo, 1993).

Moderate-Severely Mentally Impaired:

This student would be significantly below average in intellectual functioning. He/she would have an IQ score below 50 on standardized tests. He/she may or may not be able to verbally communicate. There is little socialization or interaction. He/she may be totally dependent on others for self-care (Rizzo, 1993).

Physical Education:

A class taught in public school (K-12) that offers students the opportunity to develop physical and motor fitness and fundamental motor skills used in gymnastics, dance, and individual and team games (Sherrill, 1998).

Physical Education Teacher:

A person with an undergraduate or graduate degree who teaches motor development, physical fitness, and fundamental motor skills used in gymnastics, dance, and individual and team games in the elementary, middle or high public school system. This person may or may not be a certified teacher.

Physical Impairment:

A condition that affects a student's ability to perform motor skills. The student may need a wheel chair, braces, or other adaptation to participate in physical education.

Present Levels of Performance:

Assessments of the current level of ability of a disabled student that often appear in written statements, such as, "the student can make three of five free throw shots from the foul line."

Regular Education Initiative (REI):

The federal initiative that proposed four fundamental changes in how special education services would be provided. First, students with learning problems would receive most, if not all, of their instructional services in regular education classes. Second, regular teachers, special education teachers, and support personnel would work collaboratively to provide instruction in integrated settings. Third, all instructional resources (money, materials, and personnel) for general and special education and support services would be placed under the power of one administrator (building principal). Fourth, administrative policies and procedures would be developed to encourage the placement of handicapped students in general education classrooms (Davis and Maheady, 1991).

Special Education Course:

A methods course offered in the general education or special education major that prepares future classroom teachers for working with disabled students.

Specific Learning Disability:

"Defined by federal legislation as follows: a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written. This disorder may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (Sherrill, 1998).

Support Services:

Supplementary human and non-human resources and aids used in regular physical education for disabled students. The support services help disabled students to function in the regular class safely, successfully, and with satisfaction. Examples of support services are adapted physical education teachers, physical therapists, special education teachers, teaching assistants, peer tutors (students), and special equipment.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this investigation was to examine the relationship between teacher attitudes toward elementary and secondary disabled students and selected attributes of public school physical education teachers (K-12). The literature reviewed identified the underlying framework that influenced this researcher and thus the research itself. Specifically, the review was organized into the following sections: (a) related research on teachers' perceptions of inclusion, REI, and mainstreaming, (b) related research on teachers' suggestions for successful inclusion, (c) Theory of Reasoned Action and the relationship between attitudes and behavior, (d) instrumentation available to measure teachers' attitudes toward working with disabled students in regular classes, and (e) related research on relationships between teacher attributes and attitudes toward working with disabled students in regular classes.

Related Research on Teachers' Perceptions Of the REI, Inclusion and Mainstreaming

A study was undertaken by Robert D. Coates (1989) to provide data concerning teachers' views regarding the Regular Education Initiative (REI). He examined data regarding regular classroom teachers' perceptions and attitudes about REI. One hundred and twenty five K-12 teachers were randomly selected from five counties in Iowa and asked to respond to a survey questionnaire. Eighty-eight teachers responded to questions about number of years teaching experience, grade level taught, current class size, and the number of disabled students taught in their regular classes. Thirty-four (39%) taught K-3, thirty-one (35%) taught 4-6, six (7%) taught 7-8 and seventeen (19%) taught 9-12. The mean class size was 20.71, mean number of disabled students served was 2.9, and the mean number of years teaching experience was 14.34.

Teachers in the Coates study were asked to respond to 15 items on a 5-point Likert scale, with 1 corresponding to strongly agree, and 5 corresponding to strongly disagree. The questions were designed to measure teachers' agreement or disagreement with different aspects of teaching disabled students in the regular class.

The results of this study suggested that regular teachers did not agree with the idea of teaching disabled students in regular classes. They indicated that

the resource room or special education setting was the best placement for disabled students to receive their education. They also felt that mildly disabled students could not be educated entirely by the regular teacher even if the teacher received additional training, support, or consultation assistance.

Coates (1989) expressed concern that an overall negative attitude toward working with disabled students in regular classes might be held by teachers nationwide. He felt that widespread resistance from regular teachers might hamper the success of educating disabled students in regular classes. Coates suggested that further research be conducted in various parts of the country to determine if the views of others regular education teachers was the same as the Iowa teachers.

Phillips, Allred, Brulle, and Shank (1990) conducted a research project in January of 1989. They sent four public school superintendents who had expressed an interest in the REI movement a thirty-item survey. The surveys were distributed to 1,012 general education teachers in four Illinois school districts, with 314 (31%) being returned.

Surveys asked teachers to rate their willingness to work with disabled students in their classes and rate their skills in providing an education for these students. A 5-point Likert-type scale was used to answer the questions. They were also asked to rank a list of support/resources that might help them better serve the disabled students in their programs.

The majority of teachers in this study said that they would be willing to teach gifted and physically disabled students, but not students with mental disabilities. Teachers felt that they lacked skills needed to integrate students that were severely or profoundly disabled, severely emotionally disturbed, and visually impaired. Teachers listed the following support/resources in order of preference: (1) special materials, (2) classroom aides, (3) consultation with special educators, (4) in-service training in behavior management and strategies, (5) experiences actually working with the disabled, (6) more compensation, and (7) college course work in special education. As a whole, the teachers expressed positive attitudes toward mainstreaming. They felt confident in their ability to work with parents, provide individual assistance for students, adapt materials, participate in IEP meetings, modify curriculum, and manage behaviors. They did not feel confident in their ability to write behavioral objectives, interpret test results, and write IEP's.

Phillips, Allred, Brulle, and Shank concluded that type and severity of disability appeared to dictate a teacher's willingness to work with students that had special needs. The general education teacher's desire to work with other general and special education teachers was one issue that the authors felt should be fostered by college professors in teacher-preparation programs. The information gathered from the collaborative/consultative relationships could be used to plan pre-service and in-service training for future and current teachers.

Semmel, Abernathy, Gretchen-Butera, and Lesar (1991) also conducted a study that surveyed the perceptions of regular teachers concerning the REI. Six schools in central and southern California and sixteen schools in northern Illinois participated in the study. All teachers were surveyed during a regular scheduled staff meeting.

Seventy-one special education teachers and 310 regular education teachers completed a survey that consisted of 66 questions that assessed teachers' attitudes, beliefs, and perceptions about current procedures for educating mildly disabled students in special education classes. They were also asked their feelings about the REI. Mildly disabled students were described as having a learning handicap, learning disability, or behavior disorder. Negatively and positively phrased questions were part of the instrument and the order of the items was randomly determined. Teachers responded with an answer of agree or disagree to each question. They were also encouraged to provide qualitative comments for any of the questions in the survey. The return rate for the questionnaires was 85.6%.

Results of the study indicated that both special education and regular education teachers tended to prefer the current policy of placing mildly disabled students in special education classes for part of their educational services. Regular education teachers expressed concerns about lack of teacher training for working with disabled students, large class settings, and demands on their instructional time.

Neither group of teachers seemed to favor the concept of a consultant model, for example, working together so that disabled students would receive their education in regular classes. In regard to the consultant model, regular teachers were positive about receiving additional non-human resources (money, equipment, etc.), but they were negative about innovations that suggested an impact on their present situation (classroom practices and instructional time allocations).

A relatively high percentage of the teachers (regular and special education) felt that full-time placement in the regular class for mildly disabled students might negatively affect the allotment of instructional time for other students. Regular teachers stated that it would be difficult to meet district curriculum goals established for the normal students if they were also asked to provide an education for the mildly disabled students.

The authors reported that regular teachers did not perceive themselves as having necessary skills to adapt instruction for mildly disabled students. Teachers stated that the regular class setting could not adequately address the instructional needs of disabled students, and both groups of teachers felt that disabled students would not receive positive social benefits from the regular class placement. Less than one-third of the surveyed teachers believed that the regular classroom was the best placement for mildly disabled students to receive their education.

The authors stated that these results might be due to special education teachers' and regular education teachers' concern with a major change in teacher delivery for the disabled. They went on to warn that this shift of responsibility for the disabled student, without necessary support and training, could be counter-productive for the education of the disabled. If the perceptions and expectations of regular teachers for mildly disabled abilities and behaviors were negative, the teachers would not take "ownership" for their learning. If regular teachers felt that disabled students were a burden, then the REI (full-time placement in regular classes) might have negative effects on the learning process for disabled students.

Based on the results of their study, Semmel, Abernathy, Gretchen-Butera, and Lesar (1991) suggested that further research be conducted to study the status of the REI and needed changes for better program planning for disabled student. They expressed that this study was implemented to stimulate the work between regular and special education teachers for a shared responsibility of the education for disabled students.

Whinnery, L. Fuchs, and D. Fuchs (1991) examined factors that affect acceptance of instructional strategies for teaching students with mild disabilities. A total of 114 teachers from one combined elementary and middle school and five elementary schools in a suburban-rural Southeast school system participated in the study. The group represented regular, special, and remedial

teachers who taught grades 1 through 6. Teachers were chosen because of their potential participation in future research about serving disabled students in the regular classroom.

The 114 questionnaires were sent by mail, and 55 (48%) were returned. Forty-eight regular, eight special, and four remedial education teachers returned their survey. The average years of teaching experience for the three groups was 12.47 for regular, 11 for special, and 18 years for remedial education teachers. The average number of students served was 27.45 for regular, 18.6 for special and 36.75 for remedial education teachers. The questionnaire was designed to research teacher attitudes toward potential teaching strategies for adapting the regular classroom environment for mildly disabled students.

Teachers responded to a 5-point Likert scale. Regular teachers were asked to answer questions pertaining to their competence and willingness to teach mildly disabled students in their classrooms. Special education and remedial teachers were asked questions pertaining to their competence and willingness to provide assistance to regular teachers for working with mildly disabled students in regular classes.

Whinnery, L. Fuchs, and D. Fuchs also asked the three groups of teachers to rate academic-instructional and social behavior intervention strategies for working with mildly disabled students. All strategies were rated on four dimensions, using the 5-point Likert scale. The dimensions were teachers' familiarity with the strategy, effectiveness of the strategy for helping disabled

students, difficulty of implementing the strategy, and their willingness to implement the strategy. Scores of 1 indicated a negative perception of the strategy, and a score of 5 indicated a positive perception of the strategy.

There was no significant difference among the three groups in perceived amount of assistance provided by support personnel for mainstreamed students with mild disabilities. The mean score for the quality of assistance across the teacher groups was 2.43, which suggested a perception of a moderate amount of assistance. Regular and special education teachers rated assistance at about the midpoint of the scale, and remedial teachers rated it near the midpoint. Regular teachers rated their feelings of competence to provide an education for the mildly disabled as 3.2. The special education and remedial teachers rated their feelings of competence to provide assistance to the regular teacher as 4.38 and 4.25. All three groups gave a favorable rating for their willingness to provide services for disabled students in the regular class. However, special and remedial teachers rated their willingness as significantly higher than the regular teachers did.

Results of the study indicated that there was no overall difference among the three groups of teachers when they rated the effectiveness of academic strategies needed to accommodate disabled students in regular classes. All three groups of teachers also rated the effectiveness of strategies and their willingness to implement the strategies higher than familiarity and ease of implementation of strategies.

The study indicated no overall difference among the three teacher groups in their perception of the effectiveness of behavior interventions when working with mildly disabled students. All three groups gave a higher willingness rating for behavior intervention methods that were positive rather than punitive, and a higher rating on methods that took less time to implement.

Whinnery, L. Fuchs, and D. Fuchs (1991) concluded that findings from the study might have several implications for teachers' acceptance of strategies needed to help disabled students become successful in regular classes. First, additional training might be necessary to better inform teachers of potential instructional strategies that would allow disabled students to be better educated in regular classes. Second, teachers' willingness to implement new strategies might be more closely related to perceived effectiveness than perceived ease of implementation. Last, willingness to implement difficult and unfamiliar strategies might suggest a perceived importance of instructional strategies needed for mainstreamed disabled students and a need for more training to develop strategies for the disabled student. Results of the study also suggested that teachers might be familiar with a variety of behavioral intervention methods but view them as ineffective with disabled students. They might also be reluctant to implement interventions that they see as ineffective. Whinnery, L. Fuchs, and D. Fuchs (1991) also suggested that future studies needed to focus on ways to create effective strategies for working with disabled students

acceptable to the teachers involved in the process of mainstreaming disabled students in regular classes.

The population of a study done by Michele L. Barton (1992) included thirty-one randomly selected elementary general education teachers from two Chicago area schools. Teachers were given a thirty-item attitude survey designed to measure their feelings toward the mainstreaming of special education students, particularly the learning disabled, into regular education classes.

Barton (1992) found that 53.25% of the teachers had a positive attitude, 34.42% had an undecided attitude and 12.34% had a negative attitude toward mainstreaming. Teachers who disapproved of mainstreaming gave reasons of lack of in-service training (64.5%) and insufficient support (54.8%) from administrators and special education teachers. A significant number of teachers (80.6%) felt that the number of disabled students placed in regular classes should be limited. However, 60% of the teachers felt mainstreaming was socially beneficial for disabled students. A large group of teachers (64.46%) said that they would attend classes for in-service training on mainstreaming. The survey also revealed that regular teachers (87.1%) wanted to participate in the planning of IEP's for disabled students.

Barton (1992) concluded by saying that information from teachers on mainstreaming should be used by administrators and special education teachers to create successful mainstreaming programs. Barton also suggested using

teachers' comments about mainstreaming to improve existing mainstreaming programs.

A survey of regular education teachers in a mid-western suburban public school district was conducted by Myles and Simpson (1992) to determine which types of modifications would persuade teachers to mainstream students labeled with a behavioral disorder (BD) or a learning disability (LD). All 381 teachers from the 19 elementary schools were asked to participate in the study with a return rate of 51% (n=194).

The instrument used in the survey was designed to assess regular teachers' acceptance of students with behavioral and learning problems in their classes. Teachers were provided with a general description of the characteristics of behavioral disordered and learning disabled students.

Teachers were asked to provide minimal modifications that would persuade them to serve disabled students in their regular classes on a full-time basis. Suggested modifications provided in the survey were as follows: (a) smaller class sizes, (b) additional time to plan, (c) assistance from paraprofessionals, (d) support services, (e) consultation from special education teachers, and (f) in-service workshops. Next they were asked if they would be willing to educate disabled students in their regular class with the modifications they mentioned in their survey and without the modifications. Lastly, they were asked to identify which of the following policies was the most important to them: having a part in

making decisions about needed modifications for the mainstreamed disabled student or the school system providing mandatory modifications for all mainstreamed disabled students.

The mean score for minimum number of modifications needed to serve the two mentioned disabilities was 3.35 for BD students and 3.63 for LD students. Support services, the modification mentioned most often as necessary to facilitate mainstreaming, was stated by 163 (84%) teachers. Seventy-one percent also considered consultation by a special education teacher to be important for successful mainstreaming. Only 26% of the teachers mentioned in-service programs as necessary for teaching the BD and LD student in regular classes. Percentages of the other three modifications mentioned were class size (69%), paraprofessional assistance (60%), and extra planning time (39%). The second question was designed to determine if provided modifications would significantly affect the teacher's willingness to work with disabled students in regular classes.

A discriminate function analysis was conducted to assess if teachers would be more willing to work with disabled students if modifications were available and if they were not available. None of the mentioned modifications was a predictor of improved willingness to work with disabled students when the teacher was receiving modifications in the regular class. Number of modifications served as a significant predictor of willingness to accept the disabled student in the regular class if modifications were not available to the

teacher. When asked for their preference to participate in the decision-making process or to select mandatory modifications provided by their school system, 75% of the teachers chose to be a part of the decision-making process.

Myles and Simpson (1992) concluded that further research was needed to clarify issues of needed modifications for educating disabled students in the regular class. They also said that involving regular teachers in the decision-making process for choosing modifications for disabled students might improve their willingness to provide modifications in their regular classes.

Schumm, Vaughn, Gordon, and Rothlein (1994) conducted a survey to investigate regular teachers' beliefs, skills, and practices for meeting the needs of learning disabled (LD) students in regular classes. Teachers were chosen for the study through principal and special education teacher recommendations. Principals from 39 schools (elementary, middle, and high school) chose a group of regular teachers that they felt provided effective programming for disabled students in their classrooms. Special education teachers reviewed and verified the list of teachers. The teachers chosen by both the principals and the special educators were interviewed and asked to rate their effectiveness to meet the needs of LD students in their classes. Sixty teachers who rated themselves as effective providers of an education for disabled students in the regular class were asked to participate in the study.

Teachers completed a survey, The Teachers' Beliefs and Attitudes Towards Planning for Mainstreamed Students (TBAP). Teachers were instructed to use a Likert-type scale (1=low, 4=high) to indicate their level of agreement for 30 items in the questionnaire. Items covered the following areas:

a. use of IEP's and psychological tests to plan programming for disabled students
b. adapted long-range planning for disabled students
c. adapted short-range planning for disabled students
d. varied group composition (small group, large group, whole class) that involves the disabled student
e. adapted course content for disabled students
f. adjusted time and pace of lessons for disabled students
g. adapted tests for disabled students
h. frequent checks (discussion) with individual disabled students
i. individualized instruction based on the specific needs of each disabled student, and
j. individualized or different criteria for grading disabled students.

Teachers were asked to read the ten items and respond to each in three different ways: first their belief in the item, second their practice of the item, and finally their skill in practicing the item. They were also asked to describe their beliefs and skills in planning and modifying for learning disabled students in two open-ended questions at the end of the survey.

All but two of the teachers gave a moderate to high rating of the beliefs, skills, and practices for planning and modifying for disabled students in regular classes. When rating their belief in an item, two were mentioned in the low range, long-range planning and modifications of tests for disabled students.

None of the teachers rated their skill to provide an item in the low agreement range. Teachers said that they were more likely to have discussions with disabled students as well as change the size of groups that included disabled students. They were less likely to use varied information sources, long-range planning, adaptations of course content, and adaptations of tests. Teachers felt that these items required more time to incorporate into their normal schedule.

A statistically significant correlation was found between teachers' beliefs and practices, beliefs and skills, and practices and skills. There was a lack of significant correlation between belief and skills for modification of course content. Teachers rated themselves as skilled in adapted course content, but they stated that they did not practice this skill with their disabled students.

There were differences among the different grade levels of teachers for adapting course content. Elementary teachers adapted course content more often than middle and high school teachers did.

There was no extensive individualized planning for LD students by regular teachers. Most teachers at all three grade levels said that they attempted to fit the LD student into the existing curriculum and class activities. The majority of

teachers stated that they expected LD students to master the same lesson content as other students in the regular teachers' classes. They said that they rarely reduced the amount of content for LD students.

Schumm, Vaughn Gordon, and Rothlein (1994) stated that their study was conducted to gain insights that would help structure future training sessions for regular teachers that would be teaching disabled students in regular classes. The authors concluded by offering the following insights:

a. future research needs to focus on content adaptations that allow disabled students to experience academic success in the regular class
b. regular teachers need to be taught adaptations that are feasibly implemented
c. barriers that inhibit a regular teacher's implementation of adaptations must be removed (large classes, too little planning time)
d. discussions must take place in which regular teachers can focus on ways adaptations may or may not work
e. teacher education programs must provide programming that offers potentially effective practices of modifying regular classes for disabled students
f. teacher education programs must provide information on professional development that includes methodology on interactive planning with special education personnel so that individualized programs can be developed for disabled students in regular classes.

Bradley and West (1994) directed a study to assess staff-training needs of school personnel that were responsible for implementing programs for students with disabilities in regular education settings. They established focus groups of five to seven people that represented participation from the following groups of educators in each of five elementary schools: special educators, general educators, building administrators, related services (speech pathologists, occupational therapists), and special education teaching assistants. All participants took part in the study on a voluntary basis.

Each focus group began with a statement by the facilitator regarding current trends toward inclusion of disabled students in regular education classes. Each group was audiotaped, and tapes were later transcribed and analyzed by the researcher for emerging themes. The following questions were asked in each group:

1. What ideas do you have for professional and support staff to work together to deliver services for disabled students in general education classes? What type of training would be needed to implement these ideas?
2. What skills and/or training do you think would be needed for your staff to work collaboratively with one another?
3. How could staff training help you with the skills and information needed to successfully educate disabled

students in your school?

Bradley and West provided several central themes that emerged from the study's focus groups. Respondents were interested in receiving information regarding disabled students and their needs before students were placed in their programs. Teachers were concerned with disabled students being placed in their classes without a reduction of the overall number of students in the class. Teachers wanted training sessions in time management and support provided through materials, supplies, and consultation. They also wanted an instructional assistant or special educator to be available to spend time in their classroom for help with major problems.

The authors suggested that further research should incorporate focus group interviews to gather data on the needs of regular teachers for including disabled students in their regular classes. They also concluded that additional studies should be conducted with different educators in additional schools to increase the external validity of the current study.

Schumm and Vaughn (1995) investigated teachers' perceptions about including disabled students in regular classes over a five-year period. Their purpose in conducting this research was to use the information to establish guidelines for teacher training and the development of effective inclusion practices.

Data were collected from over 1000 teachers representing elementary, middle, and high school grade levels. Data collected from the five-year period led the authors to a discussion of several issues of concern for successful inclusion to take place.

The first issue of concern was that regular teachers felt that they were lacking in knowledge, skills, and confidence needed to plan for disabled students in their regular classes. Seven hundred and seventy-five regular teachers were asked questions to determine their perceptions on planning. Ninety-eight percent of teachers felt that they were excellent planners for non-disabled students, but only 39% said that they were excellent or good planners for mainstreamed disabled students.

Many of the teachers felt that their teacher preparation programs did not provide them with adequate information for teaching disabled students. They also mentioned that state curricular guides and textbooks offered very little information for possible modifications for disabled students.

Teachers indicated that they had very little knowledge of instructional methods used by special education teachers in their schools or how similar their adaptations were to the ones used by special education teachers. Teachers voiced concern about appropriate adaptations for disabled students in their classes, as well as how to implement the adaptations into their lesson plans while continuing to meet the needs of non-disabled students. Individualizing instruction was not viewed as impractical. Some teachers were knowledgeable

of individualizing strategies, but unsure of how to implement modifications without short changing the academic needs of non-disabled students.

The second issue of concern was teachers' feelings about support services (human). Regular teachers mentioned that special education teachers and other resource specialists were extremely valuable when planning adaptations for disabled students, but these resources were often not readily available. Elementary teachers indicated that communication with special education teachers occurred occasionally while secondary teachers indicated that communication occurred rarely.

Issue three involved the frequency that regular teachers used adaptations with disabled students in the regular class. Several central themes emerged when teachers discussed their use of adaptations for disabled students. First, regular teachers saw the development of adaptations as a responsibility of special education teachers. Many felt that disabled students should only be placed in regular classes when they were ready to learn the same content at the same pace as the non-disabled students.

Second, teachers felt that most adaptations that the disabled student might legitimately need could not feasibly be administered in the regular class. Class size, physical set-up of the room, and access to necessary resources was listed as barriers to making modifications for disabled students.

Third, teachers indicated that adaptations for disabled students took too much time away from course content coverage for the rest of the class.

Pressure to cover specific objectives established by mandated curricula required that they move at a certain pace. Many teachers said that it was implausible to simplify or individualize the curriculum for disabled students. Doing so would prevent them from covering their established material.

Fourth, there was reluctance to provide adaptations for disabled students because teachers felt that adapting lessons would draw attention to the students. Teachers felt that using different books and other materials tended to cause negative attention toward disabled students. High school teachers indicated that adaptations would not be provided for disabled students after graduation and using them in school would not prepare them for the "real world."

The last issue mentioned was a concern that adaptations being used for disabled students had not been part of a systematic plan specifically designed for individual student needs. Teachers who were implementing adaptations in this study were not practicing pre or post planning for adaptations. They were making adjustments during the teaching phase of the lesson as a "second thought" process. The authors stated that situation-driven adaptations were very important, but that short-range and long-range planning to develop needed adaptations for each individual disabled student must be addressed.

Schumm and Vaughn (1995) provided suggestions for future research and several recommendations for teacher education programs. Continued research in instructional strategies that promote learning for disabled students in regular

classes should focus on what teachers can and will use. This research should examine effective and efficient ways to plan and make adaptations for disabled students in ways that teachers can continue to plan and teach the non-disabled students.

Vaughn, Schumm, Jallad, Slusher, and Saumell (1996) conducted an investigation of teachers' perceptions of inclusion. They targeted teachers that might be directly affected by inclusion but were not currently practicing inclusion in their schools. Twenty-six special educators, 25 regular educators, 8 remedial educators, and 15 teachers of the gifted were involved in a study that involved focus group interviews. All of the participants were teaching in a large metropolitan school district in the southeast. The 74 participants included were kindergarten through 12th grade teachers who taught art, math, science, and history. General, special education and gifted teachers were divided into groups by elementary, middle, and high school grade levels. A tenth group was formed with elementary-remedial teachers.

All ten groups were asked the following questions:

1. What do you know about inclusion?
2. What factors could possibly facilitate or negatively affect the implementation of an inclusion model in your school?
3. What would you consider to be an ideal model for inclusion?
4. What should researchers be asking to determine the effects of

inclusion?

Information from the interviews was examined by subgroup (regular, special education, remedial, and gifted), with no differences between groups being noted. Therefore, the central themes that emerged were reported for teachers as a whole. Following are the themes that resulted from teachers responding to the four questions in the interview process:

1. Understanding Inclusion – Teachers varied from little or no understanding of inclusion to a suggestion of a high level of familiarity with inclusion. Several felt that they were uninformed about inclusion, and others said that they needed an operational definition for inclusion because they feared the pressure of future responsibilities with the implementation of inclusion. All subgroups expressed a need to understand their roll for educating disabled students in regular classes.
2. Teachers' Feelings About Inclusion – The most consistent response from teachers, regardless of their level of knowledge about inclusion, was a strong negative feeling about inclusion. They indicated great concern about the implications of inclusion for the teaching profession. Many stated that they would leave the teaching profession if inclusion were imposed on their teaching position. There were expressions of doubt that inclusion would be successful at all.

Teachers listed fears of lawsuits, increased workloads, and safety for disabled and non-disabled students.

3. Lashing Out at Decision Makers – Teachers felt that administrators were uninformed about inclusion and would likely leave teachers out of the loop when policies and procedures were established for inclusion. Teachers said that inclusion was being promoted by people who did not work in classrooms and were totally unaware of the consequences or procedures for its implementation.
4. Barriers to the Success of Inclusion – Class size was mentioned most often by all teachers, as the most significant barrier to successful inclusion. One special educator said that if regular teachers with 35 to 40 non-disabled students were asked to include disabled students in their class, the teacher would unconsciously sabotage the process. The second barrier to success was a lack of additional resources. Teachers felt that additional personnel could enhance the success of inclusion. Other needed resources were computers, computer hardware and software, and textbooks. A third barrier was a lack of desire of regular teachers to work with disabled students. Regular teachers said that they had chosen to be teachers of non-disabled students, not special educators of disabled students. On the other hand, special educators said that they wanted to teach disabled students. Other barriers mentioned by teachers were lack of needed

additional funds, additional paperwork, adequate facilities, adapted grading procedures, team teaching, and the stigma attached to the disabled student when they required modifications in the regular class.

5. Ingredients for Successful Inclusion – Two topics emerged as necessary ingredients for successful inclusion. First was communication between all teachers and other support personnel who would be planning the educational program for the disabled student? The second topic mentioned by teachers was peer tutoring and cooperative learning within the regular class setting.

6. Needs of All Students – Many teachers were concerned about the disabled student receiving an appropriate education in the regular class. They stated that previously mentioned barriers could potentially deny the specific needs of the disabled student. They also expressed concern for non-disabled students. They were worried about equity for the regular student with the teacher's time being split between disabled and non-disabled students. A few mentioned that non-disabled students might begin to resent disabled students.
7. Preparing Teachers to Work in Inclusive Schools – All teachers were concerned that regular teachers were not trained to participate in the inclusion model. Some felt that regular teachers would need to take

several additional special education courses, and others suggested that future teachers should be working toward a double major in college (regular and special education).

8. Perceived Parental Concerns – Special education teachers felt that parents would want their disabled students to stay in special education classes. They said that they did not think parents would want their children in classes with a teacher that was not properly trained to work with disabled students.
9. Benefits of Inclusion – Some special education teachers expressed views of possible benefits of inclusion. One benefit mentioned was that many of the disabled students from self-contained classes enjoyed going to lunch and assemblies where they could be with their non-disabled peers. Teachers felt that disabled students would have an improved self-esteem when given the opportunity to interact with non-disabled students in regular classes. Other benefits given by special education teachers were that non-disabled peers could often help disabled students learn more than the teacher could. They also felt that disabled students would be more prepared for mainstreamed society if they had participated in a school that offered inclusion.

Vaughn, Schumm, Jallad, Slusher, and Saumell (1996) concluded their article by warning readers to be aware that teachers in the study had no experience with inclusion and therefore might not be able to give a true

perspective on its benefits or problems. They suggested future studies with regular teachers from other parts of the country as well as teachers who were participating in inclusion programs.

Downing, Eichinger, and Williams (1997) developed an interview format for assessing elementary school principals, general educators (K-6), and special educators in four schools that represented different levels of inclusive education. Trained graduate students interviewed a total of twenty-seven people, nine from each of the three groups of professionals.

The four elementary schools practiced one of the following levels of inclusion:

1. full inclusion – all special education students were fully integrated into regular education classes, regardless of the severity of the disability.
2. partial integration – the severely disabled students were served in self-contained classes for the majority of the day but went to age-appropriate regular classes for certain times of the day with support personnel.
3. no inclusion – disabled students were educated in self-contained classes and had no participation in regular education

classes.

Downing, Eichinger, and Williams (1997) were interested in seeing if professional role and/or level of inclusive implementation would have any bearing on perceptions regarding the education of the disabled in regular classes. They found that regardless of role or level of implementation, all respondents felt the same about several barriers, benefits, support needed, and teaching strategies.

The number one cited barrier to inclusion was a negative attitude of general educators toward working with disabled students. Sixty- seven percent of respondents stated a need for trained and skilled support staff for regular education teachers.

Over half of the respondents stated that there was a lack of sufficient financial support for inclusive education. Administrators and general education teachers mentioned a need for time to team with special educators for successful inclusion of disabled students.

Downing, Eichinger, and Williams (1997) concluded by stating several limitations for their study. First, the small number of participants made generalizing to a larger population difficult. Second, only one geographic region was represented. Third, only elementary teachers were included in the study. Fourth, since all of the teachers in the study volunteered, they may have had a predisposed negative or positive attitude toward inclusion. Last, none of the teachers were asked about their level of success with inclusion or if the level of

support services they received was adequate for including disabled students in regular classes. The authors said that answers to these two questions would have offered valuable data and should be asked in future studies.

Related Research on Teachers' Suggestions For Successful Mainstreaming and Inclusion Programs

York-Barr, Schultz, Doyle, Kronberg, and Crossett (1996) contacted school supervisors from the St. Cloud School District in central Minneapolis and asked them to identify individuals who were effective in the inclusive schooling initiative. The following 17 people were chosen: 4 parents of disabled students, 3 district-wide administrators, 2 school principals, 5 regular education teachers, and 3 special educators/inclusion facilitators. The 17 individuals represented six elementary schools, 2 junior high, and 1 high school.

In the interviews all were asked open-ended questions to elicit data about beliefs, practices, and the processes and outcomes of inclusion. Parents and administrators were asked questions about involvement or experiences with inclusion, while teachers were asked about their own personal classrooms. All of the interviewees were told that they were chosen for the study because they were perceived as knowledgeable, supportive, or effective in implementing inclusion.

Inductive analysis was used to analyze the data, which allowed several key themes to emerge:

1. All students, including the disabled were viewed as highly valued members of the classroom community. Disabled students were seen as whole people with needs more similar to their non-disabled peers than different.
2. Students were encouraged to be respectful, caring, and helpful, and to try to get along with others.
3. Everyone interviewed felt supported in his or her efforts in the inclusion process. Regular teachers had respect and value for the efforts made by the special education teachers to aid in the inclusion of the disabled student in the regular class. Administrators and principals were seen as highly supportive and committed to the inclusion process. Only one teacher felt a lack of support from his building principal. There was a common belief that for change such as inclusion to take place and be successful, a collective effort must emerge.
4. The professionals in the study had a high self-efficacy and self-worth. They were very aware of the positive impact they had on children and seemed to be morally driven to accomplish educational goals for their students.
5. Of those interviewed, each one identified an individual in their life who had been a positive, substantial influence. Educators mentioned significant individuals who had influenced them to become teachers.

6. Advice was given to prospective educators, including suggestions for professional preparation. First, was that future teachers must like (if not love) and believe in their students. Second, they must spend time in actual classrooms in order to experience the realities of including disabled students in regular classes.

York-Barr, Schultz, Doyle, Kronberg, and Crossett (1996) shared several limitations to their study. First, only seventeen individuals from one school system were interviewed. Second, only individuals who were viewed as having positive views of inclusion were interviewed. Last, the responses of teachers and administrators were not verified by researchers' observations. The researchers suggested that replications of the study in other school districts and other parts of the country could provide information that would further the cause for successful inclusion.

Building principals and special educators identified regular educators who were effective in educating disabled students in a study by Olson, Chalmers, and Hoover (1997). Only teachers who were chosen by both the principal and the special education teacher participated in the study. Ten regular teachers were nominated, and all agreed to participate.

Seven themes emerged from the interview process:

1. Tolerant, Reflective, and Flexible Personalities – Even though

different personalities were observed, all of the teachers displayed a passion for teaching and a patient, loving attitude toward students. Many mentioned that they were willing to try new instructional modifications for individualizing for disabled students. They also shared a self-reflective attitude that caused them to continually question their teaching methods in order to make improvements in their educational delivery.

2. Responsibility for All Students – All teachers, to varying degrees, expressed a feeling of ownership for all of their students. They made statements such as "I was hired to teach children." Many said that all students had a right to learn, and others said that all students could learn better when they had an opportunity to interact with all different ability levels.
3. Positive Relationship with Special Education – All 10 teachers indicated a positive relationship with special education teachers. Seven of the 10 indicated that they could use more support with disabled students in their classes. However, the regular teachers said that they knew that special educators were providing as much support as possible due to their current time constraints.
4. Adjusting Expectations – All teachers shared that they lowered expectations for disabled students when it was necessary. This was done in a way that still offered a challenge for the disabled student.

5. Demonstration of Interpersonal Warmth and Acceptance – Students were encouraged by regular teachers to work together in groups or with peers. Teachers felt disabled students should be encouraged to grow in areas of responsibility and decision making that would take place by students working with non-disabled peers.
6. Concerns About Administrative Arrangements – All individuals felt that there was insufficient time to work with other personnel for the planning of programs for disabled students. They stated that support of specialists and collaboration was of utmost importance for successful inclusion.
7. Inclusion Not Always Appropriate – Nine of the 10 teachers felt that there were occasions when inclusion of a disabled student would not be appropriate. They mentioned situations in which severely mentally disabled and emotionally disturbed students might be too disruptive or monopolize too much of the teacher's time.

Olson, Chalmers, and Hoover (1997) concluded the article by suggesting that replication of the study would be worthwhile. They felt that other teachers who are practicing inclusion in their classrooms should be interviewed in other parts of the United States.

There are many factors that seem to influence successful assimilation of disabled students into regular PE classes. In the January 1997 issue of JOPERD,

regular physical educators were asked to respond to the following question: "Can students with disabilities be adequately accommodated in today's physical education classes?" Teachers mentioned several factors that affect the successful inclusion of disabled students in regular physical education classes:

1. positive attitude and commitment to working with the disabled (mentioned most often)
2. participation in IEP meetings to plan PE goals and objectives for the disabled students
3. advanced planning and preparation to accommodate disabled students' needs
4. training in inclusive and mainstreaming practices
5. time to work with teaching assistants and other professionals that will be providing support for the regular PE teacher
6. flexible curriculum that offers activities for many different ability levels
7. appropriate class sizes with appropriate numbers of disabled and non-disabled students
8. adequate equipment and support personnel ("Issues," 1997).

The consensus of the article was that attitudes of physical education teachers should not discourage disabled students in regular classes. Instead, they should encourage disabled students to do their best and be confident in their own abilities.

The Theory of Reasoned Action And the Relationship Between Attitudes and Behavior

Horowitz and Bordens (1995) suggested in their book, Social Psychology that attitudes were central to explaining a person's thoughts, feelings and actions about situations, ideas, and people. They also said that knowing something about a person's attitude should predict his or her behavior. Researchers disagreed for years about the link between attitude and behaviors. Richard LaPiere (1934) argued that attitudes and behavior did not go hand in hand. LaPiere took an Asian couple to the United States and visited over 250 restaurants, hotels, and campgrounds. Even though prejudice was widespread in America during that time against Asians, the couple was refused service only on one occasion. LaPiere later wrote to all of the businesses that had served the Asian couple and asked the businesses if they would serve Chinese customers. Over 90% of the businesses responded that they would not serve Asians in their establishments. LaPiere concluded in his study that self-reported attitudes did not correspond with behavior. LaPiere's study and other past research that examined the link between attitude and behavior was examined by Allan Wicker (1969). Based on his examination, Wicker suggested that attitudes and behaviors were only weakly correlated, if at all. He questioned whether or not a person's behaviors were determined by his or her attitude.

Other researchers disagreed with LaPiere and Wicker. Many studies examined conditions under which attitudes and behaviors were correlated. Stephen Kraus (1995) analyzed this research that suggested a positive correlation between attitudes and behaviors. Kraus concluded from is examination of many studies that attitudes did predict behavior.

Two researchers from Kraus' (1995) study that examined attitudes and behaviors, were Icek Ajzen and Martin Fishbein. Ajzen and Fishbein (1980) suggested that people were thoughtful creatures and aware of their own attitudes and behaviors. They claimed in their Theory of Reasoned Action, that attitudes impact behavior in a two step process. Within the first step, two factors influenced how an attitude toward a behavior was formed. The first factor was a person's cognitive thought process (belief) about the favorable or unfavorable outcome of behaving in a certain way. The second factor was a person's belief about whether significant others (social norm) felt the he or she should engage in the behavior. Ajzen and Fishbein (1980) suggested that these two factors would determine a person's attitude, which would form his or her behavioral intention to behave in a specific manner. These two factors, in step one, affected how an attitude was formed.

The second and final step in their Theory of Reasoned Action was that a person's behavioral intention would drive him or her to behave in an outward behavior. Therefore, a person would form an attitude based on their positive or negative belief about a behavior and their perception of a social norm's

agreement with participation in the behavior. This attitude would then cause a person to engage in a behavior. Ajzen and Fishbein (1980) did not attempt to say that there was a direct link between attitude and behavior. Instead, they said that attitude influenced intentions and intentions influenced behaviors.

Ajzen and Fishbein also provided information on how to measure a person's attitude, using the two factors mentioned in the first step of their Theory of Reasoned Action: belief about the behavior and perception of the social norm's agreement with his or her enactment of the behavior. To measure the first factor in determining a person's attitude toward a behavior, Ajzen and Fishbein (1980) theorized that researchers should select a set of belief statements that reflected a person's feelings about the behavior being examined. These salient beliefs would include characteristics, qualities, and attributes of the behavior in question. The examiner would measure a person's strength of belief of each statement by asking the person to indicate his or her agreement or disagreement with the statement about the behavior. The sum of scores for the belief statements would result in an overall score of the behavior for each respondent.

Based on the Theory of Reasoned Action, to measure the second factor that determined attitude, researchers would design a set of questions, called normative belief statements that asked respondents to indicate their perception of how significant others would agree with their behavior.

Respondents would rate on a bipolar scale how specified significant others would agree with their participation in a behavior.

Fishbein and Ajzen suggested that researchers measure attitudes using different combinations of factor one and two. They said that studies could examine attitudes by measuring important belief statements alone, normative belief statements alone, or a combination of the two.

The second and final step in the Theory of Reasoned Action involved measurement of behaviors. Actual behaviors would be observed and researchers would measure the relationship, if any, between attitude scores and actual behaviors of respondents

The research instrument (PEATID-III) used in the current study was based on the Theory of Reasoned Action. PEATID-III was developed by Dr. Terry Rizzo who relied on this theory as the foundation for his work (see later discussion of Rizzo's works).

Instrumentation for Measuring Regular And Special Education Teachers' Attitudes Toward Working With Disabled Students in Regular Classes

Literature revealed several instruments that were used to survey attitudes of regular classroom and special education teachers toward teaching disabled students in regular classes. Schumm, Vaughn, Gordon and Rothlein (1994) used The Teachers' Beliefs and Attitudes Towards Planning for Mainstreamed Students (TBAP) to determine the beliefs, skills, and

practices of regular classroom teachers for disabled students in their regular classes. Teachers were asked to respond from low to high agreement on a 4-point Likert scale, regarding mainstreaming practices.

Two other instruments were found that examined teachers' positive and negative feelings toward mainstreaming. The first instrument, a 15-item questionnaire, was designed by Coates (1989) to measure regular teachers' agreement or disagreement with statements that advocated placing all disabled students in regular classes. The second instrument (Barton, 1992), a 30-item survey, examined if regular classroom teachers agreed or disagreed with the policy of mainstreaming, the need for in-service training and cooperation with special education teachers, and appropriate teacher-pupil ratios for disabled students.

Semmel, Abernathy, Butera, and Lesar (1991) surveyed regular and special education teachers with the Regular Education Initiative Teacher Survey (REITS) to determine their perceptions and opinions surrounding the regular education initiative (REI). Teachers were asked to agree or disagree with statements concerning disabled students being served in special education classes or in regular classes.

Regular classroom teachers were asked to rate their willingness to teach and their skill to teach disabled students in their regular classes in a 30-question survey developed by Phillips, Allred, Brulle, and Shank (1990). Teachers were also asked to rank a number of specific types of support and

resources that would allow them to teach disabled students in their regular classes.

The final instrument for assessing attitudes of regular and special education teachers toward teaching disabled students in regular classes discovered in the current review of literature was created by Whinnery, Fuchs, and Fuchs (1991). Their questionnaire was designed to measure regular teachers' acceptability ratings of instructional strategies and behavioral interventions for disabled students in regular classes.

Instrumentation for Measuring Attitudes of Physical Education Teachers

Two instruments were found in the review of literature that examined attitudes of physical education teachers. The first instrument was used in Aloia, Knutson, Minner, and Seggern's (1980) study and consisted of a modified version of an attitude questionnaire developed for regular classroom teachers. The questionnaire consisted of four sub-scales that examined teachers' expectations of behavior and academic achievement for disabled students, teachers' perception of different disability labels, and teachers' perceived ability to work with disabled students.

The second instrument was created by Terry L. Rizzo (1984a). Rizzo developed the Physical Educators' Attitude Toward Teaching the Handicapped (PEATH) in 1981 after a review of literature failed to provide an

instrument that would measure the attitudes of physical education teachers toward working with handicapped students in regular classes.

The PEATH was modeled after the Theory of Reasoned Action (Ajzen and Fishbein, 1980). The theory suggested that a person's beliefs about behaviors such as working with handicapped students were expected to provide insight about actual behaviors. Rizzo (1984a) interviewed a small group of physical education teachers (K-8) to ascertain model salient beliefs about advantages and disadvantages of working with handicapped students in regular classes. Responses from the interviews were subjected to content analysis, and the results constituted the attitude portion of the PEATH.

Rizzo's (1984a) rationale for creating the PEATH was an assumption that beliefs underlie attitudes toward teaching the handicapped. The attitude section of the survey was based on "the assumption that 5 – 7 salient beliefs, when taken collectively, approximate attitude toward a behavior" (Rizzo, 1984a). Reliability of the PEATH was determined by computing an alpha coefficient, which was .97 in the aforementioned interview process. Both face and sampling validity were established on the PEATH.

Six experts, all with doctoral degrees, made up the panel that established face validity. Four were physical education professors at a midwestern university, the fifth was an employee of the National Institute of Education, and the sixth a director of physical education in a public school district. They were told the purpose of the questionnaire and asked to review the survey

items for face validity. After making suggestions for improvements on several items, the panel concluded that the PEATH had sufficient face validity because the survey adequately sampled the attitudes of physical education teachers toward working with learning and physically handicapped students in regular classes.

Next a pilot study (Rizzo, 1984a) was conducted with 50 physical education teachers (K-8). Teachers were asked to read all items on the survey, make suggestions for improvements in wording, and state whether or not the instrument measured their attitudes toward working with handicapped students in regular classes. Suggestions were made for improvement in wording, and most teachers responded that attitudes were accurately measured for working with handicapped students in regular classes.

The domain of behavior, context, and time for the study (Rizzo, 1984a) were used by the panel to determine sampling validity. The criteria for sampling validity were established in the beginning stages of the PEATH development. The domain of behavior was attitudes toward teaching disabled students, the context was elementary school physical education classes, and time was the regular physical education class. Since all criteria were met, the panel of six experts established sampling validity for the PEATH.

The final PEATH document (Rizzo, 1984a) consisted of two sections. Section one included 20 questions designed to measure attitudes of physical education teachers toward teaching handicapped students. Teachers were asked to respond to their beliefs about working with learning and physically handicapped students in the following three grade levels: K-3, 4-6, and 7-8. Statements were provided and teachers were asked to respond if they strongly agreed, agreed, were undecided, disagreed, or strongly disagreed using a Likert-type scale. After reading each statement, they placed their choice in a box divided by the three grade levels for each of the two handicapping conditions. A sample statement on the PEATH was "The best way to meet the needs of learning handicapped and physically handicapped pupils is through special, separate physical education classes."

Section two contained 6 demographic questions. Teachers were asked to provide information on gender, age, number of years teaching experience, number of undergraduate or graduate courses taken in physical education for handicapped students, number of undergraduate or graduate courses taken outside of physical education for handicapped students, and experience teaching handicapped students.

The PEATH was revised, and the name was changed to the Physical Educators' Attitude Toward Teaching the Handicapped Measures-II (PEATH-II) (Rizzo and Vispoel. 1991). The PEATH-II included 12 statements concerning the teaching of handicapped students in regular classes.

Embedded blanks were provided in statements such as, "Teaching students labeled _____ in my regular physical education classes with non-handicapped students will disrupt the harmony of the class." Teachers were instructed to read every statement and place each of the following handicaps in the blank: behavioral disordered (BD), educable mentally retarded (EMR), and learning disabled (LD). After each statement, the 3 handicaps were listed along with a 5-point Likert scale identical to the one used in the PEATH. The PEATH-II was evaluated for content relevance by a group of six nationally known researchers with experience in educational programs for handicapped students. Construct validity was determined by factor analysis. Alpha coefficients for the 1991 study were developed for EMR, BD, LD, and the items on the PEATH-II were as follows: .89, .88, .88, and .85.

Rizzo revised his survey instrument a second time, changing the name to The Physical Educators' Attitude Toward Teaching Individuals with Disabilities-III (PEATID-III) (Block and Rizzo, 1995). Minor changes were made in the PEATID-III to reflect language used to describe individuals with disabilities in current law and professional practice. "Disabling condition" replaced "handicapping condition," and "nondisabled" replaced "nonhandicapped" in the 12 belief statements in section one of the instrument. Rizzo (Block and Rizzo, 1995) explained that the changes did not affect the validity of the survey because the target behavior, context, and time in belief statements were not altered. He also stated that the

survey remained consistent with Ajzen and Fishbein's Theory of Reasoned Action (1980).

Related Research on Relationships Between Teacher Attributes And Teacher Attitudes Toward Working With Disabled Students in Regular Classes

Larrivee and Cook (1979) conducted a survey to investigate the effect of selected educational variables on attitudes of regular classroom teachers toward working with disabled students. Questionnaires were sent to 250 principals in randomly selected schools in six New England states. Each principal was asked to choose ten regular classroom teachers to complete the questionnaire. Surveys were returned from 136 of the 250 schools, which represented a 54.4% return rate.

Teachers were asked to use a 5-point Likert scale to respond to 30 belief statements regarding the placement of disabled students in regular classes. Teachers' responses ranged from "strongly agree, "agree", "undecided", "disagree", to "strongly disagree." They were also asked the following demographic information: grade level taught, number of students in their classes, number of students in their school, type of school (rural, suburban, urban), perceived success teaching disabled students, level of administrative support, and availability of additional support services.

Responses to all 30-belief statements were added together which represented an overall attitude toward mainstreaming disabled students in regular classes. The following results emerged from the study:

1. Teacher attitudes toward mainstreaming became less positive as grade level increased (middle school teachers exhibited the most negative attitudes). Mean scores ranged from K (98.28), grades 1-3 (90.07), grades 4-6 (93.90), grades 7-9 (86.57), and grades 10-12 (89.05).
2. Teacher attitude was not significantly affected by class size. Classes ranged in size from 11 to 35 students. Mean scores for class size ranged from 91.82 (classes with 11-15 students) to 87.02 (classes with 31-35).
3. Teacher attitude was not significantly affected by school size. Schools ranged in size from 300 students to 1200. Mean scores for school size ranged from 90.48 (300 students) to 88.68 (1200 students).
4. Teacher attitude was not significantly affected by type of school community. The mean score for urban schools was 90.41, for suburban schools was 91.02, and for rural schools was 91.61.

5. Teachers' perceived success with disabled students significantly affected teacher attitude. Mean scores ranged from a "very low" perception (78.23) to a "very high" perception (101.72).
6. Teacher attitude was significantly affected by degree of administrative support. Mean scores ranged from "little support" (78.94) to a "great deal of support" (98.39).
7. Teacher attitude was significantly affected by availability of support services. Mean scores ranged from "little support" (80.78) to a "great deal of support" (98.83).

Additional research was suggested to further examine the effect of the three variables that significantly affected teacher attitude toward working with disabled students in regular classes. The authors also suggested studies that would examine a possible relationship between teachers' perceived success with disabled students and students' different ability levels.

Aloia, Knutson, Miner, and Van Seggarn (1980) investigated the attitudes of 57 public school elementary and high school physical education teachers (21 females and 36 males) toward teaching disabled students in their programs. Physical education teachers completed a questionnaire modified from an attitude survey developed for regular classroom teachers that examined their expectations of the potential ability of disabled students, attitude toward

different disability labels, and perception about their ability to work with disabled students.

Data were analyzed by using analysis of variance procedures. The following results were observed:

1. First, physical education teachers had a more positive attitude toward working with mentally retarded students (mean score=33.55) than they did with physically disabled students (mean score=32.18).
2. Second, female teachers (mean score=77.90) tended to have higher expectations for disabled students than did male teachers (mean score=74.08).
3. Teacher's perceived ability to work with educable mentally retarded students (20.06) differed from their perceived ability to work with physically handicapped students (17.00).
4. There was no significant difference between teachers' initial expectations for educable mentally retarded and physically impaired students (mean scores were not provided for this calculation).

Aloia, Knutson, Miner, and Van Seggarn (1980) concluded their article by offering several suggestions for successful mainstreaming of handicapped students in regular physical education classes. First, teachers need more effective inservice and preservice training that would provide information on characteristics of handicapped students. Second, more research was encouraged that would document concerns and needs of physical education

teachers for providing services for handicapped students. Third, a need for research was mentioned that would examine additional-different handicapping conditions since physical education teachers would be working with many different types of handicaps in their regular classes. Last, researchers would need to document the general knowledge of physical education teachers regarding Public Law 94-142 and how the law would affect their physical education programs.

In a study by Bender, Vail, and Scott (1995), regular education teachers (grades 1-8) from three school districts in Georgia were surveyed to investigate regular education teachers' attitudes toward increased mainstreaming. Data were collected from 127 teachers during regular scheduled faculty meetings.

Teachers completed a questionnaire that included questions on educational background, certification, mainstream teaching experience, number of mainstreamed students in their classes, number of years teaching disabled students, number of years teaching, number of special education courses they had taken, and grade level taught.

Three different instruments were used in this study. The first instrument was a 6-question Likert scale used to measure teachers' attitudes toward mainstreaming. Each item was rated on 5-point scale, with 1 representing strongly disagree and a 5 representing strongly agree. A total score was generated that indicated a teacher's attitude about the benefits of

mainstreaming for disabled and non-disabled students in the regular class. A score of 4 or 5 indicated a positive attitude about mainstreaming.

A 16-item Likert scale instrument was used to measure a teacher's self-efficacy, a belief that their teaching could make a positive difference in the disabled student's education. The third instrument was a 40-item Likert scale that was used to measure teachers' use of instructional strategies for effective mainstreaming. Research-proven mainstreaming strategies were included in the self-reporting questionnaire. A high score on this assessment indicated that the regular teacher was using a wide variety of instructional strategies, on a frequent basis that facilitated the mainstreaming process.

When teachers were asked if they supported mainstreaming of the disabled, 13% stated no support for mainstreaming and 23% expressed no strong commitment to mainstreaming. Thirty-nine percent expressed support, and 24% stated strong support for mainstreaming.

The other five items on the questionnaire asked regular teachers to rate their belief in the following:

1. mainstreaming has been beneficial for disabled students
2. mainstreaming has been beneficial for non-disabled students
3. mainstreaming has been successful in my school
4. mainstreaming has improved the social skills of the disabled students
5. mainstreaming has improved the academic skills of disabled students.

On each of these questions, a sizable minority of regular teachers expressed disagreement with mainstreaming disabled students in regular classes.

Results from the assessment on the use of mainstreaming strategies offered the following data. Sixty-two percent said they individualized instruction for disabled students when necessary, and 56% indicated that they individualized with some degree of frequency.

When asked how often they modified testing procedures, 63% responded and 60% said that they varied the criteria level for instructional assignments to some degree. Seventy-two percent of teachers used peer tutors with disabled students in their classes and 48% used cooperative learning activities.

The second testing instrument for mainstreaming attitudes, teacher efficacy, and demographic variables concluded that there was no significant correlation between teachers' perceptions of their mainstreaming abilities and their actual attitude score for mainstreaming. Their attitudes toward mainstreaming did correlate positively with the number of special education courses they had taken. Teachers who had taken more courses had a more positive attitude toward mainstreaming.

Even though there was no significance, teachers at higher-grade levels had less positive attitudes toward their personal ability to mainstream as well as their overall attitude toward mainstreaming. There was a significant correlation between the number of years teaching and the teachers' self-efficacy. Teachers

who had taught the most years felt less positive about their ability to teach disabled students in their regular classes. They had also taken fewer special education courses.

There was a correlation between attitude toward mainstreaming and usage of modification strategies. Teachers with a more positive attitude score reported more utilization of effective modification strategies. Likewise, teachers with a higher self-efficacy score indicated more utilization of effective instructional modification strategies.

Bender, Vail, and Scott (1995) concluded that mainstreaming of disabled students in regular classes with teachers who are not positive about the practice of mainstreaming, could have negative implications for disabled students. They suggested the possibility of interviewing teachers that had negative or less positive attitude scores toward mainstreaming in order to identify specific complaints about mainstreaming. They also suggested further research to study the relationships between teacher attitudes toward mainstreaming and demographic variables.

Rizzo (1984a) surveyed physical educators (n=194) who taught grades K-8. Teachers in the primary grades (K-3) taught movement education activities, teachers in the intermediate grades (4-6) taught low organized and lead-up games, and teachers in the upper grades (7-8) taught competitive sport-related activities. Teachers responded to 20 belief statements about working with

disabled students in regular classes on a 5-point Likert scale on the PEATH. Possible scores for physical education teachers varied from 1 (strong disagreement) to 3 (undecided) to 5 (strong agreement). Teachers also answered six demographic questions pertaining to teacher attributes.

The purpose of the study was to determine the degree to which teachers' attitudes were affected by type of disability and grade level of disabled students. Results of the study indicated that physical educators were more positive about teaching students with learning problems (mean score=3.03) than the physically disabled (2.82). Rizzo (1984a) also found that physical education teachers in grades K-3 had more positive attitudes (mean score=3.15) toward teaching disabled students than teachers did in intermediate (mean score=3.03) and upper grades (mean score=2.92). As grade levels advanced for the teacher, attitudes became progressively less favorable toward teaching disabled students.

From this study Rizzo (1984a) concluded that further research needed to be conducted to determine at what grade level the attitudes of teachers seemed to become less favorable. He felt this information might provide suggestions for changes in physical education curricula and in-service training sessions. He also stated that physical educators might feel more positive about working with disabled students if curriculum models could be developed that offered instruction for students with different disabilities, based on their individual needs.

Rizzo (1984b) extended his research on the attitudes of regular physical education teachers by examining teacher attributes for the population from the above study. His investigation was conducted to determine the relationship between teacher attitudes and the following six attributes: (a) gender, (b) highest degree held, (c) age, (d) coursework in physical education for disabled students, (e) coursework outside of physical education for disabled students, and (f) teaching experience with disabled students.

A 5-point Likert scale was used to calculate the correlations between attitudes toward working with handicapped students and teachers' attributes. An alpha coefficient of the scale was .97. Pearson correlations were used to determine the relationship between each teacher attribute and teachers' attitudes.

Rizzo found two teacher attributes to be significantly related to favorable attitudes toward teaching disabled students in regular classes. The first was age ($F=3.87$, $p< .05$), and the second was the number of courses taken on disabled students outside of physical education ($F=4.74$, $p< .03$). The age attribute was found to be inversely related to favorable attitudes toward working with disabled students in regular classes. Younger teachers had more favorable attitudes toward disabled students than did their older colleagues. There was no significant relationship between physical education teachers' attitudes and the other four teacher attributes (gender, highest degree held, coursework in

physical education for disabled students, and teaching experience with disabled students).

Rizzo (1984b) suggested that age was a significant factor affecting teacher attitude because younger, more recent graduates might have been more informed on the policies of inclusion and the federal IDEA law. Rizzo provided two explanations for the significance of coursework. First, he suggested that teachers with favorable attitudes toward working with disabled students might have chosen to take additional coursework. Second, experiences of physical education teachers in additional courses might have offered them methodology that provided successful adaptations for disabled students in their regular classes. Rizzo (1984b) concluded by saying that additional research should be conducted to further examine the attitudes of physical education teachers toward working with disabled students in their regular classes.

Rizzo and Wright (1988) conducted a study in which they extended the attitude-attribute relationship by surveying 250 high school physical education teachers from a large midwestern urban school district, using the PEATH. Teachers were randomly selected, and of the 250 contacted, 136 responded (54%). Teachers responded on a 5-point Likert scale to 22 belief statements and answered seven demographic questions pertaining to teacher attributes. The choices on the 5-point Likert scale were identical to the scale used by Rizzo's 1984A and 1984b study.

Rizzo and Wright (1988) examined the relationship of teacher attitude to the following teacher attributes: (a) gender, (b) highest degree earned, (c) age, (d) courses taken in physical education for handicapped students, (e) special education courses taken for the handicapped, (f) years of teaching the handicapped, and (g) teacher's perceived competence in teaching handicapped students. Of the seven attributes examined, the only one that influenced teachers' attitudes toward teaching handicapped students was perceived teacher competence ($F=13.44$, $p< .00$). Results showed no significant relation between teachers' attitudes and the other six attributes.

The study did, however, show a non-significant relationship between perceived competency and the number of years experience and academic coursework.

Rizzo and Wright (1988) concluded by saying that the significance of teacher perceived competence in promoting favorable attitudes toward working with disabled students should be considered by teacher education programs in higher-education. They felt that it was reasonable to conclude that more experience and knowledge offered in college programs might provide teachers with information that would allow them to feel more competent. Researchers suggested that further studies would need to be completed to determine the impact of experience and knowledge on teachers' attitudes.

In a fourth study, Rizzo and Vispoel (1991) surveyed 94 physical education teachers. They used a revised-version of the original survey (PEATH-II) and asked the following questions:

1. Which of the selected teacher attributes (the same seven mentioned in the previous study) were related to teachers' attitudes toward working with handicapped students?
2. Which of these seven attributes were the best predictor(s) of positive attitudes toward teaching handicapped students?
3. How did the type of handicap (educable mentally retarded, behavioral disordered or learning disabled) affect the attitudes of teachers toward working with handicapped students?

Results of the study indicated that attitudes had a significant positive correlation with years of teaching physical education to students with handicaps, and a negative correlation with years of teaching experience. Rizzo and Vispoel (1991) also found that perceived competence was the teacher attribute that related the strongest to attitudes. This information was consistent with the previous study done by Rizzo and Wright (1988).

Teachers' coursework in adapted physical education classes and their years of experience teaching the handicapped had significant positive correlations with perceived competence. The last major finding of this study was that physical education teachers had a more favorable attitude toward working with learning

disabled students (mean=3.2) than they did for teaching the educable mentally retarded (mean=2.8) and the behavioral disordered (mean=2.7).

Rizzo and Wright (1988) concluded by suggesting that future studies should be conducted that examined a more diverse and representative sample of physical education teachers. They also felt that more questions (instead of one for the current study) should be asked to calculate teachers' perceived competence.

The last study to be discussed by Rizzo was conducted by Block and Rizzo in 1995. They used PEATID-III, to conduct their research. They surveyed 150 public school physical education teachers (K-12) from suburban school districts in a midwestern state. The purpose of the study was to assess the relationship between teacher attitudes and the following seven attributes: teaching assignment, teaching level, coursework in adapted physical education, coursework in special education, years teaching students with disabilities, quality of teaching experience, and perceived competence in teaching students with disabilities). Of the 150 surveyed, 91(61%) responded. A forward stepwise multiple regression analysis was used to identify and assess the relationship between teachers' attitudes and teacher attributes.

Teachers were asked to respond to questions about working with students who had severe and profound disabilities. They were given a definition for both types of disabilities. Severely disabled students were described as needing

extensive support to participate in the regular class setting. They had the ability to respond favorably to training and education when given proper instruction, adaptations for activities and equipment, and adequate support services. Profoundly students were described as having severe physical and communication deficits and severe medical and behavior problems, and they were compared to newborn infants when referring to their lack of abilities.

Physical education teachers viewed working with severely disabled students (mean=3.03) more favorably than they viewed working with profoundly disabled students (2.49). The study showed an association between academic preparation and a positive attitude toward teaching disabled students. In regard to teaching severely disabled students, the study showed that perceived quality of teaching experience ($F=17.66$, $p< .001$) and coursework in adapted physical education ($F=12.67$, $p< .001$) were the strongest attributes related to attitudes. Increased coursework in special education ($F=13.47$, $p< .001$) and higher scores in perceived teaching competence $F=10.02$, $p< .001$) were related to positive attitudes for teaching profoundly disabled students.

Block and Rizzo (1995) concluded that teacher preparation institutions should provide programming for future physical educators in the area of severe and profound disabilities. Researchers stated that school systems should plan carefully for the severely and profoundly disabled to be included in regular physical education classes due to the lack of enthusiasm from teachers. They also suggested that teachers would need training to develop a safe and

satisfying environment for severe and profound students in regular physical education classes. Finally, they stated that future studies should include a more diverse and representative sample of physical education teachers to assess relationships between attitudes and selected attributes more accurately.

Summary

Section one of chapter two was a review of related literature on teachers' perceptions of the REI, mainstreaming, and inclusion. Teachers' positive and negative perceptions of REI, mainstreaming, and inclusion were noted. Teachers also expressed many needs and concerns regarding the education of disabled students in regular classes.

In three studies, regular teachers expressed beliefs that disabled students should receive all or most of their education in a segregated setting. Teachers indicated that the regular class setting could not adequately address all of the instructional needs of disabled students.

Several themes emerged with regard to teacher concerns and needs related to mainstreaming, inclusion, and the REI:

1. Five studies revealed that regular education teachers were concerned about the number of disabled students that might be placed in their regular classes. Teachers surveyed said that too many disabled students in their regular classes would prevent teachers from meeting curriculum goals established for non-disabled students.

2. Regular teachers in five studies expressed a lack of knowledge, confidence to serve disabled students in regular classes, and necessary skills to adapt instruction.
3. Three studies reported findings indicating that teachers desired in-service training for working with disabled students in their regular classes.
4. Over half of the studies reviewed in section one found that regular teachers expressed a need for support services to provide instruction for disabled students in their regular classes. Consultation with special education teachers, placement of teaching assistants in regular classes, and additional materials and facilities were support services mentioned.

Section two of chapter two was a review of related research on teachers' suggestions for successful mainstreaming and inclusion programs. The first suggestion was for regular teachers to have a positive attitude and a commitment to working with all students regardless of ability or disability. The second suggestion was for teachers to have flexible personalities and a willingness to make changes in instructional delivery. Suggestion three was for teachers to spend time working with special education and support staff. The fourth suggestion was for teachers to attend M-team meetings in order to have input into the education plan for each disabled student they serve in the regular class. The last suggestion for successful inclusion of disabled students in

regular classes was for teachers to attend training sessions to help them adapt and modify instruction for disabled students.

Section three of chapter two was an explanation of the theory behind the current study's research instrument. In the Theory of Reasoned Action, Ajzen and Fishbein (1980) concluded that attitudes correlated with behavior only when attitude measures closely matched a behavior that was being examined. They theorized that attitude toward a behavior could be measured by a person's responses to several belief statements called behavioral beliefs. These behavioral beliefs measured a person's intentions about performing a behavior. A person would respond to each behavioral belief according to his/her agreement or disagreement with the statement. They suggested that beliefs influence attitudes, attitudes influence intentions, and intentions influence behavior.

The review of literature in section four discussed survey instrumentation used to examine attitudes of regular and special education teachers toward working with disabled students. Six instruments were found to measure regular classroom teachers' and special education teachers' attitudes toward working with disabled students in regular classes. The following attitudinal areas were measured:

1. beliefs, skills, and practices;

2. positive and negative feelings;
3. agreement or disagreement with mainstreaming policies;
4. perceptions and opinions surrounding REI, and
5. willingness to teach disabled students and adapt instruction for disabled students.

Two instruments were found that examined attitudes of physical education teachers toward teaching disabled students. The first instrument was a revised version of a survey designed to investigate teachers' expectations for disabled students, teachers' perceptions of different disability labels, and teachers' perceived ability to work with disabled students. The second instrument was created and revised by Dr. Terry Rizzo to examine relationships between attitudes of physical education teachers toward working with disabled students and selected teacher attributes. Rizzo's instrument remained consistent with the previously mentioned Theory of Reasoned Action (1980).

Section five of chapter two addressed the relationship between physical education teacher attitudes toward teaching disabled students in regular classes and selected teacher attributes. This portion of the review of literature served as the foundation for the present study. Results from the seven studies differed. Aloia, Knutson, Miner, and Van Seggarn (1980) found that female teachers had more favorable attitudes toward disabled students than male

teachers did. None of the other researchers found gender to affect attitude toward disabled students.

Rizzo (1984a) determined that age and coursework about disabled students outside of physical education were significantly related to teacher attitude. In a second study, Rizzo (1984b) also found that coursework outside of physical education was significantly related to teacher attitude. No other study found teacher age to significantly affect attitude.

A common theme was found in the studies by Rizzo and Wright (1988) and Rizzo and Vispoel (1991). In these two investigations, perceived competence was the attribute most related to physical education teachers' attitudes toward working with disabled students. Teachers with the most favorable attitudes toward working with disabled students had the highest score for perceived competence to work with disabled students in their regular classes. Block and Rizzo (1995) also indicated that perceived competence had an effect on teacher attitude, but only for the teaching of the profoundly mentally disabled.

Block and Rizzo's (1995) research was the only study that examined attitudes toward working with severe and profound disabilities. Their study found that perceived quality of teaching experience and an increase in adapted physical education coursework positively affected teachers' attitudes toward working with severely mentally disabled students. Larrivee and Cook (1979) found similar evidence that perceived competence to work with disabled students significantly affected attitudes of regular education teachers.

Block and Rizzo (1995) found that an increase in number of special education courses positively affected attitudes of physical education teachers toward profoundly mentally disabled students. No other studies found this variable to be significant.

Only Larrivee and Cook (1979) examined the relationship between regular teacher attitude toward working with disabled students and the following variables: administrative support, class size, school size, and type of school community. Administrative support was the only teacher attribute that significantly affected teacher attitude toward working with disabled students in regular classes.

The results of the studies on the relationships between attitudes of physical education teachers and teacher attributes demonstrated three main points. First, there was a lack of conclusive evidence about attitudes of physical education teachers toward teaching disabled students. Second, few studies had examined similar variables or similar disabilities. Third, few studies had been conducted on attitudes of physical education teachers toward disabled students in regular classes.

CHAPTER 3

METHODOLOGY

Chapter three is organized into three sections. The first section describes the general purpose of the study and the three research questions the study was designed to answer. Section two describes the research instrument that was utilized in the study. The final section describes the procedures that were used to implement the study.

Purpose of the Study

The purpose of the study was to examine the relationship between attitudes of public school physical education teachers (K-12) toward students with disabilities at different grade levels and selected teacher attributes. The five disabilities included were specific learning disabled, mild-moderate mentally impaired, moderate-severe mentally impaired, emotional/behavioral disordered, and physically impaired. The two grade levels for disabled students were K-5 and 6-12. These two groups were collapsed from original data. The independent variable of grade level was originally divided into seven groups: K-3, K-5, K-8, 3-5, 6-8, 9-12, and K-12. Chi-squares could not be calculated for grade level because of the proportions in the seven groups. The study was planned and implemented to answer the following questions:

1. What are the attitudes of physical education teachers toward working with disabled students in regular classes and do teacher attitudes vary according to the different disabling conditions?
2. Do attitudes of physical education teachers toward working with disabled students vary according to grade level (K-5 and 6-12)?
3. How do attitudes of physical education teachers toward working with disabled students in regular classes vary according to:
   a. gender of the physical education teacher;
   b. age of the physical education teacher;
   c. highest degree earned by the physical education teacher;
   d. number of professional preparation courses completed in physical education for disabled students;
   e. number of professional preparation courses completed in general special education for disabled students;
   f. number of years teaching physical education;
   g. number of years teaching disabled students in physical education;
   h. number of M-team meetings attended;
   i. amount of support services received by the physical education teacher;
   j. perceived quality of teaching experience of the physical education teacher for working with disabled students

   and,

k. perceived competence of the physical education teacher toward working with disabled students in the regular class?

Current Study's Research Instrument

The instrument used to collect data for the current study was the PEATID-III (Physical Educators' Attitude Toward Teaching the Handicapped-III). PEATID-III was the second revision of a survey instrument modeled after the Theory of Reasoned Action (Ajzen and Fishbein, 1980) and developed by Dr. Terry L. Rizzo (1984a).

Minor changes were made by Rizzo in the PEATID-III from the PEATH to reflect language used to describe individuals with disabilities in current law and professional practice. "Disabling condition" replaced "handicapping condition," and "nondisabled" replaced "nonhandicapped" in the 12 belief statements in section one of the instrument. Rizzo (Block and Rizzo, 1995) explained that the changes did not affect the validity of the survey because the target behavior, context, and time in belief statements were not altered. He also stated that the survey remained consistent with Ajzen and Fishbein's Theory Of Reasoned Action (1980).

Six experts, all with doctoral degrees, made up the panel that established content validity for the PEATH (the original instrument). Four were physical education professors at a midwestern university, the fifth was an employee of the National Institute of Education, and the sixth a director of physical education

in a public school district. They were told the purpose of the questionnaire and asked to review the survey items for face validity. After making suggestions for improvements on several items, the panel concluded that the PEATH had sufficient face validity because the survey adequately sampled the attitudes of physical education teachers toward working with learning and physically handicapped students in regular classes.

Construct validity for PEATID-III was established by factor analysis (Rizzo and Wright, 1988). Alpha coefficients for PEATID-III were based on severe and profound disabilities and all items in Rizzo's 1993 study and were .89, .91, and .94 respectively. Evidence of further reliability related to PEATID-III are found in Rizzo's (1984a) study with the PEATH instrument.

PEATID-III was discovered by the current investigator in an article, "Attitudes and Attributes of Physical Educators Associated With Teaching Individuals With Severe and Profound Disabilities," written by Martin E. Block and Terry L. Rizzo (Block and Rizzo, 1995). Dr. Rizzo was contacted by Email and the investigator was sent the PEATID-III instrument.

The information sent by Dr. Rizzo contained the survey document, instructions for using the survey, and permission to use the PEATID-III (Appendix A). In this document Rizzo gave permission to add or delete disability types and/or demographic information as needed by the investigator. Rizzo (1993) said that disability labels and demographic information could be altered to fit individual research needs. These changes did not affect validity of the survey

because the target behavior, context and time in belief statements would not be changed. The twelve statements regarding the teaching of the disabled were not modified for the current investigation.

This investigator made modifications in the current survey. Physical impairment was added to the disabilities examined and the following demographic questions were added. Teachers were asked to provide their highest degree held, number of M-team meetings attended, and amount of support services received.

A pilot study was conducted prior to the major investigation. Surveys were given to five physical education teachers: two elementary, one middle, and two high school. Teachers were asked to read the survey and give suggestions for corrections, additions, or deletions. All five teachers returned the survey with no suggestions for changes.

Following is a description of the modified survey used in the current study (Appendix B). The first portion of the PEATID-III included 12 statements with blanks provided for the physical education teacher to insert each of the five disabilities. For example, "Teaching students labeled _____ in my regular physical education classes will motivate nondisabled students to learn to perform motor skills." Under each of the 12 statements, the five disabilities were listed along with a 5-point Likert scale. The physical education teacher was asked to read each statement, placing each disability into the blank, and choose SD= strongly disagree; D = disagree; U = undecided; S = agree; and SA =

strongly agree. Responses for questions 1-60 for all 97 physical education teachers were entered into the SPSS (Statistical Product Service Solutions) statistical program (Appendix C). The second portion of the survey instrument consisted of twelve selection-type or open-ended questions about demographics, information about teaching experience, and the physical education teachers' perception of their competence and quality of teaching disabled students.

Procedures for the Study

Procedures for Data Collection

Five counties in East Tennessee, representing suburban and rural student populations were chosen to participate in the study. A letter was sent to each school superintendent or other designated school representative requesting permission to survey all K-12 physical education teachers (Appendix D). Each of the five counties gave permission, in the form of a letter to the investigator, to survey all of their physical education teachers (K-12). After receiving authorization to conduct the study, a letter requesting participation in the study (Appendix D), a copy of the questionnaire, and a return stamped envelop addressed to the investigator was distributed to each physical education teacher (K-12) in the five East Tennessee counties by the designated person in each county. Questionnaires were color coded by county to determine the return rate so that additional contact could be made if necessary.

School systems provided the names of all (K-12) physical education teachers and the name of the school where they taught. The number of physical education teachers identified by each school system determined the number of surveys sent to each county. Following are the number of surveys that were sent to each county: county one – 20; county two – 27; county three – 32; county four – 14, and county five – 137. The surveys were hand-delivered or mailed to designated school officials. County four's surveys were mailed, and all other counties' surveys were hand-delivered. At the end of a two-week time period, it was determined by the return rate of 35% that additional contact should be made to all five counties. Teachers were promised anonymity. A personal fax (appendix D) was sent to each physical education teacher that had been previously contacted. The faxed message to each physical education teacher increased the return rate from 35% to 42%. The final return rate by county was as follows: county one – 60%; county two – 59.3%; county three – 46.8%; county four – 35.7% and county five – 35.8%. After receiving the surveys, data were entered into the SPSS statistical program on a personal computer. Responses to the open-ended question concerning support provided for all physical education teachers were reported in the results section of this document.

Description of the Sample

Participants in the survey were 97 public school physical education teachers (K-12) from five East Tennessee suburban/rural counties. They consisted of 43 females and 54 males. Physical education teachers were asked to respond to twelve selection-type or open-ended questions about demographics, information about teaching experience and the PE teacher's perception of their competence and quality of teaching.

Forty-three females responded to the survey. The average number of years teaching experience for females was 16.7, and years of teaching the disabled was 13 years. The average age of female physical education teachers participating in the study was 42.4 years.

Of the women participating in the study, nineteen (44.2%) held a bachelor's degree. Nineteen (44.2%) held a master's degree and five (11.6%) had completed forty-five hours or more above a masters.

Of the forty-three women responding to the survey, forty (93%) stated that they had taken an adapted physical education course. Three women did not respond to the question. Twenty-one women (49%) had taken coursework relating to the disabled outside of physical education, and seventeen (40%) had taken no additional coursework outside of physical education. Five women did not respond to this question.

Twenty-nine women (67%) said that they attended all (n=2) or some (n=27) of their disabled student's M-team meetings. Eleven (26%) had attended none of the meetings. Three women did not respond to this question.

Twenty-five (58%) women indicated that they received some type of support services, and fourteen (33%) received no support services. Four women did not respond to this question.

Thirty-eight women (88%) rated their quality of teaching the disabled as satisfactory (n=27) or very satisfactory (n=11). Two women (5%) indicated that their quality of teaching the disabled was not good. Three of the women did not respond to this question.

Twenty-three women (53%) rated their competency to teach disabled students as somewhat competent. Seventeen (40%) said that they felt very competent to work with the disabled. Three women did not respond to this question.

Fifty-four males responded to the survey. The average years of teaching experience for the males were 14.6, and years of teaching the disabled were 10.0 years. The average age of male physical educators participating in the study was 41.8 years.

Of the men participating in the study, twenty-one (39%) held a bachelor's degree. Twenty-two (41%) held a master's degree, and ten (19%) had completed forty-five hours or more above a master's degree.

Of the fifty-four men responding to the survey, forty-six (85%) stated that they had taken an adapted physical education class, and four (7%) had not. Four men did not respond to this question. Twenty-five men (46%) had taken coursework relating to the disabled outside of physical education, and twenty-five (46%) had taken no additional coursework outside of physical education. Four men did not respond to this question.

Forty men (74%) said that they attended all (n=3) or some (n=37) of their disabled student's M-team meetings. Nine (17%) had attended no M-team meetings. Five men did not respond to this question.

Thirty-two men (59%) indicated that they received some type of support services, and seventeen (31%) indicated that they received no support services. Five men did not respond to this question.

Forty-five men (83%) rated their quality of teaching the disabled as satisfactory (n=35) or very satisfactory (n=10). Three men (6%) rated the quality of their teaching the disabled as "not good". Six men did not respond to this question.

Thirty-five (65%) of the men rated their competency teaching the disabled as somewhat competent, and thirteen (24%) said that they felt very competent to work with disabled students. Six men did not respond to this question. Table 1 depicts the frequency distribution of physical education teachers according to selected demographic variables.

Table 1

Frequency Distribution of Physical Educators According to Selected Demographic Variables

	Frequency	Proportion		Frequency	Proportion
Females (n=43)			Males (n=54)		
Age			Age		
25-28	5	11%	24-28	8	15%
29-33	3	7%	29-33	4	8%
34-38	3	7%	34-38	11	20%
39-43	8	19%	39-43	4	8%
44-48	15	35%	44-48	9	16%
49-52	7	16%	49-52	11	20%
54-57	2	5%	54-58	7	13%
Years Teaching			Years Teaching		
1 – 5	6		1 – 5	12	
6 – 10	4		6 – 10	13	
11 – 15	9		11 – 15	8	
16 – 20	7		16 – 20	4	
21 – 25	10		21 – 25	5	
26 – 35	5		26 – 30	9	
31 – 33	2		31 – 33	3	
Grade Level Taught			Grade Level Taught		
K – 3	6		K – 3	2	
K – 5	16		K – 5	7	
K – 8	1		K – 8	3	
6 – 8	10		6 – 8	18	
9 – 12	8		9 – 12	22	
3 – 5	2		3 – 5	1	
K – 12	0		K – 12	1	

Females (n=43)	Frequency	Males (n=54)	Frequency
Years Teaching the Disabled		Years Teaching the Disabled	
none	0	none	1
1 – 5	11	1– 5	15
6 – 10	6	6 – 10	20
11 – 15	8	11 – 15	7
16 – 20	6	16 – 20	4
21 – 25	9	21 – 25	3
26 – 30	1	26 – 30	2
30 – 33	2	30 – 33	2
Highest Degree Held		Highest Degree Held	
Bachelor	19	Bachelor	21
Masters	19	Masters	22
Above a Masters	5	Above a Masters	11
Courses on the Disabled in PE		Courses on the Disabled in PE	
Yes	40	Yes	46
No	0	No	4
Courses on the Disabled Outside of PE		Courses on the Disabled Outside of PE	
Yes	21	Yes	25
No	17	No	25
M-team Meetings Attended		M-team Meetings Attended	
All	2	All	3
Some	27	Some	37
None	11	None	9

Females (n=43)	Frequency	Males (n=54)	Frequency
Receive Support		Receive Support	
Yes	25	Yes	32
No	14	No	17
Perceived Quality of Teaching		Perceived Quality of Teaching	
No Experience	0	No Experience	0
Not Good	2	Not Good	3
Satisfactory	27	Satisfactory	35
Very Good	11	Very Good	10
Perceived Competence Teaching the Disabled		Perceived Competence Teaching the Disabled	
Not At All	0	Not At All	0
Somewhat	23	Somewhat	35
Very	17	Very	13

Construction of Respondent Groups

Cross tabulation procedures were used to tabulate demographic variables into categories to determine goodness-of-fit. This goodness-of-fit test compared the observed and expected frequencies in each category to test if all categories contained the same proportion of values or that each category contained a user-specified proportion of values. The cross tabulation tests produced groups that were not proportioned for effective testing of significance. Therefore, variables (selected independent and all dependent) were collapsed to make the following new groups that were used to calculate chi-square and ANOVA tests. The following independent variables were collapsed into new groups based on cross-tabulation tests:

a. age,
b. years teaching physical education,
c. years teaching disabled students,
d. highest degree held,
e. grade level taught,
f. number of M-team meetings attended,
g. perceived quality of teaching disabled students,
h. perceived competence to teach disabled students.

All five disabilities (dependent variables) were also collapsed. Following is a description of the collapsed groups with the percentages found for each one.

Age was divided into three groups. Ages 21 to 33 were placed into group one (n=20, 20.6%), ages 34 to 46 into group two (n=36, 37.1%), and ages 47 to 55 into group three (n=41, 42.3%).

Total years of teaching physical education was divided into two groups. Teachers with 1 to 15 years were placed into group one (n=52, 53.6%), and those with 16 or more years of experience were put into group two (n=45, 46.4%).

Total number of years teaching disabled students was divided into two groups. Teachers with 1 to 15 years were placed into group one (n=67, 69.1%), and those with 16 or more years of experience were put into group two (n=29, 29.9%). One (1%) person did not respond to this question.

The highest degree held by physical education teachers was divided into two groups. Those with a bachelor's degree were put into group one (n=40, 41.2%), and teachers with a master's degree or above went into group two (n=57, 58.8%).

Disabled students' grade level was collapsed by putting K-5th into group one (n=37, 38.1%) and 6-12th into group two (n=58, 59.8%). Two (2.1%) people did not respond to this question.

M-team meetings attended by physical education teachers was divided into two groups with all or some meetings attended placed into group one (n=69, 71.1%) and no meetings attended put into group two (n=20, 20.6%). Eight (8.2%) people did not respond to this question.

Teachers' perceived quality of teaching disabled students was divided into group one (n=5, 5.2%) containing those who perceived their quality as satisfactory and group two (n=83, 85.6%) with those perceiving their quality as very good. Nine (9.3%) people did not respond to this question.

Perceived competency for teaching disabled students was divided into the following two groups. Teachers who felt somewhat competent were placed into group one (n=58, 59.8%), and those who felt very competent were put into group two (n=30, 30.9%). Eight (9.3%) people did not respond to this question.

All five disabilities (dependent variables) were collapsed into two groups based on the average scale mean attitude score for each physical education teacher. Mean scores of less than three were put into group one, and mean scores of three or greater were placed into group two.

Forty-five teachers were placed into group one and 49 into group two for specific learning disabled (1=46.4% and 2=50.5%). Three (3.1%) people did not respond to the questions pertaining to learning disabled students.

Forty-six teachers were placed into group one, and 46 were placed into group two for mild-moderate mentally impaired (1=47.4% and 2=47.4%). Five (5.2%) people did respond to questions pertaining to mild-moderate mentally impaired students.

Forty-five teachers were placed into group one, and 48 were placed into group two for moderate-severe mentally impaired (1=46.4% and 2=49.5%).

Four (4.1%) people did not respond to questions pertaining to moderate-severe mentally impaired students.

Forty-seven teachers were placed into group one, and 47 were placed into group two for emotional/behavioral disordered (1=48.5% and 2=48.5%). Three (3.1%) people did not respond to questions pertaining to emotional/behavioral disordered students.

Forty-seven teachers were placed into group one, and 46 teachers were placed into group two for physically impaired (1=48.5% and 2=47.4%). Four (4.1%) people did not respond to questions pertaining to physically impaired students.

Several independent variables were not collapsed because physical education teachers were asked to respond with a yes/no answer and a male/ female answer. The independent variables that were not collapsed included gender, support received by physical education teachers, courses taken in physical education for disabled students, and courses taken in general special education. Table 2 depicts the frequency distribution of physical education teachers' selected collapsed demographic variables and the dependent variables.

Table 2

Frequency Distribution of Physical Education Teachers
According to Selected Collapsed Demographic Variables

Independent Variables	Frequency	Proportion
Age		
21-33	20	20.6%
36-46	36	37.1%
47-55	41	42.3%
Total Years Teaching Physical Education		
1 – 15 years	52	53.6%
15 or more years	45	46.4%
Total Years Teaching Disabled Students		
1 – 15	67	69.1%
15 or more years	29	29.9%
Highest Degree Held		
Bachelor's Degree	40	41.2%
Master's Degree or Above	57	58.8%
Grade Level Taught		
Grades K-3, K-5, K-5, and 3-5	37	38.1%
Grades 6-8 and 9-12	58	59.8%
M-team Meetings Attended		
All or Some	69	71.1%
None	20	20.6%
Perceived Quality of Teaching The Disabled		
Satisfactory	5	5.2%
Very Good	83	85.6%
Perceived Competency for Teaching The Disabled		
Somewhat Competent	58	59.8%
Very Competent	30	30.9%

Dependent Variables	Frequency	Proportion
Disabilities		
Learning Disabled		
mean scores – (0-2.92)	45	46.4%
mean scores – (3-4.67)	49	50.5%
Emotionally Disturbed		
mean scores – (0-2.92)	47	48.4%
mean scores - (3-4.50)	47	48.5%
Mild-moderate mentally impaired		
mean scores – (0 - 2.92)	46	47.4%
mean scores - (3 - 4.67)	46	47.4%
Moderate-severe mentally impaired		
mean scores – (0 – 2.92)	45	46.4%
mean scores - (3 – 4.33)	48	49.5%
Physically Impaired		
mean scores - (0 - 2.92)	47	48.5%
mean scores - (3 - 4.33)	46	47.4%

Treatment of the Attitudinal Data

Responses from physical education teachers on the PEATH-III were decoded from the acronyms (SD, D, U, A and SA) to numerical values and entered into the SPSS (Statistical Product Service Solutions) program. Suggestions for scoring of the belief statements was found in the instruction portion of the PEATID-III sent of Dr. Rizzo. For questions 1-20 and 56-60, the acronyms were given the following numbers: SD=1, D=2, U=3, A=4 and SA=5. For these questions, a response of "A" or "SA" reflected a favorable attitude toward working with the disabled. For questions 21-55, the acronyms were given the following numbers: SD=5, D=4, U=3, A=2 and SA=1. For these questions, "D" AND "SD" reflected a favorable attitude toward working with the disabled.

Based on Rizzo's method of scoring on his PEATID-III instrument, a total attitude score was calculated for each physical education teacher for each disability in the current study. This attitude score was calculated by adding the responses from each teacher to the 12 belief statements for each disability. The possible overall attitude score values on the PEATID-III ranged from a low of twelve (strong disagreement with teaching disabled students in regular classes) to thirty-six (undecided about teaching disabled students) to sixty (strong agreement about teaching disabled students). Next, average scale mean attitude scores were calculated by dividing the total attitude score for each disability by 12 (number of belief statements). Rizzo (1993) suggested this method in order to interpret attitude scores around the original 5-point Likert

scale. The current study had an added scoring dimension. A mean attitude score was calculated for each of the twelve belief statements. The range for all mean attitude scores varied from:

a. one (strong unfavorable attitude toward teaching disabled pupils in regular physical education classes);
b. two (unfavorable attitude toward teaching disabled pupils in regular physical education classes);
c. three (undecided about teaching disabled students in regular classes);
d. four (favorable attitude toward teaching disabled students in regular classes) to
d. five (strong favorable toward teaching disabled students in regular classes).

For the current study, the following terms were used to describe the attitudes of physical education teachers based on their average scale mean attitude scores for each disability:

1. Slightly favorable attitude = 3.1 to 3.9
2. Slightly unfavorable attitude = 2.1 to 2.8
3. Slightly undecided attitude = 2.9 to 3.01

Summary

This chapter included the general purpose of the study and the three research questions the study was designed to answer. The chapter also included a description of the survey research instrument used in the current study. The remainder of the chapter included the following information on procedures used to implement the study: data collection, description of the sample, and treatment of the data. The study population consisted of 97 physical education teachers (K-12) from five East Tennessee counties. Further, several adjustments were made to the instrument and data analysis procedures previously used by Rizzo who develop the PEATID-III. These modifications were: physical impairment was added to the disabilities examined and three additional demographic questions were included in the current study.

CHAPTER 4

FINDINGS

The purpose of this study was to examine the relationship between attitudes of public school physical education teachers (K-12) toward students with disabilities at different grade levels and selected teacher attributes. Presented in this chapter are the results of the data collection procedures as outlined in chapter three. Results will be organized according to research questions. Chi-square tests and Analysis of Variance (ANOVA) tests were used in the data analysis. A confidence level of .05 was used for all tests of significance.

Research Question One

"What are the attitudes of physical education teachers toward working with disabled students in regular classes and do theses attitudes vary according to the disabling conditions?"

The five disabilities studied were as follows: Specific Learning Disability (LD), Emotional/Behavioral Disorder (BD), Mild-Moderate Mental Impairment (MMR), Moderate-Severe Mental Impairment (SMR), and Physical Impairment (PI). Frequencies were tabulated for all five disabilities according to physical education teachers' responses to the twelve belief statements. The belief statements provided twelve constructs that were tabulated into an average scale mean

attitude score for each disability. Data for each belief statement were discussed for each disability.

Construct One: "One advantage of teaching students labeled _____ in my regular physical education classes with non-disabled students is that all students will learn to work together toward achieving goals."

For LD students, 61 (62.9%) agreed, 16 (16.5%) strongly agreed, 6 (6.2%) disagreed, 5 (5.2%) strongly disagreed, 7 (7.2%) were undecided, and 2 (2.1%) did not respond to the statement. The mean score for belief statement one for LD students was 3.7320.

For MMR students, 55 (56.7%) agreed, 15 (15.5%) strongly agreed, 9 (9.3%) disagreed, 4 (4.1%) strongly disagreed, 9 (9.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement one for MMR students was 3.5464.

For PI students, 41 (42.3%) agreed, 21 (21.6%) strongly agreed, 13 (13.4%) disagreed, 5 (5.2%) strongly disagreed, 13 (13.4%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement one for PI students was 3.4948.

For BD students, 35 (36.1%) agreed, 8 (8.2%) strongly agreed, 27 (27.8%) disagreed, 20 (20.6%) strongly disagreed, 2 (2.1%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement one for BD students was 2.6804.

For SMR students, 25 (25.8%) agreed, 8 (8.2%) strongly agreed, 28 (28.9%) disagreed, 13 (13.4%) strongly disagreed, 18 (18.6%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement one for SMR students was 2.7113.

Physical education teachers' responses to belief statement one indicated they slightly agreed that an advantage of teaching students labeled LD, MMR, and PI in their regular physical education classes with non-disabled students was that all students would learn to work together toward achieving goals. Teachers slightly disagreed that all students would learn to work together toward achieving goals in regular classes that included SMR and BD students.

Construct Two: "Teaching students labeled _____ in my regular physical education classes will motivate non-disabled students to learn to perform motor skills."

For LD students, 35 (36.1%) agreed, 5 (5.2%) strongly agreed, 27 (27.8%) disagreed, 13 (13.4%) strongly disagreed, 13 (13.4%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement two for LD students was 2.7938.

For MMR students, 29 (29.9%) agreed, 9 (9.3%) strongly agreed, 27 (27.8%) disagreed, 14 (14.4%) strongly disagreed, 13 (13.4%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement two for MMR students was 2.7629.

For PI students, 34 (35.1%) agreed, 14 (14.4%) strongly agreed, 25 (25.8%) disagreed, 10 (10.3%) strongly disagreed, 12 (12.4%) were undecided, and 2 (2.1%) did not respond to the statement. The mean score for belief statement two for PI students was 3.1134.

For BD students, 18 (18.6%) agreed, 2 (2.1%) strongly agreed, 33 (34%) disagreed, 25 (25.8%) strongly disagreed, 14 (14.4%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement two for BD students was 2.2165.

For SMR students, 22 (22.7%) agreed, 7 (7.2%) strongly agreed, 34 (35.1%) disagreed, 14 (14.4%) strongly disagreed, 18 (18.6%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement two for SMR students was 2.5773.

Physical education teachers' responses to belief statement two indicated that physical education teachers slightly disagreed that non-disabled students would be more motivated to learn to perform motor skills in regular classes that included LD, MMR, BD, and SMR students. Teachers were slightly favorable about non-disabled students being more motivated to learn to perform motor skills in regular classes that included PI students.

Construct Three: "Students labeled _____ will learn more rapidly if they are taught in my regular physical education class with non-disabled peers."

For LD students, 40 (41.2%) agreed, 20 (20.6%) strongly agreed, 18 (18.6%) disagreed, 6 (6.2%) strongly disagreed, 9 (9.3%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement three for LD students was 3.3918.

For MMR students, 38 (39.2%) agreed, 21 (21.6%) strongly agreed, 16 (16.5%) disagreed, 7 (7.2%) strongly disagreed, 11 (11.3%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement three for MMR students was 3.3918.

For PI students, 31 (32%) agreed, 11 (11.3%) strongly agreed, 25 (25.8%) disagreed, 9 (9.3%) strongly disagreed, 17 (17.5%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement three for PI students was 2.9897.

For BD students, 23 (23.7%) agreed, 11 (11.3%) strongly agreed, 27 (27.8%) disagreed, 13 (13.4%) strongly disagreed, 19 (19.6%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement three for BD students was 2.7938.

For SMR students, 20 (20.6%) agreed, 6 (6.2%) strongly agreed, 29 (29.9%) disagreed, 14 (14.4%) strongly disagreed, 23 (23.7%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement three for SMR students was 2.5876.

Physical education teachers' responses to belief statement three indicated that physical education teachers slightly agreed that LD and MMR students would

learn more rapidly if they were taught in regular physical education classes with non-disabled peers. Teachers were undecided about PI students and they slightly disagreed that BD and SMR would learn more rapidly if they were taught in regular physical education classes with non-disabled peers.

Construct Four: "Students labeled _____ will develop a more favorable self-concept as a result of learning motor skills in my regular physical education class with non-disabled peers."

For LD students, 58 (59.8%) agreed, 14 (14.4%) strongly agreed, 7 (7.2%) disagreed, 4 (4.1%) strongly disagreed, 11 (11.3%) were undecided, and 3 (3.1%) did not respond to the statement. The mean score for LD students for belief statement four was 3.6392.

For MMR students, 51 (52.6%) agreed, 13 (13.4%) strongly agreed, 10 (10.3%) disagreed, 4 (4.1%) strongly disagreed, 13 (13.4%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for MMR students for belief statement four was 3.4227.

For PI students, 46 (47.4%) agreed, 13 (13.4%) strongly agreed, 14 (14.4%) disagreed, 5 (5.2%) strongly disagreed, 15 (15.5%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement four for PI students was 3.3711.

For BD students, 41 (42.3%) agreed, 12 (12.4%) strongly agreed, 9 (9.3%) disagreed, 12 (12.4%) strongly disagreed, 18 (18.6%) were undecided, and 5

(5.2%) did not respond to the statement. The mean score for belief statement four for BD students was 3.1753.

For SMR students, 37 (38.1%) agreed, 9 (9.3%) strongly agreed, 20 (20.6%) disagreed, 8 (8.2%) strongly disagreed, 15 (15.5%) were undecided, and 7 (7.2%) did not respond to the statement. The mean score for belief statement four for SMR students was 2.9792.

Physical education teachers' responses to belief statement four indicated that physical education teachers slightly agreed that LD, MMR, PI, and BD students would develop a more favorable self-concept as a result of learning motor skills in regular physical education classes with non-disabled peers. Teachers were undecided about SMR students developing a more favorable self-concept as a result of learning motor skills in regular physical education classes with non-disabled peers.

Construct Five: "Students labeled _____ will not be accepted by their non-disabled peers in my regular physical education classes."

For LD students, 52 (53.6%) disagreed, 23 (23.7%) strongly disagreed, 6 (6.2%) agreed, 4 (4.1%) strongly agreed, 7 (7.2%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement five for LD students was 3.7113.

For MMR students, 50 (51.5%) disagreed, 24 (24.7%) strongly disagreed, 3 (3.1%) agreed, 2 (2.1%) strongly agreed, 10 (10.3%) were undecided, and 7

(7.2%) did not respond to the statement. The mean score for belief statement five for MMR students was 3.7423.

For PI students, 48 (49.5%) disagreed, 25 (25.8%) strongly disagreed, 6 (6.2%) agreed, 2 (2.1%) strongly agreed, 9 (9.3%) were undecided, and 7 (7.2%) did not respond to the statement. The mean score for belief statement five for PI students was 3.6907.

For BD students, 36 (37.1%) disagreed, 13 (13.4%) strongly disagreed, 18 (18.6%) agreed, 5 (5.2%) strongly agreed, 19 (19.6%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement five for BD students was 3.1649.

For SMR students, 43 (44.3%) disagreed, 18 (18.6%) strongly disagreed, 12 (12.4%) agreed, 4 (4.1%) strongly agreed, 13 (13.4%) were undecided, and 6. (6.2%) did not respond to the statement. The mean score for belief statement five for SMR students was 3.4845.

Physical education teachers' responses to belief statement five indicated they slightly disagreed that LD, MMR, PI, SMR, and LD students would not be accepted by their non-disabled peers in regular physical education classes. They were undecided about SMR students being accepted by their non-disabled peers in regular physical education classes.

Construct Six: "Students labeled _____ in my regular physical education classes with non-disabled students will disrupt the harmony of the class."

For LD students, 54 (55.7%) disagreed, 12 (12.4%) strongly disagreed, 10 (10.3%) agreed, 5 (5.2%) strongly agreed, 11 (11.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement six for LD students was 3.4433.

For MMR students, 51 (52.6%) disagreed, 12 (12.4%) strongly disagreed, 15 (15.5%) agreed, 3 (3.1%) strongly agreed, 10 (10.3%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement six for MMR students was 3.3711.

For PI students, 48 (49.5%) disagreed, 13 (13.4%) strongly disagreed, 21 (21.6%) agreed, 4 (4.1%) strongly agreed, 5 (5.2%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement six for PI students was 3.2784.

For BD students, 17 (17.5%) disagreed, 4 (4.1%) strongly disagreed, 34 (35.1%) agreed, 29 (29.9%) strongly agreed, 8 (8.2%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement six for BD students was 2.2062.

For SMR students, 30 (30.9%) disagreed, 5 (5.2%) strongly disagreed, 32 (33%) agreed, 11 (11.3%) strongly agreed, 13 (13.4%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement six for SMR students was 2.6701.

Physical education teachers' responses to belief statement six indicated they slightly disagreed that LD, MMR, and PI students would disrupt the harmony of

regular physical education classes with their non-disabled peers. Teachers slightly agreed that the harmony of regular physical education classes would be disrupted by SMR and BD students.

Construct Seven: "Having to teach students labeled _____ in my regular physical education classes with non-disabled students places an unfair burden on teachers."

For LD students, 51 (52.6%) disagreed, 9 (9.3%) strongly disagreed, 12 (12.4%) agreed, 6 (6.2%) strongly agreed, 13 (13.4%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement seven for LD students was 3.2784.

For MMR students, 48 (49.5%) disagreed, 7 (7.2%) strongly disagreed, 14 (14.4%) agreed, 8 (8.2%) strongly agreed, 14 (14.4%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement seven for MMR students was 3.1443.

For PI students, 36 (37.1%) disagreed, 10 (10.3%) strongly disagreed, 19 (19.6%) agreed, 14 (14.4%) strongly agreed, 12 (12.4%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement seven for PI students was 2.9072.

For BD students, 22 (22.7%) disagreed, 5 (5.2%) strongly disagreed, 31 (32%) agreed, 24 (24.7%) strongly agreed, 11 (11.3%) were undecided, and 5

(5.2%) did not respond to the statement. The mean score for belief statement seven for BD students was 2.3402.

For SMR students, 24 (24.7%) disagreed, 6 (6.2%) strongly disagreed, 34 (35.1%) agreed, 16 (16.5%) strongly agreed, 13 (13.4%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement seven for SMR students was 2.5670.

Physical education teachers' responses to belief statement six indicated they slightly disagreed that LD and MMR students placed an unfair burden on regular teachers. They slightly agreed that BD and SMR students placed an unfair burden on regular teachers. Physical education teachers were undecided about PI students placing an unfair burden on regular teachers.

Construct Eight: "As a physical education teacher I do not have sufficient training necessary to teach students labeled _____ with non-disabled students in my regular physical education classes."

For LD students, 47 (48.5%) disagreed, 12 (12.4%) strongly disagreed, 17 (17.5%) agreed, 8 (8.2%) strongly agreed, 8 (8.2%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement eight for LD students was 3.2371.

For MMR students, 44 (45.4%) disagreed, 11 (11.3%) strongly disagreed, 15 (15.5%) agreed, 9 (9.3%) strongly agreed, 13 (13.4%) were undecided, and 5

(5.2%) did not respond to the statement. The mean score for belief statement eight for MMR students was 3.1856.

For PI students, 34 (35.1%) disagreed, 13 (13.4%) strongly disagreed, 20 (20.6%) agreed, 13 (13.4%) strongly agreed, 11 (11.3%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement eight for PI students was 2.9588.

For BD students, 33 (34%) disagreed, 9 (9.3%) strongly disagreed, 24 (24.7%) agreed, 19 (19.6%) strongly agreed, 8 (8.2%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement eight for BD students was 2.7629.

For SMR students, 26 (26.8%) disagreed, 8 (8.2%) strongly disagreed, 29 (29.9%) agreed, 18 (18.6%) strongly agreed, 13 (13.4%) were undecided, and 3 (3.1%) did not respond to the statement. The mean score for belief statement eight for SMR students was 2.6701.

Physical education teachers' responses to belief statement eight indicated slight disagreement that they did not have sufficient training necessary to teach LD and MMR students in their regular classes. Teachers slightly agreed that they did not have sufficient training necessary to teach BD and SMR students and they were undecided about PI students.

Construct Nine: "Teaching students labeled _____ in my regular physical education classes with non-disabled students means more work for me."

For LD students, 34 (35.1%) disagreed, 2 (2.1%) strongly disagreed, 36 (37.1%) agreed, 10 (10.3%) strongly agreed, 11 (11.3%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement nine for LD students was 2.6907.

For MMR students, 22 (22.7%) disagreed, 3 (3.1%) strongly disagreed, 39 (40.2%) agreed, 12 (12.4%) strongly agreed, 15 (15.5%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement nine for MMR students was 2.4536.

For PI students, 13 (13.4%) disagreed, 2 (2.1%) strongly disagreed, 52 (53.6%) agreed, 16 (16.5%) strongly agreed, 9 (9.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement nine for PI students was 2.1546.

For BD students, 19 (19.6%) disagreed, 1 (1%) strongly disagreed, 41 (42.3%) agreed, 26 (26.8%) strongly agreed, 5 (5.2%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement nine for BD students was 2.1031.

For SMR students, 9 (9.3%) disagreed, 3 (3.1%) strongly disagreed, 54 (55.7%) agreed, 19 (19.6%) strongly agreed, 6 (6.2%) were undecided, and 6 (6.2%) did not respond to the statement. The mean score for belief statement nine for SMR students was 2.0206.

Physical education teachers' responses to belief statement nine indicated they slightly agreed that including LD, MMR and PI students in regular classes with non-disabled peers meant more work for teachers. Teachers agreed that including BD and SMR students meant more work for regular teachers.

Construct Ten: "Students labeled _____ should not be taught in regular physical education classes with non-disabled students because they require too much of my time."

For LD students, 51 (52.6%) disagreed, 20 (20.6%) strongly disagreed, 3 (3.1%) agreed, 4 (4.1%) strongly agreed, 16 (16.5%) were undecided, and 3 (3.1%) did not respond to the statement. The mean score for belief statement ten for LD students was 3.7320.

For MMR students, 42 (43.3%) disagreed, 18 (18.6%) strongly disagreed, 6 (6.2%) agreed, 4 (4.1%) strongly agreed, 22 (22.7%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement ten for MMR students was 3.5052.

For PI students, 37 (38.1%) disagreed, 15 (15.5%) strongly disagreed, 15 (15.5%) agreed, 7 (7.2%) strongly agreed, 18 (18.6%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement ten for PI students was 3.2371.

For BD students, 33 (34%) disagreed, 13 (13.4%) strongly disagreed, 15

(15.5%) agreed, 18 (18.6%) strongly agreed, 15 (15.5%) were undecided, and 3 (3.1%) did not respond to the statement. The mean score for belief statement ten for BD students was 2.9897.

For SMR students, 24 (24.7%) disagreed, 12 (12.4%) strongly disagreed, 30 (30.9%) agreed, 11 (11.3%) strongly agreed, 15 (15.5%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement ten for SMR students was 2.8041.

Physical education teachers' responses to belief statement ten indicated they slightly disagreed that LD, MMR, and PI students should not be taught in regular physical education classes with non-disabled students because they required too much of the teacher's time. Teachers were undecided about BD students not being taught in regular classes because of the time constraints on the teacher and they slightly agreed that SMR students should not be taught with their non-disabled peers in regular physical education classes because they required too much of the teacher's time.

Construct Eleven: "As a physical education teacher I need more course work and training before I feel comfortable teaching physical education classes with students labeled _____ with non-disabled students."

For LD students, 50 (51.5%) disagreed, 7 (7.2%) strongly disagreed, 21 (21.6%) agreed, 5 (5.1%) strongly agreed, 11 (11.3%) were undecided, and 3

(3.1%) did not respond to the statement. The mean score for belief statement eleven for LD students was 3.2475.

For MMR students, 38 (39.2%) disagreed, 7 (7.2%) strongly disagreed, 26 (26.8%) agreed, 6 (6.2%) strongly agreed, 16 (16.5%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement eleven for MMR students was 3.0206.

For PI students, 35 (36.1%) disagreed, 7 (7.2%) strongly disagreed, 34 (35.1%) agreed, 7 (7.2%) strongly agreed, 8 (9.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement eleven for PI students was 2.8557.

For BD students, 32 (33%) disagreed, 4 (4.1%) strongly disagreed, 30 (30.9%) agreed, 16 (16.5%) strongly agreed, 11 (11.3%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement eleven for BD students was 2.6495.

For SMR students, 24 (24.7%) disagreed, 6 (6.2%) strongly disagreed, 38 (39.2%) agreed, 13 (13.4%) strongly agreed, 11 (11.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement eleven for SMR students was 2.5567.

Physical education teachers' responses to belief statement eleven indicated they slightly disagreed that they needed more course work and training before they would feel comfortable teaching LD students in regular classes with non-disabled students. Teachers slightly agreed they needed more course work and

training to feel comfortable teaching BD and PI. Teachers were undecided about needing more course work and training before they felt comfortable teaching MMR students in regular classes with non-disabled students.

Construct Twelve: "Students labeled _____ should be taught with non-disabled students in my regular physical education classes whenever possible."

For LD students, 58 (59.8%) agreed, 15 (15.5%) strongly agreed, 5 (5.2%) disagreed, 5 (5.2%) strongly disagreed, 11 (711.3%) were undecided, and 3 (3.1%) did not respond to the statement. The mean score for belief statement twelve for LD students was 3.6598.

For MMR students, 52 (53.6%) agreed, 12 (12.4%) strongly agreed, 9 (9.3%) disagreed, 7 (7.2%) strongly disagreed, 9 (9.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement twelve for MMR students was 3.3918.

For PI students, 44 (45.4%) agreed, 7 (7.2%) strongly agreed, 19 (19.6%) disagreed, 6 (6.2%) strongly disagreed, 17 (17.5%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement twelve for PI students was 3.1546.

For BD students, 37 (38.1%) agreed, 9 (9.3%) strongly agreed, 20 (20.6%) disagreed, 17 (17.5%) strongly disagreed, 10 (10.3%) were undecided, and 4 (4.1%) did not respond to the statement. The mean score for belief statement twelve for BD students was 2.8866.

For SMR students, 27 (27.8%) agreed, 7 (7.2%) strongly agreed, 37 (28.9%) disagreed, 10 (10.3%) strongly disagreed, 11 (11.3%) were undecided, and 5 (5.2%) did not respond to the statement. The mean score for belief statement twelve for SMR students was 2.6804.

Physical education teachers' responses to belief statement twelve indicated they slightly agreed that LD, MMR, and PI students should be taught with non-disabled students in regular classes. Teachers slightly disagreed that BD and SMR students should be taught with non-disabled students in regular classes.

Several patterns emerged from the data collected for the twelve belief statements:

1. All five disabilities were perceived to cause more work for teachers.
2. Teachers indicated they needed more coursework and training to feel comfortable teaching BD, PI, and SMR students.
3. LD, MMR, BD, and SMR students were not perceived to positively motivate non-disabled students to learn motor skills.
4. Teachers felt that SMR and BD students would not learn more rapidly, would disrupt the harmony of the class, placed an unfair burden on the teacher, and should not be included in regular PE classes.
5. Teachers felt that LD, MMR, and PI students should be included in regular PE because they would not be disruptive or require too much time for the teacher. Only LD and MMR students were perceived to learn more rapidly

when placed in regular PE classes, and not perceived by teachers to be an unfair burden. Teachers also felt that no additional training was needed to work with LD and MMR students.

6. Teachers indicated that LD, MMR, PI, and BD students would develop a more favorable self-concept as a result of learning motor skills in regular physical education.
7. Teachers indicated that non-disabled students in regular PE classes would accept LD, MMR, PI, BD, and SMR students (all five disabilities).
8. Teachers felt that non-disabled students would be more motivated to learn motor skills only when included with PI students.
9. Teachers were undecided about PI students with regard to how quickly they would learn in regular classes and whether or not they were an unfair burden.

Physical education teachers had slightly favorable mean attitude scores for LD students on eleven of the twelve belief statements that ranged from 3.3 to 3.8. For MMR students, teachers had slightly favorable mean attitude scores on eight of the belief statements that ranged from 3.2 to 3.5. Physical education teachers had slightly favorable mean attitude scores for PI students on seven of the belief statements that ranged from 3.1 to 3.6. Teachers had slightly favorable mean attitude scores on two belief statements for BD students (3.2) and one belief statement for SMR students (3.5)

Responses from all physical education teachers to each of the twelve belief statements were reduced to an average scale mean attitude score for each of the five disabilities. The average scale mean attitude score values and standard deviations for all five disabilities are depicted in Table 3. Mean scores indicated that physical education teachers had slightly favorable attitudes toward working with students who were LD (3.3814) and MMR (3.2337). Physical education teachers' attitudes toward PI (3.0997) were slightly undecided and slightly unfavorable toward BD (2.6778) and SMR (2.6993) students.

A factorial analysis was conducted to determine whether or not a significant difference occurred between the mean scores of the five disabilities. Results of the analysis indicated no significant difference between any of the five disabilities (BD, LD, PI, SMR, and MMR).

Table 3

Average Scale Means And Standard Deviations Of Physical Educators' Attitudes Toward Teaching Disabled Students

Disability	Mean Scores	Standard Deviation
LD	3.3814	.8785
ED	2.6778	.9700
MMR	3.2337	.9808
SMR	2.6993	.9520
PI	3.0997	.9351

Research Question Two

"Do attitudes of physical education teachers' toward working with disabled students vary according to the grade level (K-5 or 6-12) of disabled students?"

Chi square tests were conducted to determine if grade level of disabled students significantly affected physical education teachers' attitude toward working with disabled students in regular classes. Chi square tests were calculated with collapsed groups. The following scores for significance for all disabilities were: LD (.799); BD (.204); MMR (.096); SMR (1.00) and PI (.089). In addition to the Chi square tests, a 5x2 ANOVA (disability x grade level) was computed and the following scores were calculated: LD (.688); BD (.158); MMR (.076); SMR (.845) and PI (.067). Neither test produced significantly different scores for teachers' attitudes toward working with disabled students in regular classes according to different grade levels. Slight differences were observed between the two grade levels (K-5 and 6-12) when average mean scale scores were calculated for each disability.

Physical education teachers of elementary MMR students had an average attitude mean score of (3.4775) while the teachers of secondary MMR students had an average attitude mean score of (3.0819). These scores showed that teachers of elementary MMR students had a slightly favorable attitude, and teachers of secondary MMR students had a slightly undecided attitude toward working with this disability in their regular classes.

One other disability produced scores that showed a slight difference between grade levels of disabled students. Teachers of PI students at the elementary grade level had mean scores of (3.3221) and teachers of secondary PI students had mean scores of (2.9583). These scores showed that teachers of elementary PI students had a slightly favorable attitude and teachers of secondary PI students had slightly undecided attitudes.

Teachers of disabled students in both grade levels had slightly favorable attitudes toward LD students. Teachers of elementary LD students had mean scores of (3.5) and teachers of secondary LD students had mean scores of (3.3).

Teachers of disabled students in both grade levels had slightly unfavorable attitudes toward SMR students. Teachers of elementary SMR students had mean scores of (2.768) and teachers of secondary SMR students had mean scores of (2.658).

Teachers of disabled students in both grade levels had slightly unfavorable attitudes toward BD students. Teachers of elementary BD students had mean scores of (2.6509) and teachers of secondary BD students had mean scores of (2.6767). Table 4 depicts the mean scores and standard deviation scores for grade level of all five disabilities.

Table 4

Average Scale Means and Standard Deviations of Physical Education Teachers' Attitudes Toward Teaching Disabled Students According to Grade Level

Disability/Grade		N	Mean	Standard Deviation
LD	(k-5)	37	3.5000	.8828
	(6-12)	58	3.3003	.8866
BD	(K-5)	37	2.6509	.8867
	(6-12)	58	2.6767	1.0453
MMR	(K-5)	37	3.4775	.9580
	(6-12)	58	3.0819	.9889
SMR	(K-5)	37	2.7680	.9471
	(6-12)	58	2.6580	.9734
PI	(K-5)	37	3.3221	.8749
	(6-12)	58	2.9583	.9677

Research Question Three

How do attitudes of physical education teachers toward working with disabled students in regular classes vary according to the following teacher attributes:

a. gender of the physical education teacher

b. age of the physical education teacher

c. highest degree earned by the physical education teacher

d. number of professional preparation courses completed in physical education for disabled students

e. number of professional preparation courses completed in general special education for disabled students

f. number of years teaching physical education

g. number of years teaching disabled students in physical education

h. number of m-team meetings attended

i. amount of support services received by the physical education teacher

j. perceived quality of teaching experience of the physical education teacher for working with disabled students

and,

k. perceived competence of the physical education teacher toward working with disabled students in regular classes?

Chi square tests were conducted to determine if any of the independent variables (teacher attributes) significantly affected the attitudes of physical education teachers toward disabled students (LD, BD, MMR, SMR and PI) in their regular classes. Chi-square tests were used to test each independent variable and Analysis of Variance (ANOVA) tests were calculated on variables that produced significant scores on the Chi-square tests. Each independent variable (teacher attribute) is discussed separately.

Chi-square test procedures tabulated each independent and dependent variable into categories to determine goodness-of-fit. This goodness-of-fit test compared the observed and expected frequencies for each variable to determine if the proportion of values contained a user-specified proportion of values. For each Chi-square test, a "p" value of .05 determined if the independent (teacher attribute) significantly affected the attitudes of physical education teachers.

Numbers greater than .05 indicated that independent variables did not significantly affect teacher attitude.

The ANOVA procedure produced a one-way analysis of variance for each dependent variable (each disability) by an independent (teacher attribute) variable. Variance around mean scores was used to determine the significant affect of each teacher attribute. For each Chi-square test, a "p" value of .05 determined if the independent (teacher attribute) significantly affected the attitudes of physical education teachers. Numbers greater than .05 indicated that independent variables did not significantly affect teacher attitude.

Gender

The first independent variable to be discussed is gender. The average mean scale values by gender were calculated for each disability. Females' mean scores were higher than males' for students that were LD (f=3.4942 / m=3.2917), MMR (f=3.4477 / m=3.0633), SMR (f=2.8004 / m=2.6188), and PI (f=3.3221/ m=2.9583). Males' mean scores were slightly higher for BD (f=2.655 / m=2.6960). Table 5 depicts the Chi-square test scores for gender for all five disabilities. Gender was not found to significantly affect the attitude of physical education teachers toward working with disabled students in their regular classes.

Table 5

Chi-square Test Scores for Gender

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	1.162	1	.281
BD	1.587	1	.208
MMR	.947	1	.330
SMR	.053	1	.819
PI	.074	1	.786

Age

The second independent variable to be discussed is age. Age was collapsed into three groups. Ages 21 to 33 were placed into group one, ages 34 to 46 were placed into group two, and ages 47 to 55 were placed into group three. All three groups of physical education teachers had a slightly favorable attitude score for the LD (1=3.4708, 2=3.5833, 3=3.1606). Group one (3.1667) and two (3.5324) had a slightly favorable attitude score for MMR, with the third group scoring an undecided attitude (3.0041). The only physical education teachers scoring a slightly favorable attitude for PI was group two (3.3634). Group one (3.0958) had a slightly undecided attitude and group three (2.8699) had a slightly unfavorable attitude for PI. All three groups of physical educators had a

slightly unfavorable attitude toward working with the BD (1=2.6417, 2=2.8009, and 3=2.5874). Group one and three had a slightly unfavorable attitude toward working with the SMR (1=2.5583, and 3=2.5833). Group two (2.9097) expressed an undecided attitude toward working with the SMR. The middle group (ages 34-36) reflected a higher average mean score than group one (ages 34-46) or three (ages 47-55) for all five disabilities. Teachers in group two had slightly favorable attitudes toward working with three of the five disabilities (LD, MMR, and PI), slightly unfavorable attitudes toward working with BD and undecided attitudes toward working with PI students. Group three (ages 47-55) had slightly unfavorable attitudes toward working with three of the five disabilities (BD, SMR, and PI), slightly undecided attitudes toward working with MMR students, and slightly favorable attitudes toward working with LD students. Group one (ages 21-33) had slightly favorable attitudes toward working with LD and MMR students, slightly unfavorable attitudes toward working with BD and SMR and slightly undecided attitudes toward working with PI students. A one-way AVOVA was conducted to further analyze the data for the independent variable of age. The results are provided in Table 6.

Attitudes of physical education teachers were significantly affected by the independent variable of age for MMR students only. The oldest group (group three, n=41) had a mean score of (3.0041) which indicated an undecided attitude toward working with MMR students. Teachers in group three were ages 47-55. The middle group (group two, n=36) had a mean score of (3.5324)

which indicated a slightly favorable attitude toward working with MMR students. Teachers in group two were ages 34-46. The youngest group (group one, n=20) had a mean score of (3.16670) which indicated a slightly favorable attitude toward working with MMR students in their regular classes. Teachers in the youngest group were ages 21-33.

Table 6

ANOVA Test for Age

Disability	Sum of Squares	df	Mean Square	F	Sig.
BD	.210	2	.105	.416	.661
LD	.278	2	.139	.836	.437
MMR	1.327	2	.662	3.608	.031
SMR	.347	2	.174	.726	.487
PI	.903	2	.452	2.035	.136

Highest Degree Held

The third independent variable to be discussed is highest degree held by physical education teachers. Collapsed groups were examined and the scores showed that physical education teachers' attitudes were not affected significantly by highest degree held for any of the five disabilities. All physical education teachers, regardless of the degree held, had slightly favorable attitudes toward working with LD (BS=3.3479, MS and above=3.4050) and MMR (BS=3.2021, MS and above=3.2558) students; slightly unfavorable attitudes toward working with BD (BS=2.7750, MS and above=2.6096); and SMR (BS=2.6563, MS and above=2.7295) students; and slightly undecided attitudes toward working with PI (BS=2.9188, MS and above=2.9722) students. Table 7 depicts Chi-square scores for highest degree held for all five disabilities.

Adapted Physical Education Courses

The fourth independent variable to be discussed is number of professional preparation courses completed in physical education for disabled students. This variable was collapsed into two groups. Eighty teachers had completed professional preparation courses in physical education for disabled students and two teachers had taken no classes. Forty (41.2%) teachers had taken one class, 25 (25.8%) had taken two classes, 7 (7.2%) had taken three classes. 2 (2.1%) had taken four classes, 2 (2.1%) had taken five classes, 3 (3.1%) had taken six classes and 1 (1%) had taken seven classes.

Table 7

Chi-square Test for Highest Degree Held by Physical Education Teachers

	Chi-square		
Disability	(value)	(df)	(sig.)
PI	2.180	1	.140
LD	.147	1	.701
BD	1.841	1	.175
MMR	1.610	1	.204
SMR	.112	1	.738

Two (2.1%) teachers had taken no classes and 15 (15.5%) did not answer the question. A Chi-square test could not be calculated because of the number of responses for the collapsed groups (they did or did not take professional preparation courses in physical education for disabled students).

Special Education Courses

The fifth variable to be discussed is number of professional preparation courses completed in general special education for disabled students. Forty-three (44.3%) teachers had taken courses in general special education and 39 (40.2%) had taken no classes. Twenty-one (21.6%) had taken one class, 16 (16.5%) had taken two classes, 3 (3.1%) had taken three classes, 1 (1%) had

taken four classes and 2 (2.1%) had taken five classes. Fifteen (15.5%) teachers did not answer the question. Teachers that had taken courses in general special education classes had higher mean scores for all five disabilities. The following mean scores were calculated for each disability: LD (y=3.6051, n=3.3130); BD (y=2.8605, n=2.5264); MMR (y=3.5163, n=3.0752) SMR (y=2.9094, n-2.5083); and PI (y=3.3895, n=2.5083). Number of general special education courses affected the attitude for all five disabilities, with LD and PI being the only disabilities significantly affected. Number of general special education courses made a difference between a slightly undecided attitude and a slightly favorable attitude toward MMR and PI. This variable also made a difference between a slightly unfavorable and a slightly undecided attitude toward SMR students. Table 8 depicts the Chi-square test scores for number of general special education courses taken outside of physical education. A one-way AVOVA was conducted to further analyze the data for this independent variable. Table 9 depicts the ANOVA tests.

Table 8

Chi-square Test Scores for Number of Special Education Courses

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	3.9555	1	.047
BD	3.458	1	.063
MMR	2.426	1	.119
SMR	3.045	1	.081
PI	5.999	1	.014

Table 9

ANOVA Test for Number of General Special Education Classes

Disability	Sum of Squares	df	Mean Square	F	Sig.
PI	1.284	1	1.284	6.295	.014
LD	.534	1	.534	4.048	.047

M-team Meetings Attended

The sixth independent variable to be discussed is number of M-team meetings attended by the physical education teacher. This variable was collapsed into two groups. Group one attended all or some of the M-team meetings and

group two attended none of the m-team meetings. Sixty-nine (71.1%) teachers attended all (n=5) or some (n=64) of the m-team meetings for the disabled students that they worked with in their regular classes. Twenty (20.6%) teachers attended none of the m-team meetings for the disabled students that they worked with in their regular classes. Eight (8.2%) of the teachers did not respond to this question. Physical education teachers' attitudes were not affected significantly by the number of m-team meetings attended by physical education teachers for any of the five disabilities. Physical education teachers' attitudes toward all five disabilities were as follows: BD (1=2.6993, 2=2.7500); LD (1=3.4843, 2=3.3875); MMR (1=3.2778, 2=3.3542); SMR (1=2.6800, 2.9208); and PI (1=2.9843, 2=3.0875). Attitudes toward working with SMR and PI students were the only disabilities that number of M-team meetings attended changed. Teachers that attended M-team meetings had a slight-unfavorable attitude (2.6800) and teachers that attended no meetings (2.9208) had a slight-undecided attitude toward working with SMR students. Teachers that attended M-team meetings had a slight-undecided attitude (2.9843) toward working with PI and teachers that attended no meetings had a slight-favorable attitude (3.0875) toward working with PI students. Table 10 depicts the Chi-square test scores.

Support Services

The seventh independent variable to be discussed is the amount of support services received by physical education teachers. Chi-square tests showed that attitudes toward LD, MMR, and PI were significantly affected by support services received. Table 11 depicts the Chi-square scores for support.

Table 10

Chi-square Test Scores for Number of M-team Meetings Attended

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	.182	1	.669
BD	.012	1	.913
MMR	.028	1	.867
SMR	2.231	1	.135
PI	.150	1	.699

Table 11

Chi-square Test Scores for Support Services

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	4.863	1	.027
BD	2.373	1	.123
MMR	4.863	1	.035
SMR	2.669	1	.102
PI	5.363	1	.021

A one-way ANOVA was calculated for LD, MMR, and PI. The one-way ANOVA scores showed that attitudes were significantly affected by support services toward teaching LD, PI, and MMR. Table 12 depicts the data from the ANOVA calculations. The mean score for teachers receiving support services for LD was (3.6272) and the score for teachers who did not receive support was (3.1586). Teachers receiving support services had a higher mean attitude score. Both groups of teachers had slightly favorable attitudes toward working with LD students. The mean score for teachers receiving support for PI was (3.3640) and the score for teachers who did not receive support was (2.8172). Support services made a difference in the attitude of physical education teachers from slight-unfavorable attitudes without support to slightly favorable with support for

Table 12

ANOVA Test Scores for Support Services

Disability	Sum of Squares	df	Mean Square	F	Sig.
LD	.688	1	.688	5.031	.027
PI	1.003	1	1.003	4.872	.030
MMR	1.230	1	1.230	5.583	.020

PI. The same held true for MMR students. Teachers receiving support services had a slightly favorable (3.5380) attitude toward working with MMR students and teachers receiving no support had slightly unfavorable (2.8686) attitudes toward MMR students. Support services made a difference in the attitude of physical education teachers from a slightly unfavorable attitude (2.3414) with no support to a slightly undecided (2.9547) attitude with support for SMR students. Physical education teachers who received support services and those who did not receive support had slightly unfavorable attitudes toward working with BD students, but the teachers who did not receive support had a stronger unfavorable attitude toward working with BD students in regular classes.

Total Years Teaching Physical Education

The eighth independent variable to be discussed is total number of years teaching physical education. Fifty-two (53.6%) teachers had 15 years or less and 45 (46.4%) had 16 years or more experience teaching physical education. Physical education teachers' attitudes toward working with LD and BD students were significantly affected by the total number of years teaching physical education. Number of years teaching had an inverse affect on the attitudes of teachers toward working with LD and BD students in regular classes. Table 13 depicts the Chi-square scores. The mean score for teachers who had taught 16 or more years was (2.5444) and the mean score for teachers who had taught 15 or less years was (2.7933) for BD. Both groups of teachers had a slightly unfavorable attitude toward teaching BD students but the teachers with more years of experience had a stronger unfavorable attitude. The mean score for teachers who had taught 16 or more years for LD was (3.1981) and the teachers with 15 years or less had a mean score of (3.5401). The group of teachers with more years of experience had a slightly favorable attitude toward working with LD but the teachers with fewer years of experience had a slightly stronger favorable attitude. Teachers in both groups had slightly favorable attitudes toward working with MMR students. Teachers with 16 or more years had a mean score of 3.1352 and teachers with 15 or less years had a mean score of 3.3189. Teachers with fewer years of experience teaching physical education

Table 13

Chi-square Test Scores for Number of Years Teaching Physical Education

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	8.291	1	.004
BD	5.944	1	.015
MMR	1.250	1	.264
SMR	1.286	1	.257
PI	2.516	1	.113

had stronger favorable attitudes toward MMR students. Both groups of teachers had slightly unfavorable attitudes toward working with SMR students. Teachers with 15 years or less had a mean score of 2.7580 and teachers with 16 or more years experience had a mean score of 2.6315. Teachers with 15 or less years of experience had a mean score of 3.0224 and teachers with 16 or more years of experience had a mean score of 2.8667 for PI students. Number of years experience made a difference between a slightly undecided attitude toward PI students and a slightly unfavorable attitude toward PI students. Teachers with the most experience had lower mean scores for all five disabilities. A one-way ANOVA was calculated for LD and BD and the scores are depicted in table 14.

Table 14

ANOVA Test Scores for Number of Years Teaching Physical Education For BD and LD

Disability	Sum of Squares	df	Mean Square	F	Sig.
BD	1.467	1	1.467	6.201	.015
LD	1.386	2	.693	4.494	.014

Total Years Teaching The Disabled

The ninth independent variable to be discussed is number of years teaching disabled students. Sixty-seven (69.1%) teachers (group one) had 15 years or less experience working with disabled students in their regular classes and 29 (29.9%) teachers (group two) had 16 or more years experience teaching disabled students. One teacher did not respond to this question. Both groups of teachers had slightly favorable attitudes toward teaching LD (1=3.4502, 2=3.3391) and MMR (3.2550, 2=3.2960) students. Both groups had slightly unfavorable attitudes toward working with BD (1=2.7562, 2=2.5891) and SMR (1=2.7127, 2=7.615) students. Both groups of teachers (1=2.9851, 2=2.9713) had slightly undecided attitudes toward working with PI students. Physical education teachers' attitudes were not significantly affected by the number of

Perceived Quality of Teaching

The tenth independent variable to be discussed is the physical education teachers' perceived quality of their teaching for disabled students. Eighty-three (85.6%) teachers felt very competent and 5 (5.2%) felt somewhat competent to teach disabled students in their regular classes. Nine (9.3%) teachers did not answer the question. Teachers who felt very competent to teach disabled students had the following mean scores for all five disabilities: BD (2.7500); SMR (2.7741); PI (3.2118); LD (3.5171) and MMR (3.3293). Teachers who felt very

Table 15

Chi-square Test Scores for Number of Years Teaching Disabled Students

	Chi-square		
Disability	(value)	(df)	(sig)
LD	1.590	1	.207
BD	3.180	1	.075
MMR	.016	1	.898
SMR	.639	1	.424
PI	.025	1	.875

competent had slightly favorable attitudes toward LD, PI, and MMR students, and slight-unfavorable attitudes toward BD and SMR students. The five teachers who felt somewhat competent to work with disabled students had the following mean scores for all five disabilities: BD (2.4000); SMR (2.4167); PI (2.8333); LD (3.0500) and MMR (3.1833). Teachers who felt somewhat competent had slightly unfavorable attitudes toward working with BD, SMR, and PI students. They had slightly undecided attitudes toward working with LD students and slightly favorable attitudes toward working with MMR students. Chi-square tests could not be calculated because of the number of teachers in both groups.

Perceived Competency of Teaching

The eleventh and last independent variable to be discussed is the physical education teachers' perceived competency to work with disabled students in regular classes. Fifty-eight (59.8%) teachers felt their competency to teach disabled students was satisfactory and 30 (30.9%) felt their competency to teach disabled students in their regular classes was very good. Nine (9.3%) teachers did not answer this question. Physical education teachers who felt satisfactorily-competent to work with disabled students had the following mean scores: BD (2.6193); SMR (2.6710); PI (3.1408); LD (3.4210) and MMR (3.2945). These teachers had slightly unfavorable attitudes toward working with BD and SMR students and slightly favorable attitudes toward working with PI, LD, and MMR students. Physical education teachers who felt very competent to work with

students. Physical education teachers who felt very competent to work with disabled students had the following mean scores: BD (2.9444); SMR (2.9139); PI (3.2861); LD (3.6250) and MMR (3.3722). Level of perceived competence increased mean attitude scores for all five disabilities. Attitudes were increased from slightly unfavorable for BD and SMR to slightly undecided attitudes for teachers who felt very competent. Teachers who felt very competent had higher favorable attitudes for LD, MMR, and PI students. Differences in attitudes were observed, but attitudes were not significantly affected by the physical education teachers' perceived competency for any of the five disabilities. Table 16 depicts the scores for the Chi-square tests.

Table 16

Chi-square Test Scores for Perceived Competency to Work With Disabled Students

	Chi-square		
Disability	(value)	(df)	(sig.)
LD	1.188	1	.276
BD	3.289	1	.070
MMR	.952	1	.329
SMR	.771	1	.380
PI	2.442	1	.118

Types of Support Services Received

Physical education teachers were asked, "Do you receive support services during the classes that disabled students participate in your physical education classes". If they responded "yes" to the question, they were asked to provide the type of support that they received. Fifty-seven (58.8%) teachers responded that they did receive support services during the classes that they served disabled students in their regular classes. Fourteen teachers said that they received assistance from peer tutors with disabled students in their classes. Eleven teachers responded that they received support from physical therapists. Four physical education teachers received support from special education teachers and thirty-three received support from teaching assistants. Table 17 depicts the frequencies for support services received by physical education teachers in their regular classes.

Table 17

Frequencies for Support Services Received by Physical Education Teachers

Type of Support	Frequency
Peer Tutors	14
Teaching Assistants	33
Physical Therapists	11
Special Education Teachers	4

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A summary of the results and conclusions about the relationship between attitudes of public school physical education teachers (K-12) toward students with disabilities at different grade levels and selected teacher attributes is presented in this chapter. In the preceding chapters, the research questions were introduced, selected literature was reviewed, procedures used to conduct the study were explained and the results of the statistical analysis of the data were reported. Recommendations for future research are also suggested in chapter 5.

Summary

The purpose of the study was to examine the relationship between attitudes of public school physical education teachers (K-12) toward students with disabilities at different grade levels and selected teacher attributes. The study was designed to answer the following questions:

1. What are the attitudes of physical education teachers toward working with disabled students in regular classes, and do these attitudes vary according to student disability?
2. Do attitudes of physical education teachers' toward working with disabled students vary according to grade level (K-5 or 6-12)?
3. How do attitudes of physical education teachers' toward working with disabled students in regular classes vary according to the following:
   a. gender of the physical education teacher;
   b. age of the physical education teacher;
   c. highest degree earned by the physical education teacher;
   d. number of professional preparation courses completed in physical education for disabled students;
   e. number of professional preparation courses completed in general special education for disabled students;
   f. number of years teaching physical education;
   g. number of years teaching disabled students in physical education;
   h. number of M-team meetings attended;
   i. amount of support services received by the physical education teacher;
   j. perceived quality of teaching experience of the physical education teacher for working with disabled students

   and,

k. perceived competence of the physical education teacher toward working with disabled students in the regular class?

Question One

The first research question examined the attitudes of physical education teachers toward working with LD, BD, MMR, SMR, and PI students in regular classes. The answer to this question came from analysis of data from the responses of physical education teachers (K-12) to the attitude items (1-60) of the PEATID- III (Rizzo, 1993). Results from the survey demonstrated that physical education teachers had slightly unfavorable attitudes toward BD and SMR students, slightly undecided attitudes toward PI, and slightly favorable attitudes toward LD and MMR.

The finding from the current study that physical education teachers had slightly unfavorable attitudes toward working with Emotional/Behavioral Disordered (BD) students (mean score=2.6778) was consistent with the results from a study by Rizzo and Vispoel (1991) who found an average mean attitude score of 2.7 for physical education teachers toward teaching BD students in their regular classes. The results from the current study that physical education teachers had slightly unfavorable attitudes toward working with Moderate-Severe Mentally Impaired (SMR) students (mean=2.6993) was also consistent with the results of the study by Block and Rizzo (1995). They found an average mean

attitude score of 2.49 for physical education teachers toward working with (SMR) students.

The current study's finding that physical education teachers had slightly favorable attitudes toward working with Learning Disabled (LD) students (mean=3.3814) was also consistent with Rizzo (1984b) and Rizzo and Vispoel (1991). These researchers found average mean attitude scores of 3.03 and 3.2 for LD students.

However, the slightly undecided attitude toward working with Physically Impaired (PI) students (mean=3.0997) was not consistent with the unfavorable attitude score of 2.82 found by Rizzo (1984a). One other inconsistency was the slightly favorable attitude mean score of 3.2337 for Mild-Moderate Mentally Impaired (MMR) students in the current study. Rizzo and Vispoel (1991) found an unfavorable attitude score of 2.8.

Mean attitude score values for the 12 belief statements were consistent with the overall attitude scores for LD, MMR, BD, and SMR students. Scores were not consistent for PI students.

Teachers indicated slightly favorable attitude scores on eleven of the twelve belief statements for LD and MMR. These scores were consistent with the slightly favorable overall teacher attitude for LD and MMR. The only unfavorable score occurred when teachers were asked about additional work required for LD and MMR students in their regular classes. Teachers indicated that LD and MMR students would be accepted by nondisabled peers, develop skills more rapidly,

develop a more favorable self-concept, and would not place an unfair burden on the teacher when educated in regular PE classes.

Mean scores on the twelve belief statements for BD and SMR students were also consistent with the slightly unfavorable overall teacher attitude scores for BD and SMR students. Teachers indicated slightly unfavorable attitude scores for 11 belief statements for SMR students and ten belief statements for BD students. Teachers felt that BD and SMR students were disruptive to the harmony of the class, required too much teacher time, were an unfair burden on the teacher, would not benefit socially or physically, and should not be included in regular PE classes. The only favorable attitude expressed for SMR and BD students was that non-disabled peers would accept them in physical education.

Teachers had an overall attitude score of slightly undecided for PI students. This was not consistent with the mean scores for the twelve belief statements. Teachers indicated slightly favorable mean attitude scores for eight of the twelve belief statements. Teachers felt that non-disabled students would be more motivated to improve motor skills in classes that included PI students. Teachers also felt that PI students would not disrupt the harmony of the class, would not place an unfair burden on the teacher, and would develop a more favorable self-concept when included in regular physical education. Teachers were undecided about how quickly PI students would learn skills, whether or not PI students placed an unfair burden on the teacher, and if additional training was needed to educate PI students in regular physical education.

Question Two

The second question examined the effect that grade level of disabled students had on the attitudes of physical education teachers toward working with disabled students in regular classes. Although there were some differences in attitude scores for elementary and secondary physical education teachers in the current study, none of these differences was statistically significant. Teachers had slightly unfavorable attitudes toward working with elementary and secondary BD (elem.=2.6509, sec.=2.6767) and SMR (elem.=2.7680, sec.=2.6580) students and slightly favorable attitudes toward working with elementary and secondary LD (elem.=3.5, sec.=3.3003) students. Teachers of elementary (mean=3.4775) MMR students did have a higher favorable attitude score than did teachers for secondary (mean=3.0819) MMR students. The secondary score was closer to an undecided attitude toward MMR students. There was also a difference for PI students. Teachers of elementary students had a slightly favorable attitude score of 3.3221 while the teachers of secondary students had a slightly unfavorable attitude score of 2.9583. Larrivee and Cook (1979) found similar results for grade level differences for regular classroom teachers.

Teacher attitudes toward working with disabled students became less positive as grade level increased. Mean scores ranged from grades K-3 (98.28) to 4-6 (93.90) to 7-8 (86.57) to 10-12 (89.05). Rizzo (1984a) also found that physical education teachers in grades K-3 (mean=3.15) had more positive attitudes

toward teaching disabled students than did teachers in 4-6 (mean=3.03) and 7-8 (mean=2.92).

Question Three

Question three examined the effect that selected teacher attributes had on attitudes of physical education teachers toward teaching disabled students in regular classes. The results of the Chi-square and ANOVA testing suggested that of the eleven independent (external-demographic) variables under consideration in the current study, four were significantly related to attitudes of physical education teachers toward teaching disabled students in regular classes. Support services were found to significantly affect the attitudes of physical education teachers for LD, MMR, and PI students. Teachers who received support (3.6272) demonstrated a more favorable attitude toward working with LD students than did the teachers who did not receive support (3.1586). Support services received by physical education teachers made a difference between a slightly favorable (3.3640) and a slightly unfavorable (2.8172) attitude toward working with PI students. The same held true for teachers' attitudes toward MMR students. Teachers receiving support services had a slightly favorable attitude (3.5380) score while the teachers who did not receive support services had a slightly unfavorable (2.8683) attitude score for MMR students.

Physical education teachers mentioned several support services that they received. Following is a list of those support services organized from those

mentioned most often to those mentioned least often: teaching assistants, peer tutors, physical therapists, and special education teachers.

The number of years teaching physical education by the physical education teacher was found to significantly affect attitudes toward working with LD and BD students. There was a negative correlation with the total number of years taught. Teachers who had taught 1-15 years had higher favorable attitudes (3.5401) than the teachers who had worked 16-33 years (3.1981). Number of years teaching physical education was also found to be significant in determining attitudes toward working with BD students. There was a negative correlation with the total number of years teaching experience for physical education. Teachers that had taught 16-33 years had a more unfavorable (2.5444) attitude toward working with BD students. Teachers with 1-15 years teaching experience had a less unfavorable attitude (2.7933) toward working with BD students.

Age had an inverse affect on attitudes of physical education teachers toward working with MMR students. Older teachers had an undecided attitude (mean=3.0041) and the middle (mean=3.5324) and younger (mean=3.1667) groups had slightly favorable attitudes toward working with MMR students. These findings were comparable to the above stated findings concerning number of years teaching experience.

Number of special education courses for disabled students outside of physical education had a significant affect on attitude toward LD (y=3.6051, n=3.3130) students and PI (y=3.3895, n=2.5083) students. Teachers with and without

coursework in special education had slightly favorable attitudes toward LD students; however, teachers who had taken courses in special education had a higher favorable attitude. A greater difference was noted with attitudes of PI students. Teachers who had taken courses in special education had a slightly favorable attitude toward PI students, while teachers who had taken no classes in special education classes had a slightly unfavorable attitude toward PI students. The current study's findings that courses on disabled students outside of physical education significantly affected physical education teachers' attitudes was consistent with Rizzo (1984b). Rizzo found that courses in special education outside of physical education had a significant relationship with teacher attitude toward working with disabled students.

Seven of the eleven independent variables did not significantly affect the attitudes of physical education teachers toward working with LD, BD, MMR, SMR, and PI students in regular classes. The seven variables were gender, highest degree held, courses in adapted PE, number of M-team meetings attended, years teaching disabled students, perceived quality of teaching disabled students, and perceived competence to teach disabled students. In reference to four of the seven variables, findings which indicated that there was not a significant affect on attitude were consistent with the research conducted by Rizzo and Vispoel (1991) and Rizzo (1984b). Both studies by Rizzo found that teacher attitudes were not significantly affected by the teacher attributes of gender, coursework in adapted PE, highest degree held, and years teaching disabled students.

Conclusions

Attitudes of physical education teachers in the current study varied only slightly, according to different types of disabilities. A general factorial test resulted in no significant differences among attitudes toward the five disabilities (BD, LD, MMR, SMR, and PI).

Based on the twelve constructs, physical education teachers appeared willing to work with LD and MMR students and unwilling to work with BD and SMR students in their regular classes. Teachers were negative toward LD and MMR students only when asked about additional work required to teach LD and MMR students. Physical education teachers were, however, willing to work with LD and MMR students in their regular classes. The only positive feeling expressed toward both SMR and BD students was that non-disabled students would accept the SMR and BD in regular physical education classes. Physical education teachers also felt that BD students would develop a more favorable self-concept when educated with non-disabled peers in regular classes. Physical education teachers, nonetheless, were not willing to work with SMR and BD students in regular classes.

Teachers appeared to have mixed feelings about working with PI students. They expressed positive feelings on eight of the belief statements and undecided feelings on three of the belief statements. There were unsure if they had adequate training to work with PI students, unsure of the burden placed on the

teacher, and unsure of how quick the PI students could learn in regular physical education classes. Teachers, therefore, expressed a slight willingness to work with PI students in regular classes.

Attitude scores for the twelve constructs and the overall mean attitudes scores indicated that physical education teachers felt neither strongly favorable or strongly unfavorable about working with disabled students in regular classes.

Physical education teachers were more willing to work with elementary disabled students than secondary students. Though the difference between the two grade levels was slight, the data indicated that elementary disabled students were perceived to require less teacher time away from non-disabled students.

The introduction of inclusion into public schools in the last fifteen years appears to have had an influence on teachers' attitudes toward working with disabled students in regular classes. Younger teachers and teachers with fewer years of teaching experience had more favorable attitudes toward working with disabled students in regular classes than older teachers and those with more years of teaching experience. Newer teachers probably had more coursework and training for teaching disabled students in the past twenty-five years.

Support services appear to be an indicator of more positive attitudes toward working with disabled students in regular classes. In the construct that resulted in unfavorable attitudes toward all five disabilities, teachers expressed a feeling that disabled students meant more work for the teacher. Teachers also expressed a feeling that BD and SMR students placed an unfair burden on

teachers and that SMR students took too much of the teachers' time. Support services (additional personnel) would allow the teacher to more effectively serve both non-disabled and disabled students.

Recommendations

As a result of this study, the following recommendations appear warranted:

1. Since physical education teacher attitudes in this and other studies were directly related to the levels and types of support services available to the teachers, it is recommended (a) that further research be conducted to determine needed support services and (b) that every effort then be made to provide most critical support services identified.
2. This study as well as those by Rizzo and others did not identify while physical education teachers feel negatively about working with several types of disabled students. Therefore, further research should be conducted that examines the reasons why physical education teachers feel negatively about working with disabled students. Investigators should conduct interviews with teachers from all grade levels to determine feelings toward students with different disabilities.

   This research should include physical education teachers in different age groups and teachers with different amounts of teaching experience (number of years teaching physical education).

3. Further research should be conducted to examine actual behaviors of physical education teachers while working with disabled students in regular classes. This research should investigate the methods used by teachers to determine whether or not teachers are adequately providing necessary adaptations and modifications for disabled students to receive a quality physical education program in regular classes.
4. This study was limited to suburban/rural teachers from school systems in East Tennessee. Studies by Rizzo and others have also been geographically limited. Therefore, further studies should be conducted to determine attitudes of physical education teachers in other areas of the country.
5. If this study is replicated using the PEATID-III survey instrument, certain adjustments/modifications should be made in the instrument and procedures. These modifications include the following: scoring of each individual belief statement to determine teachers' attitudes toward working with disabled students and investigation of other disabilities that physical education teachers are serving in regular classes.

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APPENDICES

APPENDIX A

Instructions and Original Survey

INSTRUCTIONS AND ORIGINAL SURVEY

Physical Educators' Attitude Toward Teaching Individuals with Disabilities-III

(Terry L. Rizzo, 1993)

General Directions:

This study contains a series of statements which express beliefs about teaching individuals with disabilities in your regular physical education classes. There are no right or wrong responses. Circle the response that best describes your beliefs about each statement for each disability.

Enclosed is an explanation of four disabling conditions found in the survey to assist you in your response. Read the descriptions carefully before you begin the study. It is important to respond to the statements using only these descriptions.

DO NOT SKIP ANY QUESTIONS.

CIRCLE ONLY ONE RESPONSE PER DISABILITY.

ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

DESCRIPTIONS OF DISABILITIES

Emotional/Behavioral Disorder: The term refers to a condition characterized by one or more of the following behavior clusters: severely deviant disruptive, aggressive or impulsive behaviors, withdrawn or anxious, general pervasive unhappiness, depressed or wide mood swings, delinquency, hyperactivity, social maladjustment, hypersensitivity. It is usually serviced with a behavior management program.

Specific Learning Disability: "A specific learning disability is a disorder within the individual which affects learning relative to that individual's potential. The disability interferes with the acquisition, organization, and/or expression of information such as in listening, reading, writing, thinking, and movement. In physical education this student could have difficulty with spacial awareness."

Mild-Moderate Mentally Impaired: This student would be considered to have an IQ score in the range of 50 to 80 on standardized intellectual tests. The student will probably develop communication skills and social skills but will lag behind their peers. the student usually can learn vocational and daily living skills but may need guidance and/or assistance in these areas. These students may have difficulty in performing motor skills, and exhibit a short attention span.

Moderate-Severely Mentally Impaired: This student would be significantly subaverage in intellectual functioning. They would have an IQ score below 50 on standardized tests. They may or may not be able to verbally communicate. There is little socialization or interaction. They are totally dependent on others for self-care.

Please circle the response which best corresponds to your agreement with each statement and for each labeled disability. Do NOT skip any.

KEY

SD=STRONGLY DISAGREE
D=DISAGREE
U=UNDECIDED
A=AGREE
SA=STRONGLY AGREE

One advantage of teaching students labeled in my regular physical education classes with nondisabled students is that all students will learn to work together toward achieving goals.

1. Emotional/behavioral disorder	SD	D	U	A	SA	
2. Specific learning disability		SD	D	U	A	SA
3. Mild-moderate mentally impaired		SD	D	U	A	SA
4. Moderate-severe mentally impaired		SD	D	U	A	SA

Teaching students labeled in my regular physical education classes will motivate nondisabled students to learn to perform motor skills.

5. Emotional/behavioral disorder	SD	D	U	A	SA	
6. Specific learning disability		SD	D	U	A	SA
7. Mild-moderate mentally impaired		SD	D	U	A	SA
8. Moderate-severe mentally impaired		SD	D	U	A	SA

Students labeled will learn more rapidly if they are taught in my regular physical education class with nondisabled students.

9. Emotional/behavioral disorder	SD	D	U	A	SA	
10. Specific learning disability		SD	D	U	A	SA
11. Mild-moderate mentally impaired		SD	D	U	A	SA
12. Moderate-severe mentally impaired		SD	D	U	A	SA

Students labeled will develop a more favorable self-concept as a result of learning motor skills in my regular physical education class with nondisabled peers.

13. Emotional/behavioral disorder SD D U A SA
14. Specific learning disability SD D U A SA
15. Mild-moderate mentally impaired SD D U A SA
16. Moderate-severe mentally impaired SD D U A SA

Students labeled will not be accepted by their nondisabled peers in my regular physical education classes.

17. Emotional/behavioral disorder SD D U A SA
18. Specific learning disability SD D U A SA
19. Mild-moderate mentally impaired SD D U A SA
20. Moderate-severe mentally impaired SD D U A SA

Students labeled in my regular physical education classes with nondisabled students will disrupt the harmony of the class.

21. Emotional/behavioral disorder SD D U A SA
22. Specific learning disability SD D U A SA
23. Mild-moderate mentally impaired SD D U A SA
24. Moderate-severe mentally impaired SD D U A SA

Having to teach students labeled in my regular physical education classes with nondisabled students places an unfair burden on teachers.

25. Emotional/behavioral disorder SD D U A SA
26. Specific learning disability SD D U A SA
27. Mild-moderate mentally impaired SD D U A SA
28. Moderate-severe mentally impaired SD D U A SA

As a physical education teacher, I do not have sufficient training necessary to teach students labeled with nondisabled students in my regular physical education classes.

29. Emotional/behavioral disorder SD D U A SA
30. Specific learning disability SD D U A SA
31. Mild-moderate mentally impaired SD D U A SA
32. Moderate-severe mentally impaired SD D U A SA

Teaching student labeled in my regular physical education classes with nondisabled students means more work for me.

33. Emotional/behavioral disorder SD D U A SA
34. Specific learning disability SD D U A SA
35. Mild-moderate mentally impaired SD D. U A SA
36. Moderate-severe mentally impaired SD D U A SA

Students labeled should not be taught in my regular physical education classes with nondisabled students because they will require too much of my time.

37. Emotional/behavioral disorder	SD	D	U	A	SA	
38. Specific learning disability		SD	D	U	A	SA
39. Mild-moderate mentally impaired		SD	D	U	A	SA
40. Moderate-severe mentally impaired		SD	D	U	A	SA

As a physical education teacher, I need more course work and training before I will feel comfortable teaching physical education classes with students labeled with nondisabled students.

41. Emotional/behavioral disorder	SD	D	U	A	SA	
42. Specific learning disability		SD	D	U	A	SA
43. Mild-moderate mentally impaired		SD	D	U	A	SA
44. Moderate-severe mentally impaired		SD	D	U	A	SA

Students labeled should be taught with nondisabled students in my regular physical education classes whenever possible.

45. Emotional/behavioral disorder	SD	D	U	A	SA	
46. Specific learning disability		SD	D	U	A	SA
47. Mild-moderate mentally impaired		SD	D	U	A	SA
48. Moderate-severe mentally impaired		SD	D	U	A	SA

A FEW FINAL QUESTIONS ABOUT YOURSELF

Identify your gender. Female Male

What is your age?

How many years have you taught physical education?

What grade levels are you presently teaching?

Do you have a Developmental/Adapted Physical Education teaching license? Yes No

Have you taken any Developmental/Adapted Physical Education courses?
Undergraduate? Yes No If so, how many courses?

Graduate? Yes No If so, how many courses?

Have you taken any Special Education courses?
Undergraduate? Yes No If so, how many courses?
Graduate? Yes No If so, how many courses?

Have you had any experience teaching individuals with disabilities?

Yes No

How many years have you taught individuals with disabilities?
Number of years

Rate the quality of your teaching experience for individuals with disabilities.
No experience
Not good
Satisfactory
Very good

If you have been around or worked with individuals with disabilities, what disability (ies) did they have?

How competent do you feel teaching students with disabilities?
Not al all
Somewhat
Very

THANK YOU FOR YOUR HELP!

A Change to the Survey

The PEATID-III is a revision of the PEATH-II. A minor change was made to specific expressions in the survey. Specifically, the terms "disabling condition" replaced "handicapping condition" and "nondisabled" replaced "nonhandicapped" in the belief statements. The change represents language describing individuals with disabilities and is consistent with current (U.S.) law and professional practice. Please note this minor change will not affect the validity of the survey because the target behavior, context and time in the belief statements were not altered.

Scoring the PEATID-III

The first portion of the PEATID-III consists of 12 statements with embedded blanks such as, "Teaching students labeled as * in regular physical education classes with nondisabled students will disrupt the harmony of the class," and "Having to teach students labeled * in regular physical education classes with nondisabled students places an unfair burden on teachers." Under each of the 12 statements, labeled disabling conditions are listed along with a 5-point Likert scale (i.e., 1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree). Respondents are instructed to mentally insert the appropriate label into the blank when answering a given item. Scale scores are derived from the items, one for each disabling condition and a total score. The labels of disabling conditions* and demographics* (last page) can be altered to fit individual research needs.

Scale mean scores are based on the sum of item scores for each scale divided by the number of items within the scale so that they are interpreted about the original 5-point Likert scale. To derive proper scale means, scores for negatively phrased statements (5,6,7,8,9,10,11) must be reversed. The second portion of the PEATID-III consists of items about selected demographics.

Validity and Reliability of the PEATID-III

The PEATID-III was originally evaluated for content relevance (Messick, 1989) by a panel of six experts, all of whom had doctoral degrees -- four in kinesiology (physical education), one in special education, and one in educational psychology. Four of the six experts were faculty members at a midwestern university, the fifth was employed by the National Institute on Disability and Rehabilitation Services, and the sixth was the director of physical education for a large midwestern urban school district. The experts were told the purpose of the survey and were

asked to review it for face and content validity. They commented on the content of the items, suggested improvements in the wording of certain items, and concluded that the survey had sufficient validity because it adequately sampled the beliefs of physical educators toward teaching individuals with disabilities. Construct validity was supported by factor analysis (Rizzo, 1988). Alpha coefficients (Cronbach, 1951) for the present study based on severe, profound and all PEATID-III items were .89, .91, and .94, respectively. Additional evidence of validity and reliability related to PEATID-III items can be found in Rizzo's (1984) study describing the original PEATH. Please note that the labels of disabling conditions (on this version) and demographics or attributes (on the last page) represent interests of mine and Dr. Ellen Kowalski, Adelphia University, this paper appeared APAQ, 13(2), 180-196.

APPENDIX B

Current Study's Survey Instrument

CURRENT STUDY'S SURVEY INSTRUMENT

Physical Educators' Attitude

Toward Teaching Individuals with Disabilities – III

(Terry L. Rizzo, 1993)

GENERAL DIRECTIONS:

This survey contains a series of statements, which express beliefs about teaching individuals with disabilities in your regular physical education classes. There are no right or wrong responses. Circle the response that best describes your beliefs about each disability.

Enclosed is an explanation of five disabling conditions found in the survey to assist you in your response. Read the descriptions carefully before you begin the study. It is important to respond to the statements using only these descriptions.

DO NOT SKIP ANY QUESTIONS.

CIRCLE ONLY ONE RESPONSE PER DISABILITY.

ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

DESCRIPTIONS OF DISABILITIES

EMOTIONAL/BEHAVIORAL DISORDER: The term refers to a condition characterized by one or more of the following behavior clusters: severely deviant disruptive, aggressive or impulsive behaviors, withdrawn or anxious, general pervasive unhappiness, depressed or wide mood swings, delinquency, hyperactivity, social maladjustment, hypersensitivity. It is usually serviced with a behavior management program.

SPECIFIC LEARNING DISABILITY: A specific learning disability is a disorder within the individual which affects learning relative to that individual's potential. The disability interferes with the acquisition, organization, and/or expression of information such as in listening, reading, writing, thinking, and movement. In physical education this student could have difficulty with spatial awareness.

MILD-MODERATE MENTALLY IMPAIRED: This student would be considered to have an IQ score in the range of 50-80 on standardized intellectual tests. The student will probably develop communication skills and social skills but will lag behind their peers. The student usually can learn vocational and daily living skills but may need guidance and/or assistance in these areas. These students may have difficulty in performing motor skills, and exhibit a short attention span.

MODERATE-SEVERELY MENTALLY IMPAIRED: This student would be significantly subaverage in intellectual functioning. They would have an IQ score below 50 on standardized tests. They may or may not be able to verbally communicate. There is little socialization or interaction. They are totally dependent on others for self-care.

PHYSICALLY IMPAIRED: Any physical impairment that affects the student's ability to perform motor skills. The student may need a wheel chair, braces or other adaptation to participate in physical education.

Read each statement placing the different disability in the blank. Circle the response that best expresses your belief for <u>every</u> disability.

****

KEY

SD=STRONGLY DISAGREE
D= DISAGREE
U= UNDECIDED
A= AGREE
SA=STRONGLY ADGEE

****

One advantage of teaching students labeled _____ in my regular physical education classes with non-disabled students is that all students will learn to work together toward achieving goals.

1.	Emotional/behavioral disorder	SD	D	U	A	SA
2.	Specific learning disability	SD	D	U	A	SA
3.	Mild-moderate mentally impaired	SD	D	U	A	SA
4.	Moderate-severe mentally impaired	SD	D	U	A	SA
5.	Physically impaired	SD	D	U	A	SA

Teaching students labeled _____ in my regular physical education classes will motivate non-disabled students to learn to perform motor skills

6.	Emotional/behavioral disorder	SD	D	U	A	SA
7.	Specific learning disability	SD	D	U	A	SA
8.	Mild-moderate mentally impaired	SD	D	U	A	SA
9.	Moderate-severe mentally impaired	SD	D	U	A	SA
10.	Physically impaired	SD	D	U	A	SA

Students labeled _____ will learn more rapidly if they are taught in my regular physical education class with non-disabled students.

11.	Emotional/behavioral disorder	SD	D	U	A	SA
12.	Specific learning disability	SD	D	U	A	SA
13.	Mild-moderate mentally impaired	SD	D	U	A	SA
14.	Moderate-severe mentally impaired	SD	D	U	A	SA
15.	Physically impaired	SD	D	U	A	SA

Students labeled _____ will develop a more favorable self-concept as a result of learning motor skills in my regular physical education class with non-disabled peers.

16.	Emotional/behavioral disorder	SD	D	U	A	SA
17.	Specific learning disability	SD	D	U	A	SA
18.	Mild-moderate mentally impaired	SD	D	U	A	SA
19.	Moderate-severe mentally impaired	SD	D	U	A	SA
20.	Physically impaired	SD	D	U	A	SA

Students labeled _____ will not be accepted by their non-disabled peers in my regular physical education classes.

21. Emotional/behavioral disorder	SD	D	U	A	SA
22. Specific learning disability	SD	D	U	A	SA
23. Mild-moderate mentally impaired	SD	D	U	A	SA
24. Moderate-severe mentally impaired	SD	D	U	A	SA
25. Physically impaired	SD	D	U	A	SA

Students labeled _____ in my regular physical education classes with non-disabled students will disrupt the harmony of the class.

26. Emotional/behavioral disorder	SD	D	U	A	SA
27. Specific learning disability	SD	D	U	A	SA
28. Mild-moderate mentally impaired	SD	D	U	A	SA
29. Moderate-severe mentally impaired	SD	D	U	A	SA
30. Physically impaired	SD	D	U	A	SA

Having to teach students labeled _____ in my regular physical education classes with non-disabled student places an unfair burden on teachers.

31. Emotional/behavioral disorder	SD	D	U	A	SA
32. Specific learning disability	SD	D	U	A	SA
33. Mild-moderate mentally impaired	SD	D	U	A	SA
34. Moderate-severe mentally impaired	SD	D	U	A	SA
35. Physically impaired	SD	D	U	A	SA

As a physical education teacher, I do not have sufficient training necessary to teach students labeled _____ with non-disabled students in my regular physical education classes.

36. Emotional/behavioral disorder	SD	D	U	A	SA
37. Specific learning disability	SD	D	U	A	SA
38. Mild-moderate mentally impaired	SD	D	U	A	SA
39. Moderate-severe mentally impaired	SD	D	U	A	SA
40. Physically impaired	SD	D	U	A	SA

Teaching students labeled _____ in my regular physical education classes with non-disabled students means more work for me.

41. Emotional/behavioral disorder	SD	D	U	A	SA
42. Specific learning disability	SD	D	U	A	SA
43. Mild-moderate mentally impaired	SD	D	U	A	SA
44. Moderate-severe mentally impaired	SD	D	U	A	SA
45. Physically impaired	SD	D	U	A	SA

Students labeled _____ should not be taught in regular physical education classes with non-disabled students because they will require too much of my time.

46.	Emotional/behavioral disorder	SD	D	U	A	SA
47.	Specific learning disability	SD	D	U	A	SA
48.	Mild-moderate mentally impaired	SD	D	U	A	SA
49.	Moderate-severe mentally impaired	SD	D	U	A	SA
50.	Physically impaired	SD	D	U	A	SA

As a physical education teacher, I need more course work and training before I will feel comfortable teaching physical education classes with students labeled _____ with non-disabled students.

51.	Emotional/behavioral disorder	SD	D	U	A	SA
52.	Specific learning disability	SD	D	U	A	SA
53.	Mild-moderate mentally impaired	SD	D	U	A	SA
54.	Moderate-severe mentally impaired	SD	D	U	A	SA
55.	Physically impaired	SD	D	U	A	SA

Students labeled _____ should be taught with non-disabled students in my regular physical education classes whenever possible.

56.	Emotional/behavioral disorder	SD	D	U	A	SA
57.	Specific learning disability	SD	D	U	A	SA
58.	Mild-moderate mentally impaired	SD	D	U	A	SA
59.	Moderate-severe mentally impaired	SD	D	U	A	SA
60.	Physically impaired	SD	D	U	A	SA

****

A FEW FINAL QUESTIONS ABOUT YOURSELF

61. Identify your gender. Female Male

62. What is your age? _____

63. How many years have you taught physical education? _____

64. What grade levels are you presently teaching? _____

65. Have many years have you taught disabled students? _____

66. What is the highest degree that you hold? _____

67. Have you taken any Developmental/Adapted Physical Education courses?

A. YES NO B. (if so, how many courses? _____)

68. Have you taken any Special Education courses?

A. YES NO B. (if so, how many courses? _____)

69. Which student's M-team meetings do you attend?

ALL SOME NONE

70. Do you receive any support services during the classes that the disabled students participate in your physical education classes? (peer tutors, teaching assistants, physical therapists, others)

YES NO (If so, who and to what degree?)

71. Rate the quality of your teaching experience for individuals with disabilities.

No Experience Not Good Satisfactory Very Good

72. How competent do you feel teaching students with disabilities?

Not at all Somewhat Very

PLEASE FOLD THE SURVEY AND PLACE IT IN THE SELF-ADDRESSED STAMPED ENVELOPE. THANK YOU FOR YOUR TIME AND CONSIDERATION IN THIS MATTER. PLEASE RETURN THE SURVEY NO LATER THAN MAY 22ND.

APPENDIX C

Raw Data

TABLE ONE

ORIGINAL RAW DATA

county	teacher	q1	q2	q3	q4	q5	q6
1	1	4	4	4	4	4	3
1	2	4	4	4	4	4	2
1	3	4	4	4	2	2	2
1	4	4	4	4	2	4	2
1	5	1	5	5	4	5	1
1	6	2	2	2	2	2	4
1	7	1	1	4	4	2	1
1	8	2	4	4	1	2	2
1	9	4	4	4	4	4	4
1	10	3	4	4	2	4	2
1	11	4	4	3	2	3	2
1	12	4	4	3	2	3	2
2	1	5	5	5	5	5	3
2	2	2	4	4	3	4	3
2	3	1	3	4	2	5	1
2	4	2	4	4	1	3	2
2	5	2	4	4	4	4	2
2	6	1	3	3	3	3	4
2	7	2	3	4	3	5	3
2	8	4	5	4	4	4	2
2	9	2	3	4	4	4	2
2	10	4	4	4	4	4	4
2	11	4	4	4	2	3	2
2	12	4	5	4	4	3	4
2	13	2	4	4	1	4	1
2	14	1	5	5	5	5	1
2	15	4	4	4	4	4	2
2	16	3	3	3	3	3	3
3	1	5	5	5	5	5	3
3	2	4	4	4	3	4	3
3	3	4	4	4	4	4	2
3	4	1	4	4	4	4	2
3	5	4	4	4	4	4	4
3	6	4	4	4	4	4	2
3	7	4	4	3	3	3	2
3	8	2	4	4	4	4	1
3	9	4	4	4	2	4	4
3	10	2	5	5	2	5	2
3	11	2	4	4	2	4	1

county	teacher	q1	q2	q3	q4	q5	q6
3	12	4	4	4	3	2	4
3	13	1	4	2	2	2	4
3	14	1	4	2	2	2	4
3	15	2	4	4	3	4	3
4	1	4	4	4	4	4	3
4	2	4	4	4	4	4	2
4	3	2	4	4	3	2	2
4	4	9	4	9	9	9	9
4	5	9	9	9	9	9	9
5	1	1	4	4	2	4	1
5	2	4	4	4	2	2	4
5	3	1	4	5	4	5	1
5	4	5	5	5	3	5	3
5	5	2	2	4	1	3	1
5	6	1	4	4	3	5	1
5	7	2	5	5	3	5	1
5	8	2	4	4	2	4	2
5	9	4	5	4	3	3	4
5	10	2	4	3	2	3	1
5	11	1	2	2	4	5	1
5	12	4	4	2	2	3	1
5	13	4	4	4	2	4	2
5	14	4	4	5	4	5	4
5	15	9	5	9	9	9	9
5	16	4	4	4	4	5	4
5	17	2	2	2	2	2	2
5	18	4	5	5	5	5	1
5	19	2	4	4	2	4	2
5	20	1	2	2	3	4	1
5	21	4	4	4	3	2	4
5	22	4	3	2	2	4	4
5	23	5	5	5	5	5	5
5	24	5	5	5	5	5	4
5	25	4	4	4	4	4	5
5	26	4	5	4	3	5	3
5	27	2	2	4	1	4	1
5	28	2	3	4	3	2	3
5	29	4	4	4	4	4	2
5	30	1	1	1	1	1	1
5	31	1	4	4	1	4	1
5	32	9	4	9	9	9	9

county	teacher	q1	q2	q3	q4	q5	q6
5	33	4	4	3	2	4	2
5	34	4	4	4	4	4	2
5	35	9	9	9	9	4	9
5	36	2	4	4	2	3	2
5	37	5	4	3	2	2	2
5	38	1	9	9	9	9	4
5	39	1	1	1	1	1	1
5	40	2	4	4	2	4	2
5	41	2	4	3	2	1	3
5	42	5	4	4	3	5	1
5	43	2	4	4	2	4	2
5	44	2	4	4	1	4	2
5	45	1	4	2	1	4	1
5	46	1	1	1	1	4	1
5	47	2	4	5	5	5	2
5	48	1	4	5	1	1	1
5	49	5	5	5	5	5	3

q7	q8	q9	q10	q11	q12	q13	q14
3	3	3	3	3	3	3	2
2	2	2	2	2	2	2	2
2	4	4	2	2	2	2	2
2	2	2	2	2	2	2	2
5	1	1	5	1	5	5	1
4	4	4	4	4	4	4	4
1	1	1	1	1	1	4	3
2	2	2	2	2	4	4	2
4	4	4	4	3	3	3	3
4	4	2	3	2	4	4	2
2	2	2	2	4	4	4	3
2	2	2	2	4	4	4	3
3	3	3	3	5	5	5	5
5	5	4	5	3	5	5	3
3	5	5	5	2	3	5	4
2	2	2	2	2	4	4	2
4	4	4	4	2	2	2	2
4	4	4	4	3	3	3	3
4	4	2	4	4	4	4	3
2	2	2	2	3	4	4	4
3	4	4	4	2	3	4	4
4	4	4	4	4	4	4	4
2	2	2	2	4	4	1	1
5	4	4	4	4	4	3	3
1	1	1	1	1	2	4	1
4	5	5	5	2	4	5	5
3	3	3	4	3	3	3	3
3	3	3	3	3	5	3	3
3	3	3	3	4	4	4	4
4	4	4	4	5	5	4	3
2	2	2	2	3	5	5	4
4	4	4	5	3	4	4	1
4	4	3	3	4	4	2	2
2	2	2	4	3	5	5	5
2	3	3	3	2	2	3	3
4	4	4	4	1	4	4	4
4	4	2	4	2	2	4	4
2	2	2	2	3	4	4	2
1	2	2	2	2	4	4	2

q7	q8	q9	q10	q11	q12	q13	q14
4	4	4	4	4	4	4	3
4	2	2	4	4	5	2	2
4	2	2	4	4	5	2	2
2	2	3	4	2	3	4	4
4	3	4	4	4	3	3	3
2	2	2	2	4	4	4	4
4	4	2	4	2	4	4	2
9	9	9	1	5	9	9	9
9	9	9	9	9	9	9	9
4	4	2	4	1	4	4	2
4	3	2	2	5	5	5	3
2	3	3	5	3	4	5	3
3	3	3	5	5	5	5	5
1	2	2	2	4	4	1	1
4	4	3	5	3	5	5	3
4	5	5	5	5	5	5	5
2	2	2	2	4	4	4	3
5	5	3	3	4	5	5	3
1	1	1	3	3	4	4	1
1	1	2	2	1	1	1	1
1	1	1	1	2	2	2	2
2	2	2	2	2	4	4	2
4	4	4	4	5	4	4	4
9	9	9	5	9	9	5	9
4	4	4	5	3	4	4	4
2	2	2	2	4	4	4	2
2	3	4	4	4	5	5	4
4	4	3	4	2	3	4	4
1	1	1	1	1	1	1	1
4	4	2	2	5	5	5	2
4	2	2	4	4	2	2	3
5	5	5	5	5	5	4	4
4	5	4	4	3	4	4	4
4	4	5	4	2	2	2	2
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2	2	2	2	2	2	2	2
4	4	4	4	2	2	4	2
1	1	1	1	1	1	1	1
1	1	1	1	1	4	4	1
3	9	9	9	9	4	9	9

q7	q8	q9	q10	q11	q12	q13	q14
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9	9	9	4	9	9	9	9
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4	2	2	4	2	2	2	2
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3	4	4	4	2	4	4	4
4	3	1	1	2	2	2	1
3	5	3	3	3	4	4	4
2	2	2	2	2	5	5	2
2	2	2	2	2	2	2	2
4	1	1	4	3	4	3	3
1	1	1	4	1	1	1	1
2	4	5	5	1	4	5	4
1	1	1	1	1	5	5	2
3	3	3	3	5	5	5	5

q15	q16	q17	q18	q19	q20	q21	q22
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2	4	4	4	4	4	2	2
4	3	5	4	4	5	5	1
4	3	4	4	4	4	2	1
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4	4	4	4	4	4	4	2
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2	3	3	3	3	3	4	2
4	4	4	4	3	4	2	2
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1	4	4	4	4	4	4	2
3	4	4	3	2	3	2	2
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3	4	4	3	3	4	2	2
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2	2	4	3	1	4	4	2
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4	1	4	4	4	4	3	3
4	4	4	4	2	4	2	2
4	3	4	4	2	4	3	2
2	3	4	4	4	4	3	2

q15	q16	q17	q18	q19	q20	q21	q22
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5	4	4	9	9	4	3	2
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2	4	4	2	2	2	2	4
9	9	9	4	9	9	9	5
9	9	9	9	9	9	9	9
2	1	2	2	2	2	4	2
3	5	5	5	5	5	2	2
5	2	4	4	4	5	1	2
5	5	5	5	5	5	1	1
4	4	4	4	1	1	4	2
4	2	4	4	4	4	3	1
5	4	4	4	4	4	4	4
4	3	4	4	2	4	3	2
3	5	5	5	5	5	1	1
1	3	4	4	2	3	1	1
1	3	3	3	3	3	4	2
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2	4	4	4	4	2	1	1
4	5	4	4	4	4	3	3
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4	3	4	4	4	4	3	2
4	2	4	4	2	4	2	2
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2	5	5	5	2	2	2	2
3	4	4	3	3	4	4	4
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4	2	2	2	2	2	2	2
1	1	1	1	1	1	5	5
4	2	4	4	2	2	4	2
9	9	4	9	9	9	9	1

q15	q16	q17	q18	q19	q20	q21	q22
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2	4	4	4	4	4	4	4
4	9	9	9	9	4	4	9
3	5	3	2	2	4	1	1
3	4	3	3	3	3	2	2
2	4	4	4	2	4	2	2
1	1	1	1	1	1	5	5
4	2	2	2	2	2	4	4
1	3	3	2	2	1	4	2
3	3	3	3	3	3	3	5
4	3	4	4	4	3	2	1
2	4	4	4	4	4	2	2
2	4	4	4	4	4	3	3
1	1	1	1	1	1	1	1
4	3	4	4	3	4	3	1
2	1	5	5	4	4	5	1
5	4	4	4	4	4	1	1

q23	q24	q25	q26	q27	q28	q29	q30
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1	1	1	2	2	2	2	2
2	2	2	3	2	2	4	4
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1	3	1	5	1	1	3	1
1	1	1	4	2	2	2	2
4	4	1	5	3	2	4	1
2	1	1	5	2	2	4	4
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1	1	1	5	2	2	3	2
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2	2	2	4	2	2	3	2
2	4	2	2	2	2	5	2
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4	5	4	5	4	4	5	5
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3	3	3	3	3	3	3	3
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3	3	3	5	2	3	3	3
2	2	3	5	2	2	2	2
2	4	2	2	2	2	4	2
2	3	2	4	2	2	4	2
2	4	2	5	2	2	5	2

q23	q24	q25	q26	q27	q28	q29	q30
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9	4	4	4	4	4	4	4
5	9	9	5	9	9	9	9
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2	2	2	4	2	2	2	2
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2	2	2	5	5	5	5	5
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3	3	1	5	2	4	5	4
3	4	4	4	3	3	3	4
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5	5	5	5	5	5	5	5
2	4	2	4	2	2	4	9
9	9	9	9	1	9	9	9

q23	q24	q25	q26	q27	q28	q29	q30
3	4	3	4	2	4	4	2
2	2	2	4	4	2	2	2
9	9	9	4	9	9	9	9
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3	3	3	5	2	5	5	2
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1	1	1	5	2	2	2	1
1	1	1	5	1	1	4	4
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q31	q32	q33	q34	q35	q36	q37	q38
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4	4	4	4	4	2	2	2
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4	2	2	2	2	2	2	2
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4	4	4	4	5	2	2	2
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3	2	2	2	2	3	2	2
4	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1
4	4	4	4	4	2	2	2
2	2	2	4	2	2	2	2
3	3	3	3	3	2	1	1
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4	4	3	3	3	5	5	3
5	2	2	2	2	5	3	3
2	2	2	4	2	2	2	2
3	2	2	5	3	1	1	1
4	2	2	4	2	4	2	2

q31	q32	q33	q34	q35	q36	q37	q38
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4	2	3	4	4	2	2	3
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4	9	3	4	4	4	2	4
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2	2	2	2	2	5	2	2
5	1	2	3	1	2	2	2
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4	3	3	4	4	2	2	2
4	2	3	5	3	2	2	2
5	5	4	4	1	1	1	1
5	5	5	5	5	4	4	4
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3	3	3	3	3	3	3	3
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4	3	3	3	4	4	3	3
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5	5	5	5	5	5	5	5
5	2	2	5	5	5	2	2
9	1	9	9	9	1	1	1

q31	q32	q33	q34	q35	q36	q37	q38
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4	2	2	2	4	4	4	4
1	9	9	9	9	1	9	9
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5	5	5	5	5	5	5	5
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4	3	3	4	5	3	2	3
4	4	4	4	4	3	3	3
4	1	1	4	1	4	1	1
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5	3	4	5	5	5	5	5
4	4	4	4	4	5	5	5
2	1	1	1	1	5	2	2
5	1	1	1	1	5	1	1
2	2	2	2	2	4	4	4

q39	q40	q41	q42	q43	q44	q45	q46
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3	3	5	5	5	5	5	4
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4	4	3	3	3	3	3	2
2	2	5	4	4	4	4	5
1	1	1	1	1	1	1	1
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2	2	4	2	2	4	3	2
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3	3	5	4	4	4	4	5
3	2	2	2	2	4	2	2
1	1	4	2	2	1	2	3
4	2	2	2	2	2	2	5

q39	q40	q41	q42	q43	q44	q45	q46
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3	2	4	4	4	4	4	4
4	2	4	4	4	4	4	5
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4	4	4	4	4	4	4	1
4	4	2	2	4	4	4	3
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4	4	4	4	4	4	4	1
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3	4	4	4	4	4	4	2
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5	5	5	5	5	5	5	5
5	5	5	2	2	5	5	5
1	1	9	2	9	9	9	9

q39	q40	q41	q42	q43	q44	q45	q46
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4	4	4	4	4	4	4	2
9	9	4	9	9	9	9	1
2	3	2	2	1	2	4	2
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5	5	5	4	5	5	4	5
2	2	2	2	2	2	2	2
2	2	5	1	1	1	1	5
4	4	4	4	4	4	4	1

q47	q48	q49	q50	q51	q52	q53	q54
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1	1	1	1	1	1	1	1
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3	3	3	3	2	2	2	2
3	3	3	3	1	1	1	1
2	2	2	2	4	4	4	4
3	3	4	3	2	2	4	5
1	1	1	1	2	2	2	2
2	2	4	2	2	2	2	4
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3	3	3	3	5	2	2	2
2	2	4	2	3	3	3	3
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2	2	5	2	4	2	2	4

q47	q48	q49	q50	q51	q52	q53	q54
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2	2	4	2	5	2	4	5
2	2	4	4	3	2	2	4
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2	3	4	4	3	2	3	4
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2	5	4	5	2	2	4	3
1	1	1	1	5	5	5	5
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1	1	1	1	2	2	2	2
3	3	3	3	5	2	2	2
1	1	2	1	2	3	4	5
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1	1	3	1	4	2	2	4
2	2	2	2	2	2	2	2
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2	3	3	3	2	2	4	4
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1	1	1	1	3	3	3	3
1	1	1	1	2	2	2	4
2	2	5	2	5	2	2	5
2	2	2	2	4	3	3	3
2	2	4	4	4	4	4	4
5	5	5	5	5	5	5	5
2	2	5	4	5	2	2	5
1	9	9	9	9	1	9	9

q47	q48	q49	q50	q51	q52	q53	q54
2	3	4	5	2	2	3	5
2	2	2	2	4	4	4	4
9	9	9	9	4	9	9	9
3	4	4	2	2	2	3	3
3	2	2	2	2	2	3	4
4	4	4	4	4	4	4	4
5	5	5	5	4	4	4	4
3	3	3	3	4	4	3	3
2	3	4	4	3	3	3	4
3	3	3	3	5	3	5	3
2	2	4	2	4	2	2	3
2	2	5	5	4	2	4	4
3	3	3	3	4	4	4	4
5	5	5	5	2	2	5	5
2	2	2	2	5	2	2	2
1	1	2	2	1	1	1	1
1	1	1	1	4	4	4	4

q55	q56	q57	q58	q59	q60	q61	q62
4	4	4	4	4	4	1	47
2	4	4	4	4	4	2	52
4	4	4	4	2	2	2	50
2	4	4	4	2	3	2	46
1	1	3	3	1	4	2	36
4	4	4	4	4	4	2	44
5	2	4	4	1	1	1	50
5	2	4	4	2	2	2	50
4	3	3	3	3	3	2	37
4	2	4	4	2	4	1	40
4	4	4	4	3	4	2	35
2	1	4	4	3	3	1	48
4	4	4	4	4	4	1	41
4	4	5	5	4	4	2	25
4	1	2	2	2	3	2	35
2	2	4	4	2	2	1	45
2	4	4	4	4	4	2	26
3	2	2	2	2	2	2	27
4	2	2	2	2	2	2	27
4	4	4	4	4	4	2	55
2	1	3	4	4	4	2	29
1	4	4	4	4	4	1	48
4	4	4	4	1	3	1	43
2	4	4	2	2	2	1	47
2	1	4	4	2	3	2	40
2	3	4	4	4	4	1	39
2	3	3	3	3	3	2	44
1	3	3	3	3	3	2	37
4	4	4	4	4	4	1	47
4	4	4	4	2	4	2	27
2	5	5	5	5	5	2	50
2	4	4	4	2	4	2	49
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4	5	5	5	3	4	2	24
3	2	4	3	3	3	1	44
2	1	4	4	4	4	2	42
3	4	4	4	2	4	1	47
2	3	4	4	2	4	1	47
2	1	4	4	1	4	2	46

q55	q56	q57	q58	q59	q60	q61	q62
3	4	4	4	4	4	2	35
2	2	4	2	2	4	2	29
2	2	4	4	2	4	2	31
4	4	4	4	2	2	2	47
3	5	3	1	4	2	2	57
2	5	5	5	5	5	2	47
4	3	4	3	2	2	1	26
9	2	9	9	9	9	2	58
9	9	9	9	9	9	2	15
1	4	4	2	3	3	1	33
5	5	5	5	4	4	2	50
1	2	1	1	2	1	1	45
2	5	5	5	5	5	1	36
2	1	4	4	4	4	1	51
3	2	5	5	2	4	1	57
4	5	5	5	3	4	1	27
1	3	4	4	2	4	1	46
2	5	5	5	5	5	2	43
2	3	4	4	2	3	1	38
2	2	2	2	2	2	1	40
4	4	4	2	2	2	2	50
2	4	4	4	4	4	1	42
4	4	4	4	4	4	2	48
9	9	5	9	9	9	1	33
4	4	4	4	4	4	2	49
2	4	4	4	4	4	2	35
2	4	5	5	5	5	1	28
5	1	3	4	2	3	2	51
3	1	1	1	1	1	2	48
4	4	4	4	2	2	2	35
4	4	4	3	3	4	2	28
2	4	4	4	4	4	1	34
2	4	4	4	4	4	1	51
3	4	4	4	4	4	1	25
2	4	5	4	4	5	1	39
2	2	4	4	1	4	1	26
4	2	3	3	3	2	2	43
4	4	4	4	2	2	2	31
5	1	1	1	1	1	2	55
5	1	4	4	2	2	1	32
9	9	4	9	9	9	2	55

q55	q56	q57	q58	q59	q60	q61	q62
1	4	4	4	2	1	2	37
4	4	4	4	4	4	2	57
9	9	9	9	9	4	2	57
2	4	3	2	2	3	2	34
4	4	4	3	2	2	2	49
4	2	2	2	2	2	1	54
4	1	1	1	1	1	1	50
2	2	3	3	2	3	1	42
4	2	4	4	2	2	1	50
5	3	5	3	5	3	1	49
2	3	4	4	2	4	1	45
4	2	4	4	2	2	2	38
4	1	3	1	1	3	2	47
2	1	1	1	1	4	1	46
2	2	4	4	4	4	1	47
1	1	5	5	4	4	1	47
4	5	5	5	5	5	1	51

q63	q64	q65	q66	q67a	q67b	q68a	q68b
12	1	12	1	1	1	1	1
29	5	29	2	1	1	1	2
23	2	15	3	2	0	2	0
15	2	20	4	1	9	1	9
12	4	14	1	1	1	1	2
15	4	15	3	1	2	2	0
28	4	28	3	1	1	2	0
27	5	15	3	1	2	1	1
12	4	6	1	1	1	1	1
11	2	5	2	1	1	1	2
8	4	8	1	1	2	1	1
27	4	25	2	1	3	1	2
15	2	15	1	1	3	1	3
3	2	3	1	1	1	1	1
8	5	5	4	1	1	1	3
14	1	14	1	1	2	1	1
2	4	2	1	1	1	1	1
3	9	3	2	1	1	2	0
3	5	3	1	1	1	2	0
28	6	5	2	1	1	2	0
6	5	6	2	1	2	1	2
13	2	10	1	1	2	1	1
19	5	10	1	1	1	2	0
23	4	5	2	1	1	2	0
18	2	18	1	1	3	1	1
17	5	17	3	1	1	1	4
11	2	9	1	1	1	1	1
7	4	7	1	1	3	1	1
2	1	24	4	1	2	1	2
5	5	5	2	1	2	2	0
28	4	23	1	1	1	2	0
17	3	17	2	1	2	2	5
6	4	6	4	1	2	1	2
2	3	2	1	1	1	1	1
22	3	2	2	9	9	9	9
10	4	15	1	1	2	2	0
7	2	2	1	1	3	1	1
23	1	23	2	1	6	2	0
10	5	10	2	1	1	1	1

q63	q64	q65	q66	q67a	q67b	q68a	q68b
7	4	7	4	1	2	1	2
2	3	2	1	1	2	1	2
4	4	2	2	1	2	1	3
15	5	6	4	9	9	9	9
32	5	30	2	1	1	2	0
12	5	12	2	1	1	1	1
3	5	3	1	1	1	1	1
27	5	32	2	1	6	2	0
15	4	0	1	2	2	3	2
7	4	7	1	1	3	1	2
21	4	6	1	1	2	2	0
13	2	13	2	1	2	1	1
14	4	14	1	1	1	1	2
31	2	31	2	1	9	9	9
25	1	5	2	1	9	2	9
2	2	2	2	1	4	2	0
17	6	7	2	1	2	2	0
20	2	15	2	1	5	1	5
16	2	16	1	1	7	2	0
19	2	17	2	1	4	2	0
28	4	25	2	1	1	2	0
22	4	20	2	1	9	1	9
25	5	10	2	1	6	1	2
9	2	9	4	1	2	1	9
27	4	10	2	1	2	2	0
5	5	5	1	1	1	1	2
7	2	7	1	1	1	2	0
28	2	18	2	1	1	1	1
25	5	10	3	1	1	2	0
3	5	3	1	1	1	2	0
8	5	3	2	1	2	2	0
11	4	11	1	1	2	1	1
26	1	25	2	1	9	1	9
2	5	2	1	1	1	1	1
11	2	11	2	1	9	1	9
1	4	1	1	1	1	1	1
20	5	8	1	1	1	2	0
3	4	8	1	1	1	2	0
32	5	9	5	2	9	2	0
5	4	5	4	1	1	1	2
7	5	2	2	1	9	2	0

q63	q64	q65	q66	q67a	q67b	q68a	q68b
9	7	6	4	1	5	1	2
32	4	32	2	9	9	9	9
30	1	10	1	1	1	2	0
3	5	5	2	9	9	9	9
10	5	10	1	9	9	9	9
33	5	33	1	9	9	9	9
30	5	2	1	9	9	9	9
20	5	13	2	1	1	2	0
24	2	24	1	1	2	2	0
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6	4	6	2	2	0	2	0
25	5	25	2	1	1	2	0
25	5	25	1	1	3	2	0
23	6	23	2	1	2	2	0
24	2	24	1	1	1	2	0
29	4	21	2	1	1	2	0

q69	q70	q71	q72
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2	1	3	2
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2	1	2	3
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2	2	3	2
3	1	3	2
3	1	3	2
9	9	9	9
2	1	3	2
2	1	4	3
2	1	4	3
3	2	3	2

q69	q70	q71	q72
3	1	4	2
2	1	4	2
2	1	3	2
9	9	9	9
2	1	4	3
1	2	3	2
2	2	3	2
2	2	4	3
9	9	9	9
3	9	3	2
2	1	4	3
3	2	4	3
2	1	3	3
3	1	3	3
2	1	3	2
3	1	3	3
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2	2	3	2
3	2	3	2
2	2	3	2
2	2	3	2
2	1	3	2
3	2	9	9
2	2	3	2
1	2	4	3

q69	q70	q71	q72
2	2	3	2
9	9	9	9
3	2	3	2
9	9	9	9
9	9	9	9
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9	9	9	9
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2	1	3	2
3	1	2	2
2	1	4	3
2	2	3	2
2	1	3	2
2	2	3	2
2	2	3	2
3	1	3	2
2	1	3	2

APPENDIX D

Request To Conduct Survey

Letter To Teachers Requesting Participation In The Study

Fax Sent to All Physical Education Teachers

Date

Dear School Representative:

My name is Melanie Hodgson, and I am a professor at Carson-Newman College's Physical Education Department. I am also a graduate student at the University of Tennessee. I am interested in surveying your physical education teachers as partial fulfillment of my dissertation project for the doctorate of education. This survey is totally voluntary on their part. The information will be confidential. I will not be able to identify any person's information by name. Your county is one of five total counties I plan to use in my research.

My research project focuses on the relationship between attributes of physical education teachers and their attitudes toward teaching disabled students in their regular physical education classes. I have chosen this project because I teach a methods course in Adapted Physical Education at Carson-Newman. I am extremely interested in preparing my students (future physical education teachers) to work effectively with the disabled. I hope to glean helpful information for teaching the disabled in regular physical education classes from current P.E. teachers. I plan to use the data from the survey to make improvements in my course and to prepare workshops and in-service programs for public schools. My desire is that the gathered information will give insight into the needs of P.E. teachers for offering appropriate programming for disabled students.

Enclosed, you will find a copy of the survey and the cover letter that will be sent to each physical education teacher. I would like to survey your elementary, middle school, and high school physical education teachers. Please return your response to this request by FAX to 423-475-2212. Thank you for your consideration in this matter. If you have any questions, please call me at 423-471-3303 or 423-475-8306.

Sincerely,

Melanie Hodgson, Assistant Professor
Health, Physical Education, and Leisure Services
Carson-Newman College

Enclosure

Dear Physical Education Teacher,

My name is Melanie Hodgson, and I am a professor at Carson-Newman College's physical education department. I am also a graduate student at the University of Tennessee. The attached questionnaire is partial fulfillment of my dissertation project for the Doctorate of Education.

My research project focuses on the relationship between attributes of physical education teachers and their attitudes toward teaching disabled students in their regular PE classes. I have chosen this topic because I teach a methods course in Adapted Physical Education at Carson-Newman. I am extremely interested in preparing my students (future physical education teachers) to work effectively with the disabled. I hope to glean helpful information for teaching the disabled in regular physical education classes from current PE teachers.

I plan to use the data from the survey to make improvements in my course and to prepare workshops and inservice programs for public schools. My desire is that the gathered information will give insight into the needs of PE teachers for offering appropriate programming for disabled students.

You have been chosen to complete this survey because you teach PE in an elementary, middle, or high school in one of five east Tennessee counties. Participation in this research project is purely voluntary, and all responses will be anonymous. I will not be able to identify any of the respondents with their responses. Your completion of the survey serves as an informed consent. There is no penalty for a decision not to complete the survey.

Results derived from the compilation of the data will be available to you upon request. You may e-mail me at Hodgson@CNCACC.CN.EDU or contact me at the address below and I will mail you the results. You may
also call at 423-475-8306. Thank you for your willingness to participate in this study.
PLEASE RETURN SURVEY NO LATER THAN MAY 22ND.

Sincerely,

Melanie Hodgson
Assistant Professor, Carson-Newman College
420 West Old A. J. Hwy.
New Market, TN 37820

TO:

FROM: MELANIE HODGSON

MESSAGE:

THIS IS A REMINDER TO PLEASE FILL OUT THE SURVEY THAT YOU RECEIVED CONCERNING THE TEACHING OF THE DISABLED IN YOUR PHYSICAL EDUCATION CLASSES.

I WOULD GREATLY APPRECIATE YOU FILLING OUT THE SURVEY AND RETURNING IT IN THE SELF-ADDRESSED ENVELOPE THAT YOU RECEIVED. MY DISSERTATIION PROJECT IS DEPENDENT ON THE NUMBER OF SURVEYS THAT I RECEIVE.

IF YOU HAVE ALREADY FILLED OUT THE SURVEY,
THANK YOU!!!!!!!!!

THANK YOU,

MELANIE HODGSON

VITA

Melanie Thomas Hodgson was born in Knoxville, Tennessee, on June 9, 1953. She attended elementary school in Jefferson City, Tennessee, and graduated from Jefferson High School in May 1971. She entered the University of Tennessee and in March 1975 received a Bachelor of Science degree in Health and Physical Education. She taught Physical Education for disabled students in Jefferson County from 1975 to 1977. In March 1976 she entered the graduate program at the University of Tennessee and received a Masters of Science degree in Special Education on August 23, 1977. She taught Special Education at Jefferson County High School from 1977 to 1991. She began working at Carson-Newman College in August 1991 in the Health, Physical Education, and Recreation Department. She teaches Physical Education methodology and coordinates the Teacher Licensure Program at Carson-Newman College. She entered graduate school the summer of 1992 at the University of Tennessee as a part-time doctoral student in the College of Education. She will receive the Doctor of Education degree with a major in Curriculum and Instruction in August 1999.

Melanie has been married to Jack A. Hodgson for 25 years. They have a daughter, Cara Marie who is 20 years old, and a son, Trevor Isaac, who is 18 years old. They live in New Market, Tennessee.