This is to certify that the
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READY TO TEACH?:
EXAMINATION OF PHYSICAL EDUCATION TEACHERS' PERCEIVED PREPARATION AND PERCEIVED COMPETENCE TO TEACH

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Geffrey Colón

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Major Professor's Signature

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READY TO TEACH?:

EXAMINATION OF PHYSICAL EDUCATION TEACHERS' PERCEIVED PREPARATION AND PERCEIVED COMPETENCE TO TEACH

By

Geffrey Colón

A DISSERTATION

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ABSTRACT

READY TO TEACH?: EXAMINATION OF PHYSICAL EDUCATION TEACHERS' PERCEIVED PREPARATION AND PERCEIVED COMPETENCE TO TEACH

By

Geffrey Colón

The relationship between the perceived competence of physical education teachers with 1 to 3 years in experience and preservice education and personal characteristics was examined. Spearman-rho correlation coefficients were used to address the postulated hypotheses to determine which of the six predictors (i.e., professional preparation, personal qualities, social/professional qualities, aspects of school management, techniques of teaching competence, mentoring induction programs) within the questionnaire were significant with regards to the overall perceived competence of physical education teachers toward their readiness to teach. Significance was set at the .05 levels for the probability of determining prediction of influence per item given the exploratory nature of the study and the small sample size. Four of the six hypotheses were supported. Perceived competence was significantly correlated with professional preparation (r = .75), mentoring induction programs (r = .60), personal qualities (r = .53), and techniques of teaching competence (r = .53). The data analysis for the second purpose of this study involved examining the predictive strength of perceived preparation categories on perceived competence to teach, by means of a simultaneous regression using the predictor variables that correlated significantly with overall perceived competence. Results of the multiple regression analysis indicated that professional preparation was the strongest predictor of

perceived competence to teach physical education among novice teachers in this study. Thus, physical education induction programs should have a strong emphasis in preparing teachers with a school-based experience and university professional training that exhibits a positive collaboration model.

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A great deal of time went by from the start of the process to conceive a topic for this dissertation to the time of its completion. I certainly have grown leaps and bounds from my acceptance into the graduate program in the fall of 1990 as a master's degree student to my leaving ABD to accept an assistant professor position in 1998 and to finally completing my dissertation in the summer of 2005. Many individuals have been instrumental in my scholarly and professional development, my family, professors, peers in the graduate program, as well as peers in the ranks of professors from different universities. Unfortunately, I can not mention all of them, but in my heart and mind all of them know that their help and support was instrumental and a positive impact in my life.

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CHAPTER I
INTRODUCTION

Nature of the Problem

On April 13, 2000, program standards for the physical education endorsement were approved by the State Board of Education in the State of Michigan. The standards were developed by a Michigan referent group of content experts representing K-12 teachers and higher education faculty, and were aligned with the K-12 Michigan Curriculum Framework and with standards developed by the National Association for Sport and Physical Education (NASPE). These standards represent a broad consensus regarding what all physical education teachers must know and be able to do to support student learning. How prepared do beginning level physical education teachers feel they are to support student learning? Novice physical education teachers come to their positions with an array of preparation experiences from various sources. Some experiences may make them feel more competent to support student learning than other experiences. In knowing which experiences are most predictive of the perceived competence of novice teachers to teach, teacher preparation programs can adjust their approaches accordingly. The purpose of this study was to examine the perceived competence of teachers with 1 to 3 years of experience regarding their readiness to teach as predicted by their perceived preparation experiences. These preparation experiences include university program curriculum requirements, school-based experiences, and mentor induction programs.

University Program Curricula Role in the Development of Novice Teachers

The role of the university program curriculum in the development of the novice teacher is essential for obtaining pedagogical and content knowledge required to

successfully teach physical education. The current trend to obtain the knowledge for teaching physical education is coined as a dynamic process that interacts with practical life-world experiences of preservice teachers and the pedagogical content knowledge obtained through the university curriculum (Rossi, 1996).

According to Rossi's (1996) description of the dynamic learning process, the university curriculum guides the development of preservice teachers by providing specific emphasis on areas needed to teach physical education. The university curriculum focuses on providing content knowledge about the field of physical education so that preservice teacher are prepared to teach different fundamental motor skills, sport skills, and life-long physical skills when they enter the teaching profession. The content knowledge is followed by pedagogical knowledge in courses emphasizing the planning of unit and lesson plans. Additionally, courses focus on teaching methods that include instructional techniques, modeling and demonstration, and how to deliver technical information coupled with corrective feedback aimed at improving pupil's skill level through practice. Ultimately, pedagogical and content knowledge must be accompanied by aspects of reflective teaching in order for preservice teachers to analyze their own teaching practices to seek improvements in teaching physical education (Rossi, 1996). Thus, self-analysis through critical thinking and reflections on the part of preservice teachers during their university preparation years is important for their development as future teachers in the field.

Another component of the university program curriculum is to provide an environment that is open to experimentation and allows preservice teachers to engage in a threat-free setting that permits them to experience success and failures through

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trial and error. For example, a threat-free environment for preservice teachers occurs during peer-teaching practice sessions in the university curriculum of courses. Such courses allow the preservice teacher to implement lesson plans, develop a teaching style, and in constructive fashion, obtain feedback from peers and professors that enables them to reflect on their teaching methodology for the purpose of self-improvement and to increase competence as a future teacher in physical education. Rossi (1996) refers to this process as "action research," in which the action is tied with reflections directly related to the acquiring of pedagogical and content knowledge needed by the preservice teacher to teach physical education. Action research is a necessary component of the university curriculum for the development of preservice teachers because it critiques the teaching methods in practice and it challenges assumptions of teaching on the part of the preservice teacher without placing long lasting negative effects on the persona of the prospective teacher.

The importance of collaboration between university programs, schools, and mentors (i.e., university supervisors, cooperating teachers) provides the strongest preparation for preservice teachers to develop the critical thinking skills necessary to teach physical education (Mawer, 1996). Results from several studies about the organization of a collaborative team (i.e., university programs, schools, mentors) have concluded that such partnership promotes an increase in communication, collegiality, experimentation, expectations, and rewards (Clift, Veal, & Holland, 1995; Oja & Smulyan, 1989; Smylie, Lazarus, & Bronlee-Conyer, 1996). These studies indicated that positive team processes (i.e., university program requirement, university supervisors for preservice teachers, and cooperating teachers) could increase

substantive interaction and foster critical thinking among novice teachers which would lead to the development of new thinking and behaviors.

In addition to the positive team processes to foster critical thinking, Rogers' (1969) principles of learning emphasized that learning has to engage the self. By engaging the self, preservice teachers utilize their own learning resources to succeed in the learning process, and the success is attributed to their self-determined efforts. In addition, a threat-free learning climate (such as an established cooperative learning environment in the university setting) is crucial for free exchange of ideas and examination of taken-for-granted assumptions. To conclude, if a university is to be helpful, it needs to provide a learning climate, which facilitates a prospective teacher's openness to new experiences and change.

Moreover, rapid changes in the characteristics and learning needs of K-12 students demand the need for university programs, school districts, and teachers to act collectively. Increasing demands on education are forcing university programs, teachers, administrators, and parents to work and learn together to create a stronger learning community. Opportunities for preservice teachers, university supervisors, and cooperating teachers to share, to work collaboratively, and to experiment without fear are critical components for a positive learning climate (Asayesh, 1993). A problem reported by Sergiovani (1992) indicated that many educational leaders failed to transform their organizations into a learning community due to their inability to tap the sources of motivation of their teachers and staff. To do that, university programs and school districts need to promote a culture of authenticity, a deeper way of connecting with one another to make the university preparation process and the

subsequent school life of prospective teachers more meaningful, and for prospective teachers to feel more competence in their readiness to teach.

School Based Preparation Experiences

The shift in educational programs endorsing teaching certificates was described by Mawer (1996) as significant in the history of teacher preparation. The transformation from a largely university based professional training into a school/university partnership collaboration in which the preservice teacher spends pre-student teaching hours in the school setting working under the supervision of cooperating teachers creates a more practical induction experience into the profession of physical education. As a result of this collaborative effort and with the mentoring of cooperating teachers, the preservice teacher gathers experience in relationship to personal qualities, social and professional attributes, and aspects of school management needed to effectively teach physical education. Consequently, the importance of the collaboration efforts between universities, schools, and cooperating teachers has created a new direction in the field of teacher education (Mawer, 1996).

School based experiences provide preservice teachers with practical applications of information learned through the university program requirements. The collaboration format between universities and school districts begins with the interaction of theory and practice to clarify the different aspects of the approach to becoming a physical education teacher who is competent and able to reflect intelligently (Shenton & Murdoch, 1996). In this process, the preservice teacher learns about the discipline based on a theoretical analysis of study, which is then transferred into good teaching with the reflection of practice in the physical education context. This model (i.e., the

interaction between theory and practice) allows the prospective teacher to practically implement educational/pedagogic theory in the actual school settings. In this fashion, the university supervisors, cooperating teachers, and students are all involved in the contribution of the student's development as a future teacher.

Studies support the interaction approach model between theory and practice. For instance, Richards, Moore, and Gipe (1996) believed that contextual conditions unique to a particular school setting play a part in influencing what novice teachers (similar to preservice teachers during their student-teaching experience) learn and how they think about teaching. The researchers elicited the classroom management problems with which beginning teachers are preoccupied. A study of a school's organization (Reiman & Edelfelty, 1990) indicated that an opportunity for team lessons and unit planning could impact novice teachers in their attitude toward lesson planning, sensitivity for individual learning needs, and feelings of connection with colleagues. In like manner, the interaction between the school's organization, the cooperating teacher, and the school setting in which the preservice teacher conducts the student-teaching experience provides a school-based preparation that leaves a long lasting impression in the pedagogical foundation of future teachers.

The contribution of the cooperating teacher as a mentor is crucial in the development of the prospective teacher and in successful collaboration with a university program to foster school based experiences (Mawer, 1996). Three considerations must be given regarding the contribution of a cooperating teacher in order to ensure a good and fair experience for preservice teachers. First, the cooperating teacher has the time and status to allow the mentoring to be effective with

the prospective teacher. This means that school administrators and the cooperating teachers themselves are committed to the mentoring process of preservice teachers.

Second, the cooperating teacher has a clear understanding of the university program goals, curriculum, and practical experiences that the preservice teacher is to experience in his or her induction to the physical education profession. In addition, the cooperating teacher should have some input on the aspect of practical experiences that are provided in the mentoring of preservice teachers.

The last condition is the agreement between schools, the cooperating teachers, and university supervisors about the most appropriate model of shared responsibility for the development of the preservice teacher's competency in the field of physical education. This agreement will delineate who is responsible for delivering theoretical content and applied practical instruction in the development of the preservice teacher.

Effective training models should involve more than teaching about new ideas. Much learning is required on the part of teachers whose first-hand experiences and learning processes pose the greatest challenge to deep change. Therefore, to create and maintain this kind of learning climate, training efforts need to establish the current stage of a teacher's development and then serve to facilitate further development toward a higher stage (Odell, 1990). Beginning teachers need ongoing support, careful attention, and built-in structure to continually think and reflect on their assumptions and practices. School-based experiences can provide them with this type of preparation.

Mentoring Induction Programs

Upon formally entering the teaching profession as a newly hired teacher, the

development of teaching competence continues. Michigan legislation mandates that school districts implement a system of mentoring for novice teachers as well as a professional development program during the first 3 years of teaching. The work of Huling-Astin (1990) views an induction program as a "planned program intended to provide some systematic and sustained assistance, specifically to beginning teachers for at least one school year" (as cited in Lawson, 1992, p.163). Common induction practices include: (a) provision of printed materials about employment conditions and school regulations, (b) orientation visits to the school before the start of the first year, (c) released time for professional development, (d) support groups for beginning teachers, (e) consultation with experienced teachers, (f) workshops on specific topics, (g) opportunities to observe, and (h) team teaching (Veenman, 1984).

Reported literature has shown the influence of induction programs on meeting the needs of beginning teachers. For instance, mentoring programs have been identified as one of the favorable strategies designed to provide beginning teachers with structured personal assistance (Reiman & Thies-Sprinthall, 1998). Smylie and Conyers (1991) suggested a competency-based approach, with which novice teachers could eventually seek their own resources for instructional decision-making rather than depending on external sources for the solution to their problems. The same authors contend that upon reflection and with the guidance of experienced teachers, beginning teachers are able to evaluate their own teaching strengths and weaknesses in a more objective way (Smylie & Conyers, 1991).

The impact of the socialization process on teachers' identities and adaptation was explored by Lawson (1992). Lawson explains that "induction could not be viewed as

a linear, one-way process of socialization wherein recruits are induced into the profession's way of defining and performing work" (p.164). In addition to helping beginning teachers deal with teaching matters, Langer, Pasch, Gardner, Starko, and Moody (2000) believed that induction programs needed to address issues such as working relationships. Their survey indicated that beginning teachers who appeared to have acquired competence in the classroom still remained challenged by school situations and relationships with administrators, peers and parents.

Another factor that directly or indirectly encourages the development of novice teachers is the influence of leadership. Leadership from the school principal can "galvanize participants in an induction program" (Reiman & Edelfelt, 1990, p.14). Having a supportive and knowledgeable principal is a necessary condition for teachers to engage in a new way of teaching (McDiarmid, 1994). Furthermore, Wilkinson (1997) stated that when working with novice teachers, the priority of a principal's job is to keep the teachers well informed without making them feel inadequate, unprepared, or unable to do the job. Strong leadership can create the learning opportunity through designing training programs as well as maintaining the learning process through providing organizational supports. The knowledge and skills acquired in the training program are maximized when teachers put their new learning into their classroom practice. According to Joyce and Showers (1995), training programs cannot produce effective results without the support of strong leadership and collegiality among the staff. Strong leadership and strong mentoring are necessary to help novice teachers feel more competent in the classroom setting.

The Role of Perceived Competence in the Professional Development of Novice Teachers

Based on a social-cognitive perspective of perceived competence (Bandura, 1986, 1997, Harter 1981a, 1981b,) a novice teacher's perceptions to be able to support student learning and persist as a teacher are influenced by the perceived success and challenge of that person's past mastery experiences, modeling, and social reinforcement. Although Harter's (1981a, 1981b, 1982) work focused on childhood, she provided a theoretical model to determine levels of perceived competence that tapped cognitive, social, and physical competence, as well as feelings of general self-worth. For the current study, the theoretical foundation of Harter's model was the base for defining the perceived competence of novice teachers.

By means of a three-phase model, Harter (1981a, 1981b) provides a framework for understanding factors that cause novice teachers to choose to achieve and persist in situations of accomplishment related to the field of teaching physical education. The model is centered on the construct that perceived competence in a particular domain should be related to the motivational orientation of the novice teacher (i.e., the higher the perceived competence, the more intrinsically oriented is the individual). (See Appendix E). In phase I of the model, intrinsic motivation, referred to as effectance motivation, allows for the individual to engage in achievement tasks or a set of mastery behaviors. By producing an effect on the environment, the individual tends to experience pleasure and joy (Harter, 1981a, 1981b).

The socialization and internalization phases of Harter's model are the most pertinent to the perceived competence of novice teachers. In phase II, the process of

socialization has an effect on the motivation behaviors of an individual. The process of socialization occurs when the prospective teacher enters the physical education major at the university program and it has an effect on the teacher's motivation behaviors. In the socialization process, university supervisors, cooperating teachers and peers react to the prospective teacher's attempts to master tasks in two ways: (a) by evaluating the product; and (b) by projecting a level of acceptance or rejection of the attempt. Reactions to the product project right or wrong, success or failure. Through social learning processes such as modeling and reinforcement these responses feed into prospective teachers' sense of competence and affect the development of intrinsic motivation. For example, if a university professor reacts to the preservice teacher's successful attempts during peer teaching with verbal praise, then the prospective teacher will continue his or her teaching methods and feel a sense of competence in teaching. Reactions to the overall process project a level of acceptance. Sharing in the preservice teacher's sense of accomplishment in being an effective instructor has a positive impact on his or her emerging sense of personal worth. Ignoring or conveying a sense of little value for such efforts may temper the future teacher's responses, leading to less positive feelings of worth. While affect is the central correlate to motivation for mastery behaviors, perceptions of competency and feelings of self-worth become related to motivation. Thus, in the socialization phase, the university supervisors or cooperating teachers lay the foundation for the development of preservice teachers' sense of competence during their induction years into the profession.

In phase III, the internalization phase of Harter's model, significant others continue to respond to the novice teacher with both evaluative and acceptance/rejection information. Each continues to have an effect on perceptions of competence and affect respectively. However, as the novice teacher gathers more experience, he or she begins to perceive him/herself in a more complex manner as the capacity for logical thought and appreciation of the relationship between cause and effect emerges. Harter referred to this new aspect of information processing as the internalization of cognitive-informational structures (i.e., the Internalized Set of Mastery Goals and Criteria for Success). Internalized mastery goals and criteria for success begin to be formed when novice teachers adopt the performance standards of master teachers in their field. Such process allows novice teachers to judge how much they value a specific domain and what level of performance constitutes success or competence.

The consistency and relevancy of the evaluative feedback that novice teachers receive from supervisors and mentors influences the degree to which goals and criteria for success are internalized. The feedback affects perceptions of whom or what controls performance outcomes. If novice teachers are given clear, consistent, and relevant evaluations about their performances; then they will develop consistent and realistic internalization structures and understand who controls performance outcomes. Inconsistent evaluations instead lead to ambiguities about the source of control (unknown control). Applying Harter's model to novice teachers, the driving force for the "motivation chain" is the novice teacher's perception of who controls the outcome of performance situations. Those who understand who controls it are the high level

performers; those without a clear understanding perform less competently. Competence affects results from one's perceptions of competence and the acceptance or rejection of that performance level by others. It also affects motivation level but not as directly as perceived competence.

In summary, Harter's model (1981a, 1981b) proposes that a clear understanding on the part of the novice teacher on how performance outcomes are controlled, leads the novice teacher to demonstrate higher levels of actual competence. Actual competence then leads to higher perceptions of competence and to a strong motivation to demonstrate mastery of tasks in that domain. Conversely, novice teachers who are not sure as to why they are successful or unsuccessful perform less competently, perceive themselves as less competent and lack motivation to achieve in that domain.

In this study, the overall perceived competence of beginning teachers and its relationship to being ready to teach are examined according to established norms and categories that comprise the discipline of teaching physical education at the K-12 level. The foundations for the development of perceived competence are directly tied to the psychological core of the self, and the dynamic interactions found within the physical environment and the people in such context. Once the beginning teacher figures out the factors that positively influence his or her development as an effective teacher, overall perceived competence in the area of teaching increases and the beginning teacher continues to focus on achieving positive outcomes with his or her students. Although this study is cast within Harter's framework (1981a, 1981b), her measurement instrument was not specific for beginning teachers. Thus, an instrument specific to this study was designed and a perceived competence in teaching question

was used as the basis for comparison with characteristics of teaching competencies.

Statement of the Problem

The purpose of this study was to examine the perceived competence of teachers with 1 to 3 years in experience regarding their readiness to teach in relationship to how their school-based experiences, university program curriculum requirements, and mentor induction programs prepared them to teach K-12 physical education. In addition, the predictive strength of perceived preparation categories on perceived competence to teach was examined.

Hypotheses

H1: Significant correlations exist between perceived professional preparation scores and overall perceived competence in regards to readiness to teach physical education.

H2: Significant correlations exist between the perceived preparation scores in regards to personal qualities needed to teach physical education and overall perceived competence in regards to readiness to teach physical education.

H3: Significant correlations exist between the perceived preparation scores in regards to the social/professional qualities needed to effectively manage social situations in the school setting and overall perceived competence in regards to readiness to teach physical education.

H4: Significant correlations exist between the perceived preparation scores in regards to aspects of school management and overall perceived competence in regards to readiness to teach physical education.

H5: Significant correlations exist between the perceived preparation scores in regards to techniques in teaching physical education and overall perceived competence for

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H6: Significant correlations exist between the perceived preparation scores in regards to mentoring induction programs and overall perceived competence in regards to readiness to teach physical education.

No hypothesis was stated for the comparison between perceived preparation predictors and overall perceived competence due to lack of research in this specific area.

Delimitations and Limitations

This study is delimited to teachers with 1 to 3 years of teaching experience in the area of physical education in the State of Michigan. This study is limited by the type of physical education program requirements mandated by the universities from which teachers obtained their endorsement for a teaching certificate. In addition, the level of prior experience in settings associated with learning how to teach (e.g., coaching, after-school recreational leaders) that teachers possess will impact their score of perceived preparation to teach physical education at the K-12 level.

Another limitation of this study was the small sample size, which limited the types of statistical analyses that could be conducted to explore the research questions. The small sample size was due to the small population pool of Michigan teachers that fit the narrow range of experience for novice teachers in the area of physical education at the K-12 level.

Operational Definitions

Preservice teacher – refers to individuals seeking a teaching certificate endorsement from an accredited university physical education program.

Student-teaching – refers to the time when the preservice teacher is placed in a school

setting to teach physical education under the supervision of a cooperating teacher and a university supervisor.

Novice teacher – refers to individuals compiling 1 to 3 years of teaching experience according to the selection criteria used in this study.

Cooperating teacher – refers to teachers that are tenured and provide guidance and modeling for the preservice teacher.

Induction – in this study refers to the process of indoctrination into the field of physical education that starts when the individual enters the university program and continues when the individual is hired by a school district.

Mentoring – denotes the guidance that the preservice and novice teacher obtains through the advice of physical education university supervisors, cooperating teachers, and senior faculty members.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to investigate the perspectives of competence in preparation of physical education novice teachers according to their program content and field experiences. In this chapter a theoretical framework defining the scope of teacher preparation is presented from the contributions of the reported literature. These contributions are organized around the major headings relating to the aspects of competence and teaching expertise stated in Chapter 1 that correspond to the seven sections of the questionnaire. The sections contained within this literature review are presented in the following order: (a) professional preparation and development of teaching expertise, (b) development of personal qualities in relationship to teaching, (c) socializing influence of the organization on beginning teachers, (d) mentoring induction programs, (e) perceived competence, and (f) evaluation of teaching competence.

Professional Preparation and Development of Teaching Expertise

Different perspectives of teaching have been studied in terms of teaching, teachers' approaches to problem-solving, the focus of the training, and administrative practice. Starting with the instrumental view of teaching, the emphasis was on the technical proficiency of teaching, but little emphasis was required about the reflective decision-making process. According to Smylie and Conyers (1991) a concern was raised about this view which portrayed teachers as technicians following a set of simple and routine technical tasks; and that a teacher's major function would be perceived as delivering information in a prescribed manner. In regards to the

implication for problem-solving, Nolan and Huber (1989) pointed out that this view of teaching, characterized by technical rationality, assumed that both the problems of practice and the methods for solution were generalizable across multiple teaching contexts.

Built on this instrumental, technical perspective, learning to teach becomes more of a process of knowing theory and research findings, and using this knowledge to make teaching behaviors more effective and efficient. However, after reviewing several research findings, Wideen, Mayer-Smith, and Moon (1998) found little evidence supporting such a view of learning to teach. Lastly, the administrative practice influenced by this perspective tends to govern the pedagogy, knowledge, and behavior of teachers with a universal system, but overlooks the personal factors that powerfully influence teaching practice – the voices of the teachers, the questions that teachers ask, the interpretive frames that teachers use to understand (Cochran-Smith & Lytle, 1990), and the context in which the learning takes place (Richards, Moore & Gipe, 1997; Feiman-Nemser & Buchmann, 1989).

Beginning in the 1970's, considerable attention has been placed on the study of teachers' decision making (Carter, 1990). According to the reflective perspective, teachers are instructional problem solvers who frame and solve practical problems through reflective action and inquiry (Zimpher & Howey, 1987). This shift to a reflective view in teaching resulted in new understanding and different inquiry of what teaching is and how teaching should be developed. Teaching is no longer the delivery of knowledge, instead, it is the facilitation of knowledge construction (Nelson & Hammerman, 1996). Teachers are recognized as professionals and reflective

practitioners who facilitate the rhythm of the classroom life through "pacing and ordering, structuring and expanding" (Shulman, 1987, p.2). Reflective action, not routine action, continuously engages teachers in active, constant, and critical learning processes to improve their teaching. Those who hold this view (i.e., the reflective action) believe that teaching consists of not only technical behaviors, but also is significantly influenced by personal and contextual factors which determine teachers' decisions in their teaching practice.

Teaching begins with a teacher's understanding of the following categories: content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of educational ends, purposes, and values, and their philosophical and historical grounds (Shulman, 1987). Through this knowledge base, teachers design their ways of talking, showing, enacting or representing ideas to help students comprehend information and acquire new skills. A bank of professional "know-how" provides teachers with resources not only for teaching but also problem-solving. To successfully carry out teaching, teachers need to have access to a well-developed "mental index" (Shulman, 1987, p.2) which helps them to organize their lessons, to attend to cues as teaching proceeds, and to make proper decisions as problems arise (Leinhardt & Greeno, 1986). In sum, development occurs when the conceptual framework that teachers refer to for defining and solving problems moves toward a more complicated level.

Training in inquiry helps teachers learn how to perceive their world from multiple perspectives (Darling-Hammond, 1998). Darling-Hammond believed that when

beginning teachers engaged in studying research and conducting their own inquiries through cases, action research, and structured reflections about practice, they developed the capacity to inquire systematically and sensitively into the nature of learning and effects of teaching. Quoting Darling-Hammond, this process "empowers teachers with greater understanding of complex situations rather than seeking to control them with simplistic formulas" (p.9). Understanding complex situations is further emphasized when the teacher encounters the organizational and administrative culture of their particular school, and how it impacts their development of teaching expertise.

The interaction between individual performance and organizational capacity (i.e., administrative practice) is reciprocal; the influence is mutual (Carter, 1990). For example, Darling-Hammond (1998) noted that when teachers participated in professional roles such as mentors, they helped to foster the development of a collaborative school. At the same time, mentors' involvement deepened their knowledge and helped to construct knowledge that was more useful for both their practice and ongoing theory building. Cunningham and Gresso (1993) pointed out, that structures and processes (e.g., school district policies) maintained the organization, but organization culture shaped how people recognized and reacted to events in their work life. They believed that to change organizational performance and effectiveness, the focus should be on building a culture of excellence. It was the organizational culture that mediated the participation of the members, which in turn promoted the culture of the organization. The rules and regulations were insufficient to shape the behaviors of the individuals.

Due to the interdependent relationship between the individuals and the organization, Little (1993) emphasized that the development of teachers and organizational innovations needed to be addressed simultaneously. In the same vein, Fullan (1997) called attention to strengthening the moral link between teachers' development and organizational innovation. Maintaining that "...teaching is a moral craft, it has purpose for those who do it" (p.5). Unfortunately, many innovation efforts neglect the moral domain that brings teachers to the organization, and as a result, they fail to develop this domain as a source of innovation. Thus, by attending to teachers' moral voice, school assumptions and beliefs; the organization can foster a community that discusses and develops their purposes together.

Development of Personal Qualities in relationship to Teaching

The personal qualities that are associated with teaching competence include the following: (a) physical qualities such as appearance, image, and voice; (b) cognitive qualities such as knowledge of the subject matter, flexibility, and creativity; and (c) character qualities such as integrity and sensitivity. Professional growth among beginning teachers is both behavioral and conceptual (Kagan, 1992). The personal qualities that influence how teachers think and act in the classroom are largely influenced by their childhood and school experiences (Knowles & Holt-Reynolds, 1991, as cited in Langer & Colton, 1994). Inquiry relating to how the organizational context impacts on beginning teachers' beliefs and teaching behaviors has derived interesting findings. Griffin (1985) suggested that the belief system of beginning teachers could be so strong that beginning teachers ignored the norms of the schools and chose strategies that fit into their own philosophy. Etheridge (1989), however,

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revealed that beginning teachers established their teaching behaviors through adopting a series of adjustment strategies because of the workplace constraints. Both Griffin and Etheridge agreed that beginning teachers came to their full-time teaching positions with preferred practices developed through prior experiences. However, Etheridge observed that when the pool of preferred strategies was exhausted without yielding success, beginning teachers chose less desirable strategies in order to survive.

A review written by Kagan (1992) examining 40 studies concluded that two critical elements shaped prior beliefs of beginning teachers: exemplary models of teachers and the teacher's image of "self as learner". Kagan believed that if interventions were to be profound, they had to facilitate a learning process through which teachers were able to acknowledge the gap between their ways of thinking about how students learned and the way students really learned. Consequently, teachers used this new understanding to modify, adapt, and reconstruct their image of self as teachers. Once the teacher's self-image was resolved, teachers shifted their attention from their own behaviors to the behaviors of the students. This shift of focus also meant that teachers would attend to what students were learning from academic tasks rather than the design of instruction. Thus, Kagan proposed that growth consisted of at least five components: (1) an increase in metacognition, (2) the acquisition of knowledge about pupils, (3) a shift in attention, (4) the development of standard procedures, and (5) growth in problem-solving skills. The development of a creative solution to a problem required a collegial environment (Langer & Colton, 1994). One way that teachers acquired new information was through collaborative dialogue with other professionals. This interaction caused beginning teachers to

reflect, question, and consider different perspectives in a safe and open atmosphere. In addition, the experiences often encouraged beginning teachers to take risks and provided an opportunity that nurtured reflective practices.

Socializing Influence of the Organization on Beginning Teachers

In this section, the socializing agents (i.e., organizational structure, students, colleagues, leadership in the organization, parents, and a learning community) are discussed in relationship to the development of teachers and teaching expertise. The work of Danziger (1971) on teacher socialization research is a field of inquiry that seeks to understand the process whereby the individual becomes a participating member of the society of teachers (as cited in Zeichner, 1990). This framework explains how the "underlying unity and cohesiveness" (Burrell & Morgan, 1979, p.17) of the organization impacts individuals on learning about their roles and making situational adjustments to the culture of the organization. The interpretive approach to teacher socialization seeks to understand the process through the eyes of the participants rather than the perspectives of the researchers, because researchers believe that teachers are individuals who make choices and who are capable of autonomous actions. The emphasis of this approach is on subjective meanings of participants; it aims to see the social world as it exists through the names, concepts, and labels used by participants (Zeichner & Gore 1990).

Poole and Okeafor (1989) reported that organizational structures that enhanced teachers' interactions and provisions for developing collegial support played crucial roles in facilitating the educational change process. Comparing conventional schools, congenial schools, and collegial schools, Glickman, Gordon, and Ross-Gordon (1998)

concluded that the collegial schools were organized to better meet human needs and develop internal motivation, because they provided the trust, support, professional interaction, choice, and challenge necessary to encourage and stimulate professional growth and self-actualization.

Researchers continue to seek to understand the power of organizational factors on the beginning teacher's transformation process (Doyle, 1979; Kagan, 1992; Wildman, Niles, Magliaro, McLaughlin, 1990; Zeichner & Gore, 1990). Most of the just mentioned researchers summarized factors into four categories—students, colleagues, leadership, and parents. Wildman, et al (1990) emphasized that these factors should only be viewed as broad organizers for describing the socialization of beginning teachers, because the dynamic interplay between the factors and beginning teachers' beliefs and expectations determines their experiences.

Students. Students play an influential role in shaping beginning teachers' judgements, actions, feelings of competence, and satisfaction with teaching (Wildman, et al, 1990). Kagan (1992) and Wildman, et al (1990) pointed out that beginning teachers entered teaching with definite beliefs and assumptions of how students performed and learned. As beginning teachers acquired a new understanding of how students learned, they used the new insights to modify their teaching behaviors. According to Doyle (1979), students influenced teachers on many aspects of teaching including a general teaching approach, and patterns of language as well as the type and frequency of specific teaching methods.

Colleagues. A collegial relationship with other teachers is found to be critical in the learning process of beginning teachers (Kagan, 1992; Wildman, et al, 1990).

Most beginning teachers long to be accepted and respected as part of the professional community. Therefore, it is very important for beginning teachers to know that someone always cares about them and will offer them empathy for what they are experiencing (Gold, 1996). Helpful colleagues not only provide beginning teachers with useful strategies, but also help to create a climate where beginning teachers can proceed with learning. For instance, collaborative dialogue among colleagues is instrumental in creating a cognitive and emotional safety zone in which ideas flow for consideration without judgement (Garmston, 1998). Colleagues can also ease the beginning teachers' stress caused by the enormous uncertainty, and provide criteria against which beginners judge their progress. However, Denscombe's (1980), Eddy's (1969), and Nigris' (1988) works (as cited in Zeichner and Gore, 1990) pointed out that several diverse teacher cultures often existed in a school and that teachers sometimes found conflicting pressures by colleagues who tried to influence them.

Leadership. Principals have a major influence on shaping the initial teaching experiences of beginning teachers. The role that the principals project often determines the type of context to which the teachers will respond (Gold, 1996). Studies about leadership influence on the teachers' change process seemed varied, yet their conclusions are complimentary. Poole and Okeafor (1989) learned that the building principal might not influence the implementation of a new curriculum through direct task-relevant interactions with teachers; however, their support through providing materials, resources, and support personnel and monitoring their use was perceived to be very significant by beginning teachers. After reviewing several research findings, Zeichner and Gore (1990) believed that teachers' perspectives were

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developed and maintained more through the formal expectations of the job than through the direct influence of individual administrators. Wildman, et al. (1990) contended that administrators played a key role in beginning teachers' professional growth; administrators had authority to determine the narrow path between the system and the teachers. In addition to encouraging beginning teachers through acknowledging their work, the degree of autonomy afforded to teachers by a principal was of special importance (Kagan, 1992).

Parents. In addition to the managerial factor, the parents are another important factor in the socialization of the beginning teachers (Gold, 1996). Gold (1996) indicated that teachers' feelings of competence were enhanced when receiving support from parents. In contrast, negative experiences with parents often discouraged beginning teachers and caused feelings of incompetence that diminished their confidence as effective teachers. Hatton in 1987 (as cited in Zeichner & Gore, 1990) noticed that parents in high-status schools exerted direct influence on the working situation of teachers. In this sense, parental pressure became "the basic mechanism for the socialization of teachers into the traditions of a school community" (Zeichner & Gore, 1990, p.340).

A learning community cumulative effects. In the initial stage of their career, beginning teachers need assistance and encouragement which helps them make good decisions as they move through the transition from student to professional and learn to transform the curriculum into meaningful lessons (Gold, 1996). Gold recognized the importance of the development of teachers' thinking; thus, calling attention to providing assistance in helping teachers learn how to invest their actions on the spot

and how to draw from the knowledge bank they already posses.

In their work on beginning teachers' reflectivity, Kilgore, Ross, and Zbikowski (1990) reported that supportive leadership that valued teacher decision-making and a school culture that encouraged continuous improvement were features critical in sustaining reflective practice among beginning teachers. After analyzing six first-year teachers' interview data, Kilgore, et al noticed that teachers exhibited reflective attitudes not only because they took an active role in their development but also because of a supportive context which encouraged beginning teachers to try. Initially, these teachers did not develop a definite answer to their complicated problems, nevertheless, the supportive school context encouraged them to explore the complexity of their problems and experiment with curriculum and instructional strategies. As a result, teachers were able to make progress in their attempts to deal with the children and gain a greater understanding of themselves and the nature of teaching.

The work of Sergiovanni (1992), and Hackney and Henderson (1999) described this supportive context as a democratic learning community, an organization that creates and sustains relationships, inquiry, and purpose. This kind of community is developed through the norms of collegiality and interdependence and is "compatible with a leadership disposition that supports flexibility; creative problem-solving and collaborative decision-making experimentation; and continuous exploration" (p.68). Collegiality, in its best form, stems from within as teachers believe it is necessary and often feel obligated to share and work together (Sergiovanni, 1992). A highly collegial school not only requires school leaders who communicate approachability, availability, closeness and warmth, and multi-channelling (Morris, 1999), but also

provide opportunities for collective problem-solving and learning (cited in Sergiovanni, 1992).

Schools can create an organizational structure to support teachers' continuous learning (Darling-Hammond, 1998). In successful programs, staff development means more than providing workshops; it is a process. Once started, it is ongoing—often built into the institutional structure of a school or school system (Asayesh, 1993).

In addition, Lieberman (1995) encouraged the practices of providing beginning teachers and their mentors common planning periods and using strategies for teachers to learn together. Lieberman's work found that when teachers got together to share their problems about particular students in the process of discussion, new ideas emerged as other teachers offered strategies that they have found useful in similar situations. This process was found effective, because it allowed teachers to share their knowledge, learn from one another, and even to a greater extent, take responsibility for the development of all children in the school. Moreover, Lieberman (1995) listed some of the organizational and pedagogical changes, which prompted professional learning. These included: (a) designing a mentoring support system, (b) creating common planning periods so that there is connection across all subject areas, (c) utilizing staff expertise in leading in-house workshops, (d) organizing teaming where the organizational structure encourages constant staff learning, and (e) developing curricular changes that encourage interdisciplinary studies for short periods of time, involving staff in discussion of curriculum and pedagogy. The reports of Sparks and Hirsh in 1997 (as cited in Darling-Hammond, 1998) indicated improvements in individual performance alone were insufficient; an organization had to renew itself to

solve problems and support individual new practices. Good settings for teacher learning provided many opportunities, which allowed teachers to interpret practice with theory and disciplined inquiry (Darling-Hammond, 1998). Lieberman (1995) described that teacher development covered a wide range of opportunities. Professional learning is "both, personal and professional, both individual and collective, both inquiry-based and technical" (p. 592). Studying successful schools has led Lieberman to conclude that professional development has to be integrated as part of the life of the school in order to be powerful.

Beginning Teacher Induction Mentoring Programs

To provide necessary assistance to encourage beginning teachers' retention in teaching, the State of Michigan legislation mandates that school districts provide induction and mentoring programs during the first 3 years of teaching. The induction/mentoring programs provided beginning teachers with not only technical supports but also emotional and social support necessary for their continuous development in the initial enculturation process. However, it is important to know that the induction/mentoring programs alone cannot fully support the developmental process that becoming a fully competent teaching professional entails (Odell, 1990).

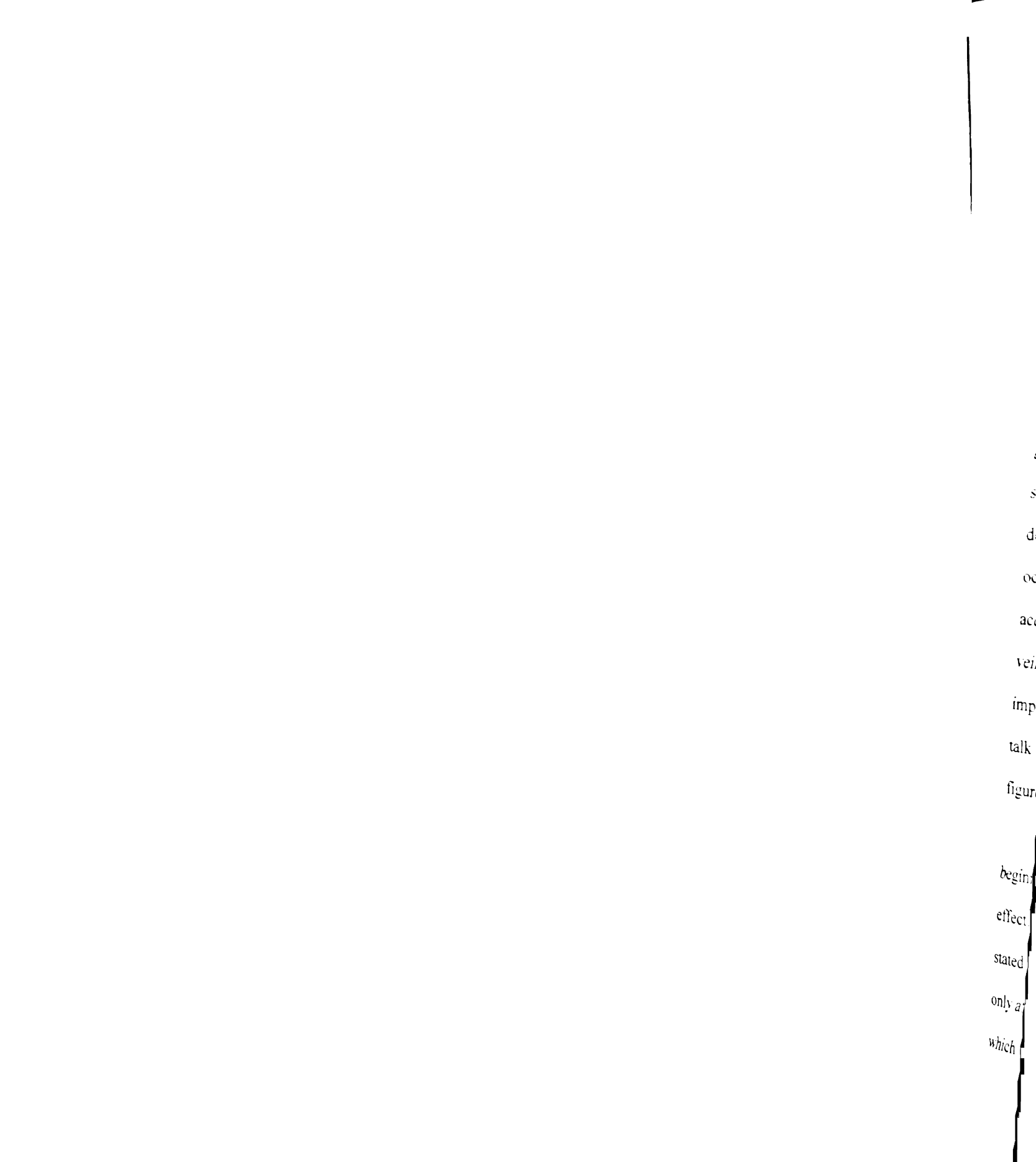
Concepts of Teacher Induction. Teacher induction not only is described as a "part of the larger teacher education continuum" (Huling-Austin, 1990), but also as a powerful intervention for developing and maintaining a strong force. From student teacher to beginning teacher, new teachers face tremendous demands in their first full-time teaching responsibilities; such major life transitions are compounded by their needs to develop teaching skills to overcome the challenges of putting theory into

practice (Tusin, 1995). These two roles of beginning teachers, teaching effectively and learning to teach, require adequate resources and support (Wildman, Niles, Magliaro, & McLaughlin, 1989). Smyth (1995) investigated the perceptions of the workplace for first-year physical education teachers and some of the themes that emerged in the course of interviews with the participants in the study. These beginning teachers featured many of the characteristics of first-year teachers, in that they were expected to perform the same duties as a 20-year veteran (Lortie, 1975). Most of the participants in the study were assigned mentors, yet, the participants found these mentors to be of little help beyond learning the daily routines of the school and becoming aware of certification procedures (Smyth, 1995). Gold (1996) estimated that 25% of beginning teachers left teaching within 2 years after they started teaching because they lacked adequate support and assistance to handle stress and make adaptations into the teaching profession as a novice teacher. Therefore, induction programs are designed to assist beginning teachers, but such programs also play an important role in reducing teacher attrition rates and in providing the adequate support novice teachers need to adjust and transition into the rigors of the teaching profession.

Instructional and psychological support. In 1984, Veenan reviewed 83 studies of interviews and questionnaires regarding the perceived problems of beginning teachers. He concluded that first-year teachers were mostly concerned with issues such as disciplining students, motivating students, working with individual differences, assessing students' performance, working with parents, organizing class work, lack of appropriate teaching materials, and dealing with problems of individual students.

The reports of Gold (1996) stated that an effective induction program needed to address multidimensional needs of beginning teachers; the supports needed to address both instructional and psychological domains. Gold concluded that an induction program needed to offer instructional support in relating to assisting beginning teachers to understand and deliver the content knowledge to the students. Also, helping beginning teachers incorporate most useful forms to represent ideas, explain concepts, and demonstrate skills. An induction program needs to prepare beginning teachers to teach a certain subject at a given level and use a variety of instructional resources; and, continue to develop beginning teachers' reflective thinking and critical evaluation.

Researchers focusing on the inquiry process of how a teacher's self-concept and self-efficacy develop has in turn paid close attention to the inner world of the beginning teacher. Accumulated feelings of frustration and inadequacy have serious consequences, because the growth process not only demands cognitive energy but also stirs affective processes. To promote reflection and problem-solving, Clift, Veal, Holland, Johnson, and McCarthy (1995) found that schools not only needed to incorporate structures that provided a time and a place for reflection, but also attended to the social and emotional needs of beginning teachers. In similar fashion, Reiman and Thies-Sprinthall (1998) concluded that disequilibrium, generated by the shift of development, disturbed a person's emotional processes. To overcome the threat of this emotional upheaval, relaxed reflection is instrumental for facilitating the growth process (Furth, 1981, as cited in Reiman & Thies-Sprinthall, 1998). Schools' structures and cultures need to provide in-school resources to support the cognitive



and affective processes characterized by the transition into teaching.

The impact of collaborative group interaction. The reported literature investigating the critical interplay between collaborative structures and individual growth adds to the understanding that interaction among teachers affects beginning teachers' development (Clift, et al, 1995; Cochran-Smith & Lytle 1990; Selinger, 1991). Selinger (1991) indicated that development of teaching skills is enhanced when beginning teachers have opportunities for critical reflection in an open, collaborative setting. Cochran-Smith and Lytle added that arrangements that involved groups of experienced and beginning teachers meeting regularly to read, problem-solve, and discuss significant questions about theory and practice allowed teachers to develop broader perspectives to examine their work. For beginning teachers, these occasions are especially important because these interactions allow them to get acquainted and feel accepted by others in the school (Clift et al. 1995). In the same vein, Reiman and Thies-Sprinthall (1998) presented insights in regards to the importance of dialogue to the growth process. They maintained that social- interactive talk could promote growth through helping individuals develop new perspectives and figure out new solutions.

Mentoring programs. The primary goal of an induction program is to assist beginning teachers in developing their personal competence and professional effectiveness. Mentoring programs have emerged to address this goal. Butt (1990) stated that interpersonal interaction between mentors and new teachers provided not only affirmation, which validated teachers' personal experiences, but also support which encouraged beginning teachers to take risks. The importance of a positive

mentoring relationship was described well in Head, Reiman, and Thies-Sprinthall (1992) words. They argued that "if real mentoring is to occur, mentor and beginning teachers have to relate to one another in a fully human manner as they work toward a common goal" (p.8). Following the notion of character development and relationships, Patterson (1968) explains that a skillful helper is the one who creates a relationship that is characterized by genuineness, empathy, and regard. This positive relationship helps to facilitate a climate which enables "individuals to take responsibility for themselves, to begin developing, or restoring, the self-esteem which is necessary for their functioning as healthy, responsible, independent human beings, able to make adequate decisions and resolve problems" (p. 43).

When comparing a more structured team approach with a buddy system approach of mentoring design, the researcher (Odell, 1990) found that the team approach design was perceived to be better. In the perceptions of the beginning teachers, more structurally designed mentoring experiences worked best. Odell (1990) described mentoring programs in relation to other arrangements. To summarize the work of Odell: "Mentoring teachers is a supplement to, not a substitute for, school orientations, in-service training, university courses, and formal and informal collegial collaborations that are supportive of learning to teach. Each of these sources of support in a comprehensive program serves to potentiate one another" (p.28).

First-Year physical education teachers' induction experiences and perceptions of their workplace. In the first year, physical education teachers inherit many of the struggles common to the teaching profession. Difficulties that characterize the experience of first-year physical education teachers include the induction process into

the profession, their particular school, and induction into the subject area (Smyth, 1992; Sparkes, Templin, & Schempp, 1990, 1993).

According to the reported literature based on beginning classroom teachers, investigators have learned that as beginning teachers switch from being students in teacher education programs to teachers in the schools, they may experience "reality shock" (Marso & Pigge, 1987; Odell, 1986; Zeichner & Tabachnik, 1981). A reason for such reality shock is that teaching in the schools greatly differs in experience from the occurrences they encountered in the student-teaching practicum setting. One of the effects of the reality shock is the "wash-out effect", which gradually erodes what the teachers learned in their teacher education programs as a result of the school practices where they are teaching (Zeichner & Tabachnik, 1981).

An indication of the wash-out effect is the frustration beginning physical educators experience in relation to institutional messages they receive about the importance and status of physical education as a subject (O'Sullivan, 1989; Schempp & Graber, 1992; Smyth, 1992; Stroot, Faucetter,& Schwager, 1993). For example, physical education teachers are normally trained by teacher education programs to have student learning as one of the primary objectives of school instruction. First-year teachers, however, tend to encounter a low expectation and priority of the prospects of student learning as a primary objective in their school environment from administrators, faculty, parents, students, or even physical education teachers themselves. Research evidence indicates that not all teachers prioritize student learning as an outcome of physical education instruction (Earls, 1981; Placek, 1983; Zahorik, 1980). On the contrary, many teachers have physical education objectives

based on standards of keeping students "busy, happy, and good" in their classes (Placek, 1983).

The social context of the workplace for physical education teachers sends subtle messages about the role of physical education in the school, and the relative unimportance of student learning is one of those messages. The subtle messages lead first-year physical education teachers to succumb and behave in ways contrary to what is in the best interest of student learning. Thus, first-year physical education teachers may forego the goals and philosophies promoted by their teacher education programs in favor of goals that are more acceptable to the local context (Smyth, 1995). This social context may influence the perceived competence of physical education teachers in regards to their readiness to teach.

Similar to previous reports (Marso & Pigge, 1987; Odell, 1986; Zeichner & Tabachnik, 1981), Smyth (1995) reported that most participants were surprised about the lack of adequate facilities to teach physical education, their rigorous teaching schedules, or the lack of support from supervisors and colleagues. Furthermore, the participants reported not being prepared to confront the social and political forces within the school community that heavily influenced their work (Smyth, 1995).

Another subtle theme that emerged from Smyth's (1995) study was the low status afforded to physical education within the school setting and the community. Workplace conditions associated with the low status of physical education forced some teachers to conduct their classes in areas and with time allocations that were less than adequate for instruction. To compound the problem, first-year teachers in this study were forced to teach physical education with fewer resources than what would

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In concordance with the low status afforded to physical education as a discipline, the absence of accountability for either subject matter coverage or student learning created a different set of problems for novice teachers. For example, adequate development of curriculum planning that would aid in achieving mastery of class management techniques for the purpose of controlling student behavior was a problem. Other problems reported by participants in Smyth's (1995) study were a sense of isolation from the main functions of the school, lower levels of efficacy as teachers, and struggles with the values acquired in their teacher education program in comparison to the present values of the school. Moreover, in terms of its long-term consequences was the absence of motivating expectations for skilled assistance with the development of teaching skills that could sustain a strong sense of professional expertise and growth over the ensuing years (Smyth).

Though many of the previously mentioned factors were frustrating, an even more frustrating reality for first-year teachers was their low sense of perceived influence to change the cultural norms (e.g., raising the status of physical education as a discipline within the school) that greatly influenced their work conditions at the school. In turn, the novice teachers tended to adopt the common response of strategic compliance. Zeichner and Tabachnik (1983) defined such occurrence as "those instances where individuals comply with the constraints posed by a situation, but retain private reservation about doing so" (p. 15). However, all of the novice teachers indicated the firm belief that if (or when) their situation changed they would (and could) return to their earlier teaching methods (Smyth, 1995).

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The Role of Perceived Competence in the Professional Development of Novice Teachers

Based on a social-cognitive perspective of perceived competence (Bandura, 1986, 1997, Harter 1981a, 1981b,) a novice teacher's perceptions to be able to support student learning and persist as a teacher are influenced by the perceived success and challenge of that person's past mastery experiences, modeling, and social reinforcement. Although Harter's (1981a, 1981b, 1982) work focused on childhood, she provided a theoretical model to determine levels of perceived competence that tapped cognitive, social, and physical competence, as well as feelings of general self-worth. For the current study, the theoretical foundation of Harter's model was the base for defining the perceived competence of novice teachers.

By means of a three-phase model, Harter (1981a, 1981b) provides a framework for understanding factors that cause novice teachers to choose to achieve and persist in situations of accomplishment related to the field of teaching physical education. The model is centered on the construct that perceived competence in a particular domain should be related to the motivational orientation of the novice teacher (i.e., the higher the perceived competence, the more intrinsically oriented is the individual). (See Appendix E). In phase I of the model, intrinsic motivation, referred to as effectance motivation, allows for the individual to engage in achievement tasks or a set of mastery behaviors. By producing an effect on the environment, the individual tends to experience pleasure and joy (Harter, 1981a, 1981b).

The socialization and internalization phases of Harter's model are the most pertinent to the perceived competence of novice teachers. In phase II, the process of

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socialization has an effect on the motivation behaviors of an individual. The process of socialization occurs when the prospective teacher enters the physical education major at the university program and it has an effect on the teacher's motivation behaviors. In the socialization process, university supervisors, cooperating teachers and peers react to the prospective teacher's attempts to master tasks in two ways: (a) by evaluating the product; and (b) by projecting a level of acceptance or rejection of the attempt. Reactions to the product project right or wrong, success or failure. Through social learning processes such as modeling and reinforcement these responses feed into prospective teachers' sense of competence and affect the development of intrinsic motivation. For example, if a university professor reacts to the preservice teacher's successful attempts during peer teaching with verbal praise, then the prospective teacher will continue his or her teaching methods and feel a sense of competence in teaching. Reactions to the overall process project a level of acceptance. Sharing in the preservice teacher's sense of accomplishment in being an effective instructor has a positive impact on his or her emerging sense of personal worth. Ignoring or conveying a sense of little value for such efforts may temper the future teacher's responses, leading to less positive feelings of worth. While affect is the central correlate to motivation for mastery behaviors, perceptions of competency and feelings of self-worth become related to motivation. Thus, in the socialization phase, the university supervisors or cooperating teachers lay the foundation for the development of preservice teachers' sense of competence during their induction years into the profession.

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In phase III, the internalization phase of Harter's model, significant others continue to respond to the novice teacher with both evaluative and acceptance/rejection information. Each continues to have an effect on perceptions of competence and affect respectively. However, as the novice teacher gathers more experience, he or she begins to perceive himself or herself in a more complex manner as the capacity for logical thought and appreciation of the relationship between cause and effect emerges. Harter referred to this new aspect of information processing as the internalization of cognitive-informational structures (i.e., the Internalized Set of Mastery Goals and Criteria for Success). Internalized mastery goals and criteria for success begin to be formed when novice teachers adopt the performance standards of master teachers in their field. Such a process allows novice teachers to judge how much they value a specific domain and what level of performance constitutes success or competence.

The consistency and relevancy of the evaluative feedback that novice teachers receive from supervisors and mentors influences the degree to which goals and criteria for success are internalized. The feedback affects perceptions of whom or what controls performance outcomes. If novice teachers are given clear, consistent, and relevant evaluations about their performances; then they will develop consistent and realistic internalization structures and understand who controls performance outcomes. Inconsistent evaluations instead lead to ambiguities about the source of control (unknown control). Applying Harter's model to novice teachers, the driving force for the "motivation chain" is the novice teacher's perception of who controls the outcome of performance situations. Those who understand who controls it are the high level

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performers; those without a clear understanding perform less competently. Competence affects results from one's perceptions of competence and the acceptance or rejection of that performance level by others. It also affects motivation level but not as directly as perceived competence.

The research conducted by Harter (1981a, 1981b) supported the theoretical foundation of her model regarding aspects of intrinsic vs. extrinsic motivation and perceived competence. Over 3,000 third to ninth graders from California, Colorado, Connecticut, and New York participated in the study. Factorial validity was established by examining the congruence coefficients representing the correlation between factor loading in different samples. These correlations ranged from .67 to .84 to support factorial validity. Higher order factoring revealed that perceived competence, challenge, curiosity, and mastery form a distinct factor with extremely high loadings of .76, .87, .70, and .80 to support the construct validity of the instrument.

The reliability measures indicated that internal consistency across samples ranged from .78 to .84 for the challenge subscale, .68 to .82 for mastery, .54 to .78 for curiosity, .72 to .81 for judgement, and .75 to .83 for the criteria subscale. Test-retest reliability data was collected in three different intervals with separate samples (i.e., after 5-months, after 9-months, and after 1-year). The samples tested after 9-months and after 1-year had the lowest reliability coefficients ranging of .48 to .63, while the sample tested after 5-months yielded somewhat higher values ranging from .58 to .76. Consequently, the internal consistency and reliability of the scale was supported.

In summary, Harter's model (1981a, 1981b) proposes that a clear understanding on the part of the novice teacher on how performance outcomes are controlled, leads the novice teacher to demonstrate higher levels of actual competence. Actual competence then leads to higher perceptions of competence and to a strong motivation to demonstrate mastery of tasks in that domain. Conversely, novice teachers who are not sure as to why they are successful or unsuccessful perform less competently, perceive themselves as less competent and lack motivation to achieve in that domain.

Evaluation of Teaching Competence

Evaluation of teaching competence involves collecting and using information to determine the worth of teachers in their respective disciplines. The teacher-evaluation system focuses on the teaching task and the mechanism to evaluate the teacher, but the different conceptions of teaching are based around the educational goals of the organization, teacher knowledge and activities, teaching behaviors, and evaluation of the self. Thus, evaluation is not only influenced by organizational considerations, but it also shapes the organizational context and the work conditions of the teaching profession (Millman & Darling-Hammond, 1990).

The manner in which evaluation is carried out influences professional and personal development as well as individual motivation to increase the level of competence in the teaching profession. Assessment of teaching competencies communicates conceptions of teaching and expectations regarding performance priorities, norms of behavior, and the nature of expectations in the teaching profession (Millman & Darling-Hammond, 1990).

In regards to methods of evaluation, in Millman and Darling-Hammond's (1990) text, *The New Handbook of Teacher Evaluation*; a series of chapters are focused on the different means by which teachers can be evaluated. Teaching competencies according to the text can be evaluated by the following approaches: (a) classroom observation, (b) rating scales, (c) self-assessment and peer review, (d) using student achievement scores to evaluate teachers, (e) a schoolteacher's portfolio, (f) conventional tests for licensure, (g) performance tests and simulations, (h) meeting standards on teacher certification tests, and (i) combining evaluation data from multiple sources. Overall, in evaluating teaching competencies regardless of the method, it must be mentioned that the process is complex and difficult. In addition, any method of evaluation that is used to assess teaching competencies must be accompanied by conception of what teaching is, but specifically, knowledge of and conception of what effective teaching really means. Unfortunately, there is no consensus based in empirical evidence, theory, or values about the characteristics of good teaching or good teachers, (Stodolsky, in Millman & Darling-Hammond, 1990). Consequently, in contemplating the use of an evaluation method, researchers are confronted not only with methodological and procedural problems, but by the nature of the problem itself, finding consensus on defining what teaching effectiveness is all about.

In considering the above dilemma, even if the researcher is having difficulties in explicitly defining good or effective teaching, the method of assessing teaching competencies and effective teaching practices will normally provide some perspective of what is important in evaluating teaching effectiveness. "Therefore, the user of any

observation system implicitly or explicitly accepts certain assumptions about the characteristics of teachers and teaching considered worth of evaluating or judging." (Stodolsky, in Millman & Darling-Hammond, 1990, p. 175) Even though the literature does not offer a consensus as to which method of evaluating teaching effectiveness is accepted the most, the evaluation is going to be guided by the research question(s) and the reasons to conduct an evaluation (e.g., personnel decisions, professional improvement, and/or rank/tenure decisions). Such issues can guide the researcher or evaluator to choose a particular method to conduct the assessment. For the purpose of this study, a rating scale questionnaire was used to examine the relationship between overall perceived teaching competence and the readiness to teach physical education. The rating scale questionnaire of the current study was developed according to characteristics of teaching effectiveness reported in rating scales (Good & Mulryan, in Millman & Darling-Hammond, 1990) and by using open-ended questions that are specific to the area of teaching physical education (Hardy, 1999).

This study's questionnaire blends an old Likert-type scale assessment instrument (i.e., the Boyce Card, 1915) used to evaluate the competence of teachers in general with the conceptual approach of a more current open-ended questionnaire (Hardy, 1999) used specifically for a sample of physical education preservice teachers. A more detailed description of the two instruments and the modifications made by the investigator for the development of the questionnaire used in this study and the reasons for choosing a rating scale is provided in the Methods section of this dissertation.

Conclusion

The work of Hatton and Smith (1994) on beginning teachers contributed to the understanding of educational researchers of reflective development within the context of preservice teacher education, but little knowledge exists as to how this skill is developed or whether it is developed in the demanding world of teaching. Taggart and Wilson (1998) provided techniques for facilitating reflective development, but lacked information on how these techniques affect the learning processes of beginning teachers. Teaching not only consists of technical behaviors, but it can also be significantly influenced by personal and contextual factors, which determine teachers' decisions in their teaching practice. It is also important to understand how teacher education training programs and mentoring induction programs are preparing physical education teachers to face the demands of the dynamic learning environment in the school setting. More studies in physical education need to be centered on the development of teaching expertise through the different contextual experiences that are required of all teachers at the pre-service and induction levels of the profession. Obtaining valuable information from novice teachers and their perceived readiness to teach physical education based on their academic and professional preparation can provide insight into the realm of teacher competency. Such insight is important for physical education teacher training programs and school districts in order to understand what truly shapes novice teachers to be competent teachers as they enter the profession. Likewise, we can learn what aspects of preparation in their perception may be lacking or are somewhat inadequate given the complexities of the school setting in which they teach. It would be helpful to provide relationships that explain

how these variables interact with each other in a specified context. Thus, studies focusing on the personal and contextual factors that impact the preparation of beginning teachers would add a significant dimension to the knowledge base of competence to teaching physical education.

CHAPTER III

METHODS

Participants and Recruitment

The participants for this investigation were former students of the investigator and they worked in13 different school districts (as identified by the participants in the background questionnaire used in this study) in the State of Michigan. The participants were contacted by phone and email and given a brief explanation of the purpose of the study. The sample consisted of 20 physical education teachers who had completed their first year of teaching but had not completed more than 3 years. The breakdown of teaching experience divided the sample into 6 completing one year, 5 completing two years, and 9 teachers who had completed their third year of teaching. The original sample started with 26 participants but six of those participants were dropped from the study because they had more than 3 years of teaching experience. The sample consisted of 12 males and eight females with the predominant ethnicity group being Caucasian-American (n=16), one Hispanic, one tri-racial participant, and two non-respondents to the identification of ethnic origin. The mean age for the sample was 28.65 years. The respondents in the sample were graduates from Eastern Michigan University. The teaching level for the sample of this study consisted of 12 elementary school teachers, 3 at the middle school level, and 5 teaching at the high school level. The predominant teaching minor in this sample was the health education area (n=14), followed by two history minors, and the remaining four participants were minors in chemistry, psychology, sociology, and Spanish.

Instruments

The instrument used in this study to measure the perceptions of preparation of physical education teachers (see Appendix A) is an adaptation of the rating scale checklist on teaching appraisal developed by Boyce (Boyce, 1915; in Millman & Darling-Hammond, 1990) and the open-ended questionnaire developed by Hardy (1999). The "Boyce Card" (Boyce, 1915; in Millman & Darling-Hammond, 1990) received particular acclaim as an example of a useful rating scale in the 1920's and 1930's for supervisory purposes regarding teacher appraisal. Administrators used the rating scales as an evaluative tool to determine teaching effectiveness, promotion merits, transfers, dismissals, and public accountability. The "Boyce Card" was divided into five main sections: personal equipment, social and professional equipment, school management, technique of teaching, and results. Each section was further subdivided by items pertinent to each section that served as a measure to evaluate a teacher's effectiveness. Teachers who were evaluated with the "Boyce Card" were rated according to a scale (i.e., Excellent, Good, Medium, Poor, Very Poor) with terms that were fairly and precisely defined. The adapted items used in the current instrument for this study that correspond to the "Boyce Card" are the following: (a) Personal Qualities section, Items 34-50; (b) Social and Professional Qualities, Items 51-62; (c) Aspects of School Management, Items 63-66; (d) Techniques of Teaching Competence, Items 67-78. Even though the "Boyce Card" was developed a very long time ago; it was chosen for this study because it provided a set of items that made reference to the overall aspect of characteristics needed to evaluate teaching competence. It also used a Likert-type assessment rating which was easily modified

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for the current rating used in this study, which in turn made the assessment of the study's respondents easy to quantify. Likewise, the Likert-type rating assessment provided the participants in this study with a friendly format to respond to the items throughout the questionnaire. The questionnaire used in this study blends an old assessment instrument (i.e., the Boyce Card) used to evaluate teachers in general with the conceptual approach of a more current open-ended questionnaire (Hardy, 1999) used specifically for a sample of physical education preservice teachers.

The open-ended questionnaire developed by Hardy (1999) was grounded in learning to teach literature (Carter, 1990; Johnston, 1994; McIntyre et al., 1996) with the intent to understand the following:

1. How preservice teachers perceived what they learned to teach from school-based experiences.
2. How they were influenced by school subject mentors and school context, and by university program professors and courses.
3. How their own past experiences and beliefs guided their own teaching development.

The questions used by Hardy (1999) followed a structured approach to survey research. The questionnaire was designed by Hardy with open-ended questions intending to understand the perspectives of the student-teachers acquisition of knowledge to prepare them for the task of teaching K-12 physical education. The adapted items used in the current instrument for this study that correspond to the Hardy (1999) survey are primarily concentrated on the Professional Preparation section. Such Items are 2-9, 12, 18-19, 21, and 24-28.

Another unique aspect of the questionnaire used in this study is that it includes

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one question (i.e., Item 1) intended to measure the overall perceived competence of teachers in this sample in terms of their readiness to teach physical education. The overall perceived competence question specifically addressed how competent respondents from this sample felt during their first year of teaching. Consequently, the question specifically addresses the aspect competence in relationship to the teaching profession and how their university curriculum and school based experiences prepared them to teach physical education.

The questionnaire used in this study (see Appendix A) consisted of seven sections with a total of 92 questions intending to understand the perceptions of teachers in their preparation to teach physical education according to the complex number of variables related to aspects of teaching competency. The six sections of the questionnaire are:

1. Overall competence question – Item 1
2. Professional preparation – Items 2-33
3. Personal qualities needed to teach physical education – Items 34-50
4. Social and professional qualities needed to effectively manage social situations in the school setting – Items 51-62
5. Aspects of school management – Items 63-66
6. Techniques of teaching competence – Items 67-78
7. Mentoring induction programs, mentors, and professional development opportunities provided by the school district – Items 79-92.

All of the questions are based on a 5-point Likert-scale with 1 = very poor, 2 = poor, 3 = average, 4 = above average, and 5 = excellent.

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Pilot study

The original questionnaire that was piloted consisted of six sections totaling 76 questions. It was administered to 16 student-teachers from an approved physical education teacher training program. The length of time to complete the questionnaire was approximately 15-20 minutes. In addition to the students responding to the questionnaire, four professors in the area of physical education pedagogy were also given the questionnaire for the purpose of obtaining feedback toward the thoroughness and clarity of the questionnaire. The feedback from professors served as an assurance that the questionnaire was comprehensive in inquiring about the different facets of teaching competency. Minor adjustments were made to a few items due to misinterpretations in the understanding of questions by preservice teachers and professors. Other items in the Professional Preparation section (Items 10-11, 13-17, 20, 22-23, 29-33); in Personal Qualities (Items 48-50); in Techniques of Teaching Competence (Items 71, 74, 77-78) were added by the investigator to represent current teaching practices and competencies. The section on mentors and induction programs (Items 79-92) was created by the investigator as a means to reflect the process of teacher development according to the reported literature. A follow-up was conducted with six participants selected at random in order to check for clarity of questions and length of time to complete the questionnaire. Their responses followed a similar pattern to their original answers and not a significant length of time was noted as a result of the expanded questionnaire. A reliability analysis was conducted and an alpha reliability coefficient of .97 provided strong statistical results for the questionnaire used in this study. A background questionnaire was developed by the investigator in

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order to obtain data on the demographics of the study's sample, emphasis on level of teaching (e.g., elementary or secondary), and years of related teaching experiences (e.g., coaching, summer camp counselors).

Procedures

The survey research process began by contacting school districts in the State of Michigan to identify teachers who had completed their 1 to 3 years of teaching physical education. After identifying such teachers, they were contacted both by phone and email with a brief description of the research project by the investigator. Upon agreement to participate in the study, participants were asked to complete an informed consent form to comply with university requirements involving research with human subjects. Teachers were asked to select their preference for completing the questionnaire, they had the choice to conduct the questionnaire by means of their personal email (i.e., questionnaire will be sent to them by the investigator via an email attachment) or by means of a paper/pencil approach. If the questionnaire was to be completed in the paper/pencil format, the investigator sent the questionnaire to the participant and also provided the respondent with a self-addressed stamped enveloped for the respondent to return the completed questionnaire. Once the responses were completed and returned to the investigator, the data analysis began, and if needed, phone interviews were conducted with some of the participants to further add explanations to specific responses targeted by the investigator.

Treatment of the Data

Descriptive statistics and six correlations (i.e., Spearman-rho) were conducted in order to test the six hypotheses regarding the relationships between perceived

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competence in readiness to teach and the six content areas of perceived preparation. The Spearman-rho analysis was selected over the Pearson's product-moment coefficient because this method is subject to less error than the product-moment formula when samples are relatively small (i.e., $\underline{n}<30$) and also when the measurement instrument being used is based on the power of an ordinal scale (Williams, 1992).

Due to the fact that there were fewer subjects than items it was impossible to conduct a factor analysis of the psychometric properties of the survey. However, items that tap the same domain of perceptions of preparation for teaching should be correlated with each other and the total score in that domain. Thus, for the purpose of analysis, items within each section of the survey were added and divided by the number of items in such section. Correlations between items and the total score within each domain are found in Appendix C.

To analyze the data for the second purpose of this study, which involved examining the predictive strength of perceived preparation categories on perceived competence to teach, a simultaneous regression analysis was conducted using only the predictor variables that correlated significantly with overall perceived competence. Because of the small sample size and possibility of multicollinearity, bivariate regressions were also conducted for all six predictors.

CHAPTER IV

RESULTS

Descriptive Statistics

The participants in this study consisted of 20 physical education teachers who had completed 1 to 3 years of teaching at the K-12 level in school districts within the State of Michigan. (See Table 1). Additional information obtained from the sample of participants included an average teaching experience of 2.15 years, coaching experience averaging 3.3 years. The level of job satisfaction for the sample indicated that, overall, the participants were "extremely satisfied" (N=4), "very satisfied" (N=8), and "satisfied" (N=5) within their current teaching positions as a group; three participants did not respond to this question.

Table 1

Background Questionnaire_Descriptive Statistics

	Mean	Std. Deviation
Age	28.65	3.99
Teaching Experience	2.15	.88
Coaching Experience	3.30	2.81

	Frequencies (N=20)
Males	12
Females	8

Teaching Level	
Elementary School	12
Middle School	3
High School	5
Certification Minor	
Health	14
History	2
Chemistry	1
Psychology	1
Sociology	1
Spanish	1

The survey used to measure the perceived preparation to teach physical education in this sample was divided into 7 sections of the questionnaire. Overall means and standard deviations for each of Sections 2-7 were based on averaging the sample respondents for all questions within each section according to the 5- point Likert-scale (i.e., 1 = very poor, 2 = poor, 3 = average, 4 = above average, and 5 = excellent) used to score all items. The first section, overall competence, was a one-item section. The overall mean on group responses for the participants in this study to each section of the questionnaire ranged primarily from average to above average. (See Table 2). In addition, Appendix B (Table 7) provides means and standard deviations for the 92-items of the questionnaire.

Table 2

Descriptive Statistics for Sample Responses per section of the Survey

Survey Section	Mean	Std. Deviation
Overall Competence	3.90	.718
Professional Preparation	3.74	.492
Personal Qualities	4.30	.485
Social & Professional Qualities	3.82	.597
Aspects of School Management	3.41	.774
Techniques of Teaching Competence	3.66	.560
Mentoring Induction Programs	3.02	.723

In addition, descriptive Spearman-rho correlations (See Table 3) were calculated between the sections of the survey and the following demographics of the participants: age, years of teaching experience, and years of coaching experience. As can be seen from Table 3, none of the demographic variables were significantly correlated with the Overall Competence or with the six predictive variables of perspectives of preparation to teach physical education at the K-12 level. However, in examining the correlations between coaching experience and perspectives of preparation, all are in the negative direction suggesting an inverse relationship between the just mentioned factors.

Table 3

Correlation coefficients for Participant Demographics and the Six Predictive Factors of the Survey Perspectives of Preparation to Teach Physical Education

	Age	Teaching Experience	Coaching Experience
Overall Competence	.24	-.25	-.30
Professional	.24	-.11	-.30
Personal	.40	.30	-.04
Social	.11	-.02	-.21
School Management	.10	-.002	-.15
Techniques Teaching	.09	-.13	-.20
Mentoring	-.07	-.28	-.18

* Significant at the .05 level

Test of Hypotheses

Spearman-rho correlation coefficients were conducted to address the postulated hypotheses to determine which of the six predictors within the questionnaire were significant with regards to the overall perceived competence of physical education teachers toward their readiness to teach. Significance was set at the .05 levels for the probability of determining prediction of influence per item given the exploratory nature of the study and the small sample size (See Table 4). The first row in Table 4 tests the six hypotheses. Four of the six hypotheses were supported. Perceived competence was significantly correlated in rank order with professional preparation (*r*

= .75), mentoring induction programs (r = .60), personal qualities (r = .53), and techniques of teaching competence (r = .53).

Table 4

Correlation coefficients for overall competence and the six predictive factors of the survey Perspectives of Preparation to Teach Physical Education

	Competence	Profess	Personal	Social	School	Tech	Mentor
Competence	1.00	.75**	.53*	.30	.37	.53*	.60**
Professional		1.00	.74**	.56*	.65**	.67**	.61**
Personal			1.00	.66**	.66**	.71**	.39
Social				1.00	.73**	.83**	.56*
School Management					1.00	.60**	.48*
Techniques of Teaching						1.00	.77**
Mentoring							1.00

** Significant at the .01 level *Significant at the .05 level

Regression Analysis

The data analysis for the second purpose (i.e., hypothesis #7) of this study involved examining the predictive strength of perceived preparation categories on perceived competence to teach, by means of a simultaneous regression using the predictor variables that correlated significantly with overall perceived competence. Because of the small sample size and possibility of multicollinearity, bivariate regressions were also conducted for all six predictors. Results for the multiple

regression analysis indicated that the overall equation was significant $F(4, 15) = 5.35$, *R squared* = .59, $p = .007$. The beta weights for the multiple regression and bivariate regression analyses are contained in Table 5. In addition, another regression analysis was conducted to explore the demographic variables and their impact on overall competence. The results of the regression equation were not significant $F(5, 12) = 1.56$, *R squared* = .39, $p = .25$. However, even if the results of the regression equation were not significant in part due to the small sample size, some of the beta weights were strong and they conform to the correlation coefficients that were examined in this study. (See Table 6). No multicollinearity was evident in the collinearity diagnostics produced in the SPSS version 12.0 program. None of the predictors had a condition index of greater than .30 with at least two variance proportions greater than .50 (Tabachnick & Fidell, 1996). (See Appendix D.)

Table 5

Regression analysis between Perceived Competence and the Predictor Categories of the survey Perspectives of Preparation to Teach Physical Education

	Multiple Regression		Bivariate Regression	
Variable	*B*	Sig.	*B*	Sig.
Professional	.69	.02*	.76	.00*
Personal	.04	.88	.56	.01*
Techniques of Teaching	-.10	.76	.53	.02*
Mentoring Programs	.17	.50	.54	.01*

* $p<.05$

Table 6

Regression analysis between Perceived Competence and the Demographic Variables of the Survey Perspectives of Preparation to Teach Physical Education

	Multiple Regression	
Variable	*B*	Sig.
Age	.56	.06
Gender	-.04	.87
Teaching level	.11	.68
Teaching experience	-.43	.13
Coaching experience	-.39	.21

$p<.05$

Chapter V

Discussion

The purpose of this study was to examine the overall competence of teachers with 1 to 3 years of experience regarding their readiness to teach in relationship to how their school-based experiences, university program curriculum requirements, and mentor induction programs prepared them to teach at the K-12 level in the discipline of physical education. In addition, the predictive strength of perceived preparation categories on perceived competence to teach was examined.

In examining the results for the sample in this study, participants rated their overall competence in relationship to their readiness to teach physical education at the K-12 level as above average according to the Likert-type scale used in the survey. Respondents in this study's survey perceived themselves to be rather competent as a consequence of their university curricula, school based experiences and mentoring induction programs that prepared them to be teachers in physical education. It is important to acknowledge that the sample in this study consisted of teachers who were approaching 30 years of age (mean age 28.65). Consequently, the maturity level and life experiences accumulated by this sample may also influence in a positive manner the nature of the results in this study.

Correlational evidence provided support for four of the six hypotheses. Overall perceived competence was associated with perceptions of the benefits of professional preparation, mentoring induction programs, personal qualities, and techniques of teaching. Careful examination of the items in the professional preparation section of the survey provide an overall scope of the type of experiences and university program

requirements that shape the development of physical education teachers on learning how to teach the discipline at the K-12 level. Consequently, it makes sense that overall competence correlated at the highest level with the professional preparation section because such experiences shape and build the foundation on which teachers feel competent and ready to teach once they have completed university program requirements and obtained their teaching certification endorsement. In addition, professional preparation may have correlated the highest with overall competence because sample respondents may have preconceived notions regarding the quality and prestige of their university program. Thus, messages that novice teachers received during their preservice teacher training at their respective university may serve as a means to reinforce such preconceived beliefs regarding the quality of their program and their readiness to teach (Doolittle, Dodds, & Placek, 1993). Future studies might look at responses from beginning teachers from multiple programs and universities with varying reputations of quality.

In addition, Harter's (1981a, 1981b) model of perceived competence further supports the results of the significant correlation between the professional preparation section of the survey and overall competence in this study. The socialization and internalization process of Harter's model, one being product evaluation of the task (i.e., teaching physical education), and two, acceptance or rejection of the product outcome by university supervisors or cooperating teachers specifically relates to Items 12-19 of the professional preparation survey. Such items aimed to assess the type of guidance and feedback that novice teachers received during their student-teaching experience from university supervisors and cooperating teachers regarding acceptance

or rejection of their teaching methodologies as they develop their foundation of pedagogical content knowledge to teach physical education. Therefore, overall perceived competence of novice teachers in the current study correlated significantly with the professional preparation section. This occurred, in part, because Items 12-19 of the survey related to the level of constructive criticism that novice teachers received (while student-teaching) from university supervisors and cooperating teachers regarding their effective or ineffective teaching methods. Consequently, part of the focus of university programs and school districts is to have a positive collaboration effort as part of the school-based experience that trains preservice teachers. The collaboration between university programs and school districts provides the preservice teachers with a direct experience that prepares them professionally for the rigors of teaching in the physical education profession. Such collaboration should also support and complement the mentoring induction process that school districts have in place to groom and foster the development of novice teachers in their beginning years of teaching physical education.

Even though the participants in this study worked in 13 different school districts and the mentoring process was not the same, the positive association between overall perceived competence and mentoring induction is consistent with the reported literature and fits Harter's (1981a, 1981b) model. Stroot, Faucette, and Schwager (1993) report that in the field of physical education, mentoring has been recognized as an important part of the induction process for novice teachers. Mentoring can range from a personal and mutually respectful relationship that develops informally between a novice and an experienced teacher, to formal induction programs in which mentors

are assigned by school districts to assist new teachers during their initial year(s) of teaching. In either format, the nature of mentoring relationships provides a positive transition for novice teachers into their induction to the world of teaching physical education. Mentoring, in turn, provides novice teachers with a means to meet their needs of understanding the complexities of the physical education teaching profession and a way to arrive at solutions for improving their teaching methodologies. This relationship is also supported by the fact that a strong correlation between the predictor of techniques of teaching competence and the mentoring induction section was reported. It makes sense for these two sections to correlate because one would expect good teaching techniques to be exhibited by the novice teacher if they are obtaining positive guidance and role modeling from a senior faculty member assigned to mentoring.

Focusing on Harter's model and the process of socialization and internalization for the novice teacher to develop perceived competence through mentoring can further explain the positive association results between the overall perceived competence of novice teachers and the mentoring induction section of the survey in the current study. In particular, careful examination of Items 79-84 and 90-92 of the mentoring induction section of the survey reflect how novice teachers' overall perceived competence was predicted by evaluative and acceptance/rejection information coming from mentors (i.e., senior faculty and administrators) in their respective school of employment. The influence of mentors in the development of perceived and actual competence of novice teachers by sharing a sense of accomplishment in the novice teacher's development as an effective teacher has a positive impact on the emerging sense of personal worth of

the novice teacher. Furthermore, and in concordance with Harter's model, the aspect of internalized mastery goals and criteria for success further enhances the competence of novice teachers when mentors provide standards and criteria associated with successful physical education teaching methods and the novice teacher adopts them. Thus, novice teachers increase their sense of competence as they internalize standards that constitute successful teaching practices with the help of mentors in the mentoring induction process.

In terms of personal qualities for teaching effectiveness and overall competence, it makes intuitive sense that teachers have a sense of character and altruistic nature that enables them to work with a vastly different population of students ranging from learning styles, to different ethnic and socioeconomic status within the same learning environment. Teachers work under the natural constraint of fairness and objectivity toward all students in order to carry out their teaching responsibilities in a manner that is acceptable and conforming to the expectations of the teaching profession. In that manner, physical education teachers get their pedagogy foundations from teacher education programs in which student learning is one of the primary objectives for school instruction (Smyth, 1995). Now, the reality of the teaching profession and its perception on the physical education discipline is often one of lack of accountability for student outcomes in comparison to other disciplines such as math and science (Smyth, 1995). Thus, the absence of such expectations regarding student outcomes often creates a sense of conflict between the novice teacher's preservice training and the realities of the workplace perceptions toward physical education. So, for novice teachers to not get discouraged in their approach to teach physical education in a

competent manner, it may be that their own sense of efficacy and not student outcomes can be the source of self-reliance for them to teach in a competent fashion (Smyth, 1995). Further support for the relationship between personal factors positively influencing the aspect of competence is the strong correlation evidence obtained between the professional preparation and personal qualities sections of the survey. Consequently, desirable personal qualities for teaching such as those described in Items 34-50 can establish a relationship between innate personal characteristics and to aspects of the teaching profession that are also learned through professional preparation obtained in the university and school-based settings.

Moreover, the personal qualities of resiliency and persistence that novice teachers endure in the presence of adverse teaching conditions encountered in their schools because of the lack of accountability perception (as reported by Smyth, 1995) often associated with the field of physical education fits Harter's model of perceived competence. Novice teachers choose to achieve and persist in the teaching profession in part because of personal qualities such as intrinsic motivation to experience success in their teaching endeavors and environment. The novice teachers' awareness of the effects that their mastery teaching methods have on the learning environment of their students produces a positive effect and a sense of fulfillment. Seeking such fulfillment, which is driven by personal qualities of motivation, resiliency, and persistence in Harter's (1981a, 1981b) contention, is an innate process for the individual.

More aspects of personal qualities can further explain the nature of the results on the current study. The predictor category of personal qualities was positively correlated with perceptions of overall competence in this study. As the 17 items in the

current survey for the section of personal qualities were examined, a connection with Calabrese's (2000) essential characteristics of competence was established to explain these results. The essential characteristics of competence are: (a) competence being value driven, (b) competence produces positive benefits, (c) competence is adaptive, (d) competence is time centered, (e) competence is correctly focused, (f) competence is problem generated, and (g) competence is results oriented. The fostering of the seven essential competence characteristics as described by Calabrese on the part of the novice physical education teacher allows the teacher to develop a sense of worth for his or her contributions to society. Specifically, the novice teachers are figuring out how to bring their unique personality into the context of their classroom and school in order to create a positive learning environment for their students, and for them to cultivate their overall competence as physical education teachers. Therefore, participants in this study may rely on their own set of personality constructs, as well as their university program requirements to have a sense of competence and readiness to teach physical education at the K-12 level.

Another correlation emerged between the predictor categories of social qualities needed to manage social situations in the school setting and techniques of teaching competence. In examining the items in both sections, an obvious relationship can be seen in regards to the items because in both sections aspects on how to work effectively in terms of interpersonal relationships are presented directly and indirectly by the wording of the items. Therefore, it is possible to infer that the participants in this study appropriately engaged students, colleagues, and parents in order to meet competency expectations of teachers in a school setting.

The set of questions that was tied to the aspects of techniques of teaching was significantly correlated with professional preparation. Given the lack of significance for any of the predictors of perceived competence, other than professional preparation in the multiple regression analysis, the findings suggest that neither the perceived techniques of teaching competence nor the other two predictors provided any unique contribution to the variance in perceived competence scores beyond that accounted for with professional preparation. Because the section on professional preparation accounted for the overwhelming majority of the variance in relationship to overall perceived competence scores, such section may be sufficiently comprehensive in its own merit to measure the overall perceived competence of novice teachers in their perceived preparedness to teach physical education at the K-12 level. It is therefore possible to infer that the remaining sections of the survey (i.e., personal qualities, social and professional qualities, aspects of school management, techniques of teaching competence, and mentoring induction programs) do not add much unique contribution to the investigation of the relationship between overall perceived competence and perceived readiness to teach physical education for novice teachers. The notion that professional preparation can perhaps be used as the sole section of the survey is further supported by the results obtained in the multiple regression analysis.

Further support for the idea that professional preparation serves as a foundation for the development of overall perceived competence is found in the reported literature with studies conducted by Block and Rizzo (1995) and Folsom-Meek, Nearing, and Krampf (1995). The purpose of these studies was to examine attitudes and attributes of physical education teachers working with students possessing mild disabilities. Their

results and conclusions indicated that increases in the perceived competence of physical education teachers were directly related to overall educational preparation and hands-on experience course requirements.

To further explain the nature of the results, limitations within the design of the present study should be examined. The first consideration must be given to the exploratory nature of the study. This study aimed to establish a relationship between overall perceived competence and the participants' own sense of preparedness to teach physical education by means of a 5-point Likert-type scale survey that was developed by the investigator through a combination of two different questionnaires, (Boyce, 1915; Hardy, 1999). These questionnaires were adapted, and the current survey consisted of 92 questions and seven separate sections. The surveys that were used by Boyce (1915) and by Hardy (1999) were both quite different, with Hardy's being an open-ended type of questionnaire and Boyce's focusing on an ordinal rating scale. In both instances, the author's aim for this study's questionnaire was to measure teaching effectiveness in the context of a physical education setting. For this dissertation, however, the questionnaires were combined and used to examine the relationship between overall perceived competence and perceived preparation to teach physical education. Thus, the survey used in this study represents an exploratory instrument that needs to be further analyzed as a plausible tool to measure competence in its relationship to perceived preparedness to teach from the perspective of novice teachers.

A second factor that needs to be considered to further explain the nature of the results is again found within the survey itself. Each section of the survey has a

different number of total items, professional preparation contains 32 items, personal qualities is composed of 17 items, social and professional qualities as well as techniques of teaching competence total 12 items per section, aspects of school management has only 4 items, and the section on mentoring induction programs totals 14 items. Hence, it is possible that results obtained in this study may have been influenced statistically by the number of items per section of the survey. Additionally, the perceived competence measure was a one-item questionnaire. Perhaps other questionnaires, such as Faulkner and Colin's (2000) Physical Self-Perceptions and Attitudes Toward Teaching Physical Education, and Rizzo's (1993) Physical Educators'Attitudes Toward Teaching Individuals with Disabilities (while modifying it for this study's population sample of respondents) may have provided a richer analysis of perceived competence for teaching.

Further explanation of the results is centered on the limitations and delimitations of the study. The narrow scope of the sample based on novice teachers with 1 to 3 years of teaching experience in teaching physical education did not provide a high number of available participants. Such an instance can be explained by the current trend in the teaching profession of established teachers holding on to their current positions due to the post September 11, 2001 effects and how retirement plans experienced a negative decline in financial gain as the Stock Market suffered considerable loss. As a consequence, the job market for recently graduated physical education teachers has been very competitive across the state of Michigan and finding a larger available sample was quite a challenge. Moreover, the study was limited to physical education teachers in Michigan because the investigator has a strong interest

in pursuing factual reasons for improvements (if needed) in teacher education programs in the discipline of physical education. In particular at Eastern Michigan University because he works in such institution as a professor in the physical education program.

Another limitation of the study due to the small sample size was that given the 92 questions contained in the survey a full set of exploratory statistical analyses was severely limited due to lack of power. Consequently, all possible factors that might have contributed to overall competence and perceived preparation to teach physical education could not be examined because of lack of statistical power. Also, the participants in this study were former students of the investigator and their responses were not anonymous. There is a possibility that the participants may have responded with the intention of pleasing the investigator with the direction of their responses leaning to the higher end of the questionnaire rating scale.

Conclusions and Direction for Future Research

Professional preparation was the strongest predictor of perceived competence to teach physical education among novice teachers in this study. Thus, physical education induction programs should have a strong emphasis in preparing teachers with a school-based experience and university professional training that exhibits a positive collaboration model (Mawer, 1996). Physical education programs should have an established collaboration with school districts and concrete guidelines set in such partnership in order to offer a structured experience for preservice teachers. In such fashion, physical education programs could reduce the variability of school-based experiences obtained by preservice teachers. Primarily because in many instances, it is

up to the preservice teacher to seek out the school-based experiences according to guidelines set forth by the university physical education program as part of the requirements to fulfill the teaching certification endorsement. In addition, the results of this exploratory investigation indicated that the current survey adapted from Boyce (1915) and Hardy (1999) could be explored further for use to measure the relationship between overall competence and perceived preparation to teach physical education. Six predictor categories were developed to assess aspects of teaching competence in relationship to overall perceived teaching competence. Even though 4 of the 6 predictor categories correlated significantly with overall perceived competence, the predictor category of professional preparation had the highest correlation. It seems possible that the professional preparation category can perhaps be used by itself to determine overall perceived competence in relationship to perceived preparedness to teach physical education. Yet, it is also possible that selected items found in the predictive variable sections of personal qualities, techniques of teaching competence, and mentoring induction programs can be used to strengthen the professional preparation section. Such item selection from the above mentioned sections can possibly provide a more comprehensive survey that further enhances the professional preparation section while addressing the complexities inherent in the field of teaching physical education.

For future direction, in terms of research in the area of overall perceived competence and perceived preparation for teaching effectiveness in the field of physical education, it is important to consider conducting another study with a considerably larger sample of physical education teachers regardless of their years of

experience. The larger sample can provide a more powerful statistical analysis and add support for the validity and reliability of the instrument used to measure overall perceived competence and perceived preparation in being ready to teach physical education. Another consideration is for perceived competence to be measured by using an established questionnaire such as the those used by Faulkner and Colin (2000) and Rizzo (1993) in the context of perceived preparation to teach physical education in the beginning years of teachers' career.

Further studies can also focus on comparing and contrasting novice versus expert teachers in regards to levels of overall perceived competence and perceived preparation to teach physical education. In the same fashion, similarities and differences can be examined according to university program requirements that physical education teachers adhered to in order to obtain their teacher certification endorsement. Such comparisons can provide university programs with solid rationales for evaluating, revising, and implementing changes that may help preservice teachers become better prepared to enter the teaching profession of physical education.

APPENDICES

APPENDIX A

Ready to Teach: Understanding the Perspectives of Preparation of Physical Education Teachers

INFORMED CONSENT FORM

MICHIGAN STATE UNIVERSITY
DEPARTMENT OF KINESIOLOGY

Your participation as a volunteer is requested in a physical education study as an authorized part of the research conducted by Geffrey Colón at Michigan State University under the supervision of Dr. Lynnette Overby (MSU Professor).

The purpose of this study is to examine the perceptions of preparation of physical education teachers in relationship to how their school-based experiences, university program curriculum requirements, and mentor induction programs prepared them to teach K-12 physical education. Information for this study is going to be collected by means of a survey questionnaire. Questionnaire responses from all participants will remain confidential and will not be shared with any parties or agencies outside of the realm of the study investigators. Any information reported from the results of this survey will be provided in a group format to protect the identity of responses of all participants in the study. Your privacy will be protected to the maximum extent allowable by law. The length of time to complete the questionnaire is approximately 20-30 minutes. As a participant you have the choice to complete the questionnaire online (via email) or by means of a paper/pencil format that will be provided to you. If more information is needed regarding the nature of the survey responses, some participants may be asked to take part in a phone interview to clarify or add content to specific answers from the questionnaire. Information from the phone interview will be collected by the investigator writing notes related to participant's responses, such notes will be shredded and discarded once the information is used to add explanations to the nature of this study.

The purpose of this study has been defined and fully explained. An opportunity to ask questions has been provided and any inquiries have been answered to your satisfaction. Your participation in this study is voluntary, you may refuse to answer any questions, and you may discontinue your participation at any time without any penalty. If you have further questions about this study, please contact the investigator(s) by using the contact information provided at the end of this form. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact-anonymously, if you wish- Ashir Kumar, M.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax (517) 432-4503, email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824. Within these restrictions, results of the study will be made available to you at your request.

Your signature below indicates your voluntary agreement to participate in this study.

_____ _____

Signature Date

RESPONSIBLE PROJECT INVESTIGATOR:

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BACKGROUND QUESTIONNAIRE

Name_____ Date of Birth_____(m/d/yr)

Male_____ Female_____ Ethnic Background_____

Email_____

Contact phone number(s):

Work_____Home_____

Cell_____

Mailing address:

University/College granting your teaching endorsement_____

School District_____Name of School_____

Level of teaching:

Elementary Junior HS High School (please circle level of teaching)

Minor area with teaching certificate:_____

Years of teaching experience_____

Years of coaching experience_____

List other experiences that may have helped your development as a teacher (e.g., camp counselors, recreational leader)

Job satisfaction after completion of one year of teaching (circle appropriate answer)

Extremely Satisfied...Very Satisfied...Satisfied...Somewhat Satisfied...Not Satisfied

(If not satisfied or somewhat satisfied, please explain briefly using the back of this page.)

PERSPECTIVES ON PREPARATION TO TEACH PHYSICAL EDUCATION
Adapted from Boyce (1915) and Hardy (1999)

Answer the following questions based on the academic and professional preparation experiences that shaped your readiness to teach physical education. Circle the appropriate number in this questionnaire on the scale next to each item.

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

1. Your overall level of competence with relationship to your readiness to teach physical education during your first year of teaching.....1....2....3....4....5

Professional Preparation

2. General education course requirements.....1....2....3....4....5
3. Physical education major course requirements.....1...2....3....4....5
4. Approved minor course requirements.....1....2....3....4....5
5. Professional education course requirements.....1....2....3....4....5
6. Pre-student teaching field hours requirement.....1....2....3....4....5
7. Placement (school) for student-teaching.....1....2....3....4....5
8. Learning to teach from observation, peer teaching, and laboratory teaching experiences.....1....2....3....4....5
9. Opportunity to develop teaching methods and skills throughout the student-teaching experience.....1....2....3....4....5
10. Length of the student-teaching experience.....1....2....3....4....5
11. The overall student-teaching experience.....1....2....3....4....5
12. Guidance and advice of the university supervisor assigned to you in the student-teaching experience.....1....2....3....4....5
13. Guidance and advice of the cooperating teacher assigned to you in the student-teaching experience at the elementary school.....1....2....3....4....5
14. Guidance and advice of the cooperating teacher assigned to you in the student-teaching experience at the secondary level.....1....2....3....4....5
15. The impact of corrective feedback from your cooperating teacher on your teaching during your student-teaching experience.....1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

16. The effect of the verbal reports from your cooperating teacher in helping you to improve your teaching methodologies.....1....2....3....4.....5
17. The effect of the written reports from your cooperating teacher in helping you to improve your teaching methodologies.....1....2....3....4....5
18. The effect of the verbal reports from your university supervisor in helping you to improve your teaching methodologies.....1....2....3....4....5
19. The effect of the written reports from your university supervisor in helping you to improve your teaching methodologies.....1....2....3....4....5
20. The effect of the school/school district where you did your student-teaching on your development of you as a teacher.....1....2....3....4....5
21. The effect of the constraints in the school/school district where you did your student-teaching on your development as teacher.....1....2....3....4....5
22. The overall effect of past experiences in the university context that shaped your development as a teacher.....1....2....3....4....5
23. The overall effect of past experiences in the school where student-teaching occurred that shaped your development as a teacher.....1....2....3....4....5
24. The overall effect of past experiences outside of the school context such as athletic participation and extracurricular activities that shaped your development as a teacher.....1....2....3....4....5
25. The overall effect of preconceptions of teaching and their direct relationship to your student-teaching experience.....1....2....3....4....5
26. The overall effect of the university program requirements and experiences in shaping your preparation to teach physical education.....1....2....3....4....5
27. The overall effect of the university supervisor visits to your student-teaching site in regards to your development as a teacher.....1....2....3....4....5
28. Your role and input in shaping, organizing, and processing experiences that fit your primary teaching interests within the scope of your university program.....1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

29. Your level of confidence in class management to handle discipline problems efficiently and effectively as a result of university program requirements.....1....2....3....4....5

30. Your level of confidence in class management to handle discipline problems efficiently and effectively as a result of the student-teaching experience.....1....2....3....4....5

31. Your level of comfort in handling sensitive issues of diversity with students in the physical education setting as a result of the university program requirements.....1....2....3....4....5

32. Your level of comfort in handling sensitive issues of diversity with students in the physical education setting as a result of the student-teaching experience.....1....2....3....4....5

33. Your knowledge and application of technology and software to enhance teaching methods.....1....2....3....4....5

Personal Qualities needed to teach physical education (physical, cognitive, character) based on academic and professional preparation experiences

34. General appearance (e.g., appropriate attire, grooming).....1....2....3....4....5

35. Overall health.....1....2....3....4....5

36. Quality of voice projection, pitch, clearness of gymnasium voice.....1....2....3....4....5

37. Intellectual development.....1....2....3....4....5

38. Initiative and self-reliance in originating and carrying out ideas.....1....2....3....4....5

39. Creativity, adaptability, and resourcefulness.....1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

40. Accuracy in knowledge statements, records, reports, and school work.....1....2....3....4....5
41. Overall knowledge regarding the aspect of business in the field of physical education.....1....2....3....4....5
42. Enthusiasm and optimism towards teaching physical education..1....2....3....4....5
43. Integrity and sincerity in character as a teacher.....1....2....3....4....5
44. Overall self-control in teaching.....1....2....3....4....5
45. Overall sense of promptness.....1....2....3....4....5
46. Tactfulness and sensitivity in teaching.....1....2....3....4....5
47. Fairness and objectivity towards all students.....1....2....3....4....5
48. Respect for authority in the school/school district setting.....1....2....3....4....5
49. Confidentiality on sensitive issues involving students, peers, and/or school matters.....1....2....3....4....5
50. Overall professional conduct and judgement.....1....2....3....4....5

Social and professional qualities needed to effectively manage social situations in the school setting based on academic and professional preparation experiences

51. Academic preparation from general education requirements.....1....2....3....4....5
52. Professional preparation of a technical nature.....1....2....3....4....5
53. Grasp of the subject matter by having command of the information to be taught or the skill to be developed.....1....2....3....4....5
54. Your sympathetic/empathetic understanding of children's development by using scientific and practical knowledge.....1....2....3....4....5
55. School and community interest.....1....2....3....4....5
56. Ability to meet and engage parents.....1....2....3....4....5
57. Interest in the lives of students in the present and future form....1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

58. Cooperation toward colleagues and superiors.....1....2....3....4....5
59. Loyalty toward colleagues and superiors.....1....2....3....4....5
60. Interest in professional development and staying current with the literature and latest advances in the field.....1....2....3....4....5
61. Planning and daily preparation to teach physical education.....1....2....3....4...5
62. Standard use of the English language in written and verbal formats.....1....2....3....4....5

Aspects of school management competence based on academic and professional preparation experiences

63. Care of light, temperature control and ventilation.....1....2....3....4....5
64. Cleanliness and neatness of the room.....1....2....3....4....5
65. Taking measures to conserve energy within the room environment.....1....2....3....4....5
66. Responsibility for maintenance of equipment and facilities in appropriate working conditions.....1....2....3....4....5

Techniques of teaching competence based on academic and professional preparation experiences

67. Writing clearly defined goals and objectives for each lesson.....1....2....3....4....5
68. Recognizing when to re-teach skills/concepts to students so that behaviors become permanent and automatic as a response.....1....2....3....4....5
69. Skills to teach and foster a reflective critical thinking approach among the students in the physical education setting.....1....2....3....4....5
70. Skills to provide and promote efficient study habits for students.1...2....3....4....5
71. Skill to select material of instruction to suit the interest, abilities, needs and wants of a diverse population of students in a classroom.....1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

72. Skills in organizing the subject matter and the presentation style of the lesson being taught to the students.....1....2....3....4....5

73. Skill and care in assigning homework pertinent to the lesson with prompt feedback given back to the students.....1....2....3....4....5

74. Skills in designing appropriate exams to measure content taught.1....2....3....4....5

75. Skills in motivating students by arousing their interest with appropriate and effective incentives and techniques.....1....2....3....4....5

76. Attending to the individual needs, differences, difficulties and peculiarities of a wide range of students in one setting.....1....2....3....4....5

77. Infusing technology into a physical education setting.....1....2....3....4....5

78. Maximizing the use of time with effective transitions in the physical education setting.....1....2....3....4....5

Mentoring induction programs, mentors, and professional development opportunities provided by your school district that enhanced your ability and competence to teach physical education

79. Guidance of senior faculty mentor(s) in helping you transition into your position as a physical education teacher.....1....2....3....4....5

80. Guidance of senior faculty mentor(s) in helping you understand community needs and values that are reflected in the physical education curriculum...1....2....3....4....5

81. Guidance of school administrator in helping you transition into your position as a physical education teacher.....1....2....3....4....5

82. Guidance of school administrator in helping you understand community needs and values that are reflected in the physical education curriculum.....1....2....3....4....5

83. Guidance of assistant administrator in helping you transition into your position as a physical education teacher.....1....2....3....4....5

84. Guidance of assistant administrator in helping you understand community needs and values that are reflected in the physical education curriculum...1....2....3....4....5

1 = Very Poor 2 = Poor 3 = Average 4 = Above Average 5 = Excellent

85. New teacher orientation in helping you transition into your position as a physical education teacher.....1....2....3....4....5

86. New teacher orientation in helping you understand community needs and values that are reflected in the physical education curriculum.....1....2....3....4....5

87. Professional development workshops provided by your school district to enhance your competence as a physical education teacher.....1....2....3....4....5

88. Professional development workshops provided by the teacher's union to help you understand your rights as a school district employee.....1....2....3....4....5

89. Workshops and conferences from physical education associations that helped you enhance your competence as a physical education teacher.....1....2....3....4....5

90. Teaching evaluations from the principal/assistant principal in relationship to your methods of teaching physical education.....1....2....3....4....5

91. Feedback sessions with the principal/assistant principal in relationship to your methods of teaching physical education.....1....2....3....4....5

92. Feedback sessions with teachers from your school district to help you in developing your methods of teaching physical education.....1....2....3....4....5

Appendix B

Table 7

Descriptive Statistics for all items per section in the Survey Perspectives on Preparation to Teach Physical Education (N=20)

Survey Item	Valid N	Mean	Std. Deviation
Overall Competence			
Item 1	20	3.90	.718
Professional Preparation			
Item 2	20	3.47	.611
Item 3	20	4.30	.571
Item 4	20	3.70	.571
Item 5	20	3.55	.825
Item 6	20	3.70	.864
Item 7	20	4.00	.858
Item 8	20	3.85	.670
Item 9	20	4.00	.725
Item 10	20	4.00	.944
Item 11	20	4.00	.787
Item 12	20	4.05	.887
Item 13	20	4.26	.733
Item 14	20	3.60	.123
Item 15	20	4.25	.786
Item 16	20	3.95	.759
Professional Preparation (continued)			
Item 17	20	3.75	.850

Item 18	20	4.00	.794
Item 19	20	3.85	.745
Item 20	20	3.84	.688
Item 21	20	3.21	.418
Item 22	20	3.75	.716
Item 23	20	3.85	.745
Item 24	20	3.80	.894
Item 25	20	3.35	.489
Item 26	20	3.95	.887
Item 27	20	3.75	.966
Item 28	20	3.70	.801
Item 29	20	3.20	.951
Item 30	20	3.90	.718
Item 31	20	3.00	.973
Item 32	20	3.45	.998
Item 33	20	3.15	1.16
Total Average Items 2-33		3.74	.492

Personal Qualities

Item 34	20	4.40	.680
Item 35	20	4.25	.550
Item 36	20	4.20	.951
Item 37	20	4.25	.716
Item 38	20	4.25	.638
Item 39	20	4.35	.587
Item 40	20	4.00	.648
Item 41	19	3.89	.737
Item 42	20	4.75	.444
Item 43	20	4.45	.686

Item 44	20	4.45	.686
Item 45	20	4.25	.910
Item 46	20	4.25	.716
Item 47	20	4.45	.604
Item 48	20	4.35	.745
Item 49	20	4.30	.732
Item 50	20	4.40	.680
Total Average Items 34-50		4.30	.485

Social & Professional Qualities

Item 51	20	3.15	.670
Item 52	20	3.30	.923
Item 53	20	4.15	.670
Item 54	20	3.65	.745
Item 55	20	3.75	1.02
Item 56	20	3.65	.933
Item 57	20	3.80	.833
Item 58	20	4.05	.825
Item 59	20	3.90	.967
Item 60	20	4.25	.638
Item 61	20	4.15	.745
Item 62	20	4.05	.998
Total Average Items 51-62		3.82	.597

Aspects of School Management

Item 63	20	3.10	1.02
Item 64	20	3.75	.786
Item 65	20	2.95	.998
Item 66	20	3.85	1.03
Total Average Items 63-66		3.41	.775

Techniques of Teaching Competence

Item 67	20	3.95	.825
Item 68	20	3.95	.686
Item 69	20	3.65	.587
Item 70	20	3.25	.966
Item 71	20	3.60	.753
Item 72	20	4.10	.640
Item 73	20	3.50	.760
Item 74	20	3.45	1.05
Item 75	20	3.90	.852
Item 76	20	3.80	.951
Item 77	20	2.90	.911
Item 78	19	4.05	.705
Total Average Items 67-78		3.66	.560

Mentoring Induction Programs

Item 79	19	3.47	1.30
Item 80	19	3.05	1.02
Item 81	19	3.15	1.11
Item 82	19	3.15	.834
Item 83	15	2.86	.915
Item 84	15	3.00	1.06
Item 85	19	2.94	.779
Item 86	19	3.00	.881
Item 87	19	2.84	1.21
Item 88	18	3.00	1.08
Item 89	19	4.15	.834
Item 90	19	3.36	.830
Item 91	19	3.26	.805

Item 92	19	3.42	.768
Total Items Average 78-92		3.02	.723

Table 8

Participant Data Means for each section of the survey Perspectives on Preparation to Teach Physical Education

Participant	Competence	Professional	Personal	Social	School Management	Techniques Teaching	Mentoring
1	4.00	4.25	4.41	4.50	4.25	4.00	4.00
2	4.00	3.19	3.76	3.92	2.75	3.42	3.21
3	4.00	3.91	4.24	3.58	4.00	3.67	3.36
4	4.00	3.38	3.47	3.25	2.50	3.00	3.00
5	4.00	3.41	4.24	2.67	2.75	3.25	3.29
6	5.00	4.00	4.53	4.00	3.50	4.58	4.07
7	5.00	4.31	4.88	3.58	4.00	3.50	2.21
8	5.00	4.84	4.94	4.75	4.25	4.42	3.64
9	3.00	3.06	3.82	3.33	3.50	3.17	1.00
10	4.00	3.84	4.29	4.17	3.75	3.83	2.86
11	3.00	3.29	3.35	2.83	2.00	2.42	2.21

Participant	Competence	Professional	Personal	Social	School Management	Techniques Teaching	Mentoring
12	4.00	4.23	4.71	4.25	4.25	4.18	3.66
13	4.00	3.87	4.53	3.50	4.00	3.17	3.21
14	4.00	4.09	4.47	4.50	3.50	4.50	3.83
15	3.00	3.22	4.00	3.08	1.75	3.42	2.66
16	3.00	3.56	3.59	3.50	2.75	3.08	2.58
17	3.00	3.63	4.75	4.17	3.50	3.83	2.79
18	3.00	3.25	4.65	4.58	4.00	3.83	2.86
19	4.00	4.19	4.65	4.25	4.25	4.25	4.00
20	5.00	4.34	4.94	4.00	3.00	4.00	3.50

Appendix C

Table 9

Correlation coefficients between items within each of the predictor sections of the survey Perspectives on Preparation to Teach Physical Education

Professional Preparation

Items	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	1.0													
3	.60**	1.0												
4	-.07	.25	1.0											
5	.22	.36	.23	1.0										
6	.44	.62**	-.04	.31	1.0									
7	-.03	.28	.24	.51*	.20	1.0								
8	.19	.51*	.54*	.44	.35	.38	1.0							
9	.20	.50*	.41	.20	.25	.37	.10	1.0						
10	.08	.35	.29	.13	.22	.04	-.18	.69**	1.0					
11	.16	.34	.24	.54*	.44	.67**	.13	.78**	.49	1.0				
12	.17	.34	.28	.01	.47*	.35	-.06	.58**	.63**	.65**	1.0			
13	.24	.63**	.05	.34	.60**	.37	.62**	.33	.03	.35	.06	1.0		
14	.002	-.07	.24	.24	-.05	.69**	.05	.27	-.03	.56*	.26	.13	1.0	
15	.11	.33	.19	.50*	.36	.69**	.24	.67	.34	.89**	.46*	.53	.64**	1.0

** Significant at the .01 level

* Significant at the .05 level

Items	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	.18	.65**	.31	.31	.46*	.64**	.39	.67**	.36	.66**	.48*	.73**	.52*	.75
17	.13	.50*	.21	.39	.40	.58**	.19	.68**	.38	.74**	.54*	.56*	.48*	.83*
18	.11	.58**	.33	.05	.23	.50	.07	.55**	.50*	.36	.60**	.22	.32	.39
19	.15	.59**	.22	.02	.63**	.38	.27	.38	.36	.43	.65**	.47*	.26	.38
20	.71**	.68**	.25	.23	.53*	.42	.34	.45	.28	.37	.55*	.50*	.25	.31
21	.45	.41	-.16	.16	.03	-.18	.18	.00	-.19	-.12	-.39	.47	.05	.04
22	.45	.61**	.29	.60**	.38	.56*	.37	.53*	.35	.60**	.40	.38	.35	.52*
23	.29	.24	.34	.58**	.24	.40	.27	.30	.15	.52*	.28	.10	.55*	.45*
24	.27	.46*	.12	.31	.64**	.40	.47*	.25	.19	.32	.28	.51	.01	.15
25	.38	.36	.38	.12	.51*	.22	.32	.45*	.40	.50	.59**	.31	.35	.33
26	.33	.57**	.30	.61**	.26	.56*	.45*	.65**	.38	.68**	.26	.48*	.35	.70**
27	.42	.63**	.32	.30	.65**	.51*	.50*	.45*	.30	.51*	.60**	.65**	.37	.60**
28	.40	.59**	.36	.18	.56*	.17	.57**	.34	.33	.40	.45*	.48*	.11	.34
29	.10	.35	.17	.10	.38	-.17	.18	.17	.48*	.14	.27	.21	-.24	-.10
30	.38	.47*	.28	.52*	.16	.40	.17	.51*	.60**	.43	.35	.20	.22	.35
31	.46*	.70**	.34	.45*	.56**	.17	.61**	.21	.27	.15	.10	.53*	-.10	.18
32	.36	.38	.10	.48*	.42	.29	.24	.36	.47*	.51*	.34	.38	.34	.56*
33	.41	.67**	.44	.19	.61**	.07	.69**	.19	.07	.06	.19	.44	-.24	.03

** Significant at the .01 level

* Significant at the .05 level

Items	16	17	18	19	20	21	22	23	24	25	26	27	28
16	1.0												
17	.81**	1.0											
18	.70**	.55*	1.0										
19	.73**	.49*	.70**	1.0									
20	.61**	.59**	.58**	.58**	1.0								
21	.20	.16	-.03	-.08	.13	1.0							
22	.60**	.56**	.38	.25	.62**	.20	1.0						
23	.37	.33	.18	.15	.27	.21	.73**	1.0					
24	.40	.15	.23	.43	.51*	-.19	.54*	.34	1.0				
25	.49*	.21	.30	.59**	.50*	-.07	.47*	.59**	.63**	1.0			
26	.62**	.56*	.36	.20	.43	.10	.84**	.60**	.44	.40	1.0		
27	.78**	.56*	.56*	.77**	.61**	.15	.50*	.39	.47*	.70**	.42	1.0	
28	.55*	.28	.24	.67**	.50*	.10	.44	.32	.43	.70**	.40	.73**	1.0

** Significant at the .01 level

* Significant at the .05 level

Items	29	30	31	32	33
29	1.0				
30	.45*	1.0			
31	.58**	.53*	1.0		
32	.51*	.64**	.55*	1.0	
33	.19	.07	.67**	.07	1.0

** Significant at the .01 level

* Significant at the .05 level

Personal Qualities

Items	35	36	37	38	39	40	41	42	43	44	45	46	47
35	1.0												
36	.70**	1.0											
37	.48*	.45*	1.0										
38	.65**	.55*	.30	1.0									
39	.43	.31	.35	.69**	1.0								
40	.28	.38	.65**	.34	.44	1.0							
41	.14	.16	.65**	.31	.52*	.69**	1.0						
42	.50*	.20	.19	.10	.06	.11	-.02	1.0					
43	.56*	.47*	.47*	.53*	.43	.54*	.55*	.24	1.0				
44	.30	.41	.62**	.24	.44	.76**	.69**	.31	.71**	1.0			
45	.43	.30	.50*	.19	.39	.71**	.62**	.27	.71**	.65**	1.0		
46	.58**	.36	.64**	.30	.48*	.51*	.61**	.40	.62**	.53*	.77**	1.0	
47	.53*	.31	.44	.39	.55*	.64**	.56*	.46*	.67**	.67**	.67**	60**	1.0

** Significant at the .01 level

* Significant at the .05 level

Items	35	36	37	38	39	40	41	42	43	44	45	46	47
48	.45*	.28	.56*	.23	.27	.79**	.52*	.47*	.62**	.74**	.74**	.53*	.83**
49	.43	.36	.21	.57**	.48*	.66**	.46*	.10	.62**	.37	.65**	.61**	.63*
50	.59**	.26	.43	.34	.39	.48*	.46*	.26	.57**	.44	.59**	.74**	.75*

** Significant at the .01 level

* Significant at the .05 level

Items	48	49	50
48	1.0		
49	.53*	1.0	
50	62**	.68**	1.0

** Significant at the .01 level

* Significant at the .05 level

Social and Professional Qualities

Items	51	52	53	54	55	56	57	58	59	60	61	62
51	1.0											
52	.30	1.0										
53	.21	.51*	1.0									
54	.22	.31	.55*	1.0								
55	.37	.50*	.62**	.37	1.0							
56	.42	.34	.59**	.59**	.79**	1.0						
57	.10	.03	.34	.42	.68**	.61**	1.0					
58	.50*	.34	.64**	.34	.76**	.80**	.54*	1.0				
59	.51*	.40	.61**	.44	.74**	.75**	.56**	.94**	1.0			
60	.40	.20	.52*	.55*	.60**	.64**	.55*	.57**	.57**	1.0		
61	.74**	.28	.27	.25	.26	.45*	.10	.60**	.57**	.54*	1.0	
62	.66**	.38	.32	.36	.31	.34	.24	.50*	.51*	.69**	.76**	1.0

** Significant at the .01 level

* Significant at the .05 level

Aspects of School Management

Items	63	64	65	66
63	1.0			
64	.80**	1.0		
65	.49*	.32	1.0	
66	.70**	.66**	.42	1.0

** Significant at the .01 level

* Significant at the .05 level

Techniques of Teaching

Items	67	68	69	70	71	72	73	74	75	76	77	78
67	1.0											
68	.36	1.0										
69	.38	.45*	1.0									
70	.61**	.66**	.42	1.0								
71	.44	.33	.49*	.49*	1.0							
72	.31	.26	.36	.37	.47*	1.0						
73	.17	.63**	.17	.40	.20	.15	1.0					
74	.56*	.28	.28	.62**	.50*	.29	.28	1.0				
75	.43	.71**	.55*	.59**	.61**	.48*	.70**	.41	1.0			
76	.29	.48*	.62**	.38	.41	.47*	.67**	.16	.73**	1.0		
77	.45*	.42	.47*	.60**	.35	.35	.45*	.57**	.57**	.39	1.0	
78	.37	.38	.33	.32	.56*	.48*	.76**	.31	.67**	.68**	.58**	1.0

** Significant at the .01 level

* Significant at the .05 level

Mentoring Induction

Items	79	80	81	82	83	84	85	86	87	88	89	90	91	92
79	1.0													
80	.87**	1.0												
81	.56*	.69**	1.0											
82	.47*	.63**	.63**	1.0										
83	.41	.56*	.77**	.87**	1.0									
84	.39	.52*	.68**	.86**	.89**	1.0								
85	.34	.32	.36	.38	.36	.53*	1.0							
86	.37	.27	-.004	.44	.43	.50	.65**	1.0						
87	.03	-.03	.05	.39	.17	.28	.32	.22	1.0					
88	.36	.55*	.52*	.38	.24	.13	.02	-.14	-.25	1.0				
89	-.07	-.20	-.24	.13	-.18	-.06	-.14	-.01	.44	-.16	1.0			
90	.19	.24	.32	.51*	.43	.68**	.22	.08	.37	.19	.40	1.0		
91	.21	.28	.57*	.30	.55*	.62*	.15	-.15	-.20	.40	.02	.64**	1.0	
92	.19	.22	.33	.46*	.51	.54*	.49*	.32	.66**	-.10	.17	.55*	.25	1.0

** Significant at the .01 level

* Significant at the .05 level

Appendix D

Table 10

Collinearity Diagnostics for the significant predictor sections of the survey Perspectives on Preparation to Teach Physical Education

		Variance Proportions			
Dimension	Condition Index	Profess	Personal	Tech Teach	Mentoring
Professional	13	.00	.01	.00	.52
Personal	24	.01	.04	.23	.25
Tech Teaching	30	.64	.00	.34	.00
Mentoring	45	.35	.95	.43	.23

Appendix E

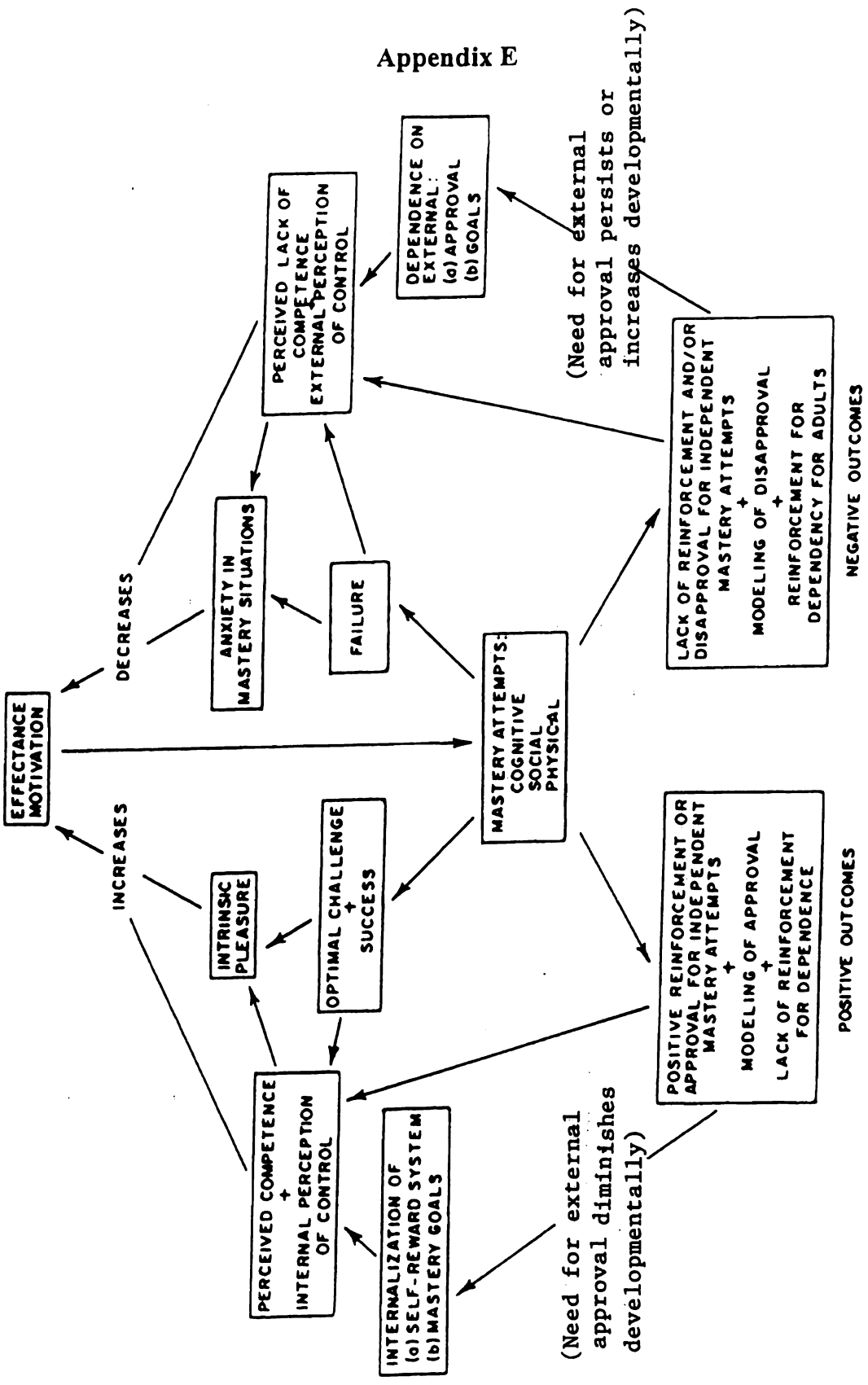

Figure 1. Harter, S. (1981a). A Model of Mastery Motivation

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